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SAR EVALUATION REPORT

Test Report No.	: 1511FS14
Applicant	: Netgear Incorporated
Applicant Address	: 350 East Plumeria Drive, San Jose, California, United States 95134
Manufacture	: Netgear Inc.
Manufacture Address	: Suite 168 – 10760 Shellbridge Way, Richmond, BC Canada V6X 3H1
Product Type	: AirCard 815S Mobile Hotspot
Trade Name	: NETGEAR
Model Number	: AC815S
Date of Received	: Sep. 22, 2015
Test Period	: Oct. 19 ~ Dec. 04, 2015
Date of Issued	: Dec. 14, 2015
Test Environment	: Ambient Temperature : $22 \pm 2^{\circ} \text{C}$ Relative Humidity : 40 - 70 %
Standard	: ANSI/IEEE C95.1-1999 / IEEE Std. 1528-2013 KDB 865664 D01 v01r04 / KDB 865664 D02 v01r02 KDB 447498 D01 v06 / KDB 941225 D01 v03r01 KDB 941225 D05 v02r04 / KDB 941225 D06 v02r01 KDB 248227 D01 v02r02
Test Lab Location	: Chang-an Lab



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Contents

1. Summary of Maximum Reported SAR Value.....	4
2. Description of Equipment under Test (EUT)	5
3. Introduction.....	7
3.1 SAR Definition	7
4. SAR Measurement Setup	8
4.1 DASY E-Field Probe System.....	9
4.1.1 E-Field Probe Specification	10
4.1.2 E-Field Probe Calibration process	11
4.2 Data Acquisition Electronic (DAE) System.....	12
4.3 Robot.....	12
4.4 Measurement Server.....	12
4.5 Device Holder.....	13
4.6 Oval Flat Phantom - ELI 5.0.....	13
4.7 Data Storage and Evaluation.....	14
4.7.1 Data Storage	14
4.7.2 Data Evaluation	15
5. Tissue Simulating Liquids	17
5.1 Ingredients.....	18
5.2 Recipes.....	18
5.3 Liquid Depth	19
6. SAR Testing with RF Transmitters.....	20
6.1 SAR Testing with GPRS/EGPRS Transmitters	20
6.2 SAR Testing with WCDMA Transmitters	20
6.3 SAR Testing with HSDPA Transmitters	20
6.4 SAR Testing with LTE-FDD Transmitters	23
6.5 LTE Frequency range and channel bandwidth.....	23
6.5.1 Maximum power reduction (MPR).....	27
6.6 Power reduction	27
6.7 SAR Testing with 802.11 Transmitters.....	28
6.8 Conducted Power.....	29
6.9 Antenna location.....	128
6.10 Stand-alone SAR Evaluate.....	131
6.11 Simultaneous Transmitting Evaluate.....	143
6.11.1 Estimated SAR	143
6.11.2 Sum of 1-g SAR of all simultaneously transmitting	146
6.11.3 SAR to peak location separation ratio (SPLSR).....	149
6.12 SAR test reduction according to KDB	149
7. System Verification and Validation.....	151
7.1 Symmetric Dipoles for System Verification	151
7.2 Liquid Parameters	152
7.3 Verification Summary	157
7.4 Validation Summary	159
8. Test Equipment List.....	161
9. Measurement Uncertainty.....	162



10. Measurement Procedure.....	165
10.1 Spatial Peak SAR Evaluation	165
10.2 Area & Zoom Scan Procedures	166
10.3 Volume Scan Procedures.....	166
10.4 SAR Averaged Methods.....	166
10.5 Power Drift Monitoring.....	166
11. SAR Test Results Summary.....	167
11.1 Head Measurement SAR	167
11.2 Body Measurement SAR.....	167
11.3 Hot-spot mode Measurement SAR	167
11.4 Extremity Measurement SAR	172
11.5 SAR Measurement Variability.....	173
11.6 Std. C95.1-1999 RF Exposure Limit.....	174
12. Conclusion.....	175
13. References	175
Appendix A - System Performance Check.....	176
Appendix B - SAR Measurement Data.....	197
Appendix C - Calibration.....	349



1. Summary of Maximum Reported SAR Value

Equipment Class	Mode	Highest Reported
		Body-Worn stand alone SAR1g (1.0 cm) (W/kg)
PCB	GPRS/EGPRS 850	0.76
	GPRS/EGPRS 1900	1.24
	WCDMA Band II	1.07
	WCDMA Band V	1.16
	LTE Band 2	1.01
	LTE Band 4	1.31
	LTE Band 5	1.02
	LTE Band 7	1.41
	LTE Band 12	1.07
	LTE Band 30	0.87
DTS	WLAN 2.4GHz	0.02
NII	WLAN 5GHz U-NII-1	0.11
	WLAN 5GHz U-NII-3	0.16
Highest Simultaneous Transmission SAR		Body-Worn Stand alone (W/kg)
PCB+ NII (Ant0 + Ant1) at test position side5		1.5

Note:1. The SAR limit (Head & Body: SAR1g 1.6 W/kg) for general population / uncontrolled exposure is specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1999



2. Description of Equipment under Test (EUT)

Applicant	Netgear Incorporated 350 East Plumeria Drive, San Jose, California, United States 95134	
Manufacture	Netgear Inc. Suite 168 – 10760 Shellbridge Way, Richmond, BC Canada V6X 3H1	
Product Type	AirCard 815S Mobile Hotspot	
Trade Name	NETGEAR	
Model Number	AC815S	
FCC ID	PY3AC815S	
IMEI No.	014475000001006	
RF Function	GPRS/EGPRS 850 GPRS/EGPRS 1900 WCDMA(RMC 12.2K) / HSDPA / HSUPA Band II WCDMA(RMC 12.2K) / HSDPA / HSUPA Band V LTE Band 2 / Band 4 / Band 5 / Band 7 / Band 12 / Band 30 IEEE 802.11b / 802.11g / 802.11n 2.4GHz 20MHz IEEE 802.11n 2.4GHz 40MHz IEEE 802.11a / IEEE 802.11ac 20MHz IEEE 802.11ac 40MHz IEEE 802.11ac 80MHz	
Tx Frequency	Band	Operate Frequency (MHz)
	GPRS/EGPRS 850	824.2 - 848.8
	GPRS/EGPRS 1900	1850.2 - 1909.8
	WCDMA(RMC 12.2K) / HSDPA / HSUPA Band II	1852.4 - 1907.6
	WCDMA (RMC 12.2K) / HSDPA / HSUPA Band V	826.4 - 846.6
	LTE Band 2 (BW 1.4, 3, 5, 10, 15, 20 MHz)	1850.0 - 1910.0
	LTE Band 4 (BW 1.4, 3, 5, 10, 15, 20 MHz)	1710.0 - 1754.9
	LTE Band 5 (BW 1.4, 3, 5, 10 MHz)	824.0 - 849.0
	LTE Band 7 (BW 5, 10, 15, 20 MHz)	704.0 - 715.9
	LTE Band 12 (BW 1.4, 3, 5, 10 MHz)	1850 - 1915
	LTE Band 30 (BW 5, 10 MHz)	2307.5 – 2312.5
	IEEE 802.11b / 802.11g / 802.11n 2.4GHz 20MHz	2412 - 2462
	IEEE 802.11n 2.4GHz 40MHz	2422 - 2452
	IEEE 802.11a	5180 - 5825
	IEEE 802.11ac 20MHz	5180 - 5825
	IEEE 802.11ac 40MHz	5190 - 5795
IEEE 802.11ac 80MHz	5210 - 5775	
*GPRS Multi Class: 10		



RF Conducted Power	Band	Power	
		W	dBm
(Avg.)	GPRS/EGPRS 850	1.841	32.65
	GPRS/EGPRS 1900	1.114	30.47
	WCDMA(RMC 12.2K) / HSDPA / HSUPA Band II	0.154	21.87
	WCDMA (RMC 12.2K) / HSDPA / HSUPA Band V	0.195	22.91
	LTE Band 2 (BW 1.4, 3, 5, 10, 15, 20 MHz)	0.167	22.23
	LTE Band 4 (BW 1.4, 3, 5, 10, 15, 20 MHz)	0.170	22.31
	LTE Band 5 (BW 1.4, 3, 5, 10 MHz)	0.229	23.60
	LTE Band 7 (BW 5, 10, 15, 20 MHz)	0.175	22.43
	LTE Band 12 (BW 1.4, 3, 5, 10 MHz)	0.274	24.37
	LTE Band 30 (BW 5, 10 MHz)	0.245	23.90
	IEEE 802.11b	0.007	8.72
	IEEE 802.11g	0.014	11.44
	IEEE 802.11n 2.4GHz 20MHz	0.014	11.41
	IEEE 802.11n 2.4GHz 40MHz	0.014	11.42
	IEEE 802.11a	0.018	12.60
	IEEE 802.11ac 20MHz	0.017	12.41
	IEEE 802.11ac 40MHz	0.017	12.39
	IEEE 802.11ac 80MHz	0.018	12.64
Antenna Type	2GHz/3GHz/4Ghz : Internal IFA type WLAN 2.4GHz/5GHz : Chip Antenna		
Battery Option	Standard Trade Name: NETGEAR Model: W-9 Spec: DC 3.8V / 4340mAh		
Device Category	Portable Device		
Application Type	Certification		

Note: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.



3. Introduction

The A Test Lab Techno Corp. has performed measurements of the maximum potential exposure to the user of **Netgear Incorporated Trade Name : NETGEAR Model(s) : AC815S**. The test procedures, as described in American National Standards, Institute C95.1-1999 [1] were employed and they specify the maximum exposure limit of 1.6mW/g as averaged over any 1 gram of tissue for portable devices being used within 20cm between user and EUT in the uncontrolled environment. A description of the product and operating configuration, detailed summary of the test results, methodology and procedures used in the equipment used are included within this test report.

3.1 SAR Definition

Specific Absorption Rate (SAR) is defined as the time derivative (rate) of the incremental energy (dw) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). It is also defined as the rate of RF energy absorption per unit mass at a point in an absorbing body (see Figure 2).

$$\text{SAR} = \frac{d}{dt} \left(\frac{dw}{dm} \right) = \frac{d}{dt} \left(\frac{dw}{\rho dv} \right)$$

Figure 2. SAR Mathematical Equation

SAR is expressed in units of Watts per kilogram (W/kg)

$$\text{SAR} = \frac{\sigma E^2}{\rho}$$

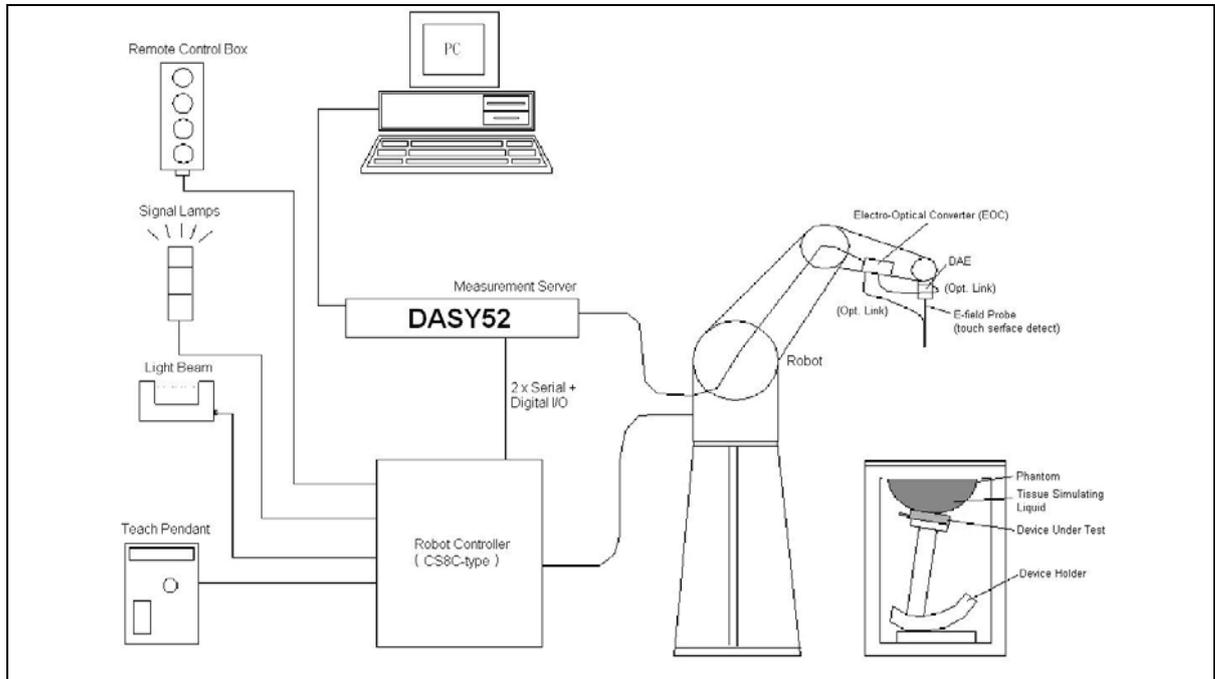
Where :

- σ = conductivity of the tissue (S/m)
- ρ = mass density of the tissue (kg/m³)
- E = RMS electric field strength (V/m)

*Note :

The primary factors that control rate of energy absorption were found to be the wavelength of the incident field in relations to the dimensions and geometry of the irradiated organism, the orientation of the organism in relation to the polarity of field vectors, the presence of reflecting surfaces, and whether conductive contact is made by the organism with a ground plane [2]

4. SAR Measurement Setup



The DASY52 system for performing compliance tests consists of the following items:

1. A standard high precision 6-axis robot (Stäubli TX family) with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
2. A dosimetric probe, i.e., an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
3. A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
4. The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
5. A probe alignment unit which improves the (absolute) accuracy of the probe positioning.
6. A computer operating Windows 2000 or Windows XP.
7. DASY52 software.
8. Remote controls with teach pendant and additional circuitry for robot safety such as warning lamps, etc.
9. The SAM twin phantom enabling testing left-hand and right-hand usage.
10. The device holder for handheld mobile phones.
11. Tissue simulating liquid mixed according to the given recipes.
12. Validation dipole kits allowing validating the proper functioning of the system.



4.1 DASYS E-Field Probe System

The SAR measurements were conducted with the dosimetric probe (manufactured by SPEAG), designed in the classical triangular configuration [3] and optimized for dosimetric evaluation. The probe is constructed using the thick film technique; with printed resistive lines on ceramic substrates. The probe is equipped with an optical multi-fiber line ending at the front of the probe tip. It is connected to the EOC box on the robot arm and provides an automatic detection of the phantom surface. Half of the fibers are connected to a pulsed infrared transmitter, the other half to a synchronized receiver. As the probe approaches the surface, the reflection from the surface produces a coupling from the transmitting to the receiving fibers. This reflection increases first during the approach, reaches maximum and then decreases. If the probe is flatly touching the surface, the coupling is zero. The distance of the coupling maximum to the surface is independent of the surface reflectivity and largely independent of the surface to probe angle. The DASYS software reads the reflection during a software approach and looks for the maximum using a 2nd order fitting. The approach is stopped when reaching the maximum.

4.1.1 E-Field Probe Specification

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in brain tissue (rotation around probe axis) ± 0.5 dB in brain tissue (rotation normal probe axis)
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm

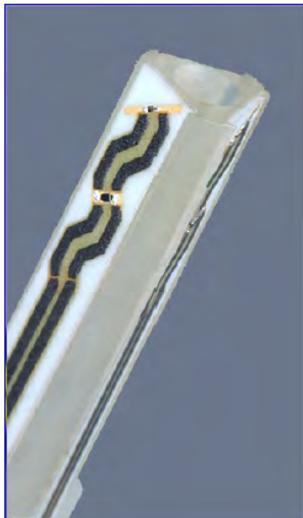


Figure 3. E-field Probe



Figure 4. Probe setup on robot



4.1.2 E-Field Probe Calibration process

Dosimetric Assessment Procedure

Each E-Probe/Probe Amplifier combination has unique calibration parameters. A TEM cell calibration procedure is conducted to determine the proper amplifier settings to enter in the probe parameters. The amplifier settings are determined for a given frequency by subjecting the probe to a known E-field density (1 mW/cm²) using an RF Signal generator, TEM cell, and RF Power Meter.

Free Space Assessment

The free space E-field from amplified probe outputs is determined in a test chamber. This calibration can be performed in a TEM cell if the frequency is below 1 GHz and in a waveguide or other methodologies above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is rotated 360 degrees until the three channels show the maximum reading. The power density readings equates to 1 mW/cm².

Temperature Assessment

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated head tissue. The E-field in the medium correlates with the temperature rise in the dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$SAR = C \frac{\Delta T}{\Delta t}$$

Where :

Δt = Exposure time (30 seconds),

C = Heat capacity of tissue (head or body),

ΔT = Temperature increase due to RF exposure.

$$\text{Or } SAR = \frac{|E|^2 \sigma}{\rho}$$

Where :

σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m³).



4.2 Data Acquisition Electronic (DAE) System

Model : DAE3, DAE4
Construction : Signal amplifier, multiplexer, A/D converter and control logic. Serial optical link for communication with DASY4/5 embedded system (fully remote controlled). Two step probe touch detector for mechanical surface detection and emergency robot stop.
Measurement Range : -100 to +300 mV (16 bit resolution and two range settings: 4mV, 400mV)
Input Offset Voltage : < 5 μ V (with auto zero)
Input Bias Current : < 50 fA
Dimensions : 60 x 60 x 68 mm

4.3 Robot

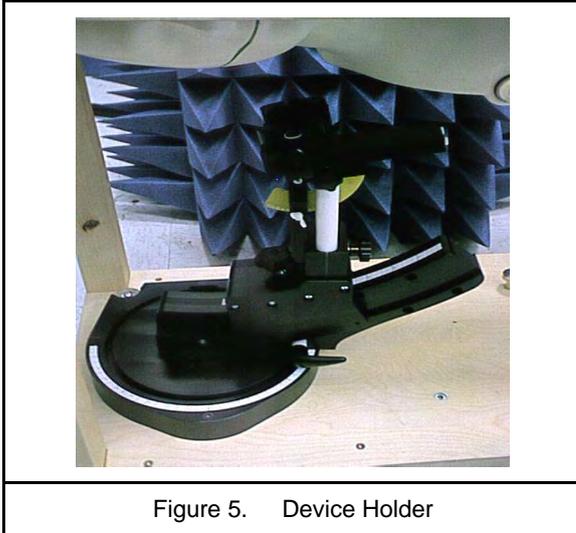
Positioner : Stäubli Unimation Corp. Robot Model: TX90XL
Repeatability : \pm 0.02 mm
No. of Axis : 6

4.4 Measurement Server

Processor : PC/104 with a 400MHz intel ULV Celeron
I/O-board : Link to DAE4 (or DAE3)
16-bit A/D converter for surface detection system
Digital I/O interface
Serial link to robot
Direct emergency stop output for robot

4.5 Device Holder

The DASY device holder is constructed of low-loss POM material having the following dielectric parameters: relative permittivity $\epsilon=3$ and loss tangent $\delta=0.02$. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.



4.6 Oval Flat Phantom - ELI 5.0

The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (Oval Flat) phantom defined in IEEE 1528-2013, CENELEC 50361 and IEC 62209-2. It enables the dosimetric evaluation of wireless portable device usage as well as body mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points with the robot.

Shell Thickness	2 ±0.2 mm
Filling Volume	Approx. 30 liters
Dimensions	190x600x400 mm (HxLxW)
Table 1. Specification of ELI 5.0	

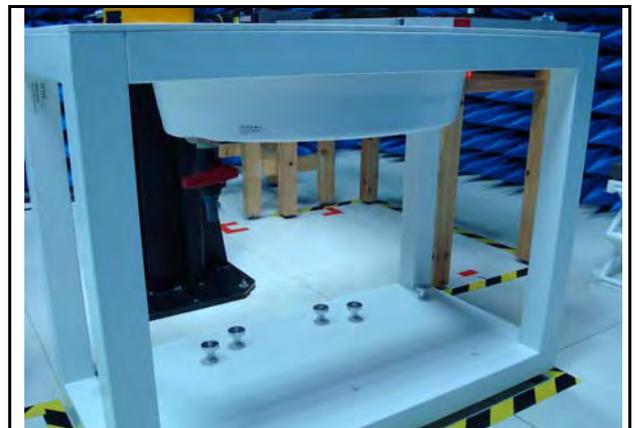


Figure 6. Oval Flat Phantom



4.7 Data Storage and Evaluation

4.7.1 Data Storage

The DASY software stores the assessed data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all the necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension DA4 or DA5. The post processing software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of erroneous parameter settings. For example, if a measurement has been performed with an incorrect crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be reevaluated.



4.7.2 Data Evaluation

The DASY post processing software (SEMCAD) automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software :

- Probe parameters : - Sensitivity $Norm_i, ai0, ai1, ai2$
- Conversion factor $ConvFi$
- Diode compression point dcp_i
- Device parameters : - Frequency f
- Crest factor cf
- Media parameters : - Conductivity σ
- Density ρ

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY components. In the direct measuring mode of the multimeter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics. If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as :

$$V_i = U_i + U_i^2 \cdot \frac{cf}{dcp_i}$$

- With V_i = compensated signal of channel i (i = x, y, z)
 U_i = input signal of channel i (i = x, y, z)
 cf = crest factor of exciting field (DASY parameter)
 dcp_i = diode compression point (DASY parameter)

From the compensated input signals the primary field data for each channel can be evaluated :

E-field probes :
$$E_i = \sqrt{\frac{V_i}{Norm_i \cdot ConvF}}$$



$$H_i = \sqrt{V_i} \cdot \frac{a_{i0} + a_{i1}f + a_{i2}f^2}{f}$$

H-field probes :

- with V_i = compensated signal of channel i (i = x, y, z)
 $Norm_i$ = sensor sensitivity of channel i (i = x, y, z)
 $\mu V/(V/m)^2$ for E-field Probes
 $ConvF$ = sensitivity enhancement in solution
 a_{ij} = sensor sensitivity factors for H-field probes
 f = carrier frequency [GHz]
 E_i = electric field strength of channel i in V/m
 H_i = magnetic field strength of channel i in A/m

The RSS value of the field components gives the total field strength (Hermitian magnitude) :

$$E_{tot} = \sqrt{E_x^2 + E_y^2 + E_z^2}$$

The primary field data are used to calculate the derived field units.

$$SAR = E_{tot}^2 \cdot \frac{\sigma}{\rho \cdot 1000}$$

- with SAR = local specific absorption rate in mW/g
 E_{tot} = total field strength in V/m
 σ = conductivity in [mho/m] or [Siemens/m]
 ρ = equivalent tissue density in g/cm³

* Note : That the density is set to 1, to account for actual head tissue density rather than the density of the tissue simulating liquid.

The power flow density is calculated assuming the excitation field to be a free space field.

$$P_{pwe} = \frac{E_{tot}^2}{3770} \quad \text{or} \quad P_{pwe} = \frac{H_{tot}^2}{37.7}$$

- with P_{pwe} = equivalent power density of a plane wave in mW/cm²
 E_{tot} = total electric field strength in V/m
 H_{tot} = total magnetic field strength in A/m



5. Tissue Simulating Liquids

The mixture is calibrated to obtain proper dielectric constant (permittivity) and conductivity of the tissue.

The dielectric parameters of the liquids were verified prior to the SAR evaluation using an 85070C Dielectric Probe Kit and an E5071B Network Analyzer.

IEEE SCC-34/SC-2 in 1528 recommended Tissue Dielectric Parameters

The head tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 in 1528 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in human head. Other head and body tissue parameters that have not been specified in 1528 are derived from the tissue dielectric parameters computed from the 4-Cole-Cole equation and extrapolated according to the head parameter specified in 1528.

Target Frequency	Head		Body	
(MHz)	ϵ_r	σ (S/m)	ϵ_r	σ (S/m)
150	52.3	0.76	61.9	0.80
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800 - 2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0	2.73
5800	35.3	5.27	48.2	6.00
(ϵ_r = relative permittivity, σ = conductivity and $\rho = 1000$ kg/m ³)				

Table 2. Tissue dielectric parameters for head and body phantoms



5.1 Ingredients

The following ingredients are used:

- Water: deionized water (pure H₂O), resistivity ≥ 16 M Ω -as basis for the liquid
- Sugar: refined white sugar (typically 99.7 % sucrose, available as crystal sugar in food shops)
-to reduce relative permittivity
- Salt: pure NaCl -to increase conductivity
- Cellulose: Hydroxyethyl-cellulose, medium viscosity (75-125 mPa.s, 2% in water, 20 °C), CAS # 54290 -to increase viscosity and to keep sugar in solution.
- Preservative: Preventol D-7 Bayer AG, D-51368 Leverkusen, CAS # 55965-84-9 -to prevent the spread of bacteria and molds
- DGBE: Diethylenglycol-monobutyl ether (DGBE), Fluka Chemie GmbH, CAS # 112-34-5 -to reduce relative permittivity

5.2 Recipes

The following tables give the recipes for tissue simulating liquids to be used in different frequency bands.

Note: The goal dielectric parameters (at 22 °C) must be achieved within a tolerance of ±5% for ε and ±5% for σ.

Ingredients (% by weight)	Frequency (MHz)												Frequency (GHz)	
	750		835		1750		1900		2450		2600		5GHz	
Tissue Type	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Water	39.28	51.30	41.45	52.40	54.50	40.20	54.90	40.40	62.70	73.20	60.30	71.40	65.5	78.6
Salt (NaCl)	1.47	1.42	1.45	1.50	0.17	0.49	0.18	0.50	0.50	0.10	0.60	0.20	0.00	0.00
Sugar	58.15	46.18	56.00	45.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HEC	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bactericide	0.10	0.10	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Triton X-100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.2	10.7
DGBE	0.00	0.00	0.00	0.00	45.33	59.31	44.92	59.10	36.80	26.70	39.10	28.40	0.00	0.00
Dielectric Constant	41.88	54.60	42.54	56.10	40.10	53.60	39.90	54.00	39.80	52.50	39.80	52.50	0.00	0.00
Conductivity (S/m)	0.90	0.97	0.91	0.95	1.39	1.49	1.42	1.45	1.88	1.78	1.88	1.78	0.00	0.00
Diethylene Glycol Mono-hexlether	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.3	10.7

Salt: 99% Pure Sodium Chloride

Sugar: 98% Pure Sucrose

Water: De-ionized, 16 M Ω⁺ resistivity

HEC: Hydroxyethyl Cellulose

DGBE: 99% Di(ethylene glycol) butyl ether, [2-(2-butoxyethoxy)ethanol]

Triton X-100 (ultra pure): Polyethylene glycol mono [4-(1,1, 3, 3-tetramethylbutyl)phenyl]ether

5.3 Liquid Depth

According to KDB865664 ,the depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm with $\leq \pm 0.5$ cm variation for SAR measurements ≤ 3 GHz and ≥ 10.0 cm with $\leq \pm 0.5$ cm variation for measurements > 3 GHz.



Figure 7. Body-Position



6. SAR Testing with RF Transmitters

6.1 SAR Testing with GPRS/EGPRS Transmitters

Configure the basestation to support GMSK and 8PSK call respectively, and set timeslot transmission for GMSK GPRS and 8PSK EDGE. Measure and record power outputs for both modulations, that test is applicable.

6.2 SAR Testing with WCDMA Transmitters

The following tests were completed according to the test requirements outlined in section 5.2 of the 3GPP TS34.121-1 specification. The DUT supports power Class 3, which has a nominal maximum output power of 24 dBm (+1.7/-3.7).

- Step 1: set a Test Mode 1 loop back with a 12.2kbps Reference Measurement Channel (RMC).
- Step 2: set and send continuously up power control commands to the device.
- Step 3: measure the power at the device antenna connector using the power meter with average detector and test SAR

6.3 SAR Testing with HSDPA Transmitters

HSDPA Date Devices setup for SAR Measurement

HSDPA should be configured according to the UE category of a test device. The number of HS-DSCH/HS-PDSCHs, HARQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission conditions, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4 ms with a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. DPCCH and DPDCH gain factors(β_c , β_d), and HS-DPCCH power offset parameters (Δ_{ACK} , Δ_{NACK} , Δ_{CQI}) should be set according to values indicated in the Table below. The CQI value is determined by the UE category, transport block size, number of HS-PDSCHs and modulation used in the H-set.

Setup for Release 5 HSDPA							
Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	$\beta_{hs}^{(1,2)}$	CM ⁽³⁾ (dB)	MRP ⁽³⁾ (dB)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15(4)	15/15(4)	64	12/15(4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note

1. Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$
2. For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude(EVM) with HS-DPCCH test in clause 5.13.1A and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and $\Delta_{NACK} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$ and $\Delta_{CQI} = 24/15$ with $\beta_{hs} = 24/15 * \beta_c$
3. CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.
4. For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 11/15$ and $\beta_d = 15/15$.



HSPA Data Devices setup for SAR Measurement.

The following procedures are applicable to HSPA (HSUPA/HSDPA) data devices operating under 3GPP Release 6. Body exposure conditions generally apply to these devices, including handsets and data modems operating in various electronic devices. HSUPA operates in conjunction with WCDMA and HSDPA. SAR is initially measured in WCDMA test configurations without HSPA. The default test configuration is to establish a radio link between the DUT and a communication test set to configure a 12.2 kbps RMC (reference measurement channel) in Test Loop Mode 1. SAR for HSPA is selectively measured with HS-DPCCH, EDPCCH and E-DPDCH, all enabled, along with a 12.2 kbps RMC using the highest SAR configuration in WCDMA with 12.2 kbps RMC only. An FRC is configured according to HSDPCCH Sub-test 1 using H-set 1 and QPSK. HSPA is configured according to E-DCH Subtest 5 requirements. SAR for other HSPA sub-test configurations is also confirmed selectively according to output power, exposure conditions and E-DCH UE Category. Maximum output power is verified according to procedures in applicable versions of 3GPP TS 34.121 and SAR must be measured according to these maximum output conditions. The UE Categories for HSDPCCH and HSPA should be clearly identified in the SAR report. The following procedures are applicable only if Maximum Power Reduction (MPR) is implemented according to Cubic Metric (CM) requirements.

When voice transmission and head exposure conditions are applicable to a WCDMA/HSPA data device, head exposure is measured according to the 'Head SAR Measurements' procedures in the 'WCDMA Handsets' section of this document. SAR for body exposure configurations are measured according to the 'Body SAR Measurements' procedures in the 'WCDMA Handsets' section of this document. In addition, body SAR is also measured for HSPA when the maximum average output of each RF channel with HSPA active is at least ¼ dB higher than that measured without HSPA using 12.2 kbps RMC or the maximum SAR for 12.2 kbps RMC is above 75% of the SAR limit. Body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set 1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 with power control algorithm 2, according to the highest body SAR configuration in 12.2 kbps RMC without HSPA. When VOIP is applicable for head exposure, SAR is not required when the maximum output of each RF channel with HSPA is less than ¼ dB higher than that measured using 12.2 kbps RMC; otherwise, the same HSPA configuration used for body measurements should be used to test for head exposure.

Due to inner loop power control requirements in HSPA, a commercial communication test set should be used for the output power and SAR tests. The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSPA should be configured according to the β values indicated below as well as other applicable procedures described in the 'WCDMA Handset' and 'Release 5 HSDPA Data Devices' sections of this document.



The highest body SAR measured in Antenna Extended & Retracted configurations on a channel in 12.2 kbps RMC. The possible channels are the High, Middle & Low channel. Contact the FCC Laboratory for test and approval requirements if the maximum output power measured in E-DCH Sub-test 2 - 4 is higher than Sub-test 5.

Setup for Release 6 HSPA / Release 7 HSPA+													
Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	$\beta_{hs}^{(1)}$	β_{ec}	β_{ed}	Bed (SF)	Bed (codes)	CM ⁽²⁾ (dB)	MPR (dB)	AG ⁽⁴⁾ Index	E-TFCI
1	11/15 ⁽³⁾	15/15 ⁽³⁾	64	11/15 ⁽³⁾	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{ed1}: 47/15$ $\beta_{ed2}: 47/15$	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15 ⁽⁴⁾	15/15 ⁽⁴⁾	64	15/15 ⁽⁴⁾	30/15	24/15	134/15	4	1	1.0	0.0	21	81

Note

- Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$.
- CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.
- For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 10/15$ and $\beta_d = 15/15$.
- For subtest 5 the β_c/β_d ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 14/15$ and $\beta_d = 15/15$.
- Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g.
- β_{ed} can not be set directly; it is set by Absolute Grant Value.



6.4 SAR Testing with LTE-FDD Transmitters

All SAR measurements for LTE were performed using the Anritsu MT8820C. A closed loop power control setting allowed the UE to transmit at the maximum output power during the SAR measurements. Configure the basestation to support LTE tests in respect to the 3GPP 36.521-1, and set ch , RB allocation number , RB allocation offset , and send continuously Up power control commands to the device.

MPR was enabled for this device. A-MPR was disabled for all SAR test measurements.

6.5 LTE Frequency range and channel bandwidth

Channel bandwidth support:

Band	BW (MHz)					
	1.4	3	5	10	15	20
LTE Band 2	V	V	V	V	V	V
LTE Band 4	V	V	V	V	V	V
LTE Band 5	V	V	V	V		
LTE Band 7			V	V	V	V
LTE Band 12	V	V	V	V		
LTE Band 30			V	V		



LTE Band	Bandwidth (MHz)	Test frequency ID	N _{UL}	Frequency of Uplink (MHz)
LTE Band 2	1.4	Low Range	18607	1850.7
		Mid Range	18900	1880.0
		High Range	19193	1909.3
	3	Low Range	18615	1851.5
		Mid Range	18900	1880.0
		High Range	19185	1908.5
	5	Low Range	18625	1852.5
		Mid Range	18900	1880.0
		High Range	19175	1907.5
	10	Low Range	18650	1855.0
		Mid Range	18900	1880.0
		High Range	19150	1905.0
	15	Low Range	18675	1857.5
		Mid Range	18900	1880.0
		High Range	19125	1902.5
20	Low Range	18700	1860.0	
	Mid Range	18900	1880.0	
	High Range	19100	1900.0	



LTE Band	Bandwidth (MHz)	Test frequency ID	N _{UL}	Frequency of Uplink (MHz)
LTE Band 4	1.4	Low Range	19957	1710.7
		Mid Range	20175	1732.5
		High Range	20393	1754.3
	3	Low Range	19965	1711.5
		Mid Range	20175	1732.5
		High Range	20385	1753.5
	5	Low Range	19975	1712.5
		Mid Range	20175	1732.5
		High Range	20375	1752.5
	10	Low Range	20000	1715.0
		Mid Range	20175	1732.5
		High Range	20350	1750.0
	15	Low Range	20025	1717.5
		Mid Range	20175	1732.5
		High Range	20325	1747.5
20	Low Range	20050	1720.0	
	Mid Range	20175	1732.5	
	High Range	20300	1745.0	
LTE Band 5	1.4	Low Range	20407	824.7
		Mid Range	20525	836.5
		High Range	20643	848.3
	3	Low Range	20415	825.5
		Mid Range	20525	836.5
		High Range	20635	847.5
	5	Low Range	20425	826.5
		Mid Range	20525	836.5
		High Range	20625	846.5
	10	Low Range	20450	829.0
		Mid Range	20525	836.5
		High Range	20600	844.0



LTE Band	Bandwidth (MHz)	Test frequency ID	N _{UL}	Frequency of Uplink (MHz)
LTE Band 7	5	Low Range	20775	2502.5
		Mid Range	21100	2535.0
		High Range	21425	2567.5
	10	Low Range	20800	2505.0
		Mid Range	21100	2535.0
		High Range	21400	2565.0
	15	Low Range	20825	2507.5
		Mid Range	21100	2535.0
		High Range	21375	2562.5
	20	Low Range	20850	2510.0
		Mid Range	21100	2535.0
		High Range	21350	2560.0
LTE Band 12	1.4	Low Range	23017	699.7
		Mid Range	23095	707.5
		High Range	23173	715.3
	3	Low Range	23025	700.5
		Mid Range	23095	707.5
		High Range	23165	714.5
	5	Low Range	23035	701.5
		Mid Range	23095	707.5
		High Range	23155	713.5
	10	Low Range	23060	704.0
		Mid Range	23095	707.5
		High Range	23130	711.0
LTE Band 30	5	Low Range	27685	2307.5
		Mid Range	27710	2310.0
		High Range	27735	2312.5
	10	Mid Range	27710	2310.0



6.5.1 Maximum power reduction (MPR)

Identify the LTE voice/data requirements in each operating mode and exposure condition with respect to head and body test configurations, antenna locations, handset flip-cover or slide positions, antenna diversity conditions etc.

The voice and data transmission:

- Data only device.

Identify if Maximum Power Reduction (MPR) is optional or mandatory, i.e. built-in by design:

- Maximum Power Reduction (MPR) is mandatory, i.e. built-in by design.
- A-MPR (additional MPR) must be disabled
- A-MPR was disabled during testing.

Maximum Power Reduction (MPR) for Power Class 3							
Channel bandwidth / Transmission bandwidth configuration (RB)							
Modulation	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20MHz	MPR (dB)
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2

6.6 Power reduction

No power reduction issue.



6.7 SAR Testing with 802.11 Transmitters

SAR test reduction for 802.11 Wi-Fi transmission mode configurations are considered separately for DSSS and OFDM. An initial test position is determined to reduce the number of tests required for certain exposure configurations with multiple test positions. An initial test configuration is determined for each frequency band and aggregated band according to maximum output power, channel bandwidth, wireless mode configurations and other operating parameters to streamline the measurement requirements. For 2.4 GHz DSSS, either the initial test position or DSSS procedure is applied to reduce the number of SAR tests; these are mutually exclusive. For OFDM, an initial test position is only applicable to next to the ear, UMPC mini-tablet and hotspot mode configurations, which is tested using the initial test configuration to facilitate test reduction. For other exposure conditions with a fixed test position, SAR test reduction is determined using only the initial test configuration.

The multiple test positions require SAR measurements in head, hotspot mode or UMPC mini-tablet configurations may be reduced according to the highest reported SAR determined using the initial test position(s) by applying the DSSS or OFDM SAR measurement procedures in the required wireless mode test configuration(s). The initial test position(s) is measured using the highest measured maximum output power channel in the required wireless mode test configuration(s). When the reported SAR for the initial test position is:

- ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and wireless mode combination within the frequency band or aggregated band. DSSS and OFDM configurations are considered separately according to the required SAR procedures.
- > 0.4 W/kg, SAR is repeated using the same wireless mode test configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg or all required test positions are tested.
 - For subsequent test positions with equivalent test separation distance or when exposure is dominated by coupling conditions, the position for maximum coupling condition should be tested.
 - When it is unclear, all equivalent conditions must be tested.
- For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, measure the SAR for these positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required test channels are considered.
 - The additional power measurements required for this step should be limited to those necessary for identifying subsequent highest output power channels to apply the test reduction.
- When the specified maximum output power is the same for both UNII 1 and UNII 2A, begin SAR measurements in UNII 2A with the channel with the highest measured output power. If the reported SAR for UNII 2A is ≤ 1.2 W/kg, SAR is not required for UNII 1; otherwise treat the remaining bands separately and test them independently for SAR.
- When the specified maximum output power is different between UNII 1 and UNII 2A, begin SAR with the band that has the higher specified maximum output. If the highest reported SAR for the band with the highest specified power is ≤ 1.2 W/kg, testing for the band with the lower specified output power is not required; otherwise test the remaining bands independently for SAR.

To determine the initial test position, Area Scans were performed to determine the position with the Maximum Value of SAR (measured). The position that produced the highest Maximum Value of SAR is considered the worst case position; thus used as the initial test position.



6.8 Conducted Power

Band	Modulation	Data Rate	CH	Frequency (MHz)	Average Power (dBm)	
					Time Average	Burst Average
GPRS 850 Multi Class :10 Max Up:2 Max Down:4 Sum:5	GMSK	4Down1Up Duty factor 1/8	Lowest	824.2	23.61	32.64
			Middle	836.6	23.62	32.65
			Highest	848.8	23.56	32.59
		3Down2Up Duty factor 2/8	Lowest	824.2	26.11	32.13
			Middle	836.6	26.08	32.10
			Highest	848.8	25.96	31.98
EGPRS 850 Multi Class :10 Max Up:2 Max Down:4 Sum:5	8PSK	4Down1Up Duty factor 1/8	Lowest	824.2	17.84	26.87
			Middle	836.6	17.86	26.89
			Highest	848.8	17.83	26.86
		3Down2Up Duty factor 2/8	Lowest	824.2	19.71	25.73
			Middle	836.6	19.74	25.76
			Highest	848.8	19.71	25.73
GPRS 1900 Multi Class :10 Max Up:2 Max Down:4 Sum:5	GMSK	4Down1Up Duty factor 1/8	Lowest	1850.2	21.43	30.46
			Middle	1880.0	21.44	30.47
			Highest	1909.8	21.42	30.45
		3Down2Up Duty factor 2/8	Lowest	1850.2	22.95	28.97
			Middle	1880.0	22.76	28.78
			Highest	1909.8	22.60	28.62
EGPRS 1900 Multi Class :10 Max Up:2 Max Down:4 Sum:5	8PSK	4Down1Up Duty factor 1/8	Lowest	1850.2	16.39	25.42
			Middle	1880.0	16.36	25.39
			Highest	1909.8	16.24	25.27
		3Down2Up Duty factor 2/8	Lowest	1850.2	18.38	24.40
			Middle	1880.0	18.31	24.33
			Highest	1909.8	18.17	24.19

Note: 1. Time Average power slot duty cycle factor calculate:

1up: Average burst power+10*LOG(1/8)

2up: Average burst power+10*LOG(2/8)

3up: Average burst power+10*LOG(3/8)

4up: Average burst power+10*LOG(4/8)



Band	Modulation	Sub-test	CH	Frequency (MHz)	Burst Average Power (dBm)
WCDMA Band II	RMC12.2K	---	Lowest	1852.4	21.75
			Middle	1880.0	21.87
			Highest	1907.6	21.69
HSDPA Band II	QPSK	1	Lowest	1852.4	21.15
			Middle	1880.0	21.20
			Highest	1907.6	21.04
		2	Lowest	1852.4	20.89
			Middle	1880.0	21.16
			Highest	1907.6	21.02
		3	Lowest	1852.4	20.57
			Middle	1880.0	20.72
			Highest	1907.6	20.51
		4	Lowest	1852.4	20.54
			Middle	1880.0	20.67
			Highest	1907.6	20.56
HSUPA Band II	QPSK	1	Lowest	1852.4	17.69
			Middle	1880.0	17.77
			Highest	1907.6	17.64
		2	Lowest	1852.4	16.91
			Middle	1880.0	17.01
			Highest	1907.6	16.98
		3	Lowest	1852.4	17.88
			Middle	1880.0	17.97
			Highest	1907.6	17.82
		4	Lowest	1852.4	16.82
			Middle	1880.0	16.99
			Highest	1907.6	16.86
		5	Lowest	1852.4	20.47
			Middle	1880.0	20.59
			Highest	1907.6	20.45



Band	Modulation	Sub-test	CH	Frequency (MHz)	Burst Average Power (dBm)
WCDMA Band V	RMC12.2K	---	Lowest	826.4	22.85
			Middle	836.6	22.91
			Highest	846.6	22.78
HSDPA Band V	QPSK	1	Lowest	826.4	21.97
			Middle	836.6	22.01
			Highest	846.6	21.93
		2	Lowest	826.4	21.82
			Middle	836.6	21.97
			Highest	846.6	21.82
		3	Lowest	826.4	21.36
			Middle	836.6	21.48
			Highest	846.6	21.38
		4	Lowest	826.4	21.34
			Middle	836.6	21.46
			Highest	846.6	21.37
HSUPA Band V	QPSK	1	Lowest	826.4	19.11
			Middle	836.6	19.01
			Highest	846.6	18.97
		2	Lowest	826.4	16.87
			Middle	836.6	17.05
			Highest	846.6	16.84
		3	Lowest	826.4	18.23
			Middle	836.6	18.35
			Highest	846.6	18.16
		4	Lowest	826.4	16.92
			Middle	836.6	17.01
			Highest	846.6	16.88
		5	Lowest	826.4	20.65
			Middle	836.6	20.74
			Highest	846.6	20.61



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	1.4 MHz	QPSK	18607	1850.7	1	0	22.02	0.159
					1	2	21.98	0.158
					1	5	21.87	0.154
					3	0	21.87	0.154
					3	1	21.68	0.147
					3	3	21.65	0.146
			6	0	20.78	0.120		
			1	0	22.01	0.159		
			1	2	22.00	0.158		
			1	5	21.91	0.155		
			3	0	21.88	0.154		
			3	1	21.87	0.154		
			3	3	21.79	0.151		
			6	0	20.76	0.119		
			1	0	21.88	0.154		
			1	2	21.81	0.152		
			1	5	21.81	0.152		
			3	0	21.76	0.150		
		3	1	21.71	0.148			
		3	3	21.50	0.141			
		6	0	20.70	0.117			
		1	0	21.72	0.149			
		1	2	21.69	0.148			
		1	5	21.68	0.147			
		3	0	21.05	0.127			
		3	1	20.98	0.125			
		3	3	20.88	0.122			
		6	0	20.70	0.117			
		1	0	21.24	0.133			
		1	2	21.22	0.132			
		1	5	21.18	0.131			
		3	0	20.95	0.124			
		3	1	20.93	0.124			
		3	3	20.79	0.120			
		6	0	20.19	0.104			
		1	0	21.76	0.150			
1	2	21.70	0.148					
1	5	21.69	0.148					
3	0	20.88	0.122					
3	1	20.84	0.121					
3	3	20.73	0.118					
6	0	20.70	0.117					
16QAM	18607	1850.7	1850.7	1	0	21.72	0.149	
				1	2	21.69	0.148	
				1	5	21.68	0.147	
				3	0	21.05	0.127	
				3	1	20.98	0.125	
				3	3	20.88	0.122	
	6	0	20.70	0.117				
	1	0	21.24	0.133				
	1	2	21.22	0.132				
	1	5	21.18	0.131				
	3	0	20.95	0.124				
	3	1	20.93	0.124				
	3	3	20.79	0.120				
	6	0	20.19	0.104				
	1	0	21.76	0.150				
	1	2	21.70	0.148				
	1	5	21.69	0.148				
	3	0	20.88	0.122				
3	1	20.84	0.121					
3	3	20.73	0.118					
6	0	20.70	0.117					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power			
					Size	Offset	(dBm)	(W)		
LTE Band 2	3 MHz	QPSK	18615	1851.5	1	0	21.85	0.153		
					1	8	21.81	0.152		
					1	14	21.76	0.150		
					8	0	20.88	0.122		
					8	4	20.87	0.122		
					8	7	20.86	0.122		
			15	0	20.86	0.122				
			1	0	21.92	0.156				
			1	8	21.91	0.155				
			1	14	21.87	0.154				
			8	0	20.88	0.122				
			8	4	20.84	0.121				
			8	7	20.83	0.121				
			15	0	20.80	0.120				
			1	0	21.84	0.153				
			1	8	21.83	0.152				
			1	14	21.77	0.150				
			8	0	20.85	0.122				
			8	4	20.83	0.121				
			8	7	20.82	0.121				
			15	0	20.80	0.120				
			1	0	21.23	0.133				
			1	8	21.13	0.130				
			1	14	21.04	0.127				
		8	0	19.96	0.099					
		8	4	19.95	0.099					
		8	7	19.94	0.099					
		15	0	19.88	0.097					
		1	0	21.17	0.131					
		1	8	21.17	0.131					
		1	14	21.09	0.129					
		8	0	19.92	0.098					
		8	4	19.90	0.098					
		8	7	19.88	0.097					
		15	0	19.85	0.097					
		1	0	21.12	0.129					
		1	8	21.08	0.128					
		1	14	21.02	0.126					
		8	0	19.84	0.096					
		8	4	19.83	0.096					
		8	7	19.83	0.096					
		15	0	19.80	0.095					
		18615	1851.5	16QAM	18615	1851.5	1	0	21.13	0.130
							1	8	21.13	0.130
							1	14	21.09	0.129
							8	0	19.92	0.098
							8	4	19.90	0.098
							8	7	19.88	0.097
15	0	19.85	0.097							
18900	1880.0	16QAM	18900	1880.0	1	0	21.17	0.131		
					1	8	21.17	0.131		
					1	14	21.09	0.129		
					8	0	19.92	0.098		
					8	4	19.90	0.098		
					8	7	19.88	0.097		
15	0	19.85	0.097							
19185	1908.5	16QAM	19185	1908.5	1	0	21.12	0.129		
					1	8	21.08	0.128		
					1	14	21.02	0.126		
					8	0	19.84	0.096		
					8	4	19.83	0.096		
					8	7	19.83	0.096		
15	0	19.80	0.095							



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power			
					Size	Offset	(dBm)	(W)		
LTE Band 2	5 MHz	QPSK	18625	1852.5	1	0	21.94	0.156		
					1	12	21.90	0.155		
					1	24	21.84	0.153		
					12	0	20.93	0.124		
					12	6	20.92	0.124		
					12	13	20.92	0.124		
					25	0	20.89	0.123		
			1	0	22.08	0.161				
			1	12	21.89	0.155				
			1	24	21.82	0.152				
			12	0	20.93	0.124				
			12	6	20.86	0.122				
			12	13	20.86	0.122				
			25	0	20.80	0.120				
			1	0	21.94	0.156				
			1	12	21.84	0.153				
			1	24	21.74	0.149				
			12	0	20.80	0.120				
			12	6	20.79	0.120				
			12	13	20.79	0.120				
			25	0	20.75	0.119				
			1	0	21.25	0.133				
			1	12	21.17	0.131				
			1	24	21.16	0.131				
		12	0	19.96	0.099					
		12	6	19.95	0.099					
		12	13	19.95	0.099					
		25	0	19.94	0.099					
		1	0	21.29	0.135					
		1	12	21.09	0.129					
		1	24	21.05	0.127					
		12	0	19.95	0.099					
		12	6	19.91	0.098					
		12	13	19.87	0.097					
		25	0	19.84	0.096					
		1	0	21.87	0.154					
		1	12	21.09	0.129					
		1	24	21.00	0.126					
		12	0	19.81	0.096					
		12	6	19.81	0.096					
		12	11	19.80	0.095					
		25	0	19.74	0.094					
		16QAM	18625	1852.5	18625	1852.5	1	0	21.25	0.133
							1	12	21.17	0.131
							1	24	21.16	0.131
							12	0	19.96	0.099
							12	6	19.95	0.099
							12	13	19.95	0.099
25	0		19.94	0.099						
1	0		21.29	0.135						
1	12		21.09	0.129						
1	24		21.05	0.127						
12	0		19.95	0.099						
12	6		19.91	0.098						
12	13	19.87	0.097							
25	0	19.84	0.096							
1	0	21.87	0.154							
1	12	21.09	0.129							
1	24	21.00	0.126							
12	0	19.81	0.096							
12	6	19.81	0.096							
12	11	19.80	0.095							
25	0	19.74	0.094							



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power			
					Size	Offset	(dBm)	(W)		
LTE Band 2	5 MHz with CA power Pcc: Band 2 Scc: Band 5 (5M)	QPSK	18625	1852.5	1	0	21.56	0.143		
					1	12	21.49	0.141		
					1	24	21.52	0.142		
					12	0	20.56	0.114		
					12	6	20.48	0.112		
					12	13	20.51	0.112		
			25	0	20.46	0.111				
			1	0	21.61	0.145				
			1	12	21.38	0.137				
			1	24	21.34	0.136				
			12	0	20.42	0.110				
			12	6	20.36	0.109				
			12	13	20.42	0.110				
			25	0	20.34	0.108				
			1	0	21.51	0.142				
			1	12	21.40	0.138				
			1	24	21.43	0.139				
			12	0	20.51	0.112				
			12	6	20.55	0.114				
			12	13	20.48	0.112				
			25	0	20.48	0.112				
			1	0	20.79	0.120				
			1	12	20.84	0.121				
			1	24	20.72	0.118				
		12	0	19.48	0.089					
		12	6	19.49	0.089					
		12	13	19.54	0.090					
		25	0	19.53	0.090					
		1	0	20.80	0.120					
		1	12	20.64	0.116					
		1	24	20.54	0.113					
		12	0	19.46	0.088					
		12	6	19.46	0.088					
		12	13	19.44	0.088					
		25	0	19.33	0.086					
		1	0	20.72	0.118					
		1	12	20.53	0.113					
		1	24	20.48	0.112					
		12	0	19.49	0.089					
		12	6	19.52	0.090					
		12	11	19.39	0.087					
		25	0	19.37	0.086					
		16QAM	18625	1852.5	18625	1852.5	1	0	20.79	0.120
							1	12	20.84	0.121
							1	24	20.72	0.118
							12	0	19.48	0.089
							12	6	19.49	0.089
							12	13	19.54	0.090
25	0		19.53	0.090						
1	0		20.80	0.120						
1	12		20.64	0.116						
1	24		20.54	0.113						
12	0		19.46	0.088						
12	6		19.46	0.088						
12	13	19.44	0.088							
25	0	19.33	0.086							
1	0	20.72	0.118							
1	12	20.53	0.113							
1	24	20.48	0.112							
12	0	19.49	0.089							
12	6	19.52	0.090							
12	11	19.39	0.087							
25	0	19.37	0.086							



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power			
					Size	Offset	(dBm)	(W)		
LTE Band 2	5 MHz with CA power Pcc: Band 2 Scc: Band 5 (10M)	QPSK	18625	1852.5	1	0	21.55	0.143		
					1	12	21.52	0.142		
					1	24	21.52	0.142		
					12	0	20.48	0.112		
					12	6	20.46	0.111		
					12	13	20.54	0.113		
			25	0	20.50	0.112				
			1	0	21.59	0.144				
			1	12	21.41	0.138				
			1	24	21.33	0.136				
			12	0	20.43	0.110				
			12	6	20.40	0.110				
			12	13	20.37	0.109				
			25	0	20.36	0.109				
			1	0	21.49	0.141				
			1	12	21.40	0.138				
			1	24	21.33	0.136				
			12	0	20.52	0.113				
			12	6	20.50	0.112				
			12	13	20.47	0.111				
			25	0	20.46	0.111				
			1	0	20.85	0.122				
			1	12	20.76	0.119				
			1	24	20.72	0.118				
		12	0	19.56	0.090					
		12	6	19.53	0.090					
		12	13	19.55	0.090					
		25	0	19.55	0.090					
		1	0	20.80	0.120					
		1	12	20.59	0.115					
		1	24	20.57	0.114					
		12	0	19.49	0.089					
		12	6	19.38	0.087					
		12	13	19.35	0.086					
		25	0	19.33	0.086					
		1	0	20.75	0.119					
		1	12	20.56	0.114					
		1	24	20.52	0.113					
		12	0	19.50	0.089					
		12	6	19.46	0.088					
		12	11	19.41	0.087					
		25	0	19.42	0.087					
		16QAM	18625	1852.5	18625	1852.5	1	0	20.80	0.120
							1	12	20.59	0.115
							1	24	20.57	0.114
							12	0	19.49	0.089
							12	6	19.38	0.087
							12	13	19.35	0.086
25	0		19.33	0.086						
1	0		20.75	0.119						
1	12		20.56	0.114						
1	24		20.52	0.113						
12	0		19.50	0.089						
12	6		19.46	0.088						
12	11	19.41	0.087							
25	0	19.42	0.087							



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power			
					Size	Offset	(dBm)	(W)		
LTE Band 2	5 MHz with CA power Pcc: Band 2 Scc: Band 12 (3M)	QPSK	18625	1852.5	1	0	21.53	0.142		
					1	12	21.49	0.141		
					1	24	21.43	0.139		
					12	0	20.55	0.114		
					12	6	20.53	0.113		
					12	13	20.47	0.111		
			25	0	20.46	0.111				
			1	0	21.60	0.145				
			1	12	21.44	0.139				
			1	24	21.38	0.137				
			12	0	20.44	0.111				
			12	6	20.40	0.110				
			12	13	20.41	0.110				
			25	0	20.28	0.107				
			1	0	21.50	0.141				
			1	12	21.38	0.137				
			1	24	21.40	0.138				
			12	0	20.53	0.113				
			12	6	20.47	0.111				
			12	13	20.53	0.113				
			25	0	20.42	0.110				
			1	0	20.78	0.120				
			1	12	20.76	0.119				
			1	24	20.77	0.119				
		12	0	19.56	0.090					
		12	6	19.51	0.089					
		12	13	19.50	0.089					
		25	0	19.47	0.089					
		1	0	20.83	0.121					
		1	12	20.65	0.116					
		1	24	20.64	0.116					
		12	0	19.47	0.089					
		12	6	19.40	0.087					
		12	13	19.37	0.086					
		25	0	19.37	0.086					
		1	0	20.66	0.116					
		1	12	20.52	0.113					
		1	24	20.47	0.111					
		12	0	19.48	0.089					
		12	6	19.45	0.088					
		12	11	19.44	0.088					
		25	0	19.40	0.087					
		16QAM	18625	1852.5	18625	1852.5	1	0	20.78	0.120
							1	12	20.76	0.119
							1	24	20.77	0.119
							12	0	19.56	0.090
							12	6	19.51	0.089
							12	13	19.50	0.089
25	0		19.47	0.089						
1	0		20.83	0.121						
1	12		20.65	0.116						
1	24		20.64	0.116						
12	0		19.47	0.089						
12	6		19.40	0.087						
12	13	19.37	0.086							
25	0	19.37	0.086							
1	0	20.66	0.116							
1	12	20.52	0.113							
1	24	20.47	0.111							
12	0	19.48	0.089							
12	6	19.45	0.088							
12	11	19.44	0.088							
25	0	19.40	0.087							



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power			
					Size	Offset	(dBm)	(W)		
LTE Band 2	5 MHz with CA power Pcc: Band 2 Scc: Band 12 (5M)	QPSK	18625	1852.5	1	0	21.52	0.142		
					1	12	21.47	0.140		
					1	24	21.47	0.140		
					12	0	20.51	0.112		
					12	6	20.49	0.112		
					12	13	20.47	0.111		
			25	0	20.54	0.113				
			1	0	21.54	0.143				
			1	12	21.35	0.136				
			1	24	21.29	0.135				
			12	0	20.48	0.112				
			12	6	20.40	0.110				
			12	13	20.40	0.110				
			25	0	20.35	0.108				
			1	0	21.44	0.139				
			1	12	21.36	0.137				
			1	24	21.41	0.138				
			12	0	20.55	0.114				
			12	6	20.50	0.112				
			12	13	20.49	0.112				
			25	0	20.47	0.111				
			1	0	20.87	0.122				
			1	12	20.81	0.121				
			1	24	20.71	0.118				
		12	0	19.53	0.090					
		12	6	19.52	0.090					
		12	13	19.49	0.089					
		25	0	19.50	0.089					
		1	0	20.85	0.122					
		1	12	20.57	0.114					
		1	24	20.60	0.115					
		12	0	19.53	0.090					
		12	6	19.48	0.089					
		12	13	19.39	0.087					
		25	0	19.34	0.086					
		1	0	20.69	0.117					
		1	12	20.56	0.114					
		1	24	20.47	0.111					
		12	0	19.50	0.089					
		12	6	19.51	0.089					
		12	11	19.44	0.088					
		25	0	19.38	0.087					
		16QAM	18625	1852.5	18625	1852.5	1	0	20.81	0.121
							1	12	20.81	0.121
							1	24	20.71	0.118
							12	0	19.53	0.090
							12	6	19.52	0.090
							12	13	19.49	0.089
25	0		19.50	0.089						
1	0		20.85	0.122						
1	12		20.57	0.114						
1	24		20.60	0.115						
12	0		19.53	0.090						
12	6		19.48	0.089						
12	13	19.39	0.087							
25	0	19.34	0.086							
1	0	20.69	0.117							
1	12	20.56	0.114							
1	24	20.47	0.111							
12	0	19.50	0.089							
12	6	19.51	0.089							
12	11	19.44	0.088							
25	0	19.38	0.087							



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power			
					Size	Offset	(dBm)	(W)		
LTE Band 2	5 MHz with CA power Pcc: Band 2 Scc: Band 12 (10M)	QPSK	18625	1852.5	1	0	21.51	0.142		
					1	12	21.54	0.143		
					1	24	21.43	0.139		
					12	0	20.56	0.114		
					12	6	20.49	0.112		
					12	13	20.52	0.113		
			25	0	20.53	0.113				
			1	0	21.53	0.142				
			1	12	21.41	0.138				
			1	24	21.34	0.136				
			12	0	20.46	0.111				
			12	6	20.43	0.110				
			12	13	20.37	0.109				
			25	0	20.33	0.108				
			1	0	21.48	0.141				
			1	12	21.41	0.138				
			1	24	21.37	0.137				
			12	0	20.49	0.112				
			12	6	20.48	0.112				
			12	13	20.48	0.112				
			25	0	20.47	0.111				
			1	0	20.79	0.120				
			1	12	20.82	0.121				
			1	24	20.71	0.118				
		12	0	19.56	0.090					
		12	6	19.55	0.090					
		12	13	19.50	0.089					
		25	0	19.51	0.089					
		1	0	20.83	0.121					
		1	12	20.65	0.116					
		1	24	20.59	0.115					
		12	0	19.51	0.089					
		12	6	19.47	0.089					
		12	13	19.36	0.086					
		25	0	19.33	0.086					
		1	0	20.75	0.119					
		1	12	20.56	0.114					
		1	24	20.54	0.113					
		12	0	19.48	0.089					
		12	6	19.46	0.088					
		12	11	19.48	0.089					
		25	0	19.41	0.087					
		16QAM	18625	1852.5	18625	1852.5	1	0	20.79	0.120
							1	12	20.82	0.121
							1	24	20.71	0.118
							12	0	19.56	0.090
							12	6	19.55	0.090
							12	13	19.50	0.089
25	0		19.51	0.089						
1	0		20.83	0.121						
1	12		20.65	0.116						
1	24		20.59	0.115						
12	0		19.51	0.089						
12	6		19.47	0.089						
12	13	19.36	0.086							
25	0	19.33	0.086							
1	0	20.75	0.119							
1	12	20.56	0.114							
1	24	20.54	0.113							
12	0	19.48	0.089							
12	6	19.46	0.088							
12	11	19.48	0.089							
25	0	19.41	0.087							



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power			
					Size	Offset	(dBm)	(W)		
LTE Band 2	5 MHz with CA power Pcc: Band 2 Scc: Band 29 (3M)	QPSK	18625	1852.5	1	0	21.55	0.143		
					1	12	21.44	0.139		
					1	24	21.46	0.140		
					12	0	20.62	0.115		
					12	6	20.51	0.112		
					12	13	20.41	0.110		
			25	0	20.54	0.113				
			1	0	21.56	0.143				
			1	12	21.46	0.140				
			1	24	21.36	0.137				
			12	0	20.45	0.111				
			12	6	20.32	0.108				
			12	13	20.34	0.108				
			25	0	20.18	0.104				
			1	0	21.46	0.140				
			1	12	21.45	0.140				
			1	24	21.42	0.139				
			12	0	20.59	0.115				
			12	6	20.46	0.111				
			12	13	20.62	0.115				
			25	0	20.38	0.109				
			1	0	20.81	0.121				
			1	12	20.85	0.122				
			1	24	20.74	0.119				
		12	0	19.62	0.092					
		12	6	19.58	0.091					
		12	13	19.58	0.091					
		25	0	19.38	0.087					
		1	0	20.84	0.121					
		1	12	20.56	0.114					
		1	24	20.58	0.114					
		12	0	19.48	0.089					
		12	6	19.38	0.087					
		12	13	19.45	0.088					
		25	0	19.32	0.086					
		1	0	20.58	0.114					
		1	12	20.52	0.113					
		1	24	20.51	0.112					
		12	0	19.40	0.087					
		12	6	19.37	0.086					
		12	11	19.53	0.090					
		25	0	19.43	0.088					
		18625	1852.5	16QAM	18625	1852.5	1	0	20.81	0.121
		1	12				20.85	0.122		
		1	24				20.74	0.119		
		12	0				19.62	0.092		
		12	6				19.58	0.091		
		12	13				19.58	0.091		
25	0	19.38	0.087							
1	0	20.84	0.121							
1	12	20.56	0.114							
1	24	20.58	0.114							
12	0	19.48	0.089							
12	6	19.38	0.087							
12	13	19.45	0.088							
25	0	19.32	0.086							
1	0	20.58	0.114							
1	12	20.52	0.113							
1	24	20.51	0.112							
12	0	19.40	0.087							
12	6	19.37	0.086							
12	11	19.53	0.090							
25	0	19.43	0.088							



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power			
					Size	Offset	(dBm)	(W)		
LTE Band 2	5 MHz with CA power Pcc: Band 2 Scc: Band 29 (5M)	QPSK	18625	1852.5	1	0	21.53	0.142		
					1	12	21.55	0.143		
					1	24	21.45	0.140		
					12	0	20.57	0.114		
					12	6	20.56	0.114		
					12	13	20.52	0.113		
			25	0	20.50	0.112				
			1	0	21.52	0.142				
			1	12	21.45	0.140				
			1	24	21.29	0.135				
			12	0	20.53	0.113				
			12	6	20.49	0.112				
			12	13	20.40	0.110				
			25	0	20.38	0.109				
			1	0	21.59	0.144				
			1	12	21.40	0.138				
			1	24	21.48	0.141				
			12	0	20.57	0.114				
			12	6	20.49	0.112				
			12	13	20.62	0.115				
			25	0	20.38	0.109				
			1	0	20.79	0.120				
			1	12	20.77	0.119				
			1	24	20.76	0.119				
		12	0	19.47	0.089					
		12	6	19.46	0.088					
		12	13	19.42	0.087					
		25	0	19.50	0.089					
		1	0	20.77	0.119					
		1	12	20.57	0.114					
		1	24	20.67	0.117					
		12	0	19.38	0.087					
		12	6	19.42	0.087					
		12	13	19.45	0.088					
		25	0	19.41	0.087					
		1	0	20.58	0.114					
		1	12	20.56	0.114					
		1	24	20.54	0.113					
		12	0	19.48	0.089					
		12	6	19.38	0.087					
		12	11	19.40	0.087					
		25	0	19.44	0.088					
		18625	1852.5	16QAM	18625	1852.5	1	0	20.77	0.119
		1	12				20.57	0.114		
		1	24				20.67	0.117		
		12	0				19.38	0.087		
		12	6				19.42	0.087		
		12	13				19.45	0.088		
25	0	19.41	0.087							
1	0	20.58	0.114							
1	12	20.56	0.114							
1	24	20.54	0.113							
12	0	19.48	0.089							
12	6	19.38	0.087							
12	11	19.40	0.087							
25	0	19.44	0.088							
18900	1880.0	18900	1880.0		1880.0	1	0	20.58	0.114	
1	12					20.56	0.114			
1	24					20.54	0.113			
12	0					19.48	0.089			
12	6					19.38	0.087			
12	11					19.40	0.087			
25	0	19.44	0.088							
19175	1907.5	19175	1907.5		1907.5	1	0	20.58	0.114	
1	12					20.56	0.114			
1	24					20.54	0.113			
12	0			19.48		0.089				
12	6			19.38		0.087				
12	11			19.40		0.087				
25	0	19.44	0.088							



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power			
					Size	Offset	(dBm)	(W)		
LTE Band 2	5 MHz with CA power Pcc: Band 2 Scc: Band 29 (10M)	QPSK	18625	1852.5	1	0	21.52	0.142		
					1	12	21.55	0.143		
					1	24	21.42	0.139		
					12	0	20.45	0.111		
					12	6	20.54	0.113		
					12	13	20.47	0.111		
			25	0	20.37	0.109				
			1	0	21.62	0.145				
			1	12	21.47	0.140				
			1	24	21.45	0.140				
			12	0	20.40	0.110				
			12	6	20.35	0.108				
			12	13	20.47	0.111				
			25	0	20.22	0.105				
			1	0	21.42	0.139				
			1	12	21.39	0.138				
			1	24	21.36	0.137				
			12	0	20.55	0.114				
			12	6	20.49	0.112				
			12	13	20.48	0.112				
			25	0	20.43	0.110				
			1	0	20.84	0.121				
			1	12	20.66	0.116				
			1	24	20.71	0.118				
		12	0	19.53	0.090					
		12	6	19.60	0.091					
		12	13	19.48	0.089					
		25	0	19.55	0.090					
		1	0	20.86	0.122					
		1	12	20.67	0.117					
		1	24	20.61	0.115					
		12	0	19.46	0.088					
		12	6	19.32	0.086					
		12	13	19.32	0.086					
		25	0	19.36	0.086					
		1	0	20.65	0.116					
		1	12	20.45	0.111					
		1	24	20.37	0.109					
		12	0	19.42	0.087					
		12	6	19.46	0.088					
		12	11	19.51	0.089					
		25	0	19.33	0.086					
		16QAM	18625	1852.5	18625	1852.5	1	0	20.84	0.121
							1	12	20.66	0.116
							1	24	20.71	0.118
							12	0	19.53	0.090
							12	6	19.60	0.091
							12	13	19.48	0.089
25	0		19.55	0.090						
1	0		20.86	0.122						
1	12		20.67	0.117						
1	24		20.61	0.115						
12	0		19.46	0.088						
12	6		19.32	0.086						
12	13	19.32	0.086							
25	0	19.36	0.086							
1	0	20.65	0.116							
1	12	20.45	0.111							
1	24	20.37	0.109							
12	0	19.42	0.087							
12	6	19.46	0.088							
12	11	19.51	0.089							
25	0	19.33	0.086							



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	5 MHz with CA power Pcc: Band 2 Scc: Band 30 (5M)	QPSK	18625	1852.5	1	0	21.58	0.144
					1	12	21.49	0.141
					1	24	21.56	0.143
					12	0	20.46	0.111
					12	6	20.53	0.113
					12	13	20.42	0.110
			25	0	20.45	0.111		
			1	0	21.51	0.142		
			1	12	21.42	0.139		
			1	24	21.31	0.135		
			12	0	20.34	0.108		
			12	6	20.34	0.108		
			12	13	20.46	0.111		
			25	0	20.26	0.106		
			1	0	21.47	0.140		
			1	12	21.36	0.137		
			1	24	21.40	0.138		
			12	0	20.54	0.113		
			12	6	20.59	0.115		
			12	13	20.52	0.113		
			25	0	20.41	0.110		
			1	0	20.77	0.119		
			1	12	20.91	0.123		
			1	24	20.66	0.116		
		12	0	19.44	0.088			
		12	6	19.50	0.089			
		12	13	19.53	0.090			
		25	0	19.55	0.090			
		1	0	20.86	0.122			
		1	12	20.66	0.116			
		1	24	20.59	0.115			
		12	0	19.47	0.089			
		12	6	19.50	0.089			
		12	13	19.53	0.090			
		25	0	19.32	0.086			
		1	0	20.70	0.117			
		1	12	20.45	0.111			
		1	24	20.47	0.111			
		12	0	19.45	0.088			
		12	6	19.44	0.088			
		12	11	19.48	0.089			
		25	0	19.43	0.088			
		16QAM	18625	1852.5	1	0	20.77	0.119
					1	12	20.91	0.123
					1	24	20.66	0.116
					12	0	19.44	0.088
					12	6	19.50	0.089
					12	13	19.53	0.090
25	0		19.55	0.090				
1	0		20.86	0.122				
1	12		20.66	0.116				
1	24		20.59	0.115				
12	0		19.47	0.089				
12	6		19.50	0.089				
12	13		19.53	0.090				
25	0		19.32	0.086				
1	0		20.70	0.117				
1	12		20.45	0.111				
1	24		20.47	0.111				
12	0		19.45	0.088				
12	6		19.44	0.088				
12	11		19.48	0.089				
25	0		19.43	0.088				



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power			
					Size	Offset	(dBm)	(W)		
LTE Band 2	5 MHz with CA power Pcc: Band 2 Scc: Band 30 (10M)	QPSK	18625	1852.5	1	0	21.56	0.143		
					1	12	21.54	0.143		
					1	24	21.56	0.143		
					12	0	20.47	0.111		
					12	6	20.40	0.110		
					12	13	20.54	0.113		
			25	0	20.41	0.110				
			1	0	21.55	0.143				
			1	12	21.38	0.137				
			1	24	21.32	0.136				
			12	0	20.41	0.110				
			12	6	20.46	0.111				
			12	13	20.45	0.111				
			25	0	20.39	0.109				
			1	0	21.55	0.143				
			1	12	21.42	0.139				
			1	24	21.44	0.139				
			12	0	20.49	0.112				
			12	6	20.47	0.111				
			12	13	20.47	0.111				
			25	0	20.50	0.112				
			1	0	20.80	0.120				
			1	12	20.88	0.122				
			1	24	20.69	0.117				
		12	0	19.53	0.090					
		12	6	19.54	0.090					
		12	13	19.49	0.089					
		25	0	19.59	0.091					
		1	0	20.73	0.118					
		1	12	20.70	0.117					
		1	24	20.53	0.113					
		12	0	19.39	0.087					
		12	6	19.49	0.089					
		12	13	19.49	0.089					
		25	0	19.35	0.086					
		1	0	20.76	0.119					
		1	12	20.45	0.111					
		1	24	20.57	0.114					
		12	0	19.47	0.089					
		12	6	19.45	0.088					
		12	11	19.47	0.089					
		25	0	19.29	0.085					
		18625	1852.5	16QAM	18625	1852.5	1	0	20.76	0.119
		1	12				20.45	0.111		
		1	24				20.57	0.114		
		12	0				19.47	0.089		
		12	6				19.45	0.088		
		12	11				19.47	0.089		
25	0	19.29	0.085							
18900	1880.0	18900	1880.0		1880.0	1	0	20.76	0.119	
1	12					20.45	0.111			
1	24					20.57	0.114			
12	0					19.47	0.089			
12	6					19.45	0.088			
12	11					19.47	0.089			
19175	1907.5	19175	1907.5		1907.5	1	0	20.76	0.119	
1	12					20.45	0.111			
1	24					20.57	0.114			
12	0					19.47	0.089			
12	6					19.45	0.088			
12	11					19.47	0.089			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	10 MHz	QPSK	18650	1855.0	1	0	22.22	0.167
					1	24	22.00	0.158
					1	49	21.98	0.158
					25	0	21.23	0.133
					25	12	21.12	0.129
					25	25	21.11	0.129
			50	0	21.04	0.127		
			1	0	22.23	0.167		
			1	24	22.00	0.158		
			1	49	21.82	0.152		
			25	0	21.11	0.129		
			25	12	20.99	0.126		
			25	25	20.88	0.122		
			50	0	20.85	0.122		
			1	0	21.96	0.157		
			1	24	21.80	0.151		
			1	49	21.71	0.148		
			25	0	20.92	0.124		
		25	12	20.83	0.121			
		25	25	20.81	0.121			
		50	0	20.71	0.118			
		1	0	21.59	0.144			
		1	24	21.32	0.136			
		1	49	21.30	0.135			
		25	0	20.23	0.105			
		25	12	20.14	0.103			
		25	25	20.08	0.102			
		50	0	20.05	0.101			
		1	0	21.53	0.142			
		1	24	21.28	0.134			
		1	49	21.09	0.129			
		25	0	20.07	0.102			
		25	12	19.99	0.100			
		25	25	19.87	0.097			
		50	0	19.85	0.097			
		1	0	21.32	0.136			
1	24	21.08	0.128					
1	49	21.00	0.126					
25	0	19.89	0.097					
25	12	19.76	0.095					
25	25	19.74	0.094					
50	0	19.69	0.093					
16QAM	18650	1855.0	1855.0	1	0	21.32	0.136	
				1	24	21.30	0.135	
				1	49	21.30	0.135	
				25	0	20.23	0.105	
				25	12	20.14	0.103	
				25	25	20.08	0.102	
	50	0	20.05	0.101				
	1	0	21.53	0.142				
	1	24	21.28	0.134				
	1	49	21.09	0.129				
	25	0	20.07	0.102				
	25	12	19.99	0.100				
	25	25	19.87	0.097				
	50	0	19.85	0.097				
	1	0	21.32	0.136				
	1	24	21.08	0.128				
	1	49	21.00	0.126				
	25	0	19.89	0.097				
25	12	19.76	0.095					
25	25	19.74	0.094					
50	0	19.69	0.093					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	10 MHz with CA power Pcc: Band 2 Scc: Band 5 (5M)	QPSK	18650	1855.0	1	0	21.84	0.153
					1	24	21.54	0.143
					1	49	21.53	0.142
					25	0	20.84	0.121
					25	12	20.69	0.117
					25	25	20.69	0.117
			50	0	20.63	0.116		
			1	0	21.72	0.149		
			1	24	21.53	0.142		
			1	49	21.32	0.136		
			25	0	20.68	0.117		
			25	12	20.47	0.111		
			25	25	20.35	0.108		
			50	0	20.34	0.108		
			1	0	21.48	0.141		
			1	24	21.33	0.136		
			1	49	21.22	0.132		
			25	0	20.41	0.110		
		25	12	20.30	0.107			
		25	25	20.26	0.106			
		50	0	20.25	0.106			
		1	0	21.20	0.132			
		1	24	20.91	0.123			
		1	49	20.84	0.121			
		25	0	19.86	0.097			
		25	12	19.71	0.094			
		25	25	19.63	0.092			
		50	0	19.60	0.091			
		1	0	21.03	0.127			
		1	24	20.76	0.119			
		1	49	20.57	0.114			
		25	0	19.65	0.092			
		25	12	19.56	0.090			
		25	25	19.39	0.087			
		50	0	19.36	0.086			
		1	0	20.89	0.123			
		1	24	20.63	0.116			
		1	49	20.51	0.112			
		25	0	19.38	0.087			
		25	12	19.24	0.084			
		25	25	19.21	0.083			
		50	0	19.24	0.084			
		16QAM	18650	1855.0	1	0	21.03	0.127
					1	24	20.76	0.119
					1	49	20.57	0.114
					25	0	19.65	0.092
					25	12	19.56	0.090
					25	25	19.39	0.087
50	0		19.36	0.086				
1	0		20.89	0.123				
1	24		20.63	0.116				
1	49		20.51	0.112				
25	0		19.38	0.087				
25	12		19.24	0.084				
25	25		19.21	0.083				
50	0		19.24	0.084				
18900	1880.0		1	0	21.03	0.127		
			1	24	20.76	0.119		
			1	49	20.57	0.114		
			25	0	19.65	0.092		
		25	12	19.56	0.090			
		25	25	19.39	0.087			
50	0	19.36	0.086					
19150	1905.0	1	0	20.89	0.123			
		1	24	20.63	0.116			
		1	49	20.51	0.112			
		25	0	19.38	0.087			
		25	12	19.24	0.084			
		25	25	19.21	0.083			
50	0	19.24	0.084					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	10 MHz with CA power Pcc: Band 2 Scc: Band 5 (10M)	QPSK	18650	1855.0	1	0	21.81	0.152
					1	24	21.52	0.142
					1	49	21.55	0.143
					25	0	20.86	0.122
					25	12	20.69	0.117
					25	25	20.68	0.117
			50	0	20.62	0.115		
			18900	1880.0	1	0	21.76	0.150
					1	24	21.48	0.141
					1	49	21.31	0.135
					25	0	20.65	0.116
					25	12	20.51	0.112
					25	25	20.36	0.109
			50	0	20.35	0.108		
			19150	1905.0	1	0	21.48	0.141
					1	24	21.25	0.133
					1	49	21.21	0.132
					25	0	20.45	0.111
		25			12	20.38	0.109	
		25			25	20.34	0.108	
		50	0	20.22	0.105			
		16QAM	18650	1855.0	1	0	21.22	0.132
					1	24	20.89	0.123
					1	49	20.86	0.122
					25	0	19.80	0.095
					25	12	19.69	0.093
					25	25	19.67	0.093
			50	0	19.57	0.091		
			18900	1880.0	1	0	21.05	0.127
					1	24	20.72	0.118
					1	49	20.61	0.115
					25	0	19.59	0.091
					25	12	19.51	0.089
					25	25	19.38	0.087
			50	0	19.37	0.086		
			19150	1905.0	1	0	20.88	0.122
					1	24	20.57	0.114
					1	49	20.47	0.111
					25	0	19.43	0.088
		25			12	19.20	0.083	
		25			25	19.19	0.083	
		50	0	19.23	0.084			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	10 MHz with CA power Pcc: Band 2 Scc: Band 12 (3M)	QPSK	18650	1855.0	1	0	21.79	0.151
					1	24	21.58	0.144
					1	49	21.58	0.144
					25	0	20.84	0.121
					25	12	20.74	0.119
					25	25	20.72	0.118
			50	0	20.65	0.116		
			1	0	21.76	0.150		
			1	24	21.51	0.142		
			1	49	21.32	0.136		
			25	0	20.67	0.117		
			25	12	20.51	0.112		
			25	25	20.36	0.109		
			50	0	20.37	0.109		
			1	0	21.49	0.141		
			1	24	21.25	0.133		
			1	49	21.17	0.131		
			25	0	20.37	0.109		
		25	12	20.35	0.108			
		25	25	20.32	0.108			
		50	0	20.21	0.105			
		1	0	21.23	0.133			
		1	24	20.87	0.122			
		1	49	20.83	0.121			
		25	0	19.84	0.096			
		25	12	19.68	0.093			
		25	25	19.65	0.092			
		50	0	19.59	0.091			
		1	0	21.03	0.127			
		1	24	20.74	0.119			
		1	49	20.60	0.115			
		25	0	19.56	0.090			
		25	12	19.49	0.089			
		25	25	19.38	0.087			
		50	0	19.32	0.086			
		1	0	20.87	0.122			
1	24	20.62	0.115					
1	49	20.50	0.112					
25	0	19.36	0.086					
25	12	19.28	0.085					
25	25	19.26	0.084					
50	0	19.22	0.084					
16QAM	18650	1855.0	1	0	21.03	0.127		
			1	24	20.74	0.119		
			1	49	20.60	0.115		
			25	0	19.56	0.090		
			25	12	19.49	0.089		
			25	25	19.38	0.087		
	50	0	19.32	0.086				
	1	0	20.87	0.122				
	1	24	20.62	0.115				
	1	49	20.50	0.112				
	25	0	19.36	0.086				
	25	12	19.28	0.085				
	25	25	19.26	0.084				
	50	0	19.22	0.084				
	1	0	20.87	0.122				
	1	24	20.62	0.115				
	1	49	20.50	0.112				
	25	0	19.36	0.086				
25	12	19.28	0.085					
25	25	19.26	0.084					
50	0	19.22	0.084					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	10 MHz with CA power Pcc: Band 2 Scc: Band 12 (5M)	QPSK	18650	1855.0	1	0	21.78	0.151
					1	24	21.60	0.145
					1	49	21.59	0.144
					25	0	20.86	0.122
					25	12	20.66	0.116
					25	25	20.65	0.116
			50	0	20.60	0.115		
			1	0	21.76	0.150		
			1	24	21.49	0.141		
			1	49	21.34	0.136		
			25	0	20.68	0.117		
			25	12	20.53	0.113		
			25	25	20.40	0.110		
			50	0	20.37	0.109		
			1	0	21.45	0.140		
			1	24	21.31	0.135		
			1	49	21.17	0.131		
			25	0	20.41	0.110		
		25	12	20.30	0.107			
		25	25	20.29	0.107			
		50	0	20.21	0.105			
		1	0	21.22	0.132			
		1	24	20.83	0.121			
		1	49	20.84	0.121			
		25	0	19.79	0.095			
		25	12	19.66	0.092			
		25	25	19.63	0.092			
		50	0	19.57	0.091			
		1	0	21.03	0.127			
		1	24	20.80	0.120			
		1	49	20.63	0.116			
		25	0	19.63	0.092			
		25	12	19.55	0.090			
		25	25	19.42	0.087			
		50	0	19.37	0.086			
		1	0	20.82	0.121			
1	24	20.60	0.115					
1	49	20.48	0.112					
25	0	19.38	0.087					
25	12	19.25	0.084					
25	25	19.23	0.084					
50	0	19.22	0.084					
16QAM	18900	1880.0	18650	1855.0	1	0	21.03	0.127
16QAM	18900	1880.0	18900	1880.0	1	24	20.80	0.120
16QAM	18900	1880.0	19150	1905.0	1	49	20.63	0.116
16QAM	18900	1880.0	18900	1880.0	25	0	19.63	0.092
16QAM	18900	1880.0	18900	1880.0	25	12	19.55	0.090
16QAM	18900	1880.0	18900	1880.0	25	25	19.42	0.087
16QAM	18900	1880.0	18900	1880.0	50	0	19.37	0.086
16QAM	18900	1880.0	19150	1905.0	1	0	20.82	0.121
16QAM	18900	1880.0	19150	1905.0	1	24	20.60	0.115
16QAM	18900	1880.0	19150	1905.0	1	49	20.48	0.112
16QAM	18900	1880.0	19150	1905.0	25	0	19.38	0.087
16QAM	18900	1880.0	19150	1905.0	25	12	19.25	0.084
16QAM	18900	1880.0	19150	1905.0	25	25	19.23	0.084
16QAM	18900	1880.0	19150	1905.0	50	0	19.22	0.084



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	10 MHz with CA power Pcc: Band 2 Scc: Band 12 (10M)	QPSK	18650	1855.0	1	0	21.82	0.152
					1	24	21.61	0.145
					1	49	21.58	0.144
					25	0	20.79	0.120
					25	12	20.66	0.116
					25	25	20.71	0.118
			50	0	20.64	0.116		
			1	0	21.78	0.151		
			1	24	21.47	0.140		
			1	49	21.30	0.135		
			25	0	20.67	0.117		
			25	12	20.53	0.113		
			25	25	20.40	0.110		
			50	0	20.37	0.109		
			1	0	21.50	0.141		
			1	24	21.28	0.134		
			1	49	21.21	0.132		
			25	0	20.43	0.110		
		25	12	20.32	0.108			
		25	25	20.27	0.106			
		50	0	20.22	0.105			
		1	0	21.24	0.133			
		1	24	20.91	0.123			
		1	49	20.82	0.121			
		25	0	19.84	0.096			
		25	12	19.66	0.092			
		25	25	19.67	0.093			
		50	0	19.62	0.092			
		1	0	20.98	0.125			
		1	24	20.75	0.119			
		1	49	20.60	0.115			
		25	0	19.56	0.090			
		25	12	19.52	0.090			
		25	25	19.37	0.086			
		50	0	19.42	0.087			
		1	0	20.87	0.122			
1	24	20.62	0.115					
1	49	20.50	0.112					
25	0	19.38	0.087					
25	12	19.26	0.084					
25	25	19.22	0.084					
50	0	19.24	0.084					
16QAM	18650	1855.0	1	0	20.87	0.122		
			1	24	20.62	0.115		
			1	49	20.50	0.112		
			25	0	19.38	0.087		
			25	12	19.26	0.084		
			25	25	19.22	0.084		
	50	0	19.24	0.084				
	1	0	20.87	0.122				
	1	24	20.62	0.115				
	1	49	20.50	0.112				
	25	0	19.38	0.087				
	25	12	19.26	0.084				
	25	25	19.22	0.084				
	50	0	19.24	0.084				
	1	0	20.87	0.122				
	1	24	20.62	0.115				
	1	49	20.50	0.112				
	25	0	19.38	0.087				
25	12	19.26	0.084					
25	25	19.22	0.084					
50	0	19.24	0.084					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	10 MHz with CA power Pcc: Band 2 Scc: Band 29 (3M)	QPSK	18650	1855.0	1	0	21.80	0.151
					1	24	21.64	0.146
					1	49	21.57	0.144
					25	0	20.86	0.122
					25	12	20.65	0.116
					25	25	20.81	0.121
			50	0	20.75	0.119		
			18900	1880.0	1	0	21.66	0.147
					1	24	21.56	0.143
					1	49	21.28	0.134
					25	0	20.65	0.116
					25	12	20.48	0.112
					25	25	20.43	0.110
			50	0	20.32	0.108		
			19150	1905.0	1	0	21.53	0.142
					1	24	21.31	0.135
					1	49	21.10	0.129
					25	0	20.43	0.110
		25			12	20.42	0.110	
		25			25	20.33	0.108	
		50	0	20.28	0.107			
		16QAM	18650	1855.0	1	0	21.25	0.133
					1	24	20.97	0.125
					1	49	20.84	0.121
					25	0	19.78	0.095
					25	12	19.63	0.092
					25	25	19.58	0.091
			50	0	19.69	0.093		
			18900	1880.0	1	0	20.95	0.124
					1	24	20.73	0.118
					1	49	20.54	0.113
					25	0	19.53	0.090
					25	12	19.51	0.089
					25	25	19.31	0.085
			50	0	19.26	0.084		
			19150	1905.0	1	0	20.87	0.122
					1	24	20.60	0.115
					1	49	20.46	0.111
					25	0	19.34	0.086
		25			12	19.34	0.086	
		25			25	19.24	0.084	
		50	0	19.26	0.084			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	10 MHz with CA power Pcc: Band 2 Scc: Band 29 (5M)	QPSK	18650	1855.0	1	0	21.79	0.151
					1	24	21.59	0.144
					1	49	21.63	0.146
					25	0	20.75	0.119
					25	12	20.71	0.118
					25	25	20.79	0.120
			50	0	20.59	0.115		
			18900	1880.0	1	0	21.77	0.150
					1	24	21.57	0.144
					1	49	21.26	0.134
					25	0	20.61	0.115
					25	12	20.45	0.111
					25	25	20.27	0.106
			50	0	20.30	0.107		
			19150	1905.0	1	0	21.42	0.139
					1	24	21.18	0.131
					1	49	21.21	0.132
					25	0	20.41	0.110
		25			12	20.37	0.109	
		25			25	20.33	0.108	
		50	0	20.27	0.106			
		16QAM	18650	1855.0	1	0	21.23	0.133
					1	24	20.85	0.122
					1	49	20.85	0.122
					25	0	19.85	0.097
					25	12	19.66	0.092
					25	25	19.57	0.091
			50	0	19.56	0.090		
			18900	1880.0	1	0	20.93	0.124
					1	24	20.65	0.116
					1	49	20.57	0.114
					25	0	19.56	0.090
					25	12	19.55	0.090
					25	25	19.46	0.088
			50	0	19.27	0.085		
			19150	1905.0	1	0	20.96	0.125
					1	24	20.63	0.116
					1	49	20.49	0.112
					25	0	19.29	0.085
		25			12	19.27	0.085	
		25			25	19.26	0.084	
		50	0	19.31	0.085			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	10 MHz with CA power Pcc: Band 2 Scc: Band 29 (10M)	QPSK	18650	1855.0	1	0	21.76	0.150
					1	24	21.62	0.145
					1	49	21.52	0.142
					25	0	20.91	0.123
					25	12	20.70	0.117
					25	25	20.79	0.120
			50	0	20.61	0.115		
			1	0	21.68	0.147		
			1	24	21.60	0.145		
			1	49	21.40	0.138		
			25	0	20.71	0.118		
			25	12	20.54	0.113		
			25	25	20.28	0.107		
			50	0	20.29	0.107		
			1	0	21.57	0.144		
			1	24	21.18	0.131		
			1	49	21.08	0.128		
			25	0	20.36	0.109		
			25	12	20.40	0.110		
			25	25	20.37	0.109		
			50	0	20.31	0.107		
			1	0	21.18	0.131		
			1	24	20.88	0.122		
			1	49	20.77	0.119		
		25	0	19.81	0.096			
		25	12	19.74	0.094			
		25	25	19.60	0.091			
		50	0	19.61	0.091			
		1	0	21.01	0.126			
		1	24	20.67	0.117			
		1	49	20.62	0.115			
		25	0	19.58	0.091			
		25	12	19.56	0.090			
		25	25	19.33	0.086			
		50	0	19.41	0.087			
		1	0	20.79	0.120			
		1	24	20.64	0.116			
		1	49	20.57	0.114			
		25	0	19.41	0.087			
		25	12	19.32	0.086			
		25	25	19.21	0.083			
		50	0	19.27	0.085			
		16QAM	18650	1855.0	1	0	21.01	0.126
					1	24	20.67	0.117
					1	49	20.62	0.115
					25	0	19.58	0.091
					25	12	19.56	0.090
					25	25	19.33	0.086
50	0		19.41	0.087				
1	0		20.79	0.120				
1	24		20.64	0.116				
1	49		20.57	0.114				
25	0		19.41	0.087				
25	12		19.32	0.086				
25	25	19.21	0.083					
50	0	19.27	0.085					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	10 MHz with CA power Pcc: Band 2 Scc: Band 30 (5M)	QPSK	18650	1855.0	1	0	21.88	0.154
					1	24	21.60	0.145
					1	49	21.47	0.140
					25	0	20.91	0.123
					25	12	20.74	0.119
					25	25	20.73	0.118
			50	0	20.61	0.115		
			18900	1880.0	1	0	21.80	0.151
					1	24	21.48	0.141
					1	49	21.37	0.137
					25	0	20.69	0.117
					25	12	20.53	0.113
					25	25	20.30	0.107
			50	0	20.38	0.109		
			19150	1905.0	1	0	21.42	0.139
					1	24	21.27	0.134
					1	49	21.30	0.135
					25	0	20.44	0.111
		25			12	20.33	0.108	
		25			25	20.28	0.107	
		50	0	20.25	0.106			
		16QAM	18650	1855.0	1	0	21.23	0.133
					1	24	20.89	0.123
					1	49	20.82	0.121
					25	0	19.76	0.095
					25	12	19.67	0.093
					25	25	19.66	0.092
			50	0	19.68	0.093		
			18900	1880.0	1	0	21.10	0.129
					1	24	20.69	0.117
					1	49	20.60	0.115
					25	0	19.68	0.093
					25	12	19.65	0.092
					25	25	19.43	0.088
			50	0	19.28	0.085		
			19150	1905.0	1	0	20.87	0.122
1	24				20.55	0.114		
1	49				20.55	0.114		
25	0				19.39	0.087		
25	12	19.20			0.083			
25	25	19.20			0.083			
50	0	19.18	0.083					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power		
					Size	Offset	(dBm)	(W)	
LTE Band 2	10 MHz with CA power Pcc: Band 2 Scc: Band 30 (10M)	QPSK	18650	1855.0	1	0	21.82	0.152	
					1	24	21.48	0.141	
					1	49	21.59	0.144	
					25	0	20.80	0.120	
					25	12	20.71	0.118	
					25	25	20.65	0.116	
			50	0	20.65	0.116			
			18900	1880.0	1	0	21.72	0.149	
					1	24	21.49	0.141	
					1	49	21.38	0.137	
					25	0	20.61	0.115	
					25	12	20.38	0.109	
					25	25	20.34	0.108	
			50	0	20.34	0.108			
			19150	1905.0	1	0	21.53	0.142	
					1	24	21.42	0.139	
					1	49	21.28	0.134	
					25	0	20.50	0.112	
					25	12	20.32	0.108	
					25	25	20.26	0.106	
			50	0	20.28	0.107			
			16QAM	18650	1855.0	1	0	21.11	0.129
						1	24	20.97	0.125
						1	49	20.85	0.122
		25				0	19.84	0.096	
		25				12	19.72	0.094	
		25				25	19.71	0.094	
		50		0	19.54	0.090			
		18900		1880.0	1	0	21.05	0.127	
					1	24	20.76	0.119	
					1	49	20.54	0.113	
					25	0	19.64	0.092	
					25	12	19.56	0.090	
					25	25	19.47	0.089	
		50		0	19.26	0.084			
		19150		1905.0	1	0	20.94	0.124	
					1	24	20.54	0.113	
					1	49	20.57	0.114	
					25	0	19.34	0.086	
					25	12	19.20	0.083	
					25	25	19.17	0.083	
		50		0	19.28	0.085			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	15 MHz	QPSK	18675	1857.5	1	0	22.01	0.159
					1	38	21.98	0.158
					1	74	21.66	0.147
					38	0	21.02	0.126
					38	18	21.02	0.126
					38	37	20.98	0.125
			75	0	20.98	0.125		
			1	0	21.95	0.157		
			1	38	21.94	0.156		
			1	74	21.50	0.141		
			38	0	20.98	0.125		
			38	18	20.92	0.124		
			38	37	20.92	0.124		
			75	0	20.88	0.122		
			1	0	21.96	0.157		
			1	38	21.90	0.155		
			1	74	21.54	0.143		
			38	0	20.96	0.125		
		38	18	20.96	0.125			
		38	37	20.91	0.123			
		75	0	20.91	0.123			
		1	0	21.34	0.136			
		1	38	21.30	0.135			
		1	74	21.25	0.133			
		38	0	20.01	0.100			
		38	18	20.00	0.100			
		38	37	19.99	0.100			
		75	0	19.96	0.099			
		1	0	21.23	0.133			
		1	38	21.18	0.131			
		1	74	21.06	0.128			
		38	0	19.96	0.099			
		38	18	19.93	0.098			
		38	37	19.92	0.098			
		75	0	19.86	0.097			
		1	0	21.27	0.134			
1	38	21.23	0.133					
1	74	21.18	0.131					
38	0	19.99	0.100					
38	18	19.98	0.100					
38	37	19.90	0.098					
75	0	19.85	0.097					
16QAM	18675	1857.5	1857.5	1	0	21.23	0.133	
				1	38	21.18	0.131	
				1	74	21.06	0.128	
				38	0	19.96	0.099	
				38	18	19.93	0.098	
				38	37	19.92	0.098	
	75	0	19.86	0.097				
	1	0	21.27	0.134				
	1	38	21.23	0.133				
	1	74	21.18	0.131				
	38	0	19.99	0.100				
	38	18	19.98	0.100				
	38	37	19.90	0.098				
	75	0	19.85	0.097				
	1	0	21.27	0.134				
	1	38	21.23	0.133				
	1	74	21.18	0.131				
	38	0	19.99	0.100				
38	18	19.98	0.100					
38	37	19.90	0.098					
75	0	19.85	0.097					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	15 MHz with CA power Pcc: Band 2 Scc: Band 5 (5M)	QPSK	18675	1857.5	1	0	21.53	0.142
					1	38	21.58	0.144
					1	74	21.26	0.134
					38	0	20.54	0.113
					38	18	20.62	0.115
					38	37	20.59	0.115
			75	0	20.60	0.115		
			1	0	21.53	0.142		
			1	38	21.47	0.140		
			1	74	20.96	0.125		
			38	0	20.52	0.113		
			38	18	20.50	0.112		
			38	37	20.43	0.110		
			75	0	20.43	0.110		
			1	0	21.46	0.140		
			1	38	21.41	0.138		
			1	74	21.14	0.130		
			38	0	20.47	0.111		
		38	18	20.49	0.112			
		38	37	20.43	0.110			
		75	0	20.37	0.109			
		1	0	20.92	0.124			
		1	38	20.90	0.123			
		1	74	20.78	0.120			
		38	0	19.52	0.090			
		38	18	19.53	0.090			
		38	37	19.55	0.090			
		75	0	19.57	0.091			
		1	0	20.73	0.118			
		1	38	20.65	0.116			
		1	74	20.57	0.114			
		38	0	19.50	0.089			
		38	18	19.49	0.089			
		38	37	19.44	0.088			
		75	0	19.35	0.086			
		1	0	20.76	0.119			
1	38	20.69	0.117					
1	74	20.67	0.117					
38	0	19.50	0.089					
38	18	19.46	0.088					
38	37	19.42	0.087					
75	0	19.40	0.087					
16QAM	18675	1857.5	1857.5	1	0	20.92	0.124	
				1	38	20.90	0.123	
				1	74	20.78	0.120	
				38	0	19.52	0.090	
				38	18	19.53	0.090	
				38	37	19.55	0.090	
	75	0	19.57	0.091				
	1	0	20.73	0.118				
	1	38	20.65	0.116				
	1	74	20.57	0.114				
	38	0	19.50	0.089				
	38	18	19.49	0.089				
	38	37	19.44	0.088				
	75	0	19.35	0.086				
	1	0	20.76	0.119				
	1	38	20.69	0.117				
	1	74	20.67	0.117				
	38	0	19.50	0.089				
38	18	19.46	0.088					
38	37	19.42	0.087					
75	0	19.40	0.087					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power			
					Size	Offset	(dBm)	(W)		
LTE Band 2	15 MHz with CA power Pcc: Band 2 Scc: Band 5 (10M)	QPSK	18675	1857.5	1	0	21.60	0.145		
					1	38	21.59	0.144		
					1	74	21.27	0.134		
					38	0	20.55	0.114		
					38	18	20.60	0.115		
					38	37	20.51	0.112		
			75	0	20.58	0.114				
			1	0	21.49	0.141				
			1	38	21.40	0.138				
			1	74	20.96	0.125				
			38	0	20.46	0.111				
			38	18	20.44	0.111				
			38	37	20.50	0.112				
			75	0	20.39	0.109				
			1	0	21.46	0.140				
			1	38	21.41	0.138				
			1	74	21.14	0.130				
			38	0	20.49	0.112				
			38	18	20.45	0.111				
			38	37	20.45	0.111				
			75	0	20.36	0.109				
			1	0	20.87	0.122				
			1	38	20.85	0.122				
			1	74	20.85	0.122				
		38	0	19.59	0.091					
		38	18	19.60	0.091					
		38	37	19.57	0.091					
		75	0	19.54	0.090					
		1	0	20.80	0.120					
		1	38	20.65	0.116					
		1	74	20.55	0.114					
		38	0	19.51	0.089					
		38	18	19.41	0.087					
		38	37	19.38	0.087					
		75	0	19.37	0.086					
		1	0	20.75	0.119					
		1	38	20.79	0.120					
		1	74	20.66	0.116					
		38	0	19.54	0.090					
		38	18	19.46	0.088					
		38	37	19.40	0.087					
		75	0	19.35	0.086					
		16QAM	18675	1857.5	18675	1857.5	1	0	20.85	0.122
							1	38	20.85	0.122
							1	74	20.85	0.122
							38	0	19.59	0.091
							38	18	19.60	0.091
							38	37	19.57	0.091
75	0		19.54	0.090						
1	0		20.80	0.120						
1	38		20.65	0.116						
1	74		20.55	0.114						
38	0		19.51	0.089						
38	18		19.41	0.087						
38	37	19.38	0.087							
75	0	19.37	0.086							
1	0	20.75	0.119							
1	38	20.79	0.120							
1	74	20.66	0.116							
38	0	19.54	0.090							
38	18	19.46	0.088							
38	37	19.40	0.087							
75	0	19.35	0.086							



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	15 MHz with CA power Pcc: Band 2 Scc: Band 12 (3M)	QPSK	18675	1857.5	1	0	21.53	0.142
					1	38	21.63	0.146
					1	74	21.19	0.132
					38	0	20.62	0.115
					38	18	20.61	0.115
					38	37	20.58	0.114
			75	0	20.61	0.115		
			1	0	21.48	0.141		
			1	38	21.40	0.138		
			1	74	21.00	0.126		
			38	0	20.42	0.110		
			38	18	20.48	0.112		
			38	37	20.49	0.112		
			75	0	20.45	0.111		
			1	0	21.51	0.142		
			1	38	21.39	0.138		
			1	74	21.13	0.130		
			38	0	20.49	0.112		
		38	18	20.51	0.112			
		38	37	20.47	0.111			
		75	0	20.39	0.109			
		1	0	20.89	0.123			
		1	38	20.89	0.123			
		1	74	20.82	0.121			
		38	0	19.61	0.091			
		38	18	19.51	0.089			
		38	37	19.58	0.091			
		75	0	19.57	0.091			
		1	0	20.78	0.120			
		1	38	20.67	0.117			
		1	74	20.61	0.115			
		38	0	19.49	0.089			
		38	18	19.49	0.089			
		38	37	19.39	0.087			
		75	0	19.34	0.086			
		1	0	20.77	0.119			
		1	38	20.79	0.120			
		1	74	20.72	0.118			
		38	0	19.46	0.088			
		38	18	19.47	0.089			
		38	37	19.41	0.087			
		75	0	19.42	0.087			
16QAM	18675	1857.5	1	0	20.78	0.120		
			1	38	20.67	0.117		
			1	74	20.61	0.115		
			38	0	19.49	0.089		
			38	18	19.49	0.089		
			38	37	19.39	0.087		
	75	0	19.34	0.086				
	1	0	20.77	0.119				
	1	38	20.79	0.120				
	1	74	20.72	0.118				
	38	0	19.46	0.088				
	38	18	19.47	0.089				
	38	37	19.41	0.087				
	75	0	19.42	0.087				
	18900	1880.0	1	0	20.77	0.119		
			1	38	20.79	0.120		
			1	74	20.72	0.118		
			38	0	19.46	0.088		
38			18	19.47	0.089			
38			37	19.41	0.087			
19125	1902.5	1	0	20.77	0.119			
		1	38	20.79	0.120			
		1	74	20.72	0.118			
		38	0	19.46	0.088			
		38	18	19.47	0.089			
		38	37	19.41	0.087			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	15 MHz with CA power Pcc: Band 2 Scc: Band 12 (5M)	QPSK	18675	1857.5	1	0	21.55	0.143
					1	38	21.61	0.145
					1	74	21.23	0.133
					38	0	20.60	0.115
					38	18	20.62	0.115
					38	37	20.55	0.114
			75	0	20.61	0.115		
			1	0	21.55	0.143		
			1	38	21.48	0.141		
			1	74	20.97	0.125		
			38	0	20.44	0.111		
			38	18	20.45	0.111		
			38	37	20.48	0.112		
			75	0	20.45	0.111		
			1	0	21.54	0.143		
			1	38	21.47	0.140		
			1	74	21.07	0.128		
			38	0	20.50	0.112		
		38	18	20.44	0.111			
		38	37	20.46	0.111			
		75	0	20.40	0.110			
		1	0	20.84	0.121			
		1	38	20.83	0.121			
		1	74	20.82	0.121			
		38	0	19.55	0.090			
		38	18	19.51	0.089			
		38	37	19.51	0.089			
		75	0	19.49	0.089			
		1	0	20.80	0.120			
		1	38	20.70	0.117			
		1	74	20.57	0.114			
		38	0	19.53	0.090			
		38	18	19.48	0.089			
		38	37	19.48	0.089			
		75	0	19.38	0.087			
		1	0	20.81	0.121			
1	38	20.71	0.118					
1	74	20.67	0.117					
38	0	19.55	0.090					
38	18	19.50	0.089					
38	37	19.45	0.088					
75	0	19.35	0.086					
16QAM	18675	1857.5	1	0	20.80	0.120		
			1	38	20.70	0.117		
			1	74	20.57	0.114		
			38	0	19.53	0.090		
			38	18	19.48	0.089		
			38	37	19.48	0.089		
	75	0	19.38	0.087				
	1	0	20.81	0.121				
	1	38	20.71	0.118				
	1	74	20.67	0.117				
	38	0	19.55	0.090				
	38	18	19.50	0.089				
	38	37	19.45	0.088				
	75	0	19.35	0.086				
	18900	1880.0	1	0	20.81	0.121		
			1	38	20.71	0.118		
			1	74	20.67	0.117		
			38	0	19.55	0.090		
38			18	19.50	0.089			
38			37	19.45	0.088			
19125	1902.5	1	0	20.81	0.121			
		1	38	20.71	0.118			
		1	74	20.67	0.117			
		38	0	19.55	0.090			
		38	18	19.50	0.089			
		38	37	19.45	0.088			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	15 MHz with CA power Pcc: Band 2 Scc: Band 12 (10M)	QPSK	18675	1857.5	1	0	21.54	0.143
					1	38	21.56	0.143
					1	74	21.26	0.134
					38	0	20.55	0.114
					38	18	20.58	0.114
					38	37	20.56	0.114
			75	0	20.55	0.114		
			1	0	21.46	0.140		
			1	38	21.49	0.141		
			1	74	21.03	0.127		
			38	0	20.43	0.110		
			38	18	20.49	0.112		
			38	37	20.44	0.111		
			75	0	20.44	0.111		
			1	0	21.54	0.143		
			1	38	21.44	0.139		
			1	74	21.06	0.128		
			38	0	20.51	0.112		
			38	18	20.48	0.112		
			38	37	20.39	0.109		
			75	0	20.37	0.109		
			1	0	20.89	0.123		
			1	38	20.82	0.121		
			1	74	20.76	0.119		
		38	0	19.54	0.090			
		38	18	19.61	0.091			
		38	37	19.56	0.090			
		75	0	19.54	0.090			
		1	0	20.78	0.120			
		1	38	20.71	0.118			
		1	74	20.58	0.114			
		38	0	19.54	0.090			
		38	18	19.49	0.089			
		38	37	19.43	0.088			
		75	0	19.34	0.086			
		1	0	20.79	0.120			
		1	38	20.77	0.119			
		1	74	20.66	0.116			
		38	0	19.47	0.089			
		38	18	19.46	0.088			
		38	37	19.43	0.088			
		75	0	19.37	0.086			
		16QAM	18675	1857.5	1	0	20.78	0.120
					1	38	20.71	0.118
					1	74	20.58	0.114
					38	0	19.54	0.090
					38	18	19.49	0.089
					38	37	19.43	0.088
75	0		19.34	0.086				
1	0		20.79	0.120				
1	38		20.77	0.119				
1	74		20.66	0.116				
38	0		19.47	0.089				
38	18		19.46	0.088				
38	37	19.43	0.088					
75	0	19.37	0.086					
18900	1880.0	1	0	20.78	0.120			
		1	38	20.71	0.118			
		1	74	20.58	0.114			
		38	0	19.54	0.090			
		38	18	19.49	0.089			
		38	37	19.43	0.088			
75	0	19.34	0.086					
19125	1902.5	1	0	20.79	0.120			
		1	38	20.77	0.119			
		1	74	20.66	0.116			
		38	0	19.47	0.089			
		38	18	19.46	0.088			
		38	37	19.43	0.088			
75	0	19.37	0.086					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	15 MHz with CA power Pcc: Band 2 Scc: Band 30 (5M)	QPSK	18675	1857.5	1	0	21.44	0.139
					1	38	21.59	0.144
					1	74	21.33	0.136
					38	0	20.46	0.111
					38	18	20.62	0.115
					38	37	20.51	0.112
			75	0	20.59	0.115		
			1	0	21.54	0.143		
			1	38	21.55	0.143		
			1	74	20.99	0.126		
			38	0	20.59	0.115		
			38	18	20.41	0.110		
			38	37	20.41	0.110		
			75	0	20.36	0.109		
			1	0	21.54	0.143		
			1	38	21.41	0.138		
			1	74	21.23	0.133		
			38	0	20.42	0.110		
		38	18	20.47	0.111			
		38	37	20.49	0.112			
		75	0	20.39	0.109			
		1	0	20.96	0.125			
		1	38	20.94	0.124			
		1	74	20.78	0.120			
		38	0	19.61	0.091			
		38	18	19.57	0.091			
		38	37	19.47	0.089			
		75	0	19.50	0.089			
		1	0	20.68	0.117			
		1	38	20.56	0.114			
		1	74	20.51	0.112			
		38	0	19.45	0.088			
		38	18	19.45	0.088			
		38	37	19.35	0.086			
		75	0	19.31	0.085			
		1	0	20.77	0.119			
1	38	20.76	0.119					
1	74	20.58	0.114					
38	0	19.58	0.091					
38	18	19.43	0.088					
38	37	19.46	0.088					
75	0	19.38	0.087					
16QAM	18675	1857.5	18900	1880.0	19125	1902.5		



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power			
					Size	Offset	(dBm)	(W)		
LTE Band 2	15 MHz with CA power Pcc: Band 2 Scc: Band 30 (10M)	QPSK	18675	1857.5	1	0	21.60	0.145		
					1	38	21.55	0.143		
					1	74	21.25	0.133		
					38	0	20.58	0.114		
					38	18	20.70	0.117		
					38	37	20.55	0.114		
			75	0	20.56	0.114				
			1	0	21.58	0.144				
			1	38	21.54	0.143				
			1	74	21.04	0.127				
			38	0	20.45	0.111				
			38	18	20.41	0.110				
			38	37	20.34	0.108				
			75	0	20.42	0.110				
			1	0	21.54	0.143				
			1	38	21.39	0.138				
			1	74	21.15	0.130				
			38	0	20.40	0.110				
			38	18	20.56	0.114				
			38	37	20.39	0.109				
			75	0	20.45	0.111				
			1	0	20.96	0.125				
			1	38	20.92	0.124				
			1	74	20.82	0.121				
		38	0	19.53	0.090					
		38	18	19.62	0.092					
		38	37	19.51	0.089					
		75	0	19.56	0.090					
		1	0	20.66	0.116					
		1	38	20.74	0.119					
		1	74	20.50	0.112					
		38	0	19.52	0.090					
		38	18	19.52	0.090					
		38	37	19.34	0.086					
		75	0	19.39	0.087					
		1	0	20.68	0.117					
		1	38	20.72	0.118					
		1	74	20.77	0.119					
		38	0	19.58	0.091					
		38	18	19.53	0.090					
		38	37	19.52	0.090					
		75	0	19.35	0.086					
		16QAM	18675	1857.5	18675	1857.5	1	0	20.92	0.124
		16QAM	18675	1857.5	18675	1857.5	1	38	20.92	0.124
		16QAM	18675	1857.5	18675	1857.5	1	74	20.82	0.121
		16QAM	18675	1857.5	18675	1857.5	38	0	19.53	0.090
		16QAM	18675	1857.5	18675	1857.5	38	18	19.62	0.092
		16QAM	18675	1857.5	18675	1857.5	38	37	19.51	0.089
16QAM	18675	1857.5	18675	1857.5	75	0	19.56	0.090		
16QAM	18900	1880.0	18900	1880.0	1	0	20.66	0.116		
16QAM	18900	1880.0	18900	1880.0	1	38	20.74	0.119		
16QAM	18900	1880.0	18900	1880.0	1	74	20.50	0.112		
16QAM	18900	1880.0	18900	1880.0	38	0	19.52	0.090		
16QAM	18900	1880.0	18900	1880.0	38	18	19.52	0.090		
16QAM	18900	1880.0	18900	1880.0	38	37	19.34	0.086		
16QAM	18900	1880.0	18900	1880.0	75	0	19.39	0.087		
16QAM	19125	1902.5	19125	1902.5	1	0	20.68	0.117		
16QAM	19125	1902.5	19125	1902.5	1	38	20.72	0.118		
16QAM	19125	1902.5	19125	1902.5	1	74	20.77	0.119		
16QAM	19125	1902.5	19125	1902.5	38	0	19.58	0.091		
16QAM	19125	1902.5	19125	1902.5	38	18	19.53	0.090		
16QAM	19125	1902.5	19125	1902.5	38	37	19.52	0.090		
16QAM	19125	1902.5	19125	1902.5	75	0	19.35	0.086		



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power			
					Size	Offset	(dBm)	(W)		
LTE Band 2	20 MHz	QPSK	18700	1860.0	1	0	22.12	0.163		
					1	49	22.04	0.160		
					1	99	21.78	0.151		
					50	0	21.14	0.130		
					50	25	21.13	0.130		
					50	50	21.06	0.128		
			100	0	20.98	0.125				
			1	0	22.03	0.160				
			1	49	22.02	0.159				
			1	99	21.71	0.148				
			50	0	21.04	0.127				
			50	25	20.97	0.125				
			50	50	20.92	0.124				
			100	0	20.84	0.121				
			1	0	21.95	0.157				
			1	49	21.88	0.154				
			1	99	21.65	0.146				
			50	0	20.98	0.125				
			50	25	20.87	0.122				
			50	50	20.87	0.122				
			100	0	20.85	0.122				
			1	0	21.40	0.138				
			1	49	21.39	0.138				
			1	99	21.10	0.129				
		50	0	20.15	0.104					
		50	25	20.06	0.101					
		50	50	20.06	0.101					
		100	0	19.95	0.099					
		1	0	21.38	0.137					
		1	49	21.27	0.134					
		1	99	20.98	0.125					
		50	0	19.99	0.100					
		50	25	19.93	0.098					
		50	50	19.91	0.098					
		100	0	19.86	0.097					
		1	0	21.28	0.134					
		1	49	21.19	0.132					
		1	99	20.65	0.116					
		50	0	19.98	0.100					
		50	25	19.88	0.097					
		50	50	19.87	0.097					
		100	0	19.83	0.096					
		16QAM	18700	1860.0	18700	1860.0	1	0	21.38	0.137
							1	49	21.27	0.134
							1	99	20.98	0.125
							50	0	19.99	0.100
							50	25	19.93	0.098
							50	50	19.91	0.098
100	0		19.86	0.097						
1	0		21.28	0.134						
1	49		21.19	0.132						
1	99		20.65	0.116						
50	0		19.98	0.100						
50	25		19.88	0.097						
50	50	19.87	0.097							
100	0	19.83	0.096							



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	20 MHz with CA power Pcc: Band 2 Scc: Band 5 (5M)	QPSK	18700	1860.0	1	0	21.63	0.146
					1	49	21.68	0.147
					1	99	21.40	0.138
					50	0	20.77	0.119
					50	25	20.60	0.115
					50	50	20.66	0.116
			100	0	20.54	0.113		
			18900	1880.0	1	0	21.56	0.143
					1	49	21.49	0.141
					1	99	21.18	0.131
					50	0	20.48	0.112
					50	25	20.53	0.113
					50	50	20.46	0.111
			19100	1900.0	100	0	20.33	0.108
					1	0	21.44	0.139
					1	49	21.40	0.138
					1	99	21.14	0.130
					50	0	20.49	0.112
		50			25	20.45	0.111	
		16QAM	18700	1860.0	50	50	20.36	0.109
					100	0	20.32	0.108
					1	0	20.95	0.124
					1	49	20.95	0.124
					1	99	20.70	0.117
					50	0	19.67	0.093
			18900	1880.0	50	25	19.58	0.091
					50	50	19.59	0.091
					100	0	19.55	0.090
					1	0	20.90	0.123
					1	49	20.82	0.121
					1	99	20.53	0.113
			19100	1900.0	50	0	19.50	0.089
					50	25	19.47	0.089
					50	50	19.49	0.089
					100	0	19.38	0.087
					1	0	20.82	0.121
1	49				20.70	0.117		
19100	1900.0	1	99	20.53	0.113			
		50	0	19.54	0.090			
		50	25	19.41	0.087			
		50	50	19.34	0.086			
		100	0	19.29	0.085			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	20 MHz with CA power Pcc: Band 2 Scc: Band 5 (10M)	QPSK	18700	1860.0	1	0	21.62	0.145
					1	49	21.64	0.146
					1	99	21.31	0.135
					50	0	20.74	0.119
					50	25	20.65	0.116
					50	50	20.68	0.117
			100	0	20.61	0.115		
			1	0	21.50	0.141		
			1	49	21.54	0.143		
			1	99	21.19	0.132		
			50	0	20.48	0.112		
			50	25	20.51	0.112		
			50	50	20.40	0.110		
			100	0	20.36	0.109		
			1	0	21.43	0.139		
			1	49	21.38	0.137		
			1	99	21.14	0.130		
			50	0	20.47	0.111		
			50	25	20.37	0.109		
			50	50	20.41	0.110		
			100	0	20.39	0.109		
			1	0	20.99	0.126		
			1	49	20.91	0.123		
			1	99	20.67	0.117		
		50	0	19.71	0.094			
		50	25	19.63	0.092			
		50	50	19.62	0.092			
		100	0	19.55	0.090			
		1	0	20.81	0.121			
		1	49	20.81	0.121			
		1	99	20.54	0.113			
		50	0	19.51	0.089			
		50	25	19.44	0.088			
		50	50	19.42	0.087			
		100	0	19.39	0.087			
		1	0	20.74	0.119			
		1	49	20.74	0.119			
		1	99	20.54	0.113			
		50	0	19.48	0.089			
		50	25	19.35	0.086			
		50	50	19.42	0.087			
		100	0	19.36	0.086			
		16QAM	18700	1860.0	1	0	20.81	0.121
					1	49	20.81	0.121
					1	99	20.54	0.113
					50	0	19.51	0.089
					50	25	19.44	0.088
					50	50	19.42	0.087
100	0		19.39	0.087				
1	0		20.74	0.119				
1	49		20.74	0.119				
1	99		20.54	0.113				
50	0		19.48	0.089				
50	25		19.35	0.086				
50	50		19.42	0.087				
100	0		19.36	0.086				
18900	1880.0		1	0	20.81	0.121		
			1	49	20.81	0.121		
			1	99	20.54	0.113		
			50	0	19.51	0.089		
			50	25	19.44	0.088		
			50	50	19.42	0.087		
100	0		19.39	0.087				
19100	1900.0		1	0	20.74	0.119		
			1	49	20.74	0.119		
			1	99	20.54	0.113		
		50	0	19.48	0.089			
		50	25	19.35	0.086			
		50	50	19.42	0.087			
100	0	19.36	0.086					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	20 MHz with CA power Pcc: Band 2 Scc: Band 12 (3M)	QPSK	18700	1860.0	1	0	21.67	0.147
					1	49	21.64	0.146
					1	99	21.34	0.136
					50	0	20.69	0.117
					50	25	20.65	0.116
					50	50	20.63	0.116
			100	0	20.57	0.114		
			1	0	21.54	0.143		
			1	49	21.49	0.141		
			1	99	21.22	0.132		
			50	0	20.55	0.114		
			50	25	20.52	0.113		
			50	50	20.41	0.110		
			100	0	20.39	0.109		
			1	0	21.48	0.141		
			1	49	21.37	0.137		
			1	99	21.14	0.130		
			50	0	20.49	0.112		
			50	25	20.40	0.110		
			50	50	20.38	0.109		
			100	0	20.32	0.108		
			1	0	20.95	0.124		
			1	49	20.89	0.123		
			1	99	20.67	0.117		
		50	0	19.67	0.093			
		50	25	19.61	0.091			
		50	50	19.58	0.091			
		100	0	19.54	0.090			
		1	0	20.88	0.122			
		1	49	20.81	0.121			
		1	99	20.49	0.112			
		50	0	19.48	0.089			
		50	25	19.47	0.089			
		50	50	19.48	0.089			
		100	0	19.41	0.087			
		1	0	20.80	0.120			
		1	49	20.73	0.118			
		1	99	20.52	0.113			
		50	0	19.53	0.090			
		50	25	19.44	0.088			
		50	50	19.36	0.086			
		100	0	19.30	0.085			
		16QAM	18700	1860.0	1	0	20.88	0.122
					1	49	20.81	0.121
					1	99	20.49	0.112
					50	0	19.48	0.089
					50	25	19.47	0.089
					50	50	19.48	0.089
100	0		19.41	0.087				
1	0		20.80	0.120				
1	49		20.73	0.118				
1	99		20.52	0.113				
50	0		19.53	0.090				
50	25		19.44	0.088				
50	50	19.36	0.086					
100	0	19.30	0.085					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	20 MHz with CA power Pcc: Band 2 Scc: Band 12 (5M)	QPSK	18700	1860.0	1	0	21.62	0.145
					1	49	21.69	0.148
					1	99	21.37	0.137
					50	0	20.68	0.117
					50	25	20.60	0.115
					50	50	20.63	0.116
			100	0	20.60	0.115		
			18900	1880.0	1	0	21.59	0.144
					1	49	21.51	0.142
					1	99	21.23	0.133
					50	0	20.46	0.111
					50	25	20.51	0.112
					50	50	20.41	0.110
			19100	1900.0	100	0	20.38	0.109
					1	0	21.52	0.142
					1	49	21.38	0.137
					1	99	21.12	0.129
					50	0	20.54	0.113
		50			25	20.45	0.111	
		16QAM	18700	1860.0	50	50	20.43	0.110
					100	0	20.38	0.109
					1	0	20.93	0.124
					1	49	20.96	0.125
					1	99	20.65	0.116
					50	0	19.67	0.093
			18900	1880.0	50	25	19.58	0.091
					50	50	19.57	0.091
					100	0	19.51	0.089
					1	0	20.89	0.123
					1	49	20.79	0.120
					1	99	20.54	0.113
			19100	1900.0	50	0	19.45	0.088
					50	25	19.45	0.088
					50	50	19.47	0.089
					100	0	19.37	0.086
					1	0	20.81	0.121
1	49				20.68	0.117		
19100	1900.0	1	99	20.51	0.112			
		50	0	19.47	0.089			
		50	25	19.41	0.087			
		50	50	19.37	0.086			
		100	0	19.33	0.086			
		100	0	19.33	0.086			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	20 MHz with CA power Pcc: Band 2 Scc: Band 12 (10M)	QPSK	18700	1860.0	1	0	21.70	0.148
					1	49	21.68	0.147
					1	99	21.38	0.137
					50	0	20.76	0.119
					50	25	20.61	0.115
					50	50	20.62	0.115
			100	0	20.57	0.114		
			1	0	21.54	0.143		
			1	49	21.49	0.141		
			1	99	21.25	0.133		
			50	0	20.47	0.111		
			50	25	20.50	0.112		
			50	50	20.45	0.111		
			100	0	20.34	0.108		
			1	0	21.46	0.140		
			1	49	21.35	0.136		
			1	99	21.12	0.129		
			50	0	20.49	0.112		
			50	25	20.40	0.110		
			50	50	20.39	0.109		
			100	0	20.35	0.108		
			1	0	21.01	0.126		
			1	49	20.96	0.125		
			1	99	20.63	0.116		
		50	0	19.69	0.093			
		50	25	19.64	0.092			
		50	50	19.62	0.092			
		100	0	19.54	0.090			
		1	0	20.90	0.123			
		1	49	20.85	0.122			
		1	99	20.53	0.113			
		50	0	19.46	0.088			
		50	25	19.46	0.088			
		50	50	19.44	0.088			
		100	0	19.33	0.086			
		1	0	20.79	0.120			
		1	49	20.68	0.117			
		1	99	20.53	0.113			
		50	0	19.47	0.089			
		50	25	19.36	0.086			
		50	50	19.41	0.087			
		100	0	19.33	0.086			
		16QAM	18700	1860.0	1	0	20.90	0.123
					1	49	20.85	0.122
					1	99	20.53	0.113
					50	0	19.46	0.088
					50	25	19.46	0.088
					50	50	19.44	0.088
100	0		19.33	0.086				
1	0		20.79	0.120				
1	49		20.68	0.117				
1	99		20.53	0.113				
50	0		19.47	0.089				
50	25		19.36	0.086				
50	50		19.41	0.087				
100	0		19.33	0.086				
18900	1880.0		1	0	20.90	0.123		
			1	49	20.85	0.122		
			1	99	20.53	0.113		
			50	0	19.46	0.088		
			50	25	19.46	0.088		
			50	50	19.44	0.088		
100	0		19.33	0.086				
19100	1900.0		1	0	20.79	0.120		
			1	49	20.68	0.117		
			1	99	20.53	0.113		
		50	0	19.47	0.089			
		50	25	19.36	0.086			
		50	50	19.41	0.087			
100	0	19.33	0.086					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	20 MHz with CA power Pcc: Band 2 Scc: Band 30 (5M)	QPSK	18700	1860.0	1	0	21.69	0.148
					1	49	21.77	0.150
					1	99	21.37	0.137
					50	0	20.74	0.119
					50	25	20.56	0.114
					50	50	20.61	0.115
			100	0	20.61	0.115		
			1	0	21.64	0.146		
			1	49	21.54	0.143		
			1	99	21.12	0.129		
			50	0	20.45	0.111		
			50	25	20.44	0.111		
			50	50	20.37	0.109		
			100	0	20.35	0.108		
			1	0	21.51	0.142		
			1	49	21.39	0.138		
			1	99	21.16	0.131		
			50	0	20.52	0.113		
		50	25	20.41	0.110			
		50	50	20.37	0.109			
		100	0	20.28	0.107			
		1	0	20.95	0.124			
		1	49	20.94	0.124			
		1	99	20.78	0.120			
		50	0	19.61	0.091			
		50	25	19.65	0.092			
		50	50	19.55	0.090			
		100	0	19.64	0.092			
		1	0	20.85	0.122			
		1	49	20.77	0.119			
		1	99	20.62	0.115			
		50	0	19.40	0.087			
		50	25	19.52	0.090			
		50	50	19.51	0.089			
		100	0	19.35	0.086			
		1	0	20.91	0.123			
1	49	20.79	0.120					
1	99	20.56	0.114					
50	0	19.52	0.090					
50	25	19.35	0.086					
50	50	19.37	0.086					
100	0	19.39	0.087					
16QAM	18700	1860.0	1	0	20.85	0.122		
			1	49	20.77	0.119		
			1	99	20.62	0.115		
			50	0	19.40	0.087		
			50	25	19.52	0.090		
			50	50	19.51	0.089		
	100	0	19.35	0.086				
	1	0	20.91	0.123				
	1	49	20.79	0.120				
	1	99	20.56	0.114				
	50	0	19.52	0.090				
	50	25	19.35	0.086				
	50	50	19.37	0.086				
	100	0	19.39	0.087				
	18900	1880.0	1	0	20.85	0.122		
			1	49	20.77	0.119		
			1	99	20.62	0.115		
			50	0	19.40	0.087		
50			25	19.52	0.090			
50			50	19.51	0.089			
100	0	19.35	0.086					
19100	1900.0	1	0	20.91	0.123			
		1	49	20.79	0.120			
		1	99	20.56	0.114			
		50	0	19.52	0.090			
		50	25	19.35	0.086			
		50	50	19.37	0.086			
100	0	19.39	0.087					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 2	20 MHz with CA power Pcc: Band 2 Scc: Band 30 (10M)	QPSK	18700	1860.0	1	0	21.67	0.147
					1	49	21.75	0.150
					1	99	21.49	0.141
					50	0	20.67	0.117
					50	25	20.63	0.116
					50	50	20.76	0.119
			100	0	20.62	0.115		
			1	0	21.58	0.144		
			1	49	21.49	0.141		
			1	99	21.21	0.132		
			50	0	20.52	0.113		
			50	25	20.57	0.114		
			50	50	20.38	0.109		
			100	0	20.25	0.106		
			1	0	21.40	0.138		
			1	49	21.39	0.138		
			1	99	21.18	0.131		
			50	0	20.56	0.114		
		50	25	20.45	0.111			
		50	50	20.37	0.109			
		100	0	20.42	0.110			
		1	0	20.91	0.123			
		1	49	21.01	0.126			
		1	99	20.63	0.116			
		50	0	19.66	0.092			
		50	25	19.63	0.092			
		50	50	19.65	0.092			
		100	0	19.59	0.091			
		1	0	20.92	0.124			
		1	49	20.75	0.119			
		1	99	20.46	0.111			
		50	0	19.49	0.089			
		50	25	19.56	0.090			
		50	50	19.39	0.087			
		100	0	19.35	0.086			
		1	0	20.89	0.123			
1	49	20.64	0.116					
1	99	20.54	0.113					
50	0	19.47	0.089					
50	25	19.40	0.087					
50	50	19.43	0.088					
100	0	19.36	0.086					
16QAM	18700	1860.0	1	0	20.92	0.124		
			1	49	20.75	0.119		
			1	99	20.46	0.111		
			50	0	19.49	0.089		
			50	25	19.56	0.090		
			50	50	19.39	0.087		
	100	0	19.35	0.086				
	1	0	20.89	0.123				
	1	49	20.64	0.116				
	1	99	20.54	0.113				
	50	0	19.47	0.089				
	50	25	19.40	0.087				
	50	50	19.43	0.088				
	100	0	19.36	0.086				
	18900	1880.0	1	0	20.92	0.124		
			1	49	20.75	0.119		
			1	99	20.46	0.111		
			50	0	19.49	0.089		
50			25	19.56	0.090			
50			50	19.39	0.087			
100	0	19.35	0.086					
19100	1900.0	1	0	20.89	0.123			
		1	49	20.64	0.116			
		1	99	20.54	0.113			
		50	0	19.47	0.089			
		50	25	19.40	0.087			
		50	50	19.43	0.088			
100	0	19.36	0.086					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power		
					Size	Offset	(dBm)	(W)	
LTE Band 4	1.4 MHz	QPSK	19957	1710.7	1	0	22.16	0.164	
					1	2	22.09	0.162	
					1	5	22.01	0.159	
					3	0	21.96	0.157	
					3	1	21.87	0.154	
					3	3	21.86	0.153	
			6	0	20.85	0.122			
			1	0	22.26	0.168			
			1	2	22.11	0.163			
			1	5	22.07	0.161			
			3	0	22.05	0.160			
			3	1	21.99	0.158			
			3	3	21.94	0.156			
			6	0	20.83	0.121			
			1	0	22.31	0.170			
			1	2	22.24	0.167			
			1	5	22.17	0.165			
			3	0	22.15	0.164			
			3	1	22.13	0.163			
			3	3	22.01	0.159			
			6	0	21.01	0.126			
			1	0	21.73	0.149			
			1	2	21.64	0.146			
			1	5	21.59	0.144			
		3	0	21.29	0.135				
		3	1	21.27	0.134				
		3	3	21.15	0.130				
		6	0	20.69	0.117				
		1	0	21.76	0.150				
		1	2	21.69	0.148				
		1	5	21.60	0.145				
		3	0	21.38	0.137				
		3	1	21.31	0.135				
		3	3	21.26	0.134				
		6	0	20.58	0.114				
		1	0	21.78	0.151				
		1	2	21.73	0.149				
		1	5	21.72	0.149				
		3	0	21.46	0.140				
		3	1	21.42	0.139				
		3	3	21.36	0.137				
		6	0	20.68	0.117				
		16QAM	20175	1732.5	1710.7	1	0	21.73	0.149
						1	2	21.69	0.148
						1	5	21.60	0.145
						3	0	21.38	0.137
						3	1	21.31	0.135
						3	3	21.26	0.134
6	0		20.58	0.114					
1	0		21.76	0.150					
1	2		21.69	0.148					
1	5		21.60	0.145					
3	0		21.38	0.137					
3	1		21.31	0.135					
3	3	21.26	0.134						
6	0	20.58	0.114						
20393	1754.3	1710.7	1732.5	1	0	21.73	0.149		
				1	2	21.73	0.149		
				1	5	21.72	0.149		
				3	0	21.46	0.140		
				3	1	21.42	0.139		
				3	3	21.36	0.137		
6	0	20.68	0.117						



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	3 MHz	QPSK	19965	1711.5	1	0	22.08	0.161
					1	8	22.00	0.158
					1	14	21.98	0.158
					8	0	20.97	0.125
					8	4	20.96	0.125
					8	7	20.95	0.124
			15	0	20.87	0.122		
			1	0	22.10	0.162		
			1	8	22.10	0.162		
			1	14	21.93	0.156		
			8	0	20.99	0.126		
			8	4	20.96	0.125		
			8	7	20.95	0.124		
			15	0	20.95	0.124		
			1	0	22.20	0.166		
			1	8	22.12	0.163		
			1	14	22.04	0.160		
			8	0	21.13	0.130		
		8	4	21.12	0.129			
		8	7	21.09	0.129			
		15	0	21.03	0.127			
		1	0	21.30	0.135			
		1	8	21.19	0.132			
		1	14	21.18	0.131			
		8	0	20.03	0.101			
		8	4	20.02	0.100			
		8	7	19.98	0.100			
		15	0	19.93	0.098			
		1	0	21.31	0.135			
		1	8	21.30	0.135			
		1	14	21.15	0.130			
		8	0	20.07	0.102			
		8	4	20.06	0.101			
		8	7	20.02	0.100			
		15	0	19.96	0.099			
		1	0	21.46	0.140			
		1	8	21.36	0.137			
		1	14	21.30	0.135			
		8	0	20.16	0.104			
		8	4	20.16	0.104			
		8	7	20.07	0.102			
		15	0	20.07	0.102			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power		
					Size	Offset	(dBm)	(W)	
LTE Band 4	5 MHz	QPSK	19975	1712.5	1	0	22.14	0.164	
					1	12	22.04	0.160	
					1	24	22.00	0.158	
					12	0	21.04	0.127	
					12	6	20.97	0.125	
					12	13	20.95	0.124	
			25	0	20.92	0.124			
			1	0	22.23	0.167			
			1	12	22.11	0.163			
			1	24	21.99	0.158			
			12	0	21.07	0.128			
			12	6	20.97	0.125			
			12	13	20.94	0.124			
			25	0	20.94	0.124			
			1	0	22.25	0.168			
			1	12	22.14	0.164			
			1	24	22.10	0.162			
			12	0	21.11	0.129			
			12	6	21.08	0.128			
			12	13	21.07	0.128			
			25	0	21.07	0.128			
			1	0	21.34	0.136			
			1	12	21.27	0.134			
			1	24	21.21	0.132			
		12	0	20.08	0.102				
		12	6	20.01	0.100				
		12	13	20.00	0.100				
		25	0	19.95	0.099				
		1	0	21.45	0.140				
		1	12	21.31	0.135				
		1	24	21.19	0.132				
		12	0	20.12	0.103				
		12	6	19.99	0.100				
		12	13	19.98	0.100				
		25	0	19.98	0.100				
		1	0	21.53	0.142				
		1	12	21.41	0.138				
		1	24	21.31	0.135				
		12	0	20.12	0.103				
		12	6	20.08	0.102				
		12	11	20.06	0.101				
		25	0	20.05	0.101				
		16QAM	20175	1732.5	1712.5	1	0	21.45	0.140
						1	12	21.31	0.135
						1	24	21.19	0.132
						12	0	20.12	0.103
						12	6	19.99	0.100
						12	13	19.98	0.100
25	0		19.98	0.100					
1	0		21.53	0.142					
1	12		21.41	0.138					
1	24		21.31	0.135					
12	0		20.12	0.103					
12	6		20.08	0.102					
12	11	20.06	0.101						
25	0	20.05	0.101						



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power			
					Size	Offset	(dBm)	(W)		
LTE Band 4	5 MHz with CA power Pcc: Band 4 Scc: Band 5 (5M)	QPSK	19975	1712.5	1	0	21.98	0.158		
					1	12	21.89	0.155		
					1	24	21.90	0.155		
					12	0	20.90	0.123		
					12	6	20.79	0.120		
					12	13	20.78	0.120		
					25	0	20.75	0.119		
			1	0	22.09	0.162				
			1	12	21.98	0.158				
			1	24	21.84	0.153				
			12	0	20.90	0.123				
			12	6	20.84	0.121				
			12	13	20.81	0.121				
			25	0	20.80	0.120				
			1	0	22.08	0.161				
			1	12	22.00	0.158				
			1	24	21.98	0.158				
			12	0	21.00	0.126				
			12	6	20.99	0.126				
			12	13	20.97	0.125				
			25	0	20.93	0.124				
			1	0	21.18	0.131				
			1	12	21.16	0.131				
			1	24	21.03	0.127				
		12	0	19.91	0.098					
		12	6	19.90	0.098					
		12	13	19.91	0.098					
		25	0	19.80	0.095					
		1	0	21.29	0.135					
		1	12	21.16	0.131					
		1	24	21.03	0.127					
		12	0	19.95	0.099					
		12	6	19.85	0.097					
		12	13	19.81	0.096					
		25	0	19.81	0.096					
		1	0	21.42	0.139					
		1	12	21.26	0.134					
		1	24	21.20	0.132					
		12	0	19.98	0.100					
		12	6	19.92	0.098					
		12	11	19.96	0.099					
		25	0	19.95	0.099					
		16QAM	19975	1712.5	19975	1712.5	1	0	21.18	0.131
							1	12	21.16	0.131
							1	24	21.03	0.127
							12	0	19.91	0.098
							12	6	19.90	0.098
							12	13	19.91	0.098
25	0		19.80	0.095						
1	0		21.29	0.135						
1	12		21.16	0.131						
1	24		21.03	0.127						
12	0		19.95	0.099						
12	6		19.85	0.097						
12	13	19.81	0.096							
25	0	19.81	0.096							
1	0	21.42	0.139							
1	12	21.26	0.134							
1	24	21.20	0.132							
12	0	19.98	0.100							
12	6	19.92	0.098							
12	11	19.96	0.099							
25	0	19.95	0.099							



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	5 MHz with CA power Pcc: Band 4 Scc: Band 5 (10M)	QPSK	19975	1712.5	1	0	21.97	0.157
					1	12	21.89	0.155
					1	24	21.87	0.154
					12	0	20.91	0.123
					12	6	20.83	0.121
					12	13	20.79	0.120
			25	0	20.79	0.120		
			1	0	22.05	0.160		
			1	12	21.98	0.158		
			1	24	21.87	0.154		
			12	0	20.92	0.124		
			12	6	20.86	0.122		
			12	13	20.77	0.119		
			25	0	20.82	0.121		
			1	0	22.13	0.163		
			1	12	22.02	0.159		
			1	24	21.95	0.157		
			12	0	21.03	0.127		
			12	6	20.99	0.126		
			12	13	20.92	0.124		
			25	0	20.92	0.124		
			1	0	21.26	0.134		
			1	12	21.12	0.129		
			1	24	21.12	0.129		
		12	0	19.95	0.099			
		12	6	19.83	0.096			
		12	13	19.91	0.098			
		25	0	19.80	0.095			
		1	0	21.28	0.134			
		1	12	21.21	0.132			
		1	24	21.01	0.126			
		12	0	20.02	0.100			
		12	6	19.91	0.098			
		12	13	19.88	0.097			
		25	0	19.83	0.096			
		1	0	21.40	0.138			
		1	12	21.30	0.135			
		1	24	21.17	0.131			
		12	0	19.97	0.099			
		12	6	19.98	0.100			
		12	11	19.91	0.098			
		25	0	19.91	0.098			
		16QAM	19975	1712.5	1	0	21.26	0.134
					1	12	21.12	0.129
					1	24	21.12	0.129
					12	0	19.95	0.099
					12	6	19.83	0.096
					12	13	19.91	0.098
25	0		19.80	0.095				
1	0		21.28	0.134				
1	12		21.21	0.132				
1	24		21.01	0.126				
12	0		20.02	0.100				
12	6		19.91	0.098				
12	13		19.88	0.097				
25	0		19.83	0.096				
1	0		21.40	0.138				
1	12		21.30	0.135				
1	24		21.17	0.131				
12	0		19.97	0.099				
12	6		19.98	0.100				
12	11		19.91	0.098				
25	0		19.91	0.098				



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power			
					Size	Offset	(dBm)	(W)		
LTE Band 4	5 MHz with CA power Pcc: Band 4 Scc: Band 12 (5M)	QPSK	19975	1712.5	1	0	21.96	0.157		
					1	12	21.94	0.156		
					1	24	21.88	0.154		
					12	0	20.99	0.126		
					12	6	20.83	0.121		
					12	13	20.74	0.119		
			25	0	20.66	0.116				
			1	0	22.18	0.165				
			1	12	21.90	0.155				
			1	24	21.86	0.153				
			12	0	20.99	0.126				
			12	6	20.74	0.119				
			12	13	20.84	0.121				
			25	0	20.79	0.120				
			1	0	22.09	0.162				
			1	12	22.05	0.160				
			1	24	21.98	0.158				
			12	0	20.95	0.124				
			12	6	20.98	0.125				
			12	13	21.03	0.127				
			25	0	20.87	0.122				
			1	0	21.13	0.130				
			1	12	21.11	0.129				
			1	24	21.03	0.127				
		12	0	19.92	0.098					
		12	6	20.00	0.100					
		12	13	19.98	0.100					
		25	0	19.73	0.094					
		1	0	21.21	0.132					
		1	12	21.12	0.129					
		1	24	21.12	0.129					
		12	0	19.88	0.097					
		12	6	19.78	0.095					
		12	13	19.72	0.094					
		25	0	19.83	0.096					
		1	0	21.38	0.137					
		1	12	21.27	0.134					
		1	24	21.20	0.132					
		12	0	19.90	0.098					
		12	6	19.98	0.100					
		12	11	19.99	0.100					
		25	0	19.88	0.097					
		19975	1712.5	16QAM	19975	1712.5	1	0	21.13	0.130
		1	12				21.11	0.129		
		1	24				21.03	0.127		
		12	0				19.92	0.098		
		12	6				20.00	0.100		
		12	13				19.98	0.100		
25	0	19.73	0.094							
1	0	21.21	0.132							
1	12	21.12	0.129							
1	24	21.12	0.129							
12	0	19.88	0.097							
12	6	19.78	0.095							
12	13	19.72	0.094							
25	0	19.83	0.096							
1	0	21.38	0.137							
1	12	21.27	0.134							
1	24	21.20	0.132							
12	0	19.90	0.098							
12	6	19.98	0.100							
12	11	19.99	0.100							
25	0	19.88	0.097							



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	5 MHz with CA power Pcc: Band 4 Scc: Band12 (10M)	QPSK	19975	1712.5	1	0	21.98	0.158
					1	12	21.92	0.156
					1	24	21.94	0.156
					12	0	20.89	0.123
					12	6	20.72	0.118
					12	13	20.81	0.121
			25	0	20.77	0.119		
			1	0	22.02	0.159		
			1	12	21.92	0.156		
			1	24	21.74	0.149		
			12	0	20.99	0.126		
			12	6	20.88	0.122		
			12	13	20.75	0.119		
			25	0	20.76	0.119		
			1	0	22.05	0.160		
			1	12	22.00	0.158		
			1	24	22.02	0.159		
			12	0	20.90	0.123		
			12	6	20.97	0.125		
			12	13	20.88	0.122		
			25	0	20.84	0.121		
			1	0	21.27	0.134		
			1	12	21.17	0.131		
			1	24	21.07	0.128		
		12	0	19.84	0.096			
		12	6	19.94	0.099			
		12	13	19.84	0.096			
		25	0	19.82	0.096			
		1	0	21.37	0.137			
		1	12	21.19	0.132			
		1	24	21.05	0.127			
		12	0	20.02	0.100			
		12	6	19.94	0.099			
		12	13	19.83	0.096			
		25	0	19.77	0.095			
		1	0	21.42	0.139			
		1	12	21.18	0.131			
		1	24	21.16	0.131			
		12	0	20.05	0.101			
		12	6	19.86	0.097			
		12	11	20.05	0.101			
		25	0	20.00	0.100			
		16QAM	19975	1712.5	1	0	21.27	0.134
					1	12	21.17	0.131
					1	24	21.07	0.128
					12	0	19.84	0.096
					12	6	19.94	0.099
					12	13	19.84	0.096
25	0		19.82	0.096				
1	0		21.37	0.137				
1	12		21.19	0.132				
1	24		21.05	0.127				
12	0		20.02	0.100				
12	6		19.94	0.099				
12	13	19.83	0.096					
25	0	19.77	0.095					
1	0	21.37	0.137					
1	12	21.19	0.132					
1	24	21.05	0.127					
12	0	20.02	0.100					
12	6	19.94	0.099					
12	13	19.83	0.096					
25	0	19.77	0.095					
1	0	21.37	0.137					
1	12	21.19	0.132					
1	24	21.05	0.127					
12	0	20.02	0.100					
12	6	19.94	0.099					
12	13	19.83	0.096					
25	0	19.77	0.095					
1	0	21.37	0.137					
1	12	21.19	0.132					
1	24	21.05	0.127					
12	0	20.02	0.100					
12	6	19.94	0.099					
12	13	19.83	0.096					
25	0	19.77	0.095					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	5 MHz with CA power Pcc: Band 4 Scc: Band 29 (3M)	QPSK	19975	1712.5	1	0	21.94	0.156
					1	12	21.90	0.155
					1	24	21.98	0.158
					12	0	20.97	0.125
					12	6	20.87	0.122
					12	13	20.69	0.117
					25	0	20.69	0.117
			1	0	22.08	0.161		
			1	12	21.98	0.158		
			1	24	21.81	0.152		
			12	0	20.82	0.121		
			12	6	20.85	0.122		
			12	13	20.72	0.118		
			25	0	20.73	0.118		
			1	0	22.03	0.160		
			1	12	21.97	0.157		
			1	24	21.91	0.155		
			12	0	21.00	0.126		
			12	6	20.94	0.124		
			12	13	20.97	0.125		
			25	0	20.95	0.124		
			1	0	21.18	0.131		
			1	12	21.16	0.131		
			1	24	21.10	0.129		
		12	0	19.95	0.099			
		12	6	19.84	0.096			
		12	13	19.88	0.097			
		25	0	19.82	0.096			
		1	0	21.20	0.132			
		1	12	21.22	0.132			
		1	24	21.12	0.129			
		12	0	19.92	0.098			
		12	6	19.81	0.096			
		12	13	19.72	0.094			
		25	0	19.84	0.096			
		1	0	21.40	0.138			
		1	12	21.16	0.131			
		1	24	21.22	0.132			
		12	0	20.02	0.100			
		12	6	19.93	0.098			
		12	11	20.02	0.100			
		25	0	20.02	0.100			
		16QAM	19975	1712.5	1	0	21.18	0.131
					1	12	21.16	0.131
					1	24	21.10	0.129
					12	0	19.95	0.099
					12	6	19.84	0.096
					12	13	19.88	0.097
25	0				19.82	0.096		
1	0		21.20	0.132				
1	12		21.22	0.132				
1	24		21.12	0.129				
12	0		19.92	0.098				
12	6		19.81	0.096				
12	13		19.72	0.094				
25	0		19.84	0.096				
1	0		21.40	0.138				
1	12		21.16	0.131				
1	24		21.22	0.132				
12	0		20.02	0.100				
12	6		19.93	0.098				
12	11		20.02	0.100				
25	0		20.02	0.100				



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	5 MHz with CA power Pcc: Band 4 Scc: Band 29 (5M)	QPSK	19975	1712.5	1	0	21.99	0.158
					1	12	21.80	0.151
					1	24	21.96	0.157
					12	0	20.89	0.123
					12	6	20.86	0.122
					12	13	20.71	0.118
			25	0	20.69	0.117		
			1	0	22.12	0.163		
			1	12	21.90	0.155		
			1	24	21.82	0.152		
			12	0	20.94	0.124		
			12	6	20.75	0.119		
			12	13	20.80	0.120		
			25	0	20.72	0.118		
			1	0	22.16	0.164		
			1	12	21.97	0.157		
			1	24	22.03	0.160		
			12	0	21.06	0.128		
			12	6	20.94	0.124		
			12	13	21.05	0.127		
			25	0	20.85	0.122		
			1	0	21.28	0.134		
			1	12	21.22	0.132		
			1	24	21.02	0.126		
		12	0	19.95	0.099			
		12	6	19.81	0.096			
		12	13	19.92	0.098			
		25	0	19.75	0.094			
		1	0	21.27	0.134			
		1	12	21.25	0.133			
		1	24	21.10	0.129			
		12	0	20.03	0.101			
		12	6	19.78	0.095			
		12	13	19.91	0.098			
		25	0	19.80	0.095			
		1	0	21.40	0.138			
		1	12	21.23	0.133			
		1	24	21.21	0.132			
		12	0	19.89	0.097			
		12	6	19.82	0.096			
		12	11	20.00	0.100			
		25	0	20.05	0.101			
		12	0	20.05	0.101			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	5 MHz with CA power Pcc: Band 4 Scc: Band 29 (10M)	QPSK	19975	1712.5	1	0	21.96	0.157
					1	12	21.83	0.152
					1	24	21.91	0.155
					12	0	20.81	0.121
					12	6	20.77	0.119
					12	13	20.78	0.120
			25	0	20.67	0.117		
			1	0	22.00	0.158		
			1	12	21.97	0.157		
			1	24	21.77	0.150		
			12	0	20.92	0.124		
			12	6	20.80	0.120		
			12	13	20.73	0.118		
			25	0	20.77	0.119		
			1	0	22.05	0.160		
			1	12	22.04	0.160		
			1	24	21.97	0.157		
			12	0	21.09	0.129		
			12	6	21.03	0.127		
			12	13	20.98	0.125		
			25	0	20.87	0.122		
			1	0	21.14	0.130		
			1	12	21.20	0.132		
			1	24	21.07	0.128		
		12	0	19.84	0.096			
		12	6	19.98	0.100			
		12	13	20.00	0.100			
		25	0	19.70	0.093			
		1	0	21.34	0.136			
		1	12	21.20	0.132			
		1	24	21.08	0.128			
		12	0	19.91	0.098			
		12	6	19.90	0.098			
		12	13	19.71	0.094			
		25	0	19.88	0.097			
		1	0	21.37	0.137			
		1	12	21.25	0.133			
		1	24	21.20	0.132			
		12	0	19.90	0.098			
		12	6	19.95	0.099			
		12	11	19.93	0.098			
		25	0	19.95	0.099			
		12	0	19.95	0.099			
		12	6	19.95	0.099			
		12	11	19.93	0.098			
		25	0	19.95	0.099			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	5 MHz with CA power Pcc: Band 4 Scc: Band 30 (5M)	QPSK	19975	1712.5	1	0	21.97	0.157
					1	12	21.92	0.156
					1	24	21.98	0.158
					12	0	20.90	0.123
					12	6	20.77	0.119
					12	13	20.73	0.118
			25	0	20.79	0.120		
			1	0	22.02	0.159		
			1	12	22.04	0.160		
			1	24	21.81	0.152		
			12	0	20.84	0.121		
			12	6	20.83	0.121		
			12	13	20.73	0.118		
			25	0	20.72	0.118		
			1	0	22.08	0.161		
			1	12	22.07	0.161		
			1	24	22.04	0.160		
			12	0	20.92	0.124		
			12	6	20.98	0.125		
			12	13	21.03	0.127		
			25	0	20.93	0.124		
			1	0	21.13	0.130		
			1	12	21.26	0.134		
			1	24	21.05	0.127		
		12	0	19.95	0.099			
		12	6	19.97	0.099			
		12	13	19.91	0.098			
		25	0	19.83	0.096			
		1	0	21.38	0.137			
		1	12	21.17	0.131			
		1	24	21.02	0.126			
		12	0	19.96	0.099			
		12	6	19.82	0.096			
		12	13	19.86	0.097			
		25	0	19.82	0.096			
		1	0	21.40	0.138			
		1	12	21.31	0.135			
		1	24	21.11	0.129			
		12	0	19.94	0.099			
		12	6	19.88	0.097			
		12	11	19.94	0.099			
		25	0	20.00	0.100			
		16QAM	19975	1712.5	1	0	21.13	0.130
					1	12	21.26	0.134
					1	24	21.05	0.127
					12	0	19.95	0.099
			12	6	19.97	0.099		
			12	13	19.91	0.098		
25	0		19.83	0.096				
1	0		21.38	0.137				
1	12		21.17	0.131				
1	24		21.02	0.126				
12	0		19.96	0.099				
12	6		19.82	0.096				
12	13	19.86	0.097					
25	0	19.82	0.096					
1	0	21.38	0.137					
1	12	21.17	0.131					
1	24	21.02	0.126					
12	0	19.96	0.099					
12	6	19.82	0.096					
12	13	19.86	0.097					
25	0	19.82	0.096					
1	0	21.38	0.137					
1	12	21.17	0.131					
1	24	21.02	0.126					
12	0	19.96	0.099					
12	6	19.82	0.096					
12	13	19.86	0.097					
25	0	19.82	0.096					
1	0	21.38	0.137					
1	12	21.17	0.131					
1	24	21.02	0.126					
12	0	19.96	0.099					
12	6	19.82	0.096					
12	13	19.86	0.097					
25	0	19.82	0.096					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power			
					Size	Offset	(dBm)	(W)		
LTE Band 4	5 MHz with CA power Pcc: Band 4 Scc: Band 30 (10M)	QPSK	19975	1712.5	1	0	21.95	0.157		
					1	12	21.89	0.155		
					1	24	21.92	0.156		
					12	0	20.88	0.122		
					12	6	20.72	0.118		
					12	13	20.85	0.122		
			25	0	20.67	0.117				
			1	0	22.01	0.159				
			1	12	21.89	0.155				
			1	24	21.93	0.156				
			12	0	20.89	0.123				
			12	6	20.90	0.123				
			12	13	20.75	0.119				
			25	0	20.88	0.122				
			1	0	22.14	0.164				
			1	12	22.00	0.158				
			1	24	22.02	0.159				
			12	0	20.92	0.124				
			12	6	20.91	0.123				
			12	13	20.90	0.123				
			25	0	20.97	0.125				
			1	0	21.21	0.132				
			1	12	21.26	0.134				
			1	24	21.00	0.126				
		12	0	19.93	0.098					
		12	6	19.81	0.096					
		12	13	19.81	0.096					
		25	0	19.86	0.097					
		1	0	21.20	0.132					
		1	12	21.10	0.129					
		1	24	21.10	0.129					
		12	0	19.92	0.098					
		12	6	19.81	0.096					
		12	13	19.87	0.097					
		25	0	19.85	0.097					
		1	0	21.51	0.142					
		1	12	21.35	0.136					
		1	24	21.28	0.134					
		12	0	19.93	0.098					
		12	6	20.00	0.100					
		12	11	19.91	0.098					
		25	0	19.99	0.100					
		19975	1712.5	16QAM	19975	1712.5	1	0	21.21	0.132
		1	12				21.26	0.134		
		1	24				21.00	0.126		
		12	0				19.93	0.098		
		12	6				19.81	0.096		
		12	13				19.81	0.096		
25	0	19.86	0.097							
1	0	21.20	0.132							
1	12	21.10	0.129							
1	24	21.10	0.129							
12	0	19.92	0.098							
12	6	19.81	0.096							
12	13	19.87	0.097							
25	0	19.85	0.097							
1	0	21.51	0.142							
1	12	21.35	0.136							
1	24	21.28	0.134							
12	0	19.93	0.098							
12	6	20.00	0.100							
12	11	19.91	0.098							
25	0	19.99	0.100							



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	10 MHz	QPSK	2000	1715.0	1	0	22.16	0.164
					1	24	22.15	0.164
					1	49	21.99	0.158
					25	0	21.08	0.128
					25	12	21.08	0.128
					25	25	21.04	0.127
			50	0	21.03	0.127		
			1	0	22.18	0.165		
			1	24	22.18	0.165		
			1	49	22.00	0.158		
			25	0	21.10	0.129		
			25	12	21.07	0.128		
			25	25	21.07	0.128		
			50	0	21.01	0.126		
			1	0	22.21	0.166		
			1	24	22.17	0.165		
			1	49	21.88	0.154		
			25	0	21.09	0.129		
		25	12	21.07	0.128			
		25	25	21.02	0.126			
		50	0	20.97	0.125			
		1	0	21.46	0.140			
		1	24	21.45	0.140			
		1	49	21.28	0.134			
		25	0	20.05	0.101			
		25	12	20.04	0.101			
		25	25	20.02	0.100			
		50	0	19.98	0.100			
		1	0	21.45	0.140			
		1	24	21.45	0.140			
		1	49	21.27	0.134			
		25	0	20.07	0.102			
		25	12	20.07	0.102			
		25	25	20.05	0.101			
		50	0	20.02	0.100			
		1	0	21.52	0.142			
1	24	21.46	0.140					
1	49	21.17	0.131					
25	0	20.05	0.101					
25	12	20.03	0.101					
25	25	20.00	0.100					
50	0	19.94	0.099					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	10 MHz with CA power Pcc: Band 4 Scc: Band 5 (5M)	QPSK	2000	1715.0	1	0	22.09	0.162
					1	24	22.05	0.160
					1	49	21.87	0.154
					25	0	20.92	0.124
					25	12	20.99	0.126
					25	25	20.90	0.123
			50	0	20.87	0.122		
			1	0	22.06	0.161		
			1	24	22.01	0.159		
			1	49	21.88	0.154		
			25	0	20.93	0.124		
			25	12	20.93	0.124		
			25	25	20.97	0.125		
			50	0	20.87	0.122		
			1	0	22.05	0.160		
			1	24	22.08	0.161		
			1	49	21.73	0.149		
			25	0	20.99	0.126		
		25	12	20.92	0.124			
		25	25	20.87	0.122			
		50	0	20.80	0.120			
		1	0	21.34	0.136			
		1	24	21.37	0.137			
		1	49	21.12	0.129			
		25	0	19.96	0.099			
		25	12	19.96	0.099			
		25	25	19.87	0.097			
		50	0	19.83	0.096			
		1	0	21.34	0.136			
		1	24	21.29	0.135			
		1	49	21.14	0.130			
		25	0	19.96	0.099			
		25	12	19.96	0.099			
		25	25	19.90	0.098			
		50	0	19.94	0.099			
		1	0	21.44	0.139			
1	24	21.30	0.135					
1	49	21.10	0.129					
25	0	19.95	0.099					
25	12	19.90	0.098					
25	25	19.93	0.098					
50	0	19.82	0.096					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	10 MHz with CA power Pcc: Band 4 Scc: Band 5 (10M)	QPSK	2000	1715.0	1	0	21.99	0.158
					1	24	22.06	0.161
					1	49	21.83	0.152
					25	0	20.97	0.125
					25	12	20.99	0.126
					25	25	20.91	0.123
			50	0	20.93	0.124		
			1	0	22.09	0.162		
			1	24	22.08	0.161		
			1	49	21.89	0.155		
			25	0	21.00	0.126		
			25	12	20.97	0.125		
			25	25	20.97	0.125		
			50	0	20.90	0.123		
			1	0	22.14	0.164		
			1	24	22.08	0.161		
			1	49	21.76	0.150		
			25	0	20.93	0.124		
		25	12	20.99	0.126			
		25	25	20.90	0.123			
		50	0	20.82	0.121			
		1	0	21.29	0.135			
		1	24	21.35	0.136			
		1	49	21.14	0.130			
		25	0	19.91	0.098			
		25	12	19.94	0.099			
		25	25	19.95	0.099			
		50	0	19.90	0.098			
		1	0	21.29	0.135			
		1	24	21.37	0.137			
		1	49	21.10	0.129			
		25	0	19.93	0.098			
		25	12	19.95	0.099			
		25	25	19.92	0.098			
		50	0	19.86	0.097			
		1	0	21.36	0.137			
1	24	21.34	0.136					
1	49	21.09	0.129					
25	0	19.97	0.099					
25	12	19.88	0.097					
25	25	19.89	0.097					
50	0	19.79	0.095					
1	0	21.29	0.135					
1	24	21.35	0.136					
1	49	21.14	0.130					
25	0	19.91	0.098					
25	12	19.94	0.099					
25	25	19.95	0.099					
50	0	19.90	0.098					
1	0	21.29	0.135					
1	24	21.37	0.137					
1	49	21.10	0.129					
25	0	19.93	0.098					
25	12	19.95	0.099					
25	25	19.92	0.098					
50	0	19.86	0.097					
1	0	21.36	0.137					
1	24	21.34	0.136					
1	49	21.09	0.129					
25	0	19.97	0.099					
25	12	19.88	0.097					
25	25	19.89	0.097					
50	0	19.79	0.095					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	10 MHz with CA power Pcc: Band 4 Scc: Band 12 (5M)	QPSK	2000	1715.0	1	0	21.99	0.158
					1	24	22.07	0.161
					1	49	21.84	0.153
					25	0	20.83	0.121
					25	12	20.89	0.123
					25	25	20.87	0.122
			50	0	20.84	0.121		
			1	0	22.12	0.163		
			1	24	22.10	0.162		
			1	49	21.85	0.153		
			25	0	20.89	0.123		
			25	12	20.86	0.122		
			25	25	21.03	0.127		
			50	0	20.90	0.123		
			1	0	22.14	0.164		
			1	24	22.08	0.161		
			1	49	21.63	0.146		
			25	0	20.97	0.125		
		25	12	20.98	0.125			
		25	25	20.95	0.124			
		50	0	20.89	0.123			
		1	0	21.25	0.133			
		1	24	21.35	0.136			
		1	49	21.18	0.131			
		25	0	19.93	0.098			
		25	12	19.87	0.097			
		25	25	19.89	0.097			
		50	0	19.83	0.096			
		1	0	21.39	0.138			
		1	24	21.25	0.133			
		1	49	21.07	0.128			
		25	0	19.96	0.099			
		25	12	19.88	0.097			
		25	25	19.97	0.099			
		50	0	19.93	0.098			
		1	0	21.36	0.137			
1	24	21.39	0.138					
1	49	21.18	0.131					
25	0	19.96	0.099					
25	12	19.85	0.097					
25	25	19.92	0.098					
50	0	19.73	0.094					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	10 MHz with CA power Pcc: Band 4 Scc: Band12 (10M)	QPSK	2000	1715.0	1	0	22.14	0.164
					1	24	22.11	0.163
					1	49	21.91	0.155
					25	0	20.85	0.122
					25	12	20.91	0.123
					25	25	20.93	0.124
			50	0	20.84	0.121		
			1	0	22.13	0.163		
			1	24	22.10	0.162		
			1	49	21.85	0.153		
			25	0	20.83	0.121		
			25	12	20.85	0.122		
			25	25	20.95	0.124		
			50	0	20.78	0.120		
			1	0	22.02	0.159		
			1	24	22.08	0.161		
			1	49	21.75	0.150		
			25	0	20.94	0.124		
		25	12	20.87	0.122			
		25	25	20.78	0.120			
		50	0	20.80	0.120			
		1	0	21.34	0.136			
		1	24	21.31	0.135			
		1	49	21.07	0.128			
		25	0	19.87	0.097			
		25	12	19.90	0.098			
		25	25	19.81	0.096			
		50	0	19.86	0.097			
		1	0	21.29	0.135			
		1	24	21.36	0.137			
		1	49	21.24	0.133			
		25	0	19.87	0.097			
		25	12	19.98	0.100			
		25	25	19.96	0.099			
		50	0	19.93	0.098			
		1	0	21.47	0.140			
1	24	21.25	0.133					
1	49	21.01	0.126					
25	0	19.99	0.100					
25	12	19.94	0.099					
25	25	19.89	0.097					
50	0	19.77	0.095					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	10 MHz with CA power Pcc: Band 4 Scc: Band 29 (3M)	QPSK	2000	1715.0	1	0	22.02	0.159
					1	24	22.09	0.162
					1	49	21.96	0.157
					25	0	20.93	0.124
					25	12	21.08	0.128
					25	25	20.88	0.122
			50	0	20.92	0.124		
			1	0	21.98	0.158		
			1	24	21.91	0.155		
			1	49	21.86	0.153		
			25	0	20.87	0.122		
			25	12	20.91	0.123		
			25	25	21.05	0.127		
			50	0	20.84	0.121		
			1	0	21.95	0.157		
			1	24	22.16	0.164		
			1	49	21.72	0.149		
			25	0	20.93	0.124		
			25	12	20.95	0.124		
			25	25	20.88	0.122		
			50	0	20.89	0.123		
			1	0	21.37	0.137		
			1	24	21.47	0.140		
			1	49	21.16	0.131		
		25	0	19.89	0.097			
		25	12	19.87	0.097			
		25	25	19.85	0.097			
		50	0	19.86	0.097			
		1	0	21.31	0.135			
		1	24	21.28	0.134			
		1	49	21.05	0.127			
		25	0	19.89	0.097			
		25	12	20.00	0.100			
		25	25	19.86	0.097			
		50	0	20.02	0.100			
		1	0	21.40	0.138			
		1	24	21.24	0.133			
		1	49	21.12	0.129			
		25	0	19.86	0.097			
		25	12	19.97	0.099			
		25	25	19.98	0.100			
		50	0	19.73	0.094			
		16QAM	2000	1715.0	1	0	21.31	0.135
					1	24	21.28	0.134
					1	49	21.05	0.127
					25	0	19.89	0.097
					25	12	20.00	0.100
					25	25	19.86	0.097
50	0		20.02	0.100				
1	0		21.40	0.138				
1	24		21.24	0.133				
1	49		21.12	0.129				
25	0		19.86	0.097				
25	12		19.97	0.099				
25	25	19.98	0.100					
50	0	19.73	0.094					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	10 MHz with CA power Pcc: Band 4 Scc: Band 29 (5M)	QPSK	2000	1715.0	1	0	22.07	0.161
					1	24	22.08	0.161
					1	49	21.85	0.153
					25	0	21.00	0.126
					25	12	20.98	0.125
					25	25	20.85	0.122
			50	0	20.90	0.123		
			1	0	22.07	0.161		
			1	24	21.98	0.158		
			1	49	21.86	0.153		
			25	0	20.91	0.123		
			25	12	20.91	0.123		
			25	25	20.90	0.123		
			50	0	20.77	0.119		
			1	0	22.07	0.161		
			1	24	22.13	0.163		
			1	49	21.81	0.152		
			25	0	20.98	0.125		
			25	12	20.98	0.125		
			25	25	20.92	0.124		
			50	0	20.83	0.121		
			1	0	21.41	0.138		
			1	24	21.44	0.139		
			1	49	21.09	0.129		
		25	0	19.96	0.099			
		25	12	19.90	0.098			
		25	25	19.94	0.099			
		50	0	19.80	0.095			
		1	0	21.28	0.134			
		1	24	21.33	0.136			
		1	49	21.08	0.128			
		25	0	20.02	0.100			
		25	12	19.91	0.098			
		25	25	19.84	0.096			
		50	0	19.86	0.097			
		1	0	21.43	0.139			
		1	24	21.32	0.136			
		1	49	21.18	0.131			
		25	0	19.90	0.098			
		25	12	19.97	0.099			
		25	25	19.98	0.100			
		50	0	19.73	0.094			
		16QAM	2000	1715.0	1	0	21.28	0.134
					1	24	21.33	0.136
					1	49	21.08	0.128
					25	0	20.02	0.100
					25	12	19.91	0.098
					25	25	19.84	0.096
50	0		19.86	0.097				
1	0		21.43	0.139				
1	24		21.32	0.136				
1	49		21.18	0.131				
25	0		19.90	0.098				
25	12		19.97	0.099				
25	25	19.98	0.100					
50	0	19.73	0.094					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	10 MHz with CA power Pcc: Band 4 Scc: Band 29 (10M)	QPSK	2000	1715.0	1	0	22.16	0.164
					1	24	22.11	0.163
					1	49	21.80	0.151
					25	0	20.86	0.122
					25	12	20.95	0.124
					25	25	20.96	0.125
			50	0	20.87	0.122		
			1	0	22.11	0.163		
			1	24	21.96	0.157		
			1	49	21.83	0.152		
			25	0	20.89	0.123		
			25	12	21.02	0.126		
			25	25	20.93	0.124		
			50	0	20.84	0.121		
			1	0	22.08	0.161		
			1	24	21.98	0.158		
			1	49	21.68	0.147		
			25	0	21.06	0.128		
			25	12	20.91	0.123		
			25	25	20.77	0.119		
			50	0	20.73	0.118		
			1	0	21.26	0.134		
			1	24	21.42	0.139		
			1	49	21.09	0.129		
		25	0	20.04	0.101			
		25	12	19.89	0.097			
		25	25	19.96	0.099			
		50	0	19.80	0.095			
		1	0	21.43	0.139			
		1	24	21.34	0.136			
		1	49	21.05	0.127			
		25	0	19.96	0.099			
		25	12	19.93	0.098			
		25	25	19.93	0.098			
		50	0	19.96	0.099			
		1	0	21.53	0.142			
		1	24	21.25	0.133			
		1	49	21.16	0.131			
		25	0	19.93	0.098			
		25	12	19.98	0.100			
		25	25	19.95	0.099			
		50	0	19.82	0.096			
		16QAM	2000	1715.0	1	0	21.26	0.134
					1	24	21.42	0.139
					1	49	21.09	0.129
					25	0	20.04	0.101
			25	12	19.89	0.097		
			25	25	19.96	0.099		
50	0		19.80	0.095				
1	0		21.43	0.139				
1	24		21.34	0.136				
1	49		21.05	0.127				
25	0		19.96	0.099				
25	12		19.93	0.098				
25	25	19.93	0.098					
50	0	19.96	0.099					
1	0	21.43	0.139					
1	24	21.34	0.136					
1	49	21.05	0.127					
25	0	19.96	0.099					
25	12	19.93	0.098					
25	25	19.93	0.098					
50	0	19.96	0.099					
1	0	21.43	0.139					
1	24	21.34	0.136					
1	49	21.05	0.127					
25	0	19.96	0.099					
25	12	19.93	0.098					
25	25	19.93	0.098					
50	0	19.96	0.099					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	10 MHz with CA power Pcc: Band 4 Scc: Band 30 (5M)	QPSK	2000	1715.0	1	0	22.13	0.163
					1	24	22.11	0.163
					1	49	21.90	0.155
					25	0	20.91	0.123
					25	12	20.94	0.124
					25	25	20.93	0.124
			50	0	20.89	0.123		
			1	0	22.11	0.163		
			1	24	22.03	0.160		
			1	49	21.95	0.157		
			25	0	21.01	0.126		
			25	12	20.88	0.122		
			25	25	20.89	0.123		
			50	0	20.78	0.120		
			1	0	22.10	0.162		
			1	24	22.16	0.164		
			1	49	21.69	0.148		
			25	0	20.91	0.123		
		25	12	21.01	0.126			
		25	25	20.85	0.122			
		50	0	20.76	0.119			
		1	0	21.27	0.134			
		1	24	21.34	0.136			
		1	49	21.10	0.129			
		25	0	19.91	0.098			
		25	12	19.98	0.100			
		25	25	19.87	0.097			
		50	0	19.77	0.095			
		1	0	21.29	0.135			
		1	24	21.33	0.136			
		1	49	21.22	0.132			
		25	0	20.04	0.101			
		25	12	19.94	0.099			
		25	25	19.89	0.097			
		50	0	19.85	0.097			
		1	0	21.38	0.137			
1	24	21.37	0.137					
1	49	21.15	0.130					
25	0	19.97	0.099					
25	12	19.98	0.100					
25	25	19.91	0.098					
50	0	19.73	0.094					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	10 MHz with CA power Pcc: Band 4 Scc: Band 30 (10M)	QPSK	2000	1715.0	1	0	22.12	0.163
					1	24	22.13	0.163
					1	49	21.82	0.152
					25	0	20.92	0.124
					25	12	21.08	0.128
					25	25	20.98	0.125
			50	0	20.82	0.121		
			1	0	22.13	0.163		
			1	24	21.95	0.157		
			1	49	21.80	0.151		
			25	0	20.98	0.125		
			25	12	20.90	0.123		
			25	25	21.05	0.127		
			50	0	20.79	0.120		
			1	0	21.95	0.157		
			1	24	22.16	0.164		
			1	49	21.71	0.148		
			25	0	21.01	0.126		
			25	12	20.87	0.122		
			25	25	20.91	0.123		
			50	0	20.82	0.121		
			1	0	21.37	0.137		
			1	24	21.45	0.140		
			1	49	21.13	0.130		
		25	0	19.90	0.098			
		25	12	20.04	0.101			
		25	25	19.91	0.098			
		50	0	19.79	0.095			
		1	0	21.25	0.133			
		1	24	21.32	0.136			
		1	49	21.10	0.129			
		25	0	19.96	0.099			
		25	12	20.04	0.101			
		25	25	19.88	0.097			
		50	0	19.87	0.097			
		1	0	21.38	0.137			
		1	24	21.34	0.136			
		1	49	21.01	0.126			
		25	0	20.03	0.101			
		25	12	19.87	0.097			
		25	25	20.03	0.101			
		50	0	19.84	0.096			
		16QAM	2000	1715.0	1	0	21.37	0.137
					1	24	21.45	0.140
					1	49	21.13	0.130
					25	0	19.90	0.098
					25	12	20.04	0.101
					25	25	19.91	0.098
50	0		19.79	0.095				
1	0		21.25	0.133				
1	24		21.32	0.136				
1	49		21.10	0.129				
25	0		19.96	0.099				
25	12		20.04	0.101				
25	25		19.88	0.097				
50	0		19.87	0.097				
1	0		21.38	0.137				
1	24		21.34	0.136				
1	49		21.01	0.126				
25	0		20.03	0.101				
25	12		19.87	0.097				
25	25		20.03	0.101				
50	0		19.84	0.096				
20175	1732.5		1	0	21.25	0.133		
			1	24	21.32	0.136		
			1	49	21.10	0.129		
		25	0	19.96	0.099			
		25	12	20.04	0.101			
		25	25	19.88	0.097			
20350	1750.0	1	0	21.38	0.137			
		1	24	21.34	0.136			
		1	49	21.01	0.126			
		25	0	20.03	0.101			
		25	12	19.87	0.097			
		25	25	20.03	0.101			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	15 MHz	QPSK	20025	1717.5	1	0	21.86	0.153
					1	38	21.78	0.151
					1	74	21.69	0.148
					38	0	21.05	0.127
					38	18	20.99	0.126
					38	37	20.97	0.125
			75	0	20.94	0.124		
			1	0	21.78	0.151		
			1	38	21.76	0.150		
			1	74	21.68	0.147		
			38	0	21.09	0.129		
			38	18	20.98	0.125		
			38	37	20.95	0.124		
			75	0	20.90	0.123		
			1	0	21.82	0.152		
			1	38	21.77	0.150		
			1	74	21.76	0.150		
			38	0	21.16	0.131		
		38	18	21.06	0.128			
		38	37	21.05	0.127			
		75	0	20.95	0.124			
		1	0	21.36	0.137			
		1	38	21.03	0.127			
		1	74	20.87	0.122			
		38	0	20.00	0.100			
		38	18	19.96	0.099			
		38	37	19.94	0.099			
		75	0	19.93	0.098			
		1	0	21.30	0.135			
		1	38	20.99	0.126			
		1	74	20.90	0.123			
		38	0	20.08	0.102			
		38	18	19.97	0.099			
		38	37	19.94	0.099			
		75	0	19.94	0.099			
		1	0	21.41	0.138			
1	38	21.03	0.127					
1	74	21.01	0.126					
38	0	20.11	0.103					
38	18	20.04	0.101					
38	37	20.00	0.100					
75	0	19.92	0.098					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	15 MHz with CA power Pcc: Band 4 Scc: Band 5 (5M)	QPSK	20025	1717.5	1	0	21.74	0.149
					1	38	21.65	0.146
					1	74	21.51	0.142
					38	0	20.90	0.123
					38	18	20.81	0.121
					38	37	20.86	0.122
			75	0	20.76	0.119		
			1	0	21.62	0.145		
			1	38	21.64	0.146		
			1	74	21.53	0.142		
			38	0	20.93	0.124		
			38	18	20.82	0.121		
			38	37	20.78	0.120		
			75	0	20.72	0.118		
			1	0	21.67	0.147		
			1	38	21.60	0.145		
			1	74	21.61	0.145		
			38	0	21.05	0.127		
			38	18	20.96	0.125		
			38	37	20.94	0.124		
			75	0	20.79	0.120		
			1	0	21.23	0.133		
			1	38	20.87	0.122		
			1	74	20.70	0.117		
		38	0	19.90	0.098			
		38	18	19.83	0.096			
		38	37	19.83	0.096			
		75	0	19.83	0.096			
		1	0	21.11	0.129			
		1	38	20.80	0.120			
		1	74	20.80	0.120			
		38	0	19.93	0.098			
		38	18	19.87	0.097			
		38	37	19.80	0.095			
		75	0	19.79	0.095			
		1	0	21.31	0.135			
		1	38	20.91	0.123			
		1	74	20.85	0.122			
		38	0	19.94	0.099			
		38	18	19.89	0.097			
		38	37	19.87	0.097			
		75	0	19.75	0.094			
		16QAM	20025	1717.5	1	0	21.23	0.133
					1	38	20.87	0.122
					1	74	20.70	0.117
					38	0	19.90	0.098
					38	18	19.83	0.096
					38	37	19.83	0.096
75	0		19.83	0.096				
1	0		21.11	0.129				
1	38		20.80	0.120				
1	74		20.80	0.120				
38	0		19.93	0.098				
38	18		19.87	0.097				
38	37	19.80	0.095					
75	0	19.79	0.095					
20325	1747.5	1	0	21.31	0.135			
		1	38	20.91	0.123			
		1	74	20.85	0.122			
		38	0	19.94	0.099			
		38	18	19.89	0.097			
		38	37	19.87	0.097			
75	0	19.75	0.094					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	15 MHz with CA power Pcc: Band 4 Scc: Band 5 (10M)	QPSK	20025	1717.5	1	0	21.72	0.149
					1	38	21.67	0.147
					1	74	21.52	0.142
					38	0	20.91	0.123
					38	18	20.81	0.121
					38	37	20.81	0.121
			75	0	20.79	0.120		
			1	0	21.67	0.147		
			1	38	21.65	0.146		
			1	74	21.56	0.143		
			38	0	20.99	0.126		
			38	18	20.81	0.121		
			38	37	20.82	0.121		
			75	0	20.73	0.118		
			1	0	21.71	0.148		
			1	38	21.65	0.146		
			1	74	21.59	0.144		
			38	0	21.06	0.128		
			38	18	20.93	0.124		
			38	37	20.90	0.123		
			75	0	20.82	0.121		
			1	0	21.24	0.133		
			1	38	20.87	0.122		
			1	74	20.75	0.119		
		38	0	19.89	0.097			
		38	18	19.78	0.095			
		38	37	19.76	0.095			
		75	0	19.75	0.094			
		1	0	21.16	0.131			
		1	38	20.83	0.121			
		1	74	20.80	0.120			
		38	0	19.90	0.098			
		38	18	19.86	0.097			
		38	37	19.78	0.095			
		75	0	19.79	0.095			
		1	0	21.24	0.133			
		1	38	20.85	0.122			
		1	74	20.85	0.122			
		38	0	20.01	0.100			
		38	18	19.92	0.098			
		38	37	19.85	0.097			
		75	0	19.83	0.096			
		16QAM	20025	1717.5	1	0	21.24	0.133
					1	38	20.85	0.122
					1	74	20.85	0.122
					38	0	20.01	0.100
					38	18	19.92	0.098
					38	37	19.85	0.097
75	0		19.83	0.096				
20175	1732.5		1	0	21.16	0.131		
			1	38	20.83	0.121		
			1	74	20.80	0.120		
			38	0	19.90	0.098		
			38	18	19.86	0.097		
		38	37	19.78	0.095			
20325	1747.5	1	0	21.24	0.133			
		1	38	20.85	0.122			
		1	74	20.85	0.122			
		38	0	20.01	0.100			
		38	18	19.92	0.098			
		38	37	19.85	0.097			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	15 MHz with CA power Pcc: Band 4 Scc: Band 12 (5M)	QPSK	20025	1717.5	1	0	21.68	0.147
					1	38	21.71	0.148
					1	74	21.44	0.139
					38	0	20.84	0.121
					38	18	20.88	0.122
					38	37	20.93	0.124
			75	0	20.72	0.118		
			1	0	21.66	0.147		
			1	38	21.56	0.143		
			1	74	21.52	0.142		
			38	0	20.91	0.123		
			38	18	20.81	0.121		
			38	37	20.72	0.118		
			75	0	20.72	0.118		
			1	0	21.71	0.148		
			1	38	21.58	0.144		
			1	74	21.62	0.145		
			38	0	21.09	0.129		
			38	18	20.93	0.124		
			38	37	20.89	0.123		
			75	0	20.84	0.121		
			1	0	21.31	0.135		
			1	38	20.90	0.123		
			1	74	20.68	0.117		
		38	0	19.94	0.099			
		38	18	19.74	0.094			
		38	37	19.84	0.096			
		75	0	19.90	0.098			
		1	0	21.16	0.131			
		1	38	20.83	0.121			
		1	74	20.79	0.120			
		38	0	19.84	0.096			
		38	18	19.86	0.097			
		38	37	19.88	0.097			
		75	0	19.69	0.093			
		1	0	21.37	0.137			
		1	38	20.94	0.124			
		1	74	20.92	0.124			
		38	0	19.87	0.097			
		38	18	19.99	0.100			
		38	37	19.84	0.096			
		75	0	19.67	0.093			
		16QAM	20025	1717.5	1	0	21.31	0.135
					1	38	20.90	0.123
					1	74	20.68	0.117
					38	0	19.94	0.099
			38	18	19.74	0.094		
			38	37	19.84	0.096		
75	0		19.90	0.098				
1	0		21.16	0.131				
1	38		20.83	0.121				
1	74		20.79	0.120				
38	0		19.84	0.096				
38	18		19.86	0.097				
38	37	19.88	0.097					
75	0	19.69	0.093					
20325	1747.5	1	0	21.37	0.137			
		1	38	20.94	0.124			
		1	74	20.92	0.124			
		38	0	19.87	0.097			
	38	18	19.99	0.100				
	38	37	19.84	0.096				
	75	0	19.67	0.093				



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	15 MHz with CA power Pcc: Band 4 Scc: Band12 (10M)	QPSK	20025	1717.5	1	0	21.75	0.150
					1	38	21.65	0.146
					1	74	21.55	0.143
					38	0	20.92	0.124
					38	18	20.76	0.119
					38	37	20.91	0.123
			75	0	20.77	0.119		
			1	0	21.59	0.144		
			1	38	21.56	0.143		
			1	74	21.53	0.142		
			38	0	21.02	0.126		
			38	18	20.91	0.123		
			38	37	20.77	0.119		
			75	0	20.80	0.120		
			1	0	21.64	0.146		
			1	38	21.68	0.147		
			1	74	21.67	0.147		
			38	0	21.03	0.127		
			38	18	20.99	0.126		
			38	37	21.03	0.127		
			75	0	20.77	0.119		
			1	0	21.29	0.135		
			1	38	20.88	0.122		
			1	74	20.66	0.116		
		38	0	19.93	0.098			
		38	18	19.87	0.097			
		38	37	19.86	0.097			
		75	0	19.74	0.094			
		1	0	21.08	0.128			
		1	38	20.83	0.121			
		1	74	20.73	0.118			
		38	0	19.84	0.096			
		38	18	19.85	0.097			
		38	37	19.78	0.095			
		75	0	19.86	0.097			
		1	0	21.29	0.135			
		1	38	20.90	0.123			
		1	74	20.94	0.124			
		38	0	19.98	0.100			
		38	18	19.80	0.095			
		38	37	19.93	0.098			
		75	0	19.67	0.093			
		16QAM	20025	1717.5	1	0	21.29	0.135
					1	38	20.90	0.123
					1	74	20.94	0.124
					38	0	19.98	0.100
					38	18	19.80	0.095
					38	37	19.93	0.098
75	0		19.67	0.093				
20175	1732.5		1	0	21.29	0.135		
			1	38	20.90	0.123		
			1	74	20.94	0.124		
			38	0	19.98	0.100		
			38	18	19.80	0.095		
		38	37	19.93	0.098			
20325	1747.5	1	0	21.29	0.135			
		1	38	20.90	0.123			
		1	74	20.94	0.124			
		38	0	19.98	0.100			
		38	18	19.80	0.095			
		38	37	19.93	0.098			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	15 MHz with CA power Pcc: Band 4 Scc: Band 30 (5M)	QPSK	20025	1717.5	1	0	21.79	0.151
					1	38	21.55	0.143
					1	74	21.55	0.143
					38	0	20.93	0.124
					38	18	20.89	0.123
					38	37	20.91	0.123
			75	0	20.69	0.117		
			1	0	21.67	0.147		
			1	38	21.59	0.144		
			1	74	21.51	0.142		
			38	0	20.84	0.121		
			38	18	20.78	0.120		
			38	37	20.81	0.121		
			75	0	20.74	0.119		
			1	0	21.57	0.144		
			1	38	21.61	0.145		
			1	74	21.58	0.144		
			38	0	21.02	0.126		
			38	18	20.90	0.123		
			38	37	20.99	0.126		
			75	0	20.71	0.118		
			1	0	21.29	0.135		
			1	38	20.85	0.122		
			1	74	20.73	0.118		
		38	0	19.85	0.097			
		38	18	19.91	0.098			
		38	37	19.84	0.096			
		75	0	19.81	0.096			
		1	0	21.06	0.128			
		1	38	20.89	0.123			
		1	74	20.77	0.119			
		38	0	19.84	0.096			
		38	18	19.78	0.095			
		38	37	19.83	0.096			
		75	0	19.87	0.097			
		1	0	21.25	0.133			
		1	38	20.89	0.123			
		1	74	20.91	0.123			
		38	0	20.03	0.101			
		38	18	19.95	0.099			
		38	37	19.80	0.095			
		75	0	19.73	0.094			
		16QAM	20025	1717.5	1	0	21.06	0.128
					1	38	20.89	0.123
					1	74	20.77	0.119
					38	0	19.84	0.096
			38	18	19.78	0.095		
			38	37	19.83	0.096		
75	0		19.87	0.097				
20175	1732.5		1	0	21.25	0.133		
			1	38	20.89	0.123		
			1	74	20.91	0.123		
			38	0	20.03	0.101		
38	18		19.95	0.099				
38	37	19.80	0.095					
75	0	19.73	0.094					
20325	1747.5	1	0	21.25	0.133			
		1	38	20.89	0.123			
		1	74	20.91	0.123			
		38	0	20.03	0.101			
38	18	19.95	0.099					
38	37	19.80	0.095					
75	0	19.73	0.094					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power		
					Size	Offset	(dBm)	(W)	
LTE Band 4	15 MHz with CA power Pcc: Band 4 Scc: Band 30 (10M)	QPSK	20025	1717.5	1	0	21.76	0.150	
					1	38	21.74	0.149	
					1	74	21.60	0.145	
					38	0	20.98	0.125	
					38	18	20.83	0.121	
					38	37	20.79	0.120	
			20175	1732.5	75	0	20.79	0.120	
					1	0	21.71	0.148	
					1	38	21.56	0.143	
					1	74	21.62	0.145	
					38	0	20.86	0.122	
					38	18	20.90	0.123	
			20325	1747.5	38	37	20.88	0.122	
					75	0	20.82	0.121	
					1	0	21.77	0.150	
					1	38	21.53	0.142	
					1	74	21.62	0.145	
					38	0	21.10	0.129	
			16QAM	20025	1717.5	38	18	20.87	0.122
						38	37	20.89	0.123
						75	0	20.75	0.119
						1	0	21.21	0.132
						1	38	20.83	0.121
						1	74	20.61	0.115
		20175		1732.5	38	0	19.83	0.096	
					38	18	19.93	0.098	
					38	37	19.81	0.096	
					75	0	19.92	0.098	
					1	0	21.06	0.128	
					1	38	20.89	0.123	
		20325		1747.5	1	74	20.85	0.122	
					38	0	19.91	0.098	
					38	18	19.96	0.099	
					38	37	19.84	0.096	
					75	0	19.76	0.095	
					1	0	21.37	0.137	
		20025		1717.5	1	38	20.89	0.123	
					1	74	20.80	0.120	
					38	0	19.85	0.097	
					38	18	19.92	0.098	
					38	37	19.95	0.099	
					75	0	19.82	0.096	



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	20 MHz	QPSK	20050	1720.0	1	0	21.98	0.158
					1	49	21.81	0.152
					1	99	21.77	0.150
					50	0	21.07	0.128
					50	25	21.00	0.126
					50	50	20.99	0.126
					100	0	20.94	0.124
					1	0	22.05	0.160
			1	49	21.80	0.151		
			1	99	21.76	0.150		
			50	0	21.45	0.140		
			50	25	20.92	0.124		
			50	50	20.89	0.123		
			100	0	20.87	0.122		
			1	0	22.10	0.162		
			1	49	21.93	0.156		
			1	99	21.92	0.156		
			50	0	21.13	0.130		
			50	25	21.07	0.128		
			50	50	21.04	0.127		
			100	0	21.00	0.126		
			1	0	21.28	0.134		
			1	49	21.05	0.127		
			1	99	21.01	0.126		
		50	0	20.04	0.101			
		50	25	19.97	0.099			
		50	50	19.94	0.099			
		100	0	19.92	0.098			
		1	0	21.32	0.136			
		1	49	21.05	0.127			
		1	99	21.03	0.127			
		50	0	20.05	0.101			
		50	25	19.91	0.098			
		50	50	19.90	0.098			
		100	0	19.87	0.097			
		1	0	21.38	0.137			
		1	49	21.26	0.134			
		1	99	21.18	0.131			
		50	0	20.16	0.104			
		50	25	20.05	0.101			
		50	50	20.03	0.101			
		100	0	20.02	0.100			
		16QAM	20050	1720.0	1	0	21.28	0.134
					1	49	21.05	0.127
					1	99	21.01	0.126
					50	0	20.04	0.101
			50	25	19.97	0.099		
			50	50	19.94	0.099		
100	0		19.92	0.098				
1	0		21.32	0.136				
1	49		21.05	0.127				
1	99		21.03	0.127				
50	0		20.05	0.101				
50	25		19.91	0.098				
50	50	19.90	0.098					
100	0	19.87	0.097					
20300	1745.0	1	0	21.38	0.137			
		1	49	21.26	0.134			
		1	99	21.18	0.131			
		50	0	20.16	0.104			
		50	25	20.05	0.101			
		50	50	20.03	0.101			
		100	0	20.02	0.100			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	20 MHz with CA power Pcc: Band 4 Scc: Band 5 (5M)	QPSK	20050	1720.0	1	0	21.78	0.151
					1	49	21.66	0.147
					1	99	21.58	0.144
					50	0	20.93	0.124
					50	25	20.85	0.122
					50	50	20.79	0.120
					100	0	20.79	0.120
					1	0	21.87	0.154
			20175	1732.5	1	49	21.59	0.144
					1	99	21.62	0.145
					50	0	20.92	0.124
					50	25	20.74	0.119
					50	50	20.74	0.119
					100	0	20.70	0.117
					1	0	21.96	0.157
					1	49	21.75	0.150
			20300	1745.0	1	99	21.75	0.150
					50	0	20.99	0.126
					50	25	20.91	0.123
					50	50	20.90	0.123
					100	0	20.89	0.123
					1	0	21.10	0.129
					1	49	20.86	0.122
					1	99	20.89	0.123
		16QAM	20050	1720.0	50	0	19.86	0.097
					50	25	19.84	0.096
					50	50	19.74	0.094
					100	0	19.78	0.095
					1	0	21.17	0.131
					1	49	20.90	0.123
					1	99	20.86	0.122
					50	0	19.90	0.098
			20175	1732.5	50	25	19.79	0.095
					50	50	19.76	0.095
					100	0	19.68	0.093
					1	0	21.26	0.134
					1	49	21.12	0.129
					1	99	21.01	0.126
					50	0	20.04	0.101
					50	25	19.86	0.097
			20300	1745.0	50	50	19.89	0.097
					100	0	19.82	0.096



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	20 MHz with CA power Pcc: Band 4 Scc: Band 5 (10M)	QPSK	20050	1720.0	1	0	21.78	0.151
					1	49	21.66	0.147
					1	99	21.63	0.146
					50	0	20.89	0.123
					50	25	20.83	0.121
					50	50	20.85	0.122
			100	0	20.82	0.121		
			1	0	21.87	0.154		
			1	49	21.61	0.145		
			1	99	21.65	0.146		
			50	0	20.85	0.122		
			50	25	20.81	0.121		
			50	50	20.73	0.118		
			100	0	20.69	0.117		
			1	0	21.89	0.155		
			1	49	21.73	0.149		
			1	99	21.77	0.150		
			50	0	20.97	0.125		
		50	25	20.96	0.125			
		50	50	20.91	0.123			
		100	0	20.80	0.120			
		1	0	21.10	0.129			
		1	49	20.88	0.122			
		1	99	20.87	0.122			
		50	0	19.88	0.097			
		50	25	19.80	0.095			
		50	50	19.80	0.095			
		100	0	19.73	0.094			
		1	0	21.16	0.131			
		1	49	20.86	0.122			
		1	99	20.90	0.123			
		50	0	19.85	0.097			
		50	25	19.80	0.095			
		50	50	19.71	0.094			
		100	0	19.68	0.093			
		1	0	21.25	0.133			
1	49	21.09	0.129					
1	99	20.99	0.126					
50	0	20.04	0.101					
50	25	19.86	0.097					
50	50	19.85	0.097					
100	0	19.84	0.096					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	20 MHz with CA power Pcc: Band 4 Scc: Band 12 (5M)	QPSK	20050	1720.0	1	0	21.72	0.149
					1	49	21.63	0.146
					1	99	21.66	0.147
					50	0	20.98	0.125
					50	25	20.87	0.122
					50	50	20.86	0.122
			100	0	20.71	0.118		
			1	0	21.89	0.155		
			1	49	21.52	0.142		
			1	99	21.58	0.144		
			50	0	20.85	0.122		
			50	25	20.72	0.118		
			50	50	20.79	0.120		
			100	0	20.75	0.119		
			1	0	21.86	0.153		
			1	49	21.74	0.149		
			1	99	21.75	0.150		
			50	0	21.03	0.127		
		50	25	20.84	0.121			
		50	50	20.88	0.122			
		100	0	20.81	0.121			
		1	0	21.11	0.129			
		1	49	20.85	0.122			
		1	99	20.90	0.123			
		50	0	19.90	0.098			
		50	25	19.87	0.097			
		50	50	19.83	0.096			
		100	0	19.88	0.097			
		1	0	21.15	0.130			
		1	49	20.80	0.120			
		1	99	20.95	0.124			
		50	0	19.89	0.097			
		50	25	19.81	0.096			
		50	50	19.71	0.094			
		100	0	19.76	0.095			
		1	0	21.21	0.132			
1	49	21.03	0.127					
1	99	21.00	0.126					
50	0	20.04	0.101					
50	25	19.91	0.098					
50	50	19.88	0.097					
100	0	19.75	0.094					
16QAM	20050	1720.0	1	0	21.11	0.129		
			1	49	20.85	0.122		
			1	99	20.90	0.123		
			50	0	19.90	0.098		
			50	25	19.87	0.097		
			50	50	19.83	0.096		
	100	0	19.88	0.097				
	1	0	21.15	0.130				
	1	49	20.80	0.120				
	1	99	20.95	0.124				
	50	0	19.89	0.097				
	50	25	19.81	0.096				
	50	50	19.71	0.094				
	100	0	19.76	0.095				
	1	0	21.21	0.132				
	1	49	21.03	0.127				
	1	99	21.00	0.126				
	50	0	20.04	0.101				
50	25	19.91	0.098					
50	50	19.88	0.097					
100	0	19.75	0.094					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	20 MHz with CA power Pcc: Band 4 Scc: Band12 (10M)	QPSK	20050	1720.0	1	0	21.83	0.152
					1	49	21.67	0.147
					1	99	21.49	0.141
					50	0	21.02	0.126
					50	25	20.78	0.120
					50	50	20.83	0.121
					100	0	20.72	0.118
					1	0	21.97	0.157
			20175	1732.5	1	49	21.64	0.146
					1	99	21.58	0.144
					50	0	20.91	0.123
					50	25	20.78	0.120
					50	50	20.67	0.117
					100	0	20.79	0.120
					1	0	21.93	0.156
					1	49	21.81	0.152
			20300	1745.0	1	99	21.66	0.147
					50	0	21.03	0.127
					50	25	20.95	0.124
					50	50	20.96	0.125
					100	0	20.98	0.125
					1	0	21.13	0.130
					1	49	20.95	0.124
					1	99	20.83	0.121
		16QAM	20050	1720.0	50	0	19.92	0.098
					50	25	19.89	0.097
					50	50	19.69	0.093
					100	0	19.79	0.095
					1	0	21.13	0.130
					1	49	20.94	0.124
					1	99	20.90	0.123
					50	0	19.97	0.099
			20175	1732.5	50	25	19.70	0.093
					50	50	19.73	0.094
					100	0	19.69	0.093
					1	0	21.17	0.131
					1	49	21.12	0.129
					1	99	20.92	0.124
					50	0	20.09	0.102
					50	25	19.76	0.095
			20300	1745.0	50	50	19.87	0.097
					100	0	19.88	0.097



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	20 MHz with CA power Pcc: Band 4 Scc: Band 30 (5M)	QPSK	20050	1720.0	1	0	21.71	0.148
					1	49	21.70	0.148
					1	99	21.51	0.142
					50	0	21.02	0.126
					50	25	20.88	0.122
					50	50	20.73	0.118
					100	0	20.83	0.121
					1	0	21.90	0.155
			20175	1732.5	1	49	21.61	0.145
					1	99	21.67	0.147
					50	0	20.86	0.122
					50	25	20.75	0.119
					50	50	20.70	0.117
					100	0	20.75	0.119
					1	0	21.92	0.156
					1	49	21.73	0.149
			20300	1745.0	1	99	21.65	0.146
					50	0	21.03	0.127
					50	25	20.82	0.121
					50	50	20.83	0.121
					100	0	20.82	0.121
					1	0	21.06	0.128
					1	49	20.96	0.125
					1	99	20.83	0.121
		16QAM	20050	1720.0	50	0	19.94	0.099
					50	25	19.78	0.095
					50	50	19.65	0.092
					100	0	19.84	0.096
					1	0	21.08	0.128
					1	49	20.86	0.122
					1	99	20.81	0.121
					50	0	19.94	0.099
			20175	1732.5	50	25	19.81	0.096
					50	50	19.82	0.096
					100	0	19.78	0.095
					1	0	21.30	0.135
					1	49	21.16	0.131
					1	99	20.92	0.124
					50	0	20.10	0.102
					50	25	19.81	0.096
			20300	1745.0	50	50	19.91	0.098
					100	0	19.80	0.095



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 4	20 MHz with CA power Pcc: Band 4 Scc: Band 30 (10M)	QPSK	20050	1720.0	1	0	21.68	0.147
					1	49	21.57	0.144
					1	99	21.65	0.146
					50	0	20.90	0.123
					50	25	20.92	0.124
					50	50	20.70	0.117
					100	0	20.70	0.117
					1	0	21.93	0.156
			20175	1732.5	1	49	21.67	0.147
					1	99	21.62	0.145
					50	0	20.93	0.124
					50	25	20.77	0.119
					50	50	20.69	0.117
					100	0	20.66	0.116
					1	0	21.95	0.157
					1	49	21.79	0.151
			20300	1745.0	1	99	21.78	0.151
					50	0	20.95	0.124
					50	25	20.84	0.121
					50	50	20.88	0.122
					100	0	20.87	0.122
					1	0	21.00	0.126
					1	49	20.94	0.124
					1	99	20.83	0.121
		16QAM	20050	1720.0	50	0	19.79	0.095
					50	25	19.91	0.098
					50	50	19.83	0.096
					100	0	19.74	0.094
					1	0	21.20	0.132
					1	49	20.89	0.123
					1	99	20.77	0.119
					50	0	19.95	0.099
			20175	1732.5	50	25	19.79	0.095
					50	50	19.74	0.094
					100	0	19.73	0.094
					1	0	21.35	0.136
					1	49	21.19	0.132
					1	99	21.10	0.129
					50	0	19.96	0.099
					50	25	19.96	0.099
			20300	1745.0	50	50	19.85	0.097
					100	0	19.91	0.098



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 5	1.4 MHz	QPSK	20407	824.7	1	0	23.01	0.200
					1	2	23.00	0.200
					1	5	22.98	0.199
					3	0	22.85	0.193
					3	1	22.83	0.192
					3	3	22.75	0.188
			6	0	21.82	0.152		
			1	0	23.35	0.216		
			1	2	23.20	0.209		
			1	5	23.18	0.208		
			3	0	23.13	0.206		
			3	1	23.09	0.204		
			3	3	23.00	0.200		
			6	0	22.11	0.163		
			1	0	23.60	0.229		
			1	2	23.55	0.226		
			1	5	23.50	0.224		
			3	0	23.48	0.223		
		3	1	23.42	0.220			
		3	3	23.32	0.215			
		6	0	22.47	0.177			
		1	0	22.29	0.169			
		1	2	22.27	0.169			
		1	5	22.26	0.168			
		3	0	21.93	0.156			
		3	1	21.91	0.155			
		3	3	21.91	0.155			
		6	0	20.90	0.123			
		1	0	22.56	0.180			
		1	2	22.46	0.176			
		1	5	22.44	0.175			
		3	0	22.21	0.166			
		3	1	22.12	0.163			
		3	3	22.03	0.160			
		6	0	21.17	0.131			
		1	0	22.92	0.196			
		1	2	22.92	0.196			
		1	5	22.85	0.193			
		3	0	22.65	0.184			
		3	1	22.53	0.179			
		3	3	22.53	0.179			
		6	0	21.57	0.144			
16QAM	20407	824.7	1	0	22.29	0.169		
			1	2	22.27	0.169		
			1	5	22.26	0.168		
			3	0	21.93	0.156		
			3	1	21.91	0.155		
			3	3	21.91	0.155		
	6	0	20.90	0.123				
	1	0	22.56	0.180				
	1	2	22.46	0.176				
	1	5	22.44	0.175				
	3	0	22.21	0.166				
	3	1	22.12	0.163				
	3	3	22.03	0.160				
	6	0	21.17	0.131				
	1	0	22.92	0.196				
	1	2	22.92	0.196				
	1	5	22.85	0.193				
	3	0	22.65	0.184				
3	1	22.53	0.179					
3	3	22.53	0.179					
6	0	21.57	0.144					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 5	3 MHz	QPSK	20415	825.5	1	0	22.97	0.198
					1	8	22.92	0.196
					1	14	22.91	0.195
					8	0	21.98	0.158
					8	4	21.96	0.157
					8	7	21.90	0.155
			15	0	21.88	0.154		
			1	0	23.28	0.213		
			1	8	23.17	0.207		
			1	14	23.13	0.206		
			8	0	22.16	0.164		
			8	4	22.14	0.164		
			8	7	22.11	0.163		
			15	0	22.05	0.160		
			1	0	23.56	0.227		
			1	8	23.46	0.222		
			1	14	23.46	0.222		
			8	0	22.54	0.179		
		8	4	22.52	0.179			
		8	7	22.49	0.177			
		15	0	22.47	0.177			
		1	0	22.21	0.166			
		1	8	22.15	0.164			
		1	14	22.15	0.164			
		8	0	21.01	0.126			
		8	4	20.99	0.126			
		8	7	20.93	0.124			
		15	0	20.90	0.123			
		1	0	22.54	0.179			
		1	8	22.43	0.175			
		1	14	22.33	0.171			
		8	0	21.23	0.133			
		8	4	21.20	0.132			
		8	7	21.10	0.129			
		15	0	21.08	0.128			
		1	0	22.90	0.195			
		1	8	22.72	0.187			
		1	14	22.72	0.187			
		8	0	21.65	0.146			
		8	4	21.57	0.144			
		8	7	21.53	0.142			
		15	0	21.52	0.142			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 5	5 MHz	QPSK	20425	826.5	1	0	23.00	0.200
					1	12	22.96	0.198
					1	24	22.90	0.195
					12	0	21.95	0.157
					12	6	21.90	0.155
					12	13	21.87	0.154
			25	0	21.87	0.154		
			1	0	23.28	0.213		
			1	12	23.20	0.209		
			1	24	23.16	0.207		
			12	0	22.21	0.166		
			12	6	22.20	0.166		
			12	13	22.19	0.166		
			25	0	22.17	0.165		
			1	0	23.52	0.225		
			1	12	23.52	0.225		
			1	24	23.38	0.218		
			12	0	22.53	0.179		
			12	6	22.49	0.177		
			12	13	22.49	0.177		
			25	0	22.44	0.175		
			1	0	22.27	0.169		
			1	12	22.19	0.166		
			1	24	22.15	0.164		
		12	0	20.96	0.125			
		12	6	20.96	0.125			
		12	13	20.93	0.124			
		25	0	20.91	0.123			
		1	0	22.51	0.178			
		1	12	22.46	0.176			
		1	24	22.46	0.176			
		12	0	21.20	0.132			
		12	6	21.19	0.132			
		12	13	21.17	0.131			
		25	0	21.17	0.131			
		1	0	22.86	0.193			
		1	12	22.71	0.187			
		1	24	22.66	0.185			
		12	0	21.57	0.144			
		12	6	21.55	0.143			
		12	11	21.54	0.143			
		25	0	21.46	0.140			
		16QAM	20425	826.5	1	0	22.27	0.169
					1	12	22.19	0.166
					1	24	22.15	0.164
					12	0	20.96	0.125
					12	6	20.96	0.125
					12	13	20.93	0.124
25	0	20.91	0.123					
1	0	22.51	0.178					
1	12	22.46	0.176					
1	24	22.46	0.176					
12	0	21.20	0.132					
12	6	21.19	0.132					
12	13	21.17	0.131					
25	0	21.17	0.131					
1	0	22.51	0.178					
1	12	22.46	0.176					
1	24	22.46	0.176					
12	0	21.20	0.132					
12	6	21.19	0.132					
12	13	21.17	0.131					
25	0	21.17	0.131					
1	0	22.51	0.178					
1	12	22.46	0.176					
1	24	22.46	0.176					
12	0	21.20	0.132					
12	6	21.19	0.132					
12	13	21.17	0.131					
25	0	21.17	0.131					
1	0	22.51	0.178					
1	12	22.46	0.176					
1	24	22.46	0.176					
12	0	21.20	0.132					
12	6	21.19	0.132					
12	13	21.17	0.131					
25	0	21.17	0.131					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 5	10 MHz	QPSK	20450	829.0	1	0	23.00	0.200
					1	24	22.84	0.192
					1	49	22.81	0.191
					25	0	22.41	0.174
					25	12	22.43	0.175
					25	25	22.41	0.174
			50	0	22.34	0.171		
			1	0	23.17	0.207		
			1	24	23.15	0.207		
			1	49	22.97	0.198		
			25	0	22.70	0.186		
			25	12	22.68	0.185		
			25	25	22.64	0.184		
			50	0	22.49	0.177		
			1	0	23.44	0.221		
			1	24	23.28	0.213		
			1	49	23.27	0.212		
			25	0	22.96	0.198		
		25	12	22.93	0.196			
		25	25	22.82	0.191			
		50	0	22.77	0.189			
		1	0	22.30	0.170			
		1	24	22.17	0.165			
		1	49	22.12	0.163			
		25	0	21.46	0.140			
		25	12	21.46	0.140			
		25	25	21.45	0.140			
		50	0	21.34	0.136			
		1	0	22.47	0.177			
		1	24	22.44	0.175			
		1	49	22.26	0.168			
		25	0	21.65	0.146			
		25	12	21.64	0.146			
		25	25	21.61	0.145			
		50	0	21.47	0.140			
		1	0	22.80	0.191			
		1	24	22.56	0.180			
		1	49	22.50	0.178			
		25	0	21.96	0.157			
		25	12	21.92	0.156			
		25	25	21.79	0.151			
		50	0	21.74	0.149			
		16QAM	20450	829.0	1	0	22.30	0.170
					1	24	22.17	0.165
					1	49	22.12	0.163
					25	0	21.46	0.140
					25	12	21.46	0.140
					25	25	21.45	0.140
50	0		21.34	0.136				
1	0		22.47	0.177				
1	24		22.44	0.175				
1	49		22.26	0.168				
25	0		21.65	0.146				
25	12		21.64	0.146				
25	25		21.61	0.145				
50	0		21.47	0.140				
1	0		22.80	0.191				
1	24		22.56	0.180				
1	49		22.50	0.178				
25	0		21.96	0.157				
25	12	21.92	0.156					
25	25	21.79	0.151					
50	0	21.74	0.149					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 7	5 MHz	QPSK	20775	2502.5	1	0	22.10	0.162
					1	12	22.08	0.161
					1	24	22.04	0.160
					12	0	21.09	0.129
					12	6	21.03	0.127
					12	13	21.03	0.127
			25	0	21.00	0.126		
			1	0	21.91	0.155		
			1	12	21.73	0.149		
			1	24	21.64	0.146		
			12	0	20.68	0.117		
			12	6	20.67	0.117		
			12	13	20.64	0.116		
			25	0	20.62	0.115		
			1	0	21.56	0.143		
			1	12	21.52	0.142		
			1	24	21.51	0.142		
			12	0	20.56	0.114		
		12	6	20.55	0.114			
		12	13	20.53	0.113			
		25	0	20.52	0.113			
		1	0	21.33	0.136			
		1	12	21.31	0.135			
		1	24	21.30	0.135			
		12	0	20.12	0.103			
		12	6	20.03	0.101			
		12	13	20.02	0.100			
		25	0	20.00	0.100			
		1	0	21.14	0.130			
		1	12	20.91	0.123			
		1	24	20.86	0.122			
		12	0	19.71	0.094			
		12	6	19.71	0.094			
		12	13	19.71	0.094			
		25	0	19.64	0.092			
		1	0	20.71	0.118			
		1	12	20.66	0.116			
		1	24	20.63	0.116			
		12	0	19.55	0.090			
		12	6	19.53	0.090			
		12	13	19.53	0.090			
		25	0	19.51	0.089			
		16QAM	20775	2502.5	1	0	20.12	0.103
					1	12	20.03	0.101
					1	24	20.02	0.100
					12	0	20.00	0.100
					12	6	20.00	0.100
					12	13	20.00	0.100
25	0		20.00	0.100				
1	0		21.14	0.130				
1	12		20.91	0.123				
1	24		20.86	0.122				
12	0		19.71	0.094				
12	6		19.71	0.094				
12	13		19.71	0.094				
25	0		19.64	0.092				
1	0		20.71	0.118				
1	12		20.66	0.116				
1	24		20.63	0.116				
12	0		19.55	0.090				
12	6	19.53	0.090					
12	13	19.53	0.090					
25	0	19.51	0.089					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 7	10 MHz	QPSK	20800	2505.0	1	0	22.34	0.171
					1	24	22.27	0.169
					1	49	21.88	0.154
					25	0	21.14	0.130
					25	12	21.12	0.129
					25	25	21.10	0.129
			50	0	21.09	0.129		
			21100	2535.0	1	0	22.06	0.161
					1	24	21.91	0.155
					1	49	21.58	0.144
					25	0	20.93	0.124
					25	12	20.82	0.121
					25	25	20.79	0.120
			50	0	20.68	0.117		
			21400	2565.0	1	0	21.76	0.150
					1	24	21.70	0.148
					1	49	21.34	0.136
					25	0	20.60	0.115
		25			12	20.59	0.115	
		25			25	20.55	0.114	
		50	0	20.44	0.111			
		16QAM	20800	2505.0	1	0	21.54	0.143
					1	24	21.47	0.140
					1	49	21.18	0.131
					25	0	20.13	0.103
					25	12	20.13	0.103
					25	25	20.08	0.102
			50	0	20.08	0.102		
			21100	2535.0	1	0	21.37	0.137
					1	24	21.16	0.131
					1	49	20.85	0.122
					25	0	19.90	0.098
					25	12	19.85	0.097
					25	25	19.82	0.096
			50	0	19.73	0.094		
			21400	2565.0	1	0	21.04	0.127
					1	24	20.95	0.124
					1	49	20.59	0.115
					25	0	19.58	0.091
		25			12	19.56	0.090	
		25			25	19.52	0.090	
		50	0	19.45	0.088			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 7	15 MHz	QPSK	20825	2507.5	1	0	22.17	0.165
					1	38	22.15	0.164
					1	74	21.90	0.155
					36	0	21.25	0.133
					36	18	21.20	0.132
					36	39	21.14	0.130
					75	0	21.12	0.129
					75	0	21.12	0.129
			21100	2535.0	1	0	21.78	0.151
					1	38	21.75	0.150
					1	74	21.51	0.142
					36	0	20.85	0.122
					36	18	20.80	0.120
					36	39	20.73	0.118
					75	0	20.73	0.118
					75	0	20.73	0.118
			21375	2562.5	1	0	21.48	0.141
					1	38	21.25	0.133
					1	74	21.14	0.130
					36	0	20.47	0.111
					36	18	20.44	0.111
					36	39	20.43	0.110
					75	0	20.37	0.109
					75	0	20.37	0.109
		16QAM	20825	2507.5	1	0	21.45	0.140
					1	38	21.40	0.138
					1	74	21.26	0.134
					36	0	20.25	0.106
					36	18	20.16	0.104
					36	39	20.14	0.103
					75	0	20.11	0.103
					75	0	20.11	0.103
			21100	2535.0	1	0	20.98	0.125
					1	38	20.95	0.124
					1	74	20.84	0.121
					36	0	19.83	0.096
					36	18	19.79	0.095
					36	39	19.76	0.095
					75	0	19.74	0.094
					75	0	19.74	0.094
			21375	2562.5	1	0	20.75	0.119
					1	38	20.54	0.113
					1	74	20.52	0.113
					36	0	19.46	0.088
					36	18	19.45	0.088
					36	39	19.44	0.088
					75	0	19.34	0.086
					75	0	19.34	0.086



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power			
					Size	Offset	(dBm)	(W)		
LTE Band 7	20 MHz	QPSK	20850	2510.0	1	0	22.43	0.175		
					1	49	22.30	0.170		
					1	99	22.05	0.160		
					50	0	21.33	0.136		
					50	25	21.29	0.135		
					50	50	21.26	0.134		
			100	0	21.24	0.133				
			21100	2535.0	1	0	22.39	0.173		
					1	49	21.92	0.156		
					1	99	21.74	0.149		
					50	0	20.92	0.124		
					50	25	20.89	0.123		
					50	50	20.88	0.122		
			100	0	20.86	0.122				
			21350	2560.0	1	0	21.98	0.158		
					1	49	21.57	0.144		
					1	99	21.42	0.139		
					50	0	20.65	0.116		
		50			25	20.60	0.115			
		50			50	20.55	0.114			
		100	0	20.47	0.111					
		16QAM	20850	2510.0	1	0	21.73	0.149		
					1	49	21.60	0.145		
					1	99	21.32	0.136		
					50	0	20.32	0.108		
					50	25	20.31	0.107		
					50	50	20.30	0.107		
					100	0	20.26	0.106		
					21100	2535.0	1	0	21.24	0.133
							1	49	21.22	0.132
							1	99	21.02	0.126
							50	0	19.94	0.099
							50	25	19.93	0.098
			50	50			19.90	0.098		
			100	0	19.88	0.097				
			21350	2560.0	1	0	20.96	0.125		
					1	49	20.81	0.121		
					1	99	20.70	0.117		
					50	0	19.64	0.092		
					50	25	19.59	0.091		
					50	50	19.58	0.091		
					100	0	19.48	0.089		



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 12	1.4 MHz	QPSK	23017	699.7	1	0	24.01	0.252
					1	3	23.92	0.247
					1	5	23.86	0.243
					3	0	23.86	0.243
					3	2	23.84	0.242
					3	3	23.65	0.232
			6	0	22.77	0.189		
			1	0	24.27	0.267		
			1	3	24.08	0.256		
			1	5	24.07	0.255		
			3	0	24.04	0.254		
			3	2	23.91	0.246		
			3	3	23.54	0.226		
			6	0	22.99	0.199		
			1	0	24.29	0.269		
			1	3	24.19	0.262		
			1	5	24.07	0.255		
			3	0	24.06	0.255		
		3	2	23.88	0.244			
		3	3	23.76	0.238			
		6	0	22.93	0.196			
		1	0	23.49	0.223			
		1	3	23.40	0.219			
		1	5	23.37	0.217			
		3	0	23.06	0.202			
		3	2	22.83	0.192			
		3	3	22.58	0.181			
		6	0	21.94	0.156			
		1	0	23.69	0.234			
		1	3	23.67	0.233			
		1	5	23.56	0.227			
		3	0	23.38	0.218			
		3	2	23.12	0.205			
		3	3	22.86	0.193			
		6	0	22.26	0.168			
		1	0	23.71	0.235			
		1	3	23.60	0.229			
		1	5	23.59	0.229			
		3	0	23.23	0.210			
		3	2	23.03	0.201			
		3	3	22.77	0.189			
		6	0	22.07	0.161			
		16QAM	23017	699.7	1	0	23.49	0.223
					1	3	23.40	0.219
					1	5	23.37	0.217
					3	0	23.06	0.202
					3	2	22.83	0.192
					3	3	22.58	0.181
6	0		21.94	0.156				
1	0		23.69	0.234				
1	3		23.67	0.233				
1	5		23.56	0.227				
3	0		23.38	0.218				
3	2		23.12	0.205				
3	3		22.86	0.193				
6	0		22.26	0.168				
1	0		23.71	0.235				
1	3		23.60	0.229				
1	5		23.59	0.229				
3	0		23.23	0.210				
3	2	23.03	0.201					
3	3	22.77	0.189					
6	0	22.07	0.161					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 12	3 MHz	QPSK	23025	700.5	1	0	24.16	0.261
					1	8	24.01	0.252
					1	14	23.93	0.247
					8	0	22.98	0.199
					8	4	22.97	0.198
					8	8	22.96	0.198
			15	0	22.96	0.198		
			1	0	24.27	0.267		
			1	8	24.11	0.258		
			1	14	24.09	0.256		
			8	0	23.18	0.208		
			8	4	23.06	0.202		
			8	8	23.06	0.202		
			15	0	23.03	0.201		
			1	0	24.36	0.273		
			1	8	24.06	0.255		
			1	14	24.03	0.253		
			8	0	23.09	0.204		
		8	4	23.05	0.202			
		8	8	23.04	0.201			
		15	0	23.03	0.201			
		1	0	23.43	0.220			
		1	8	23.36	0.217			
		1	14	23.26	0.212			
		8	0	22.04	0.160			
		8	4	21.98	0.158			
		8	8	21.96	0.157			
		15	0	21.95	0.157			
		1	0	23.68	0.233			
		1	8	23.63	0.231			
		1	14	23.60	0.229			
		8	0	22.31	0.170			
		8	4	22.23	0.167			
		8	8	22.21	0.166			
		15	0	22.19	0.166			
		1	0	23.57	0.228			
		1	8	23.53	0.225			
		1	14	23.51	0.224			
		8	0	22.14	0.164			
		8	4	22.12	0.163			
		8	8	22.11	0.163			
		15	0	22.10	0.162			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 12	5 MHz	QPSK	23035	701.5	1	0	24.07	0.255
					1	13	24.00	0.251
					1	24	23.98	0.250
					12	0	23.01	0.200
					12	6	23.01	0.200
					12	13	22.99	0.199
			25	0	22.92	0.196		
			1	0	24.19	0.262		
			1	13	24.13	0.259		
			1	24	24.05	0.254		
			12	0	23.27	0.212		
			12	6	23.22	0.210		
			12	13	23.09	0.204		
			25	0	23.05	0.202		
			1	0	24.31	0.270		
			1	13	24.29	0.269		
			1	24	24.26	0.267		
			12	0	23.20	0.209		
			12	6	23.20	0.209		
			12	13	23.16	0.207		
			25	0	23.08	0.203		
			1	0	23.60	0.229		
			1	13	23.33	0.215		
			1	24	23.25	0.211		
		12	0	22.15	0.164			
		12	6	22.15	0.164			
		12	13	22.04	0.160			
		25	0	22.04	0.160			
		1	0	23.66	0.232			
		1	13	23.53	0.225			
		1	24	23.48	0.223			
		12	0	22.34	0.171			
		12	6	22.32	0.171			
		12	13	22.17	0.165			
		25	0	22.17	0.165			
		1	0	23.89	0.245			
		1	13	23.62	0.230			
		1	24	23.51	0.224			
		12	0	22.35	0.172			
		12	6	22.29	0.169			
		12	13	22.27	0.169			
		25	0	22.25	0.168			
		16QAM	23035	701.5	1	0	23.66	0.232
					1	13	23.53	0.225
					1	24	23.48	0.223
					12	0	22.34	0.171
					12	6	22.32	0.171
					12	13	22.17	0.165
25	0		22.17	0.165				
1	0		23.66	0.232				
1	13		23.53	0.225				
1	24		23.48	0.223				
12	0		22.34	0.171				
12	6		22.32	0.171				
12	13	22.17	0.165					
25	0	22.17	0.165					
23095	707.5	1	0	23.66	0.232			
		1	13	23.53	0.225			
		1	24	23.48	0.223			
		12	0	22.34	0.171			
		12	6	22.32	0.171			
		12	13	22.17	0.165			
25	0	22.17	0.165					
23155	713.5	1	0	23.66	0.232			
		1	13	23.53	0.225			
		1	24	23.48	0.223			
		12	0	22.34	0.171			
		12	6	22.32	0.171			
		12	13	22.17	0.165			
25	0	22.17	0.165					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power			
					Size	Offset	(dBm)	(W)		
LTE Band 12	5 MHz with CA power Pcc: Band 12 Scc: Band 30 (5M)	QPSK	23035	701.5	1	0	23.93	0.247		
					1	13	23.97	0.249		
					1	24	23.83	0.242		
					12	0	23.00	0.200		
					12	6	22.94	0.197		
					12	13	22.92	0.196		
			25	0	22.80	0.191				
			1	0	24.06	0.255				
			1	13	23.99	0.251				
			1	24	24.04	0.254				
			12	0	23.22	0.210				
			12	6	23.23	0.210				
			12	13	23.04	0.201				
			25	0	22.97	0.198				
			1	0	24.18	0.262				
			1	13	24.22	0.264				
			1	24	24.15	0.260				
			12	0	23.02	0.200				
			12	6	23.19	0.208				
			12	13	23.00	0.200				
			25	0	22.94	0.197				
			1	0	23.49	0.223				
			1	13	23.15	0.207				
			1	24	23.14	0.206				
		12	0	21.98	0.158					
		12	6	21.98	0.158					
		12	13	22.00	0.158					
		25	0	21.93	0.156					
		1	0	23.63	0.231					
		1	13	23.42	0.220					
		1	24	23.39	0.218					
		12	0	22.31	0.170					
		12	6	22.21	0.166					
		12	13	22.09	0.162					
		25	0	22.05	0.160					
		1	0	23.85	0.243					
		1	13	23.48	0.223					
		1	24	23.34	0.216					
		12	0	22.36	0.172					
		12	6	22.19	0.166					
		12	13	22.18	0.165					
		25	0	22.14	0.164					
		16QAM	23095	707.5	23035	701.5	1	0	23.49	0.223
							1	13	23.15	0.207
							1	24	23.14	0.206
							12	0	21.98	0.158
							12	6	21.98	0.158
							12	13	22.00	0.158
25	0	21.93	0.156							
1	0	23.63	0.231							
1	13	23.42	0.220							
1	24	23.39	0.218							
12	0	22.31	0.170							
12	6	22.21	0.166							
12	13	22.09	0.162							
25	0	22.05	0.160							
1	0	23.85	0.243							
1	13	23.48	0.223							
1	24	23.34	0.216							
12	0	22.36	0.172							
12	6	22.19	0.166							
12	13	22.18	0.165							
25	0	22.14	0.164							



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 12	5 MHz with CA power Pcc: Band 12 Scc: Band 30 (10M)	QPSK	23035	701.5	1	0	23.94	0.248
					1	13	23.85	0.243
					1	24	23.92	0.247
					12	0	23.03	0.201
					12	6	22.96	0.198
					12	13	22.95	0.197
			25	0	22.93	0.196		
			1	0	24.07	0.255		
			1	13	23.97	0.249		
			1	24	23.98	0.250		
			12	0	23.19	0.208		
			12	6	23.12	0.205		
			12	13	23.10	0.204		
			25	0	22.97	0.198		
			1	0	24.25	0.266		
			1	13	24.27	0.267		
			1	24	24.19	0.262		
			12	0	23.09	0.204		
		12	6	23.14	0.206			
		12	13	23.18	0.208			
		25	0	22.98	0.199			
		1	0	23.57	0.228			
		1	13	23.20	0.209			
		1	24	23.18	0.208			
		12	0	22.07	0.161			
		12	6	22.00	0.158			
		12	13	21.86	0.153			
		25	0	21.89	0.155			
		1	0	23.49	0.223			
		1	13	23.35	0.216			
		1	24	23.37	0.217			
		12	0	22.18	0.165			
		12	6	22.21	0.166			
		12	13	22.01	0.159			
		25	0	22.16	0.164			
		1	0	23.76	0.238			
1	13	23.52	0.225					
1	24	23.47	0.222					
12	0	22.30	0.170					
12	6	22.25	0.168					
12	13	22.26	0.168					
25	0	22.12	0.163					
16QAM	23095	707.5	1	0	23.49	0.223		
16QAM	23095	707.5	1	13	23.35	0.216		
16QAM	23095	707.5	1	24	23.37	0.217		
16QAM	23095	707.5	12	0	22.18	0.165		
16QAM	23095	707.5	12	6	22.21	0.166		
16QAM	23095	707.5	12	13	22.01	0.159		
16QAM	23095	707.5	25	0	22.16	0.164		
16QAM	23155	713.5	1	0	23.49	0.223		
16QAM	23155	713.5	1	13	23.35	0.216		
16QAM	23155	713.5	1	24	23.37	0.217		
16QAM	23155	713.5	12	0	22.18	0.165		
16QAM	23155	713.5	12	6	22.21	0.166		
16QAM	23155	713.5	12	13	22.01	0.159		
16QAM	23155	713.5	25	0	22.16	0.164		



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 12	10 MHz	QPSK	23060	704.0	1	0	24.29	0.269
					1	25	24.04	0.254
					1	49	23.92	0.247
					25	0	23.26	0.212
					25	13	23.12	0.205
					25	25	23.08	0.203
			50	0	23.07	0.203		
			1	0	24.37	0.274		
			1	25	24.09	0.256		
			1	49	23.98	0.250		
			25	0	23.47	0.222		
			25	13	23.32	0.215		
			25	25	23.32	0.215		
			50	0	23.15	0.207		
			1	0	24.28	0.268		
			1	25	24.16	0.261		
			1	49	24.11	0.258		
			25	0	23.39	0.218		
		25	13	23.35	0.216			
		25	25	23.28	0.213			
		50	0	23.26	0.212			
		1	0	23.87	0.244			
		1	25	23.46	0.222			
		1	49	23.41	0.219			
		25	0	22.31	0.170			
		25	13	22.24	0.167			
		25	25	22.09	0.162			
		50	0	22.05	0.160			
		1	0	23.89	0.245			
		1	25	23.62	0.230			
		1	49	23.48	0.223			
		25	0	22.44	0.175			
		25	13	22.37	0.173			
		25	25	22.32	0.171			
		50	0	22.10	0.162			
		1	0	23.91	0.246			
1	25	23.60	0.229					
1	49	23.55	0.226					
25	0	22.39	0.173					
25	13	22.36	0.172					
25	25	22.28	0.169					
50	0	22.25	0.168					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 12	10 MHz with CA power Pcc: Band 12 Scc: Band 30 (5M)	QPSK	23035	701.5	1	0	24.16	0.261
					1	13	24.05	0.254
					1	24	23.86	0.243
					12	0	23.10	0.204
					12	6	23.00	0.200
					12	13	22.93	0.196
			25	0	22.99	0.199		
			1	0	24.21	0.264		
			1	13	23.96	0.249		
			1	24	23.83	0.242		
			12	0	23.45	0.221		
			12	6	23.16	0.207		
			12	13	23.31	0.214		
			25	0	23.06	0.202		
			1	0	24.26	0.267		
			1	13	24.13	0.259		
			1	24	24.00	0.251		
			12	0	23.24	0.211		
			12	6	23.18	0.208		
			12	13	23.20	0.209		
			25	0	23.23	0.210		
			1	0	23.76	0.238		
			1	13	23.46	0.222		
			1	24	23.31	0.214		
		12	0	22.16	0.164			
		12	6	22.21	0.166			
		12	13	22.10	0.162			
		25	0	22.07	0.161			
		1	0	23.89	0.245			
		1	13	23.61	0.230			
		1	24	23.40	0.219			
		12	0	22.45	0.176			
		12	6	22.23	0.167			
		12	13	22.17	0.165			
		25	0	21.92	0.156			
		1	0	23.80	0.240			
		1	13	23.57	0.228			
		1	24	23.44	0.221			
		12	0	22.30	0.170			
		12	6	22.20	0.166			
		12	13	22.28	0.169			
		25	0	22.18	0.165			
		16QAM	23035	701.5	1	0	23.76	0.238
					1	13	23.46	0.222
					1	24	23.31	0.214
					12	0	22.16	0.164
					12	6	22.21	0.166
					12	13	22.10	0.162
25	0		22.07	0.161				
1	0		23.89	0.245				
1	13		23.61	0.230				
1	24		23.40	0.219				
12	0		22.45	0.176				
12	6		22.23	0.167				
12	13		22.17	0.165				
25	0		21.92	0.156				
1	0		23.80	0.240				
1	13		23.57	0.228				
1	24		23.44	0.221				
12	0		22.30	0.170				
12	6	22.20	0.166					
12	13	22.28	0.169					
25	0	22.18	0.165					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 12	10 MHz with CA power Pcc: Band 12 Scc: Band 30 (10M)	QPSK	23035	701.5	1	0	24.11	0.258
					1	13	23.88	0.244
					1	24	23.86	0.243
					12	0	23.13	0.206
					12	6	23.13	0.206
					12	13	23.00	0.200
			25	0	23.09	0.204		
			1	0	24.36	0.273		
			1	13	24.10	0.257		
			1	24	23.86	0.243		
			12	0	23.35	0.216		
			12	6	23.27	0.212		
			12	13	23.15	0.207		
			25	0	23.03	0.201		
			1	0	24.25	0.266		
			1	13	24.09	0.256		
			1	24	23.99	0.251		
			12	0	23.34	0.216		
			12	6	23.23	0.210		
			12	13	23.11	0.205		
			25	0	23.27	0.212		
			1	0	23.79	0.239		
			1	13	23.31	0.214		
			1	24	23.43	0.220		
		12	0	22.17	0.165			
		12	6	22.08	0.161			
		12	13	22.03	0.160			
		25	0	21.94	0.156			
		1	0	23.82	0.241			
		1	13	23.61	0.230			
		1	24	23.35	0.216			
		12	0	22.26	0.168			
		12	6	22.35	0.172			
		12	13	22.22	0.167			
		25	0	22.01	0.159			
		1	0	23.77	0.238			
		1	13	23.53	0.225			
		1	24	23.38	0.218			
		12	0	22.35	0.172			
		12	6	22.23	0.167			
		12	13	22.26	0.168			
		25	0	22.12	0.163			
		16QAM	23035	701.5	1	0	23.79	0.239
					1	13	23.31	0.214
					1	24	23.43	0.220
					12	0	22.17	0.165
			12	6	22.08	0.161		
			12	13	22.03	0.160		
25	0		21.94	0.156				
1	0		23.82	0.241				
1	13		23.61	0.230				
1	24		23.35	0.216				
12	0		22.26	0.168				
12	6		22.35	0.172				
12	13	22.22	0.167					
25	0	22.01	0.159					
1	0	23.77	0.238					
1	13	23.53	0.225					
1	24	23.38	0.218					
12	0	22.35	0.172					
12	6	22.23	0.167					
12	13	22.26	0.168					
25	0	22.12	0.163					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 30	5 MHz	QPSK	27685	2307.5	1	0	23.66	0.232
					1	12	23.63	0.231
					1	24	23.58	0.228
					12	0	22.59	0.182
					12	6	22.59	0.182
					12	13	22.58	0.181
			25	0	22.57	0.181		
			1	0	23.81	0.240		
			1	12	23.70	0.234		
			1	24	23.56	0.227		
			12	0	22.68	0.185		
			12	6	22.64	0.184		
			12	13	22.63	0.183		
			25	0	22.58	0.181		
			1	0	23.79	0.239		
			1	12	23.68	0.233		
			1	24	23.65	0.232		
			12	0	22.72	0.187		
			12	6	22.66	0.185		
			12	13	22.65	0.184		
			25	0	22.59	0.182		
			1	0	23.04	0.201		
			1	12	22.97	0.198		
			1	24	22.55	0.180		
		12	0	21.66	0.147			
		12	6	21.64	0.146			
		12	13	21.64	0.146			
		25	0	21.57	0.144			
		1	0	22.87	0.194			
		1	12	22.86	0.193			
		1	24	22.82	0.191			
		12	0	21.74	0.149			
		12	6	21.71	0.148			
		12	13	21.68	0.147			
		25	0	21.62	0.145			
		1	0	23.15	0.207			
		1	12	22.99	0.199			
		1	24	22.92	0.196			
		12	0	21.84	0.153			
		12	6	21.78	0.151			
		12	11	21.75	0.150			
		25	0	21.61	0.145			
		16QAM	27685	2307.5	1	0	23.04	0.201
					1	12	22.97	0.198
					1	24	22.55	0.180
					12	0	21.66	0.147
					12	6	21.64	0.146
					12	13	21.64	0.146
25	0		21.57	0.144				
1	0		22.87	0.194				
1	12		22.86	0.193				
1	24		22.82	0.191				
12	0		21.74	0.149				
12	6		21.71	0.148				
12	13	21.68	0.147					
25	0	21.62	0.145					
27735	2312.5	1	0	23.15	0.207			
		1	12	22.99	0.199			
		1	24	22.92	0.196			
		12	0	21.84	0.153			
		12	6	21.78	0.151			
		12	11	21.75	0.150			
25	0	21.61	0.145					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band 30	10 MHz	QPSK	27710	2310.0	1	0	23.90	0.245
					1	24	23.62	0.230
					1	49	23.57	0.228
					25	0	22.80	0.191
					25	12	22.77	0.189
					25	25	22.68	0.185
					50	0	22.56	0.180
		16QAM	27710	2310.0	1	0	23.31	0.214
					1	24	23.03	0.201
					1	49	22.82	0.191
					25	0	21.86	0.153
					25	12	21.79	0.151
					25	25	21.75	0.150
					50	0	21.52	0.142



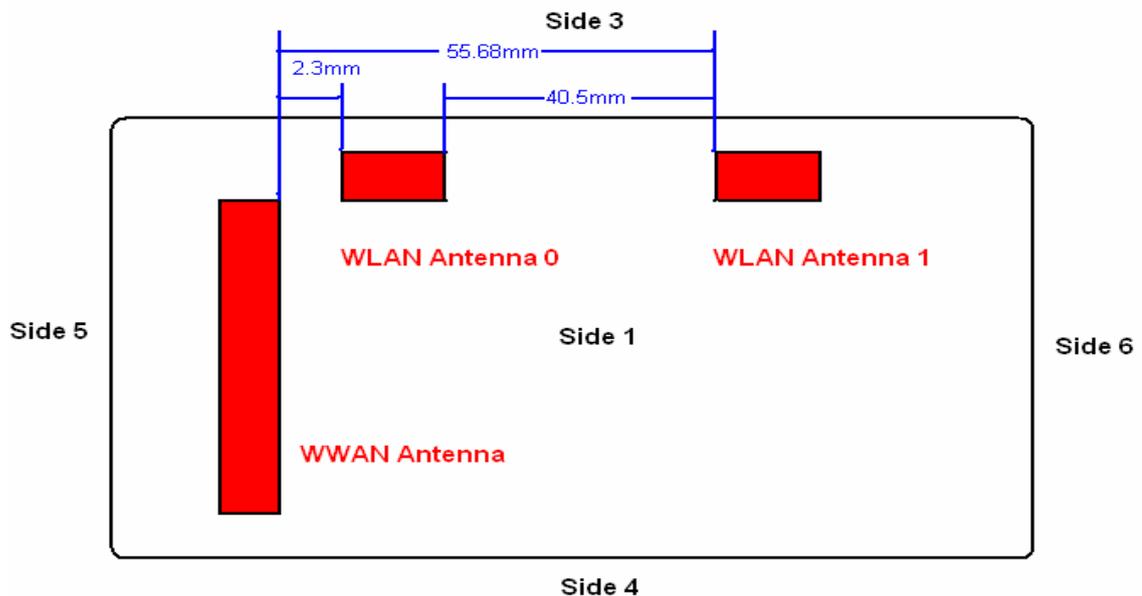
Band	Data Rate	CH	Frequency (MHz)	Average Power (dBm)		
				ANT-0	ANT-1	ANT-0+1
IEEE 802.11b	1M	1	2412.0	8.58	8.54	---
		6	2437.0	8.72	8.66	---
		11	2462.0	8.33	8.49	---
	2M	6	2437.0	8.71	8.64	---
	5.5M	6	2437.0	8.69	8.63	---
	11M	6	2437.0	8.68	8.61	---
IEEE 802.11g	6M	1	2412.0	8.56	8.29	11.44
		6	2437.0	8.41	8.39	11.41
		11	2462.0	8.11	8.23	11.18
	9M	6	2437.0	8.40	8.37	11.40
	12M	6	2437.0	8.38	8.35	11.38
	18M	6	2437.0	8.36	8.34	11.36
	24M	6	2437.0	8.35	8.33	11.35
	36M	6	2437.0	8.32	8.31	11.33
	48M	6	2437.0	8.31	8.29	11.31
54M	6	2437.0	8.29	8.28	11.30	
IEEE 802.11n 2.4GHz 20MHz	13M	1	2412.0	8.08	8.01	11.06
		6	2437.0	8.43	8.36	11.41
		11	2462.0	8.03	8.16	11.11
	26M	6	2437.0	8.42	8.35	11.40
	39M	6	2437.0	8.41	8.34	11.39
	52M	6	2437.0	8.39	8.33	11.37
	78M	6	2437.0	8.38	8.31	11.36
	104M	6	2437.0	8.36	8.29	11.34
	117M	6	2437.0	8.34	8.28	11.32
130M	6	2437.0	8.33	8.26	11.31	
IEEE 802.11n 2.4GHz 40MHz	27M	3	2422.0	8.27	8.14	11.22
		6	2437.0	8.48	8.33	11.42
		9	2452.0	8.34	8.00	11.18
	54M	6	2437.0	8.43	8.30	11.38
	81M	6	2437.0	8.40	8.26	11.34
	108M	6	2437.0	8.34	8.21	11.29
	162M	6	2437.0	8.29	8.17	11.24
	216M	6	2437.0	8.25	8.11	11.19
	243M	6	2437.0	8.19	8.07	11.14
270M	6	2437.0	8.14	8.03	11.10	

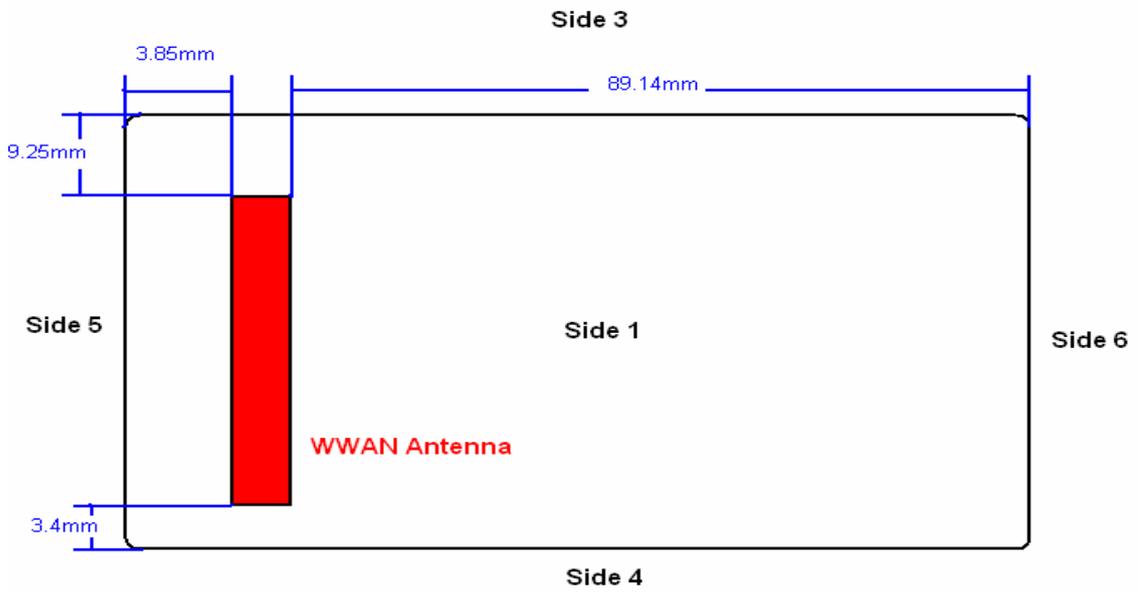
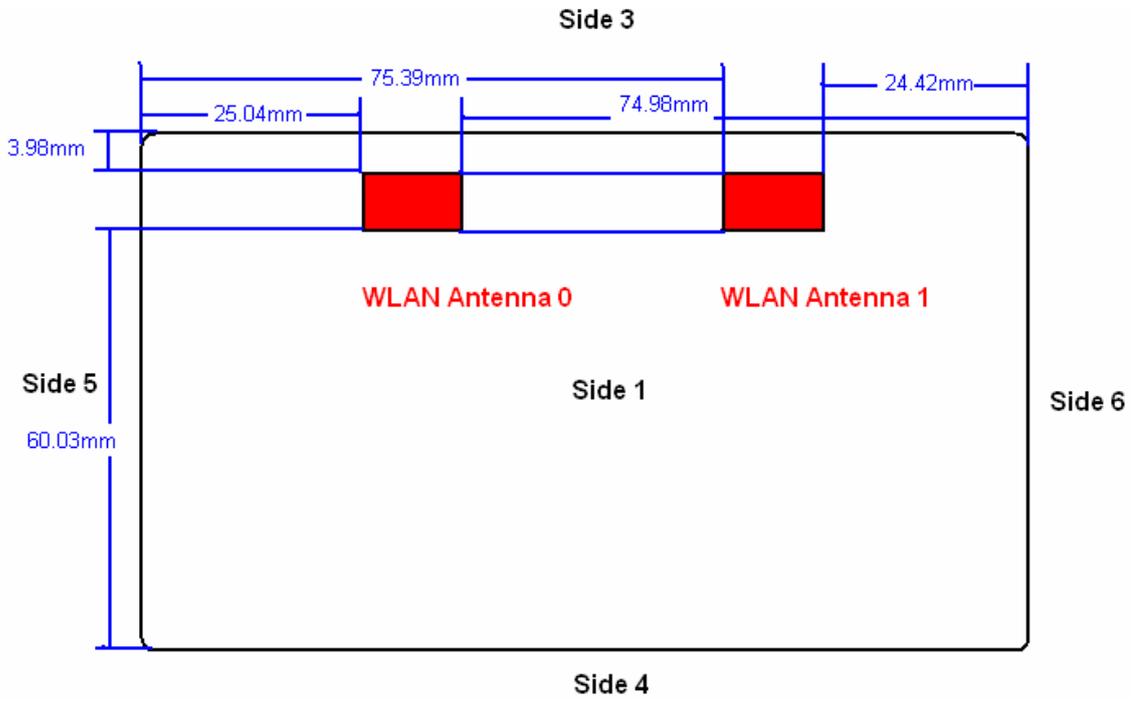


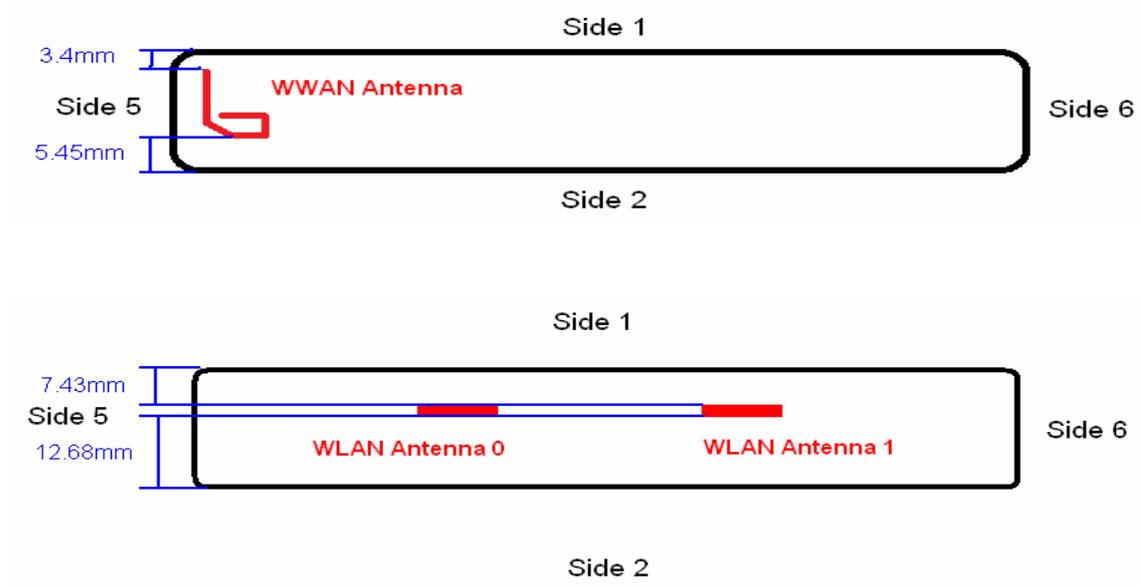
Band	Data Rate	CH	Frequency (MHz)	Average Power (dBm)		
				ANT-0	ANT-1	ANT-0+1
IEEE 802.11a	6M	36	5180.0	9.79	9.39	12.60
		40	5200.0	9.68	9.26	12.49
		44	5220.0	9.58	9.32	12.46
		48	5240.0	9.63	9.16	12.41
		149	5745.0	9.23	8.93	12.09
		153	5765.0	9.25	9.00	12.14
		157	5785.0	9.29	9.07	12.19
		161	5805.0	9.39	9.13	12.27
	54M	165	5825.0	9.30	9.16	12.24
		36	5180.0	9.70	9.29	12.51
		40	5200.0	9.59	9.14	12.38
		44	5220.0	9.53	9.20	12.38
		48	5240.0	9.55	9.04	12.31
		149	5745.0	9.14	8.85	12.01
		153	5765.0	9.18	8.92	12.06
		157	5785.0	9.21	9.00	12.12
IEEE 802.11ac 20MHz	13M	161	5805.0	9.31	9.08	12.21
		165	5825.0	9.24	9.12	12.19
		36	5180.0	9.58	9.22	12.41
		40	5200.0	9.41	9.17	12.30
		44	5220.0	9.52	9.23	12.39
		48	5240.0	9.47	9.05	12.28
		149	5745.0	9.13	8.91	12.03
		153	5765.0	8.93	8.88	11.92
	156M	157	5785.0	9.08	8.97	12.04
		161	5805.0	9.19	9.07	12.14
		165	5825.0	9.10	9.04	12.08
		36	5180.0	9.43	9.05	12.25
		40	5200.0	9.25	8.99	12.13
		44	5220.0	9.39	9.09	12.25
		48	5240.0	9.31	8.91	12.12
		149	5745.0	9.03	8.76	11.91
IEEE 802.11ac 40MHz	27M	153	5765.0	8.79	8.72	11.77
		157	5785.0	8.94	8.85	11.91
		161	5805.0	9.09	8.95	12.03
		165	5825.0	9.01	8.91	11.97
	360M	38	5190.0	9.12	8.72	11.93
		46	5230.0	9.19	8.86	12.04
		151	5755.0	9.39	9.28	12.35
		159	5795.0	9.42	9.33	12.39
IEEE 802.11ac 80MHz	58.6M	38	5190.0	8.75	8.41	11.59
		46	5230.0	8.83	8.55	11.70
	780M	151	5755.0	9.31	9.16	12.25
		159	5795.0	9.36	9.24	12.31
IEEE 802.11ac 80MHz	58.6M	42	5210.0	9.80	9.46	12.64
		155	5775.0	9.32	9.09	12.22
	780M	42	5210.0	8.59	8.28	11.45
		155	5775.0	8.10	7.89	11.01

6.9 Antenna location

Antenna-User					
Distance of WWAN_Antenna to edge		Distance of WLAN_Antenna0 to edge		Distance of WLAN_Antenna1 to edge	
WWAN_Antenna to Side 1	3.4mm	WLAN_Antenna0 to Side 1	7.43mm	WLAN_Antenna1 to Side 1	7.43mm
WWAN_Antenna to Side 2	5.45mm	WLAN_Antenna0 to Side 2	12.68mm	WLAN_Antenna1 to Side 2	12.68mm
WWAN_Antenna to Side 3	9.25mm	WLAN_Antenna0 to Side 3	3.98mm	WLAN_Antenna1 to Side 3	3.98mm
WWAN_Antenna to Side 4	3.4mm	WLAN_Antenna0 to Side 4	60.03mm	WLAN_Antenna1 to Side 4	60.03mm
WWAN_Antenna to Side 5	3.85mm	WLAN_Antenna0 to Side 5	25.04mm	WLAN_Antenna1 to Side 5	75.39mm
WWAN_Antenna to Side 6	89.14mm	WLAN_Antenna0 to Side 6	74.98mm	WLAN_Antenna1 to Side 6	24.42mm
Antenna-Antenna					
Antenna account			Distance (cm)		
WWAN_Antenna to WLAN_Antenna0			2.3mm		
WWAN_Antenna to WLAN_Antenna1			55.68mm		
WLAN_Antenna0 to WLAN_Antenna1			40.5mm		









6.10 Stand-alone SAR Evaluate

Transmitter and antenna implementation as below:

Band	WWAN Antenna	WLAN Antenna0	WLAN Antenna1
WWAN	V	-	-
WLAN	-	V	V

Stand-alone transmission configurations as below:

Band	Side 1	Side 2	Side 3	Side 4	Side 5	Side 6
GPRS/EGPRS 850	V	V	V	V	V	V
GPRS/EGPRS 1900	V	V	V	V	V	V
WCDMA Band II	V	V	V	V	V	-
WCDMA Band V	V	V	V	V	V	-
LTE Band 2	V	V	V	V	V	-
LTE Band 4	V	V	V	V	V	-
LTE Band 5	V	V	V	V	V	-
LTE Band 7	V	V	V	V	V	-
LTE Band 12	V	V	V	V	V	-
LTE Band 30	V	V	V	V	V	-
IEEE 802.11b	-	V	V	-	V	-
IEEE 802.11g	-	-	V	-	-	-
IEEE 802.11n 2.4GHz 20MHz	-	-	V	-	-	-
IEEE 802.11n 2.4GHz 40MHz	-	-	V	-	-	-
IEEE 802.11a	V	V	V	-	V	-
IEEE 802.11ac 20MHz	V	-	V	-	-	-
IEEE 802.11ac 40MHz	V	-	V	-	-	-
IEEE 802.11ac 80MHz	V	-	V	-	-	-

Note: The "-" on behalf of Stand-alone SAR is not required (Refer to KDB447498 D01 v06 4.3.1 for the Standalone SAR test exclusion considerations).



≤ 50 mm										
Antenna	Side	Band	Channel	Power (dBm)	Frequency (GHz)	Distance (mm)	Power (mW)	Result	Limit	Exclusion Considerations SAR ¹⁹
WWAN Antenna		GPRS 850	190	33	0.837	5	1995	364.9	3	SAR is required
		GPRS 1900	661	30.5	1.880	5	1122	307.7	3	SAR is required
		WCDMA Band II	9400	23	1.880	5	200	54.8	3	SAR is required
		WCDMA Band V	4183	24	0.837	5	251	45.9	3	SAR is required
		LTE Band 2	18900	23.5	1.880	5	224	61.4	3	SAR is required
		LTE Band 4	20175	23.5	1.733	5	224	59	3	SAR is required
		LTE Band 5	20525	24	0.837	5	251	45.9	3	SAR is required
		LTE Band 7	21100	22.5	2.535	5	178	56.7	3	SAR is required
		LTE Band 12	23095	24.5	0.708	5	282	47.4	3	SAR is required
		LTE Band 30	27710	24	2.310	5	251	76.3	3	SAR is required
WLAN Antenna0	1	IEEE 802.11b	6	10	2.437	7.43	10	2.1	3	SAR is not required
		IEEE 802.11g	1	10	2.412	7.43	10	2.1	3	SAR is not required
		IEEE 802.11n 2.4GHz 20MHz	6	10	2.437	7.43	10	2.1	3	SAR is not required
		IEEE 802.11n 2.4GHz 40MHz	6	10	2.437	7.43	10	2.1	3	SAR is not required
		IEEE 802.11a	36	10	5.180	7.43	10	3.1	3	SAR is required
		IEEE 802.11a	161	10	5.805	7.43	10	3.2	3	SAR is required
		IEEE 802.11ac 20MHz	36	10	5.180	7.43	10	3.1	3	SAR is required
		IEEE 802.11ac 20MHz	161	10	5.805	7.43	10	3.2	3	SAR is required
		IEEE 802.11ac 40MHz	46	10	5.230	7.43	10	3.1	3	SAR is required
		IEEE 802.11ac 40MHz	159	10	5.795	7.43	10	3.2	3	SAR is required
		IEEE 802.11ac 80MHz	42	10	5.210	7.43	10	3.1	3	SAR is required
		IEEE 802.11ac 80MHz	155	10	5.775	7.43	10	3.2	3	SAR is required



≤ 50 mm										
Antenna	Side	Band	Channel	Power (dBm)	Frequency (GHz)	Distance (mm)	Power (mW)	Result	Limit	Exclusion Considerations SAR ¹⁹
WLAN Antenna1	1	IEEE 802.11b	6	10	2.437	7.43	10	2.1	3	SAR is not required
		IEEE 802.11g	6	10	2.437	7.43	10	2.1	3	SAR is not required
		IEEE 802.11n 2.4GHz 20MHz	6	10	2.437	7.43	10	2.1	3	SAR is not required
		IEEE 802.11n 2.4GHz 40MHz	6	10	2.437	7.43	10	2.1	3	SAR is not required
		IEEE 802.11a	36	10	5.180	7.43	10	3.1	3	SAR is required
		IEEE 802.11a	165	10	5.825	7.43	10	3.2	3	SAR is required
		IEEE 802.11ac 20MHz	44	10	5.220	7.43	10	3.1	3	SAR is required
		IEEE 802.11ac 20MHz	161	10	5.805	7.43	10	3.2	3	SAR is required
		IEEE 802.11ac 40MHz	46	10	5.230	7.43	10	3.1	3	SAR is required
		IEEE 802.11ac 40MHz	159	10	5.795	7.43	10	3.2	3	SAR is required
		IEEE 802.11ac 80MHz	42	10	5.210	7.43	10	3.1	3	SAR is required
		IEEE 802.11ac 80MHz	155	10	5.775	7.43	10	3.2	3	SAR is required



≤ 50 mm										
Antenna	Side	Band	Channel	Power (dBm)	Frequency (GHz)	Distance (mm)	Power (mW)	Result	Limit	Exclusion Considerations SAR ¹⁹
WWAN Antenna		GPRS 850	190	33	0.837	5.45	1995	334.8	3	SAR is required
		GPRS 1900	661	30.5	1.880	5.45	1122	282.3	3	SAR is required
		WCDMA Band II	9400	23	1.880	5.45	200	50.3	3	SAR is required
		WCDMA Band V	4183	24	0.837	5.45	251	42.1	3	SAR is required
		LTE Band 2	18900	23.5	1.880	5.45	224	56.4	3	SAR is required
		LTE Band 4	20175	23.5	1.733	5.45	224	54.1	3	SAR is required
		LTE Band 5	20525	24	0.837	5.45	251	42.1	3	SAR is required
		LTE Band 7	21100	22.5	2.535	5.45	178	52	3	SAR is required
		LTE Band 12	23095	24.5	0.708	5.45	282	43.5	3	SAR is required
		LTE Band 30	27710	24	2.310	5.45	251	70	3	SAR is required
WLAN Antenna0	2	IEEE 802.11b	6	10	2.437	12.68	10	1.2	3	SAR is not required
		IEEE 802.11g	1	10	2.412	12.68	10	1.2	3	SAR is not required
		IEEE 802.11n 2.4GHz 20MHz	6	10	2.437	12.68	10	1.2	3	SAR is not required
		IEEE 802.11n 2.4GHz 40MHz	6	10	2.437	12.68	10	1.2	3	SAR is not required
		IEEE 802.11a	36	10	5.180	12.68	10	1.8	3	SAR is not required
		IEEE 802.11a	161	10	5.805	12.68	10	1.9	3	SAR is not required
		IEEE 802.11ac 20MHz	36	10	5.180	12.68	10	1.8	3	SAR is not required
		IEEE 802.11ac 20MHz	161	10	5.805	12.68	10	1.9	3	SAR is not required
		IEEE 802.11ac 40MHz	46	10	5.230	12.68	10	1.8	3	SAR is not required
		IEEE 802.11ac 40MHz	159	10	5.795	12.68	10	1.9	3	SAR is not required
		IEEE 802.11ac 80MHz	42	10	5.210	12.68	10	1.8	3	SAR is not required
		IEEE 802.11ac 80MHz	155	10	5.775	12.68	10	1.9	3	SAR is not required



≤ 50 mm										
Antenna	Side	Band	Channel	Power (dBm)	Frequency (GHz)	Distance (mm)	Power (mW)	Result	Limit	Exclusion Considerations SAR ¹⁹
WLAN Antenna1	2	IEEE 802.11b	6	10	2.437	12.68	10	1.2	3	SAR is not required
		IEEE 802.11g	6	10	2.437	12.68	10	1.2	3	SAR is not required
		IEEE 802.11n 2.4GHz 20MHz	6	10	2.437	12.68	10	1.2	3	SAR is not required
		IEEE 802.11n 2.4GHz 40MHz	6	10	2.437	12.68	10	1.2	3	SAR is not required
		IEEE 802.11a	36	10	5.180	12.68	10	1.8	3	SAR is not required
		IEEE 802.11a	165	10	5.825	12.68	10	1.9	3	SAR is not required
		IEEE 802.11ac 20MHz	44	10	5.220	12.68	10	1.8	3	SAR is not required
		IEEE 802.11ac 20MHz	161	10	5.805	12.68	10	1.9	3	SAR is not required
		IEEE 802.11ac 40MHz	46	10	5.230	12.68	10	1.8	3	SAR is not required
		IEEE 802.11ac 40MHz	159	10	5.795	12.68	10	1.9	3	SAR is not required
		IEEE 802.11ac 80MHz	42	10	5.210	12.68	10	1.8	3	SAR is not required
		IEEE 802.11ac 80MHz	155	10	5.775	12.68	10	1.9	3	SAR is not required



≤ 50 mm										
Antenna	Side	Band	Channel	Power (dBm)	Frequency (GHz)	Distance (mm)	Power (mW)	Result	Limit	Exclusion Considerations SAR ¹⁹
WWAN Antenna		GPRS 850	190	33	0.837	9.25	1995	197.3	3	SAR is required
		GPRS 1900	661	30.5	1.880	9.25	1122	166.3	3	SAR is required
		WCDMA Band II	9400	23	1.880	9.25	200	29.6	3	SAR is required
		WCDMA Band V	4183	24	0.837	9.25	251	24.8	3	SAR is required
		LTE Band 2	18900	23.5	1.880	9.25	224	33.2	3	SAR is required
		LTE Band 4	20175	23.5	1.733	9.25	224	31.9	3	SAR is required
		LTE Band 5	20525	24	0.837	9.25	251	24.8	3	SAR is required
		LTE Band 7	21100	22.5	2.535	9.25	178	30.6	3	SAR is required
		LTE Band 12	23095	24.5	0.708	9.25	282	25.6	3	SAR is required
		LTE Band 30	27710	24	2.310	9.25	251	41.2	3	SAR is required
WLAN Antenna0	3	IEEE 802.11b	6	10	2.437	5	10	3.1	3	SAR is required
		IEEE 802.11g	1	10	2.412	5	10	3.1	3	SAR is required
		IEEE 802.11n 2.4GHz 20MHz	6	10	2.437	5	10	3.1	3	SAR is required
		IEEE 802.11n 2.4GHz 40MHz	6	10	2.437	5	10	3.1	3	SAR is required
		IEEE 802.11a	36	10	5.180	5	10	4.6	3	SAR is required
		IEEE 802.11a	161	10	5.805	5	10	4.8	3	SAR is required
		IEEE 802.11ac 20MHz	36	10	5.180	5	10	4.6	3	SAR is required
		IEEE 802.11ac 20MHz	161	10	5.805	5	10	4.8	3	SAR is required
		IEEE 802.11ac 40MHz	46	10	5.230	5	10	4.6	3	SAR is required
		IEEE 802.11ac 40MHz	159	10	5.795	5	10	4.8	3	SAR is required
		IEEE 802.11ac 80MHz	42	10	5.210	5	10	4.6	3	SAR is required
		IEEE 802.11ac 80MHz	155	10	5.775	5	10	4.8	3	SAR is required

≤ 50 mm										
Antenna	Side	Band	Channel	Power (dBm)	Frequency (GHz)	Distance (mm)	Power (mW)	Result	Limit	Exclusion Considerations SAR ¹⁹
WLAN Antenna1	3	IEEE 802.11b	6	10	2.437	5	10	3.1	3	SAR is required
		IEEE 802.11g	6	10	2.437	5	10	3.1	3	SAR is required
		IEEE 802.11n 2.4GHz 20MHz	6	10	2.437	5	10	3.1	3	SAR is required
		IEEE 802.11n 2.4GHz 40MHz	6	10	2.437	5	10	3.1	3	SAR is required
		IEEE 802.11a	36	10	5.180	5	10	4.6	3	SAR is required
		IEEE 802.11a	165	10	5.825	5	10	4.8	3	SAR is required
		IEEE 802.11ac 20MHz	44	10	5.220	5	10	4.6	3	SAR is required
		IEEE 802.11ac 20MHz	161	10	5.805	5	10	4.8	3	SAR is required
		IEEE 802.11ac 40MHz	46	10	5.230	5	10	4.6	3	SAR is required
		IEEE 802.11ac 40MHz	159	10	5.795	5	10	4.8	3	SAR is required
		IEEE 802.11ac 80MHz	42	10	5.210	5	10	4.6	3	SAR is required
		IEEE 802.11ac 80MHz	155	10	5.775	5	10	4.8	3	SAR is required



≤ 50 mm										
Antenna	Side	Band	Channel	Power (dBm)	Frequency (GHz)	Distance (mm)	Power (mW)	Result	Limit	Exclusion Considerations SAR ¹⁹
WWAN Antenna	4	GPRS 850	190	33	0.837	5	1995	364.9	3	SAR is required
		GPRS 1900	661	30.5	1.880	5	1122	307.7	3	SAR is required
		WCDMA Band II	9400	23	1.880	5	200	54.8	3	SAR is required
		WCDMA Band V	4183	24	0.837	5	251	45.9	3	SAR is required
		LTE Band 2	18900	23.5	1.880	5	224	61.4	3	SAR is required
		LTE Band 4	20175	23.5	1.733	5	224	59	3	SAR is required
		LTE Band 5	20525	24	0.837	5	251	45.9	3	SAR is required
		LTE Band 7	21100	22.5	2.535	5	178	56.7	3	SAR is required
		LTE Band 12	23095	24.5	0.708	5	282	47.4	3	SAR is required
		LTE Band 30	27710	24	2.310	5	251	76.3	3	SAR is required
WWAN Antenna		GPRS 850	190	33	0.837	5	1995	364.9	3	SAR is required
		GPRS 1900	661	30.5	1.880	5	1122	307.7	3	SAR is required
		WCDMA Band II	9400	23	1.880	5	200	54.8	3	SAR is required
		WCDMA Band V	4183	24	0.837	5	251	45.9	3	SAR is required
		LTE Band 2	18900	23.5	1.880	5	224	61.4	3	SAR is required
		LTE Band 4	20175	23.5	1.733	5	224	59	3	SAR is required
		LTE Band 5	20525	24	0.837	5	251	45.9	3	SAR is required
		LTE Band 7	21100	22.5	2.535	5	178	56.7	3	SAR is required
		LTE Band 12	23095	24.5	0.708	5	282	47.4	3	SAR is required
		LTE Band 30	27710	24	2.310	5	251	76.3	3	SAR is required
WLAN Antenna0	5	IEEE 802.11b	6	10	2.437	25.04	10	0.6	3	SAR is not required
		IEEE 802.11g	6	10	2.437	25.04	10	0.6	3	SAR is not required
		IEEE 802.11n 2.4GHz 20MHz	6	10	2.437	25.04	10	0.6	3	SAR is not required
		IEEE 802.11n 2.4GHz 40MHz	6	10	2.437	25.04	10	0.6	3	SAR is not required
		IEEE 802.11a	36	10	5.180	25.04	10	0.9	3	SAR is not required
		IEEE 802.11a	165	10	5.825	25.04	10	1	3	SAR is not required
		IEEE 802.11ac 20MHz	44	10	5.220	25.04	10	0.9	3	SAR is not required
		IEEE 802.11ac 20MHz	161	10	5.805	25.04	10	1	3	SAR is not required
		IEEE 802.11ac 40MHz	46	10	5.230	25.04	10	0.9	3	SAR is not required
		IEEE 802.11ac 40MHz	159	10	5.795	25.04	10	1	3	SAR is not required
		IEEE 802.11ac 80MHz	42	10	5.210	25.04	10	0.9	3	SAR is not required
		IEEE 802.11ac 80MHz	155	10	5.775	25.04	10	1	3	SAR is not required



≤ 50 mm										
Antenna	Side	Band	Channel	Power (dBm)	Frequency (GHz)	Distance (mm)	Power (mW)	Result	Limit	Exclusion Considerations SAR ¹⁹
WLAN Antenna1	6	IEEE 802.11b	6	10	2.437	24.42	10	0.6	3	SAR is not required
		IEEE 802.11g	1	10	2.412	24.42	10	0.6	3	SAR is not required
		IEEE 802.11n 2.4GHz 20MHz	6	10	2.437	24.42	10	0.6	3	SAR is not required
		IEEE 802.11n 2.4GHz 40MHz	6	10	2.437	24.42	10	0.6	3	SAR is not required
		IEEE 802.11a	36	10	5.180	24.42	10	0.9	3	SAR is not required
		IEEE 802.11a	161	10	5.805	24.42	10	1	3	SAR is not required
		IEEE 802.11ac 20MHz	36	10	5.180	24.42	10	0.9	3	SAR is not required
		IEEE 802.11ac 20MHz	161	10	5.805	24.42	10	1	3	SAR is not required
		IEEE 802.11ac 40MHz	46	10	5.230	24.42	10	0.9	3	SAR is not required
		IEEE 802.11ac 40MHz	159	10	5.795	24.42	10	1	3	SAR is not required
		IEEE 802.11ac 80MHz	42	10	5.210	24.42	10	0.9	3	SAR is not required
		IEEE 802.11ac 80MHz	155	10	5.775	24.42	10	1	3	SAR is not required

Note: 1.The test reduction for distance more than 50mm. Use the max power to make sure minimum distance by evaluated for SAR testing.



> 50 mm <200mm									
Antenna	Side	Band	Channel	Power (dBm)	Frequency (GHz)	Distance (mm)	Power (mW)	Power Thresholds SAR ¹⁹ (mW)	Exclusion Considerations SAR ¹⁹
WLAN Antenna0	4	IEEE IEEE 802.11b	6	10	2.437	60.03	10	196	SAR is not required
		IEEE 802.11g	1	10	2.412	60.03	10	197	SAR is not required
		IEEE 802.11n 2.4GHz 20MHz	6	10	2.437	60.03	10	196	SAR is not required
		IEEE 802.11n 2.4GHz 40MHz	6	10	2.437	60.03	10	196	SAR is not required
		IEEE 802.11a	36	10	5.180	60.03	10	166	SAR is not required
		IEEE 802.11a	161	10	5.805	60.03	10	163	SAR is not required
		IEEE 802.11ac 20MHz	36	10	5.180	60.03	10	166	SAR is not required
		IEEE 802.11ac 20MHz	161	10	5.805	60.03	10	163	SAR is not required
		IEEE 802.11ac 40MHz	46	10	5.230	60.03	10	166	SAR is not required
		IEEE 802.11ac 40MHz	159	10	5.795	60.03	10	163	SAR is not required
		IEEE 802.11ac 80MHz	42	10	5.210	60.03	10	166	SAR is not required
		IEEE 802.11ac 80MHz	155	10	5.775	60.03	10	163	SAR is not required
		WLAN Antenna1	4	IEEE IEEE 802.11b	6	10	2.437	60.03	10
IEEE 802.11g	6			10	2.437	60.03	10	196	SAR is not required
IEEE 802.11n 2.4GHz 20MHz	6			10	2.437	60.03	10	196	SAR is not required
IEEE 802.11n 2.4GHz 40MHz	6			10	2.437	60.03	10	196	SAR is not required
IEEE 802.11a	36			10	5.180	60.03	10	166	SAR is not required
IEEE 802.11a	165			10	5.825	60.03	10	162	SAR is not required
IEEE 802.11ac 20MHz	44			10	5.220	60.03	10	166	SAR is not required
IEEE 802.11ac 20MHz	161			10	5.805	60.03	10	163	SAR is not required
IEEE 802.11ac 40MHz	46			10	5.230	60.03	10	166	SAR is not required
IEEE 802.11ac 40MHz	159			10	5.795	60.03	10	163	SAR is not required
IEEE 802.11ac 80MHz	42			10	5.210	60.03	10	166	SAR is not required
IEEE 802.11ac 80MHz	155			10	5.775	60.03	10	163	SAR is not required



> 50 mm <200mm									
Antenna	Side	Band	Channel	Power (dBm)	Frequency (GHz)	Distance (mm)	Power (mW)	Power Thresholds SAR ¹⁹ (mW)	Exclusion Considerations SAR ¹⁹
WLAN Antenna1	5	IEEE 802.11b	6	10	2.437	75.39	10	350	SAR is not required
		IEEE 802.11g	1	10	2.412	75.39	10	350	SAR is not required
		IEEE 802.11n 2.4GHz 20MHz	6	10	2.437	75.39	10	350	SAR is not required
		IEEE 802.11n 2.4GHz 40MHz	6	10	2.437	75.39	10	350	SAR is not required
		IEEE 802.11a	36	10	5.180	75.39	10	320	SAR is not required
		IEEE 802.11a	161	10	5.805	75.39	10	316	SAR is not required
		IEEE 802.11ac 20MHz	36	10	5.180	75.39	10	320	SAR is not required
		IEEE 802.11ac 20MHz	161	10	5.805	75.39	10	316	SAR is not required
		IEEE 802.11ac 40MHz	46	10	5.230	75.39	10	319	SAR is not required
		IEEE 802.11ac 40MHz	159	10	5.795	75.39	10	316	SAR is not required
		IEEE 802.11ac 80MHz	42	10	5.210	75.39	10	320	SAR is not required
		IEEE 802.11ac 80MHz	155	10	5.775	75.39	10	316	SAR is not required



> 50 mm <200mm									
Antenna	Side	Band	Channel	Power (dBm)	Frequency (GHz)	Distance (mm)	Power (mW)	Power Thresholds SAR ¹⁹ (mW)	Exclusion Considerations SAR ¹⁹
WWAN Antenna		GPRS 850	190	33	0.837	89.14	1995	382	SAR is required
		GPRS 1900	661	30.5	1.880	89.14	1122	501	SAR is required
		WCDMA Band II	9400	23	1.880	89.14	200	501	SAR is not required
		WCDMA Band V	4183	24	0.837	89.14	251	382	SAR is not required
		LTE Band 2	18900	23.5	1.880	89.14	224	501	SAR is not required
		LTE Band 4	20175	23.5	1.733	89.14	224	505	SAR is not required
		LTE Band 5	20525	24	0.837	89.14	251	382	SAR is not required
		LTE Band 7	21100	22.5	2.535	89.14	178	486	SAR is not required
		LTE Band 12	23095	24.5	0.708	89.14	282	363	SAR is not required
		LTE Band 30	27710	24	2.310	89.14	251	490	SAR is not required
WLAN Antenna0	6	IEEE 802.11b	6	10	2.437	74.98	10	346	SAR is not required
		IEEE 802.11g	6	10	2.437	74.98	10	346	SAR is not required
		IEEE 802.11n 2.4GHz 20MHz	6	10	2.437	74.98	10	346	SAR is not required
		IEEE 802.11n 2.4GHz 40MHz	6	10	2.437	74.98	10	346	SAR is not required
		IEEE 802.11a	36	10	5.180	74.98	10	316	SAR is not required
		IEEE 802.11a	165	10	5.825	74.98	10	312	SAR is not required
		IEEE 802.11ac 20MHz	44	10	5.220	74.98	10	315	SAR is not required
		IEEE 802.11ac 20MHz	161	10	5.805	74.98	10	312	SAR is not required
		IEEE 802.11ac 40MHz	46	10	5.230	74.98	10	315	SAR is not required
		IEEE 802.11ac 40MHz	159	10	5.795	74.98	10	312	SAR is not required
		IEEE 802.11ac 80MHz	42	10	5.210	74.98	10	316	SAR is not required
		IEEE 802.11ac 80MHz	155	10	5.775	74.98	10	312	SAR is not required

Note: 1.The test reduction for distance more than 50mm. Use the max power to make sure minimum distance by evaluated for SAR testing.



6.11 Simultaneous Transmitting Evaluate

Simultaneous transmission configurations as below:

Condition	Side	Frequency Band		
		WWAN Antenna	WLAN Antenna0	WLAN Antenna1
1	1	V	V	V
2	2	V	V	V
3	3	V	V	V
4	4	V	V	V
5	5	V	V	V
6	6	V	V	V

6.11.1 Estimated SAR

≤ 50 mm								
Antenna	Side	Band	Channel	Power-Tune up (dBm)	Frequency (GHz)	Distance (mm)	Power (mW)	Estimated SAR ¹⁹ (W/Kg)
WLAN Antenna1	6	IEEE 802.11b	6	10	2.437	24.42	10	0.09
		IEEE 802.11g	1	10	2.412	24.42	10	0.09
		IEEE 802.11n 2.4GHz 20MHz	6	10	2.437	24.42	10	0.09
		IEEE 802.11n 2.4GHz 40MHz	6	10	2.437	24.42	10	0.09
		IEEE 802.11a	36	10	5.180	24.42	10	0.12
		IEEE 802.11a	161	10	5.805	24.42	10	0.13
		IEEE 802.11ac 20MHz	36	10	5.180	24.42	10	0.12
		IEEE 802.11ac 20MHz	161	10	5.805	24.42	10	0.13
		IEEE 802.11ac 40MHz	46	10	5.230	24.42	10	0.13
		IEEE 802.11ac 40MHz	159	10	5.795	24.42	10	0.13
		IEEE 802.11ac 80MHz	42	10	5.210	24.42	10	0.13
		IEEE 802.11ac 80MHz	155	10	5.775	24.42	10	0.13



> 50 mm			
Antenna	Side	Band	Estimated SAR ¹⁹ (W/Kg)
WLAN Antenna0	4	IEEE 802.11b	0.4
		IEEE 802.11g	0.4
		IEEE 802.11n 2.4GHz 20MHz	0.4
		IEEE 802.11n 2.4GHz 40MHz	0.4
		IEEE 802.11a	0.4
		IEEE 802.11a	0.4
		IEEE 802.11ac 20MHz	0.4
		IEEE 802.11ac 20MHz	0.4
		IEEE 802.11ac 40MHz	0.4
		IEEE 802.11ac 40MHz	0.4
		IEEE 802.11ac 80MHz	0.4
		IEEE 802.11ac 80MHz	0.4
WLAN Antenna1		IEEE 802.11b	0.4
		IEEE 802.11g	0.4
		IEEE 802.11n 2.4GHz 20MHz	0.4
		IEEE 802.11n 2.4GHz 40MHz	0.4
		IEEE 802.11a	0.4
		IEEE 802.11a	0.4
		IEEE 802.11ac 20MHz	0.4
		IEEE 802.11ac 20MHz	0.4
		IEEE 802.11ac 40MHz	0.4
		IEEE 802.11ac 40MHz	0.4
	IEEE 802.11ac 80MHz	0.4	
	IEEE 802.11ac 80MHz	0.4	



> 50 mm			
Antenna	Side	Band	Estimated SAR ¹⁹ (W/Kg)
WWAN Antenna	6	WCDMA Band II	0.4
		WCDMA Band V	0.4
		LTE Band 2	0.4
		LTE Band 4	0.4
		LTE Band 5	0.4
		LTE Band 7	0.4
		LTE Band 12	0.4
		LTE Band 30	0.4
WLAN Antenna0		IEEE 802.11b	0.4
		IEEE 802.11g	0.4
		IEEE 802.11n 2.4GHz 20MHz	0.4
		IEEE 802.11n 2.4GHz 40MHz	0.4
		IEEE 802.11a	0.4
		IEEE 802.11a	0.4
		IEEE 802.11ac 20MHz	0.4
		IEEE 802.11ac 20MHz	0.4
		IEEE 802.11ac 40MHz	0.4
		IEEE 802.11ac 40MHz	0.4
IEEE 802.11ac 80MHz	0.4		
IEEE 802.11ac 80MHz	0.4		



6.11.2 Sum of 1-g SAR of all simultaneously transmitting

When the sum of 1-g SAR of all simultaneously transmitting antennas in and operating mode and exposure condition combination is within the SAR limit, SAR test exclusion applies to that simultaneous transmission configuration.

Sum of 1-g SAR of summary as below:

Phantom Position	Spacing (mm)	ASSY	WWAN Antenna		WLAN Antenna0		WLAN Antenna1		Σ SAR _{1g} (W/Kg)	Event	
			Band	SAR _{1g} (W/Kg)	Band	SAR _{1g} (W/Kg)	Band	SAR _{1g} (W/Kg)			
Flat	Side 1	10	N/A	GPRS 850	0.76	WLAN 5GHz	0.07	WLAN 5GHz	0.10	0.93	<1.6
		10	N/A	GPRS 1900	1.24	WLAN 5GHz	0.07	WLAN 5GHz	0.10	1.41	<1.6
		10	N/A	WCDMA Band II	1.07	WLAN 5GHz	0.07	WLAN 5GHz	0.10	1.24	<1.6
		10	N/A	WCDMA Band V	1.11	WLAN 5GHz	0.07	WLAN 5GHz	0.10	1.28	<1.6
		10	N/A	LTE Band 2	1.01	WLAN 5GHz	0.07	WLAN 5GHz	0.10	1.18	<1.6
		10	N/A	LTE Band 4	1.31	WLAN 5GHz	0.07	WLAN 5GHz	0.10	1.48	<1.6
		10	N/A	LTE Band 5	1.00	WLAN 5GHz	0.07	WLAN 5GHz	0.10	1.17	<1.6
		10	N/A	LTE Band 7	1.15	WLAN 5GHz	0.07	WLAN 5GHz	0.10	1.32	<1.6
		10	N/A	LTE Band 12	1.07	WLAN 5GHz	0.07	WLAN 5GHz	0.10	1.24	<1.6
		10	N/A	LTE Band 30	0.87	WLAN 5GHz	0.07	WLAN 5GHz	0.10	1.04	<1.6
Flat	Side 2	10	N/A	GPRS 850	0.75	WLAN 5GHz	0.02	WLAN 5GHz	0.04	0.81	<1.6
		10	N/A	GPRS 1900	0.75	WLAN 5GHz	0.02	WLAN 5GHz	0.04	0.81	<1.6
		10	N/A	WCDMA Band II	0.60	WLAN 5GHz	0.02	WLAN 5GHz	0.04	0.66	<1.6
		10	N/A	WCDMA Band V	1.16	WLAN 5GHz	0.02	WLAN 5GHz	0.04	1.22	<1.6
		10	N/A	LTE Band 2	0.60	WLAN 5GHz	0.02	WLAN 5GHz	0.04	0.66	<1.6
		10	N/A	LTE Band 4	0.61	WLAN 5GHz	0.02	WLAN 5GHz	0.04	0.67	<1.6
		10	N/A	LTE Band 5	1.02	WLAN 5GHz	0.02	WLAN 5GHz	0.04	1.08	<1.6
		10	N/A	LTE Band 7	0.65	WLAN 5GHz	0.02	WLAN 5GHz	0.04	0.71	<1.6
		10	N/A	LTE Band 12	0.91	WLAN 5GHz	0.02	WLAN 5GHz	0.04	0.97	<1.6
		10	N/A	LTE Band 30	0.72	WLAN 5GHz	0.02	WLAN 5GHz	0.04	0.78	<1.6



Phantom Position	Spacing (mm)	ASSY	WWAN Antenna		WLAN Antenna0		WLAN Antenna1		Σ SAR _{1g} (W/Kg)	Event	
			Band	SAR _{1g} (W/Kg)	Band	SAR _{1g} (W/Kg)	Band	SAR _{1g} (W/Kg)			
Flat	Side 3	10	N/A	GPRS 850	0.46	WLAN 5GHz	0.09	WLAN 5GHz	0.16	0.71	<1.6
		10	N/A	GPRS 1900	0.22	WLAN 5GHz	0.09	WLAN 5GHz	0.16	0.47	<1.6
		10	N/A	WCDMA Band II	0.19	WLAN 5GHz	0.09	WLAN 5GHz	0.16	0.44	<1.6
		10	N/A	WCDMA Band V	0.55	WLAN 5GHz	0.09	WLAN 5GHz	0.16	0.80	<1.6
		10	N/A	LTE Band 2	0.17	WLAN 5GHz	0.09	WLAN 5GHz	0.16	0.42	<1.6
		10	N/A	LTE Band 4	0.15	WLAN 5GHz	0.09	WLAN 5GHz	0.16	0.40	<1.6
		10	N/A	LTE Band 5	0.51	WLAN 5GHz	0.09	WLAN 5GHz	0.16	0.76	<1.6
		10	N/A	LTE Band 7	0.07	WLAN 5GHz	0.09	WLAN 5GHz	0.16	0.32	<1.6
		10	N/A	LTE Band 12	0.43	WLAN 5GHz	0.09	WLAN 5GHz	0.16	0.68	<1.6
		10	N/A	LTE Band 30	0.65	WLAN 5GHz	0.09	WLAN 5GHz	0.16	0.90	<1.6
Flat	Side 4	10	N/A	GPRS 850	0.49	WLAN 5GHz	**0.4	WLAN 5GHz	**0.4	1.29	<1.6
		10	N/A	GPRS 1900	0.68	WLAN 5GHz	**0.4	WLAN 5GHz	**0.4	1.48	<1.6
		10	N/A	WCDMA Band II	0.68	WLAN 5GHz	**0.4	WLAN 5GHz	**0.4	1.48	<1.6
		10	N/A	WCDMA Band V	0.52	WLAN 5GHz	**0.4	WLAN 5GHz	**0.4	1.32	<1.6
		10	N/A	LTE Band 2	0.66	WLAN 5GHz	**0.4	WLAN 5GHz	**0.4	1.46	<1.6
		10	N/A	LTE Band 4	0.55	WLAN 5GHz	**0.4	WLAN 5GHz	**0.4	1.35	<1.6
		10	N/A	LTE Band 5	0.44	WLAN 5GHz	**0.4	WLAN 5GHz	**0.4	1.24	<1.6
		10	N/A	LTE Band 7	0.27	WLAN 5GHz	**0.4	WLAN 5GHz	**0.4	1.07	<1.6
		10	N/A	LTE Band 12	0.46	WLAN 5GHz	**0.4	WLAN 5GHz	**0.4	1.26	<1.6
		10	N/A	LTE Band 30	0.26	WLAN 5GHz	**0.4	WLAN 5GHz	**0.4	1.06	<1.6



Phantom Position	Spacing (mm)	ASSY	WWAN Antenna		WLAN Antenna0		WLAN Antenna1		Σ SAR _{1g} (W/Kg)	Event	
			Band	SAR _{1g} (W/Kg)	Band	SAR _{1g} (W/Kg)	Band	SAR _{1g} (W/Kg)			
Flat	Side 5	10	N/A	GPRS 850	0.15	WLAN 5GHz	0.03	WLAN 5GHz	0.03	0.21	<1.6
		10	N/A	GPRS 1900	0.68	WLAN 5GHz	0.03	WLAN 5GHz	0.03	0.74	<1.6
		10	N/A	WCDMA Band II	0.64	WLAN 5GHz	0.03	WLAN 5GHz	0.03	0.70	<1.6
		10	N/A	WCDMA Band V	0.18	WLAN 5GHz	0.03	WLAN 5GHz	0.03	0.24	<1.6
		10	N/A	LTE Band 2	0.65	WLAN 5GHz	0.03	WLAN 5GHz	0.03	0.71	<1.6
		10	N/A	LTE Band 4	0.76	WLAN 5GHz	0.03	WLAN 5GHz	0.03	0.82	<1.6
		10	N/A	LTE Band 5	0.17	WLAN 5GHz	0.03	WLAN 5GHz	0.03	0.23	<1.6
		10	N/A	LTE Band 7	1.44	WLAN 5GHz	0.03	WLAN 5GHz	0.03	1.50	<1.6
		10	N/A	LTE Band 12	0.07	WLAN 5GHz	0.03	WLAN 5GHz	0.03	0.13	<1.6
		10	N/A	LTE Band 30	0.24	WLAN 5GHz	0.03	WLAN 5GHz	0.03	0.30	<1.6
Flat	Side 6	10	N/A	GPRS 850	0.06	WLAN 5GHz	**0.4	WLAN 5GHz	*0.13	0.59	<1.6
		10	N/A	GPRS 1900	0.37	WLAN 5GHz	**0.4	WLAN 5GHz	*0.13	0.90	<1.6
		10	N/A	WCDMA Band II	**0.4	WLAN 5GHz	**0.4	WLAN 5GHz	*0.13	0.93	<1.6
		10	N/A	WCDMA Band V	**0.4	WLAN 5GHz	**0.4	WLAN 5GHz	*0.13	0.93	<1.6
		10	N/A	LTE Band 2	**0.4	WLAN 5GHz	**0.4	WLAN 5GHz	*0.13	0.93	<1.6
		10	N/A	LTE Band 4	**0.4	WLAN 5GHz	**0.4	WLAN 5GHz	*0.13	0.93	<1.6
		10	N/A	LTE Band 5	**0.4	WLAN 5GHz	**0.4	WLAN 5GHz	*0.13	0.93	<1.6
		10	N/A	LTE Band 7	**0.4	WLAN 5GHz	**0.4	WLAN 5GHz	*0.13	0.93	<1.6
		10	N/A	LTE Band 12	**0.4	WLAN 5GHz	**0.4	WLAN 5GHz	*0.13	0.93	<1.6
		10	N/A	LTE Band 30	**0.4	WLAN 5GHz	**0.4	WLAN 5GHz	*0.13	0.93	<1.6

Note:

1.*=Estimated SAR

2.**The Estimated SAR 0.4W/Kg , test separation distances is > 50 mm .



6.11.3 SAR to peak location separation ratio (SPLSR)

When the sum of SAR is larger than the limit, SAR test exclusion is determined by the SAR to peak location separation ratio. The ratio is determined by $(SAR1 + SAR2)^{1.5}/R_i$, rounded to two decimal digits, and must be ≤ 0.04 for all antenna pairs in the configuration to qualify for 1-g SAR test exclusion.

All of sum of SAR < 1.6 W/kg, therefore SPLSR is not required.

6.12 SAR test reduction according to KDB

General:

- The test data reported are the worst-case SAR value with the position set in a typical configuration. Test procedures used were according to FCC, Supplement C [June 2001], IEEE1528-2013.
- All modes of operation were investigated, and worst-case results are reported.
- Tissue parameters and temperatures are listed on the SAR plots.
- Batteries are fully charged for all readings.
- When the Channel's SAR 1g of maximum conducted power is > 0.8 mW/g, low, middle and high channel are supposed to be tested.

KDB 447498:

- The test data reported are the worst-case SAR value with the position set in a typical configuration. Test procedures used were according to IEEE1528-2013.

KDB 865664:

- Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg.
- When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
- Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg.
- Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.



KDB 941225:

- In order to qualify for the above test reduction, the maximum burst-averaged output power for each mode (GMS/GPRS/EDGE) and the corresponding multi-slot class must be clearly identified in the SAR report for each frequency band. We perform worst case SAR with maximum time-average power on GMS/GPRS/EDGE mode.
- When HSDPA & (HSUPA / HSPA+ uplink with QPSK) power are not more than WCDMA 12.2K RMC 0.25dB and the SAR value of WCDMA BII/BV < 1.2 mW/g, therefore HSDPA & HSUPA / HSPA+ Stand-alone SAR is not required.
- SAR for EVDO Rev. A is not required when the maximum average output of each RF channels is less than that measured in Subtype 0/1 Physical layer configurations.
- For 1xRTT SAR is not required when the maximum average output of each channel is less than 1/4 dB higher than that measured in EVDO Rev.0.
- When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation, otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel.
- For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation in 5.2.1 and 5.2.2 are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
- SAR is required only when the highest maximum output power for the configuration in the higher order modulation is $> \frac{1}{2}$ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.
- For smaller channel bandwidth SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is $> \frac{1}{2}$ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.

KDB 248227:

Refer 6.8 SAR Testing with 802.11 Transmitters.

7. System Verification and Validation

7.1 Symmetric Dipoles for System Verification

Construction	Symmetrical dipole with 1/4 balun enables measurement of feed point impedance with NWA matched for use near flat phantoms filled with head simulating solutions Includes distance holder and tripod adaptor Calibration Calibrated SAR value for specified position and input power at the flat phantom in head simulating solutions.
Frequency	750, 835, 1750, 1900 ,2450, 2600, 5200 and 5600 MHz
Return Loss	> 20 dB at specified verification position
Power Capability	> 100 W (f < 1GHz); > 40 W (f > 1GHz)
Options	Dipoles for other frequencies or solutions and other calibration conditions are available upon request
Dimensions	D750V3: dipole length 177 mm; overall height 300 mm D835V2: dipole length 161 mm; overall height 340 mm D1750V2: dipole length 75.2 mm; overall height 301.5 mm D1900V2: dipole length 67.7 mm; overall height 300 mm D2450V2: dipole length 51.5 mm; overall height 300 mm D2600V2: dipole length 49.2 mm; overall height 290 mm D5GHzV2: dipole length 20.6 mm; overall height 300 mm

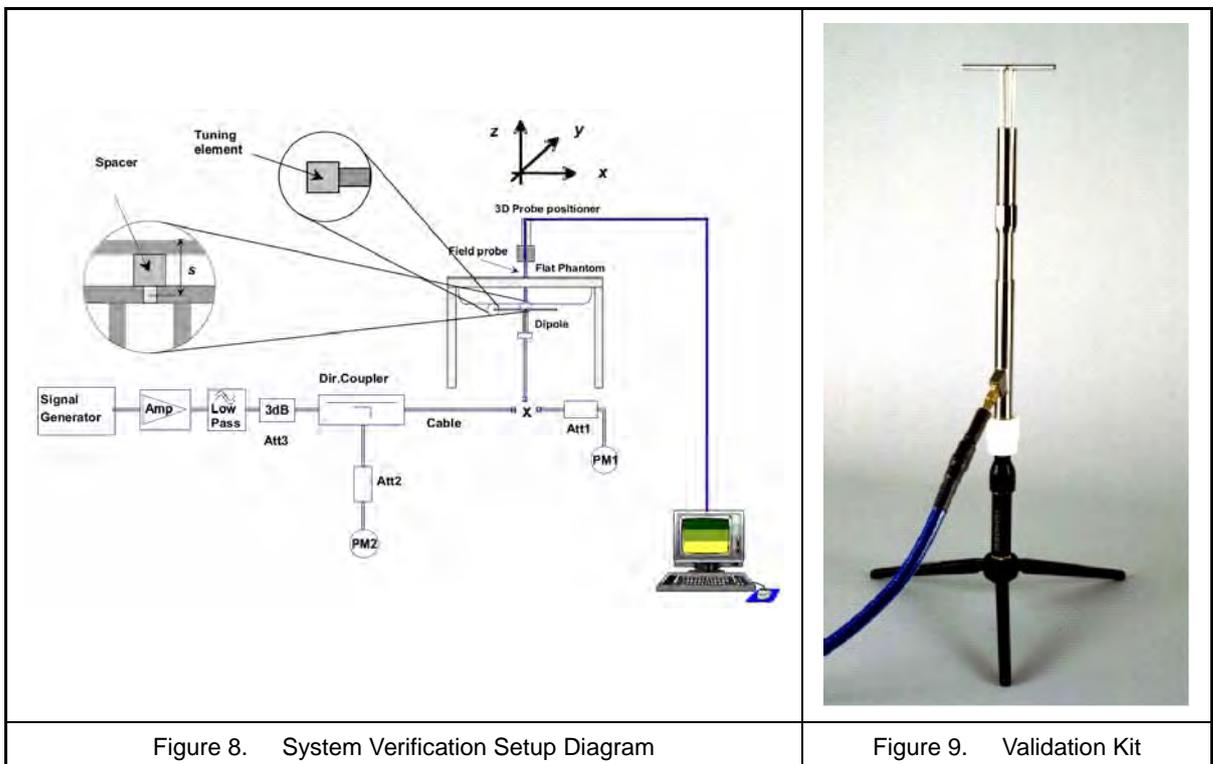


Figure 8. System Verification Setup Diagram

Figure 9. Validation Kit



7.2 Liquid Parameters

Liquid Verify								
Ambient Temperature : 22 ± 2 °C ; Relative Humidity : 40 -70%								
Liquid Type	Frequency	Temp (°C)	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)	Measured Date
750MHz (Body)	698MHz	22	ϵ_r	55.73	54.94	-1.42%	± 5	2015/10/21
			σ	0.959	0.944	-1.56%	± 5	
	730MHz	22	ϵ_r	55.61	54.27	-2.41%	± 5	
			σ	0.962	0.985	2.39%	± 5	
	750MHz	22	ϵ_r	55.53	54.58	-1.71%	± 5	
			σ	0.963	1.011	4.98%	± 5	
750MHz (Body)	698MHz	22	ϵ_r	55.73	54.94	-1.42%	± 5	2015/11/10
			σ	0.959	0.944	-1.56%	± 5	
	730MHz	22	ϵ_r	55.61	54.27	-2.41%	± 5	
			σ	0.962	0.985	2.39%	± 5	
	750MHz	22	ϵ_r	55.53	54.58	-1.71%	± 5	
			σ	0.963	1.011	4.98%	± 5	
835MHz (Body)	820MHz	22	ϵ_r	55.26	54.73	-0.96%	± 5	2015/10/23
			σ	0.969	0.961	-0.83%	± 5	
	835MHz	22	ϵ_r	55.20	54.85	-0.63%	± 5	
			σ	0.970	0.979	0.93%	± 5	
	850MHz	22	ϵ_r	55.15	54.87	-0.51%	± 5	
			σ	0.988	0.999	1.11%	± 5	
835MHz (Body)	820MHz	22	ϵ_r	55.26	54.73	-0.96%	± 5	2015/11/05
			σ	0.969	0.961	-0.83%	± 5	
	835MHz	22	ϵ_r	55.20	54.85	-0.63%	± 5	
			σ	0.970	0.979	0.93%	± 5	
	850MHz	22	ϵ_r	55.15	54.87	-0.51%	± 5	
			σ	0.988	0.999	1.11%	± 5	
835MHz (Body)	820MHz	22	ϵ_r	55.26	54.73	-0.96%	± 5	2015/11/09
			σ	0.969	0.961	-0.83%	± 5	
	835MHz	22	ϵ_r	55.20	54.85	-0.63%	± 5	
			σ	0.970	0.979	0.93%	± 5	
	850MHz	22	ϵ_r	55.15	54.87	-0.51%	± 5	
			σ	0.988	0.999	1.11%	± 5	

Table 3. Measured Tissue dielectric parameters for body phantoms -1



Liquid Verify								
Ambient Temperature : 22 ± 2 °C ; Relative Humidity : 40 -70%								
Liquid Type	Frequency	Temp (°C)	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)	Measured Date
835MHz (Body)	820MHz	22	ϵ_r	55.26	54.73	-0.96%	± 5	2015/11/24
			σ	0.969	0.961	-0.83%	± 5	
	835MHz	22	ϵ_r	55.20	54.85	-0.63%	± 5	
			σ	0.970	0.979	0.93%	± 5	
	850MHz	22	ϵ_r	55.15	54.87	-0.51%	± 5	
			σ	0.988	0.999	1.11%	± 5	
1750MHz (Body)	1700MHz	22	ϵ_r	53.56	54.19	1.18%	± 5	2015/10/19
			σ	1.457	1.478	1.44%	± 5	
	1750MHz	22	ϵ_r	53.43	54.02	1.10%	± 5	
			σ	1.488	1.522	2.29%	± 5	
	1760MHz	22	ϵ_r	53.41	53.98	1.07%	± 5	
			σ	1.495	1.525	2.01%	± 5	
1750MHz (Body)	1700MHz	22	ϵ_r	53.56	54.19	1.18%	± 5	2015/11/04
			σ	1.457	1.478	1.44%	± 5	
	1750MHz	22	ϵ_r	53.43	54.02	1.10%	± 5	
			σ	1.488	1.522	2.29%	± 5	
	1760MHz	22	ϵ_r	53.41	53.98	1.07%	± 5	
			σ	1.495	1.525	2.01%	± 5	
1900MHz (Body)	1850MHz	22	ϵ_r	53.30	54.61	2.46%	± 5	2015/10/22
			σ	1.520	1.460	-3.95%	± 5	
	1900MHz	22	ϵ_r	53.30	54.36	1.99%	± 5	
			σ	1.520	1.502	-1.18%	± 5	
	1950MHz	22	ϵ_r	53.30	54.51	2.27%	± 5	
			σ	1.520	1.574	3.55%	± 5	
1900MHz (Body)	1850MHz	22	ϵ_r	53.30	54.61	2.46%	± 5	2015/11/04
			σ	1.520	1.460	-3.95%	± 5	
	1900MHz	22	ϵ_r	53.30	54.36	1.99%	± 5	
			σ	1.520	1.502	-1.18%	± 5	
	1950MHz	22	ϵ_r	53.30	54.51	2.27%	± 5	
			σ	1.520	1.574	3.55%	± 5	

Table 4. Measured Tissue dielectric parameters for body phantoms -2



Liquid Verify								
Ambient Temperature : 22 ± 2 °C ; Relative Humidity : 40 -70%								
Liquid Type	Frequency	Temp (°C)	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)	Measured Date
1900MHz (Body)	1850MHz	22	ϵ_r	53.30	54.61	2.46%	± 5	2015/11/11
			σ	1.520	1.460	-3.95%	± 5	
	1900MHz	22	ϵ_r	53.30	54.36	1.99%	± 5	
			σ	1.520	1.502	-1.18%	± 5	
	1950MHz	22	ϵ_r	53.30	54.51	2.27%	± 5	
			σ	1.520	1.574	3.55%	± 5	
1900MHz (Body)	1850MHz	22	ϵ_r	53.30	54.61	2.46%	± 5	2015/11/24
			σ	1.520	1.460	-3.95%	± 5	
	1900MHz	22	ϵ_r	53.30	54.36	1.99%	± 5	
			σ	1.520	1.502	-1.18%	± 5	
	1950MHz	22	ϵ_r	53.30	54.51	2.27%	± 5	
			σ	1.520	1.574	3.55%	± 5	
2300MHz (Body)	2250MHz	22	ϵ_r	52.97	52.36	-1.15%	± 5	2015/12/04
			σ	1.759	1.694	-3.70%	± 5	
	2300MHz	22	ϵ_r	52.90	52.03	-1.65%	± 5	
			σ	1.807	1.738	-3.82%	± 5	
	2350MHz	22	ϵ_r	52.83	52.15	-1.29%	± 5	
			σ	1.854	1.838	-0.86%	± 5	
2450MHz (Body)	2400MHz	22	ϵ_r	52.77	51.25	-2.88%	± 5	2015/11/12
			σ	1.902	1.882	-1.05%	± 5	
	2450MHz	22	ϵ_r	52.70	51.18	-2.88%	± 5	
			σ	1.950	1.962	0.62%	± 5	
	2500MHz	22	ϵ_r	52.64	50.99	-3.13%	± 5	
			σ	2.021	2.020	-0.05%	± 5	
2450MHz (Body)	2400MHz	22	ϵ_r	52.77	51.25	-2.88%	± 5	2015/11/25
			σ	1.902	1.882	-1.05%	± 5	
	2450MHz	22	ϵ_r	52.70	51.18	-2.88%	± 5	
			σ	1.950	1.962	0.62%	± 5	
	2500MHz	22	ϵ_r	52.64	50.99	-3.13%	± 5	
			σ	2.021	2.020	-0.05%	± 5	

Table 5. Measured Tissue dielectric parameters for body phantoms -3



Liquid Verify								
Ambient Temperature : 22 ± 2 °C ; Relative Humidity : 40 -70%								
Liquid Type	Frequency	Temp (°C)	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)	Measured Date
2600MHz (Body)	2500MHz	22	ϵ_r	52.64	51.26	-2.62%	± 5	2015/10/20
			σ	2.021	2.084	3.12%	± 5	
	2550MHz	22	ϵ_r	52.57	51.13	-2.74%	± 5	
			σ	2.092	2.152	2.87%	± 5	
	2600MHz	22	ϵ_r	52.51	50.75	-3.35%	± 5	
			σ	2.163	2.193	1.39%	± 5	
2600MHz (Body)	2500MHz	22	ϵ_r	52.64	51.26	-2.62%	± 5	2015/11/10
			σ	2.021	2.084	3.12%	± 5	
	2550MHz	22	ϵ_r	52.57	51.13	-2.74%	± 5	
			σ	2.092	2.152	2.87%	± 5	
	2600MHz	22	ϵ_r	52.51	50.75	-3.35%	± 5	
			σ	2.163	2.193	1.39%	± 5	
5200MHz (Body)	5150MHz	22	ϵ_r	49.08	47.89	-2.43%	± 5	2015/11/12
			σ	5.241	5.460	4.18%	± 5	
	5200MHz	22	ϵ_r	49.01	47.76	-2.55%	± 5	
			σ	5.299	5.520	4.17%	± 5	
	5250MHz	22	ϵ_r	48.95	47.63	-2.70%	± 5	
			σ	5.358	5.550	3.58%	± 5	
5200MHz (Body)	5150MHz	22	ϵ_r	49.08	47.89	-2.43%	± 5	2015/11/25
			σ	5.241	5.460	4.18%	± 5	
	5200MHz	22	ϵ_r	49.01	47.76	-2.55%	± 5	
			σ	5.299	5.520	4.17%	± 5	
	5250MHz	22	ϵ_r	48.95	47.63	-2.70%	± 5	
			σ	5.358	5.550	3.58%	± 5	
5800MHz (Body)	5750MHz	22	ϵ_r	48.27	46.54	-3.58%	± 5	2015/11/12
			σ	5.942	6.210	4.51%	± 5	
	5800MHz	22	ϵ_r	48.20	46.40	-3.73%	± 5	
			σ	6.000	6.270	4.50%	± 5	
	5850MHz	22	ϵ_r	48.20	46.35	-3.84%	± 5	
			σ	6.000	6.290	4.83%	± 5	

Table 6. Measured Tissue dielectric parameters for body phantoms -4



Liquid Verify								
Ambient Temperature : 22 ± 2 °C ; Relative Humidity : 40 -70%								
Liquid Type	Frequency	Temp (°C)	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)	Measured Date
5800MHz (Body)	5750MHz	22	ϵ_r	48.27	46.54	-3.58%	± 5	2015/11/25
			σ	5.942	6.210	4.51%	± 5	
	5800MHz	22	ϵ_r	48.20	46.40	-3.73%	± 5	
			σ	6.000	6.270	4.50%	± 5	
	5850MHz	22	ϵ_r	48.20	46.35	-3.84%	± 5	
			σ	6.000	6.290	4.83%	± 5	

Table 7. Measured Tissue dielectric parameters for body phantoms -5



7.3 Verification Summary

Prior to the assessment, the system validation kit was used to test whether the system was operating within its specifications of $\pm 7\%$. The verification was performed at 750, 835, 1750, 1900 and 2450MHz.

Mixture Type	Frequency (MHz)	Power	SAR _{1g} (W/Kg)	SAR _{10g} (W/Kg)	Drift (dB)	Difference percentage		Probe Model / Serial No.	Dipole Model / Serial No.	1W Target		Date
						1g	10g			SAR _{1g} (mW/g)	SAR _{10g} (mW/g)	
Body	750	250 mW	2.28	1.51	0	3.40%	0.50%	EX3DV4-SN3847	D750V3-SN1004	8.82	6.01	Oct. 21, 2015
		Normalize to 1 Watt	9.12	6.04								
Body	750	250 mW	2.24	1.48	-0.01	1.60%	-1.50%	EX3DV4-SN3847	D750V3-SN1004	8.82	6.01	Nov. 10, 2015
		Normalize to 1 Watt	8.96	5.92								
Body	835	250 mW	2.41	1.58	-0.01	-1.30%	-2.20%	EX3DV4-SN3847	D835V2-SN4d082	9.77	6.46	Oct. 23, 2015
		Normalize to 1 Watt	9.64	6.32								
Body	835	250 mW	2.44	1.6	0.01	-0.10%	-0.90%	EX3DV4-SN3847	D835V2-SN4d082	9.77	6.46	Nov. 05, 2015
		Normalize to 1 Watt	9.76	6.40								
Body	835	250 mW	2.41	1.58	-0.08	-1.30%	-2.20%	EX3DV4-SN3847	D835V2-SN4d082	9.77	6.46	Nov. 09, 2015
		Normalize to 1 Watt	9.64	6.32								
Body	835	250 mW	2.52	1.65	-0.05	3.20%	2.20%	EX3DV4-SN3847	D835V2-SN4d082	9.77	6.46	Nov. 24, 2015
		Normalize to 1 Watt	10.08	6.60								
Body	1750	250 mW	9.41	4.86	-0.01	0.10%	-4.70%	EX3DV4-SN3847	D1750V2-SN1023	37.60	20.40	Oct. 19, 2015
		Normalize to 1 Watt	37.64	19.44								
Body	1750	250 mW	9.53	4.9	-0.06	1.40%	-3.90%	EX3DV4-SN3847	D1750V2-SN1023	37.60	20.40	Nov. 04, 2015
		Normalize to 1 Watt	38.12	19.60								
Body	1900	250 mW	10	5.13	0.03	-0.20%	-2.70%	EX3DV4-SN3847	D1900V2-SN5d111	40.10	21.10	Oct. 22, 2015
		Normalize to 1 Watt	40.00	20.52								
Body	1900	250 mW	10.1	5.14	0.01	0.70%	-2.60%	EX3DV4-SN3847	D1900V2-SN5d111	40.10	21.10	Nov. 04, 2015
		Normalize to 1 Watt	40.40	20.56								
Body	1900	250 mW	9.99	5.12	-0.01	-0.30%	-2.90%	EX3DV4-SN3847	D1900V2-SN5d111	40.10	21.10	Nov. 11, 2015
		Normalize to 1 Watt	39.96	20.48								
Body	1900	250 mW	9.94	5.11	-0.12	-0.80%	-3.10%	EX3DV4-SN3847	D1900V2-SN5d111	40.10	21.10	Nov. 24, 2015
		Normalize to 1 Watt	39.76	20.44								
Body	2300	250 mW	11.9	5.75	-0.09	-4.60%	-3.80%	EX3DV4-SN3847	D2300V2-SN1005	49.90	23.90	Dec. 04, 2015
		Normalize to 1 Watt	47.60	23.00								



Mixture Type	Frequency (MHz)	Power	SAR _{1g} (W/Kg)	SAR _{10g} (W/Kg)	Drift (dB)	Difference percentage		Probe Model / Serial No.	Dipole Model / Serial No.	1W Target		Date
						1g	10g			SAR _{1g} (mW/g)	SAR _{10g} (mW/g)	
Body	2450	250 mW	13.5	6.29	-0.03	2.10%	3.10%	EX3DV4-SN3847	D2450V2-SN712	52.90	24.40	Nov. 12, 2015
		Normalize to 1 Watt	54.00	25.16								
Body	2450	250 mW	13.2	6.22	-0.09	-0.20%	2.00%	EX3DV4-SN3847	D2450V2-SN712	52.90	24.40	Nov. 25, 2015
		Normalize to 1 Watt	52.80	24.88								
Body	2600	250 mW	14.8	6.5	-0.19	4.20%	2.00%	EX3DV4-SN3847	D2600V2-SN1058	56.80	25.50	Oct. 20, 2015
		Normalize to 1 Watt	59.20	26.00								
Body	2600	250 mW	14.6	6.3	-0.02	2.80%	-1.20%	EX3DV4-SN3847	D2600V2-SN1058	56.80	25.50	Nov. 10, 2015
		Normalize to 1 Watt	58.40	25.20								
Body	5200	100 mW	7.81	2.19	0.15	-0.90%	-1.40%	EX3DV4-SN3847	D5200V2-SN1021	78.80	22.20	Nov. 12, 2015
		Normalize to 1 Watt	78.10	21.90								
Body	5200	100 mW	7.87	2.23	0.12	-0.10%	0.50%	EX3DV4-SN3847	D5200V2-SN1021	78.80	22.20	Nov. 25, 2015
		Normalize to 1 Watt	78.70	22.30								
Body	5800	100 mW	7.66	2.13	0.14	-1.30%	-1.40%	EX3DV4-SN3847	D5800V2-SN1021	77.60	21.60	Nov. 12, 2015
		Normalize to 1 Watt	76.60	21.30								
Body	5800	100 mW	7.57	2.09	0.08	-2.40%	-3.20%	EX3DV4-SN3847	D5800V2-SN1021	77.60	21.60	Nov. 25, 2015
		Normalize to 1 Watt	75.70	20.90								



7.4 Validation Summary

Per FCC KDB 865664 D02v01r02, SAR system validation status should be documented to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles were used with the required tissue- equivalent media for system validation, according to the procedures outlined in IEEE 1528-2013 and FCC KDB 865664 D01v01r04. Since SAR probe calibrations are frequency dependent, each probe calibration point was validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media.

A tabulated summary of the system validation status including the validation date(s), measurement frequencies, SAR probes and tissue dielectric parameters as below.



Probe Type Model / Serial No.	Prob Cal. Point (MHz)	Head / Body	Cond.	Perm.	CW Validation			Mod. Validation			Date
			ϵ_r	σ	Sensitivity	Probe	Probe	Mod. Type	Duty Factor	PAR	
						Linearity	Isotropy				
EX3DV4-SN3847	750	Body	54.27	0.985	Pass	Pass	Pass	QPSK	Pass	N/A	Oct. 21, 2015
EX3DV4-SN3847	750	Body	54.27	0.985	Pass	Pass	Pass	QPSK	Pass	N/A	Nov. 10, 2015
EX3DV4-SN3847	835	Body	54.85	0.979	Pass	Pass	Pass	QPSK	Pass	N/A	Oct. 23, 2015
EX3DV4-SN3847	835	Body	54.85	0.979	Pass	Pass	Pass	QPSK	Pass	N/A	Nov. 05, 2015
EX3DV4-SN3847	835	Body	54.85	0.979	Pass	Pass	Pass	QPSK/RMC-12.2K	Pass	N/A	Nov. 09, 2015
EX3DV4-SN3847	835	Body	54.85	0.979	Pass	Pass	Pass	QPSK	Pass	N/A	Nov. 24, 2015
EX3DV4-SN3847	1750	Body	54.02	1.522	Pass	Pass	Pass	QPSK	Pass	N/A	Oct. 19, 2015
EX3DV4-SN3847	1750	Body	54.02	1.522	Pass	Pass	Pass	QPSK	Pass	N/A	Nov. 04, 2015
EX3DV4-SN3847	1900	Body	54.36	1.502	Pass	Pass	Pass	QPSK	Pass	N/A	Oct. 22, 2015
EX3DV4-SN3847	1900	Body	54.36	1.502	Pass	Pass	Pass	QPSK	Pass	N/A	Nov. 04, 2015
EX3DV4-SN3847	1900	Body	54.36	1.502	Pass	Pass	Pass	RMC-12.2K	Pass	N/A	Nov. 11, 2015
EX3DV4-SN3847	1900	Body	54.36	1.502	Pass	Pass	Pass	QPSK	Pass	N/A	Nov. 24, 2015
EX3DV4-SN3847	2300	Body	52.03	1.738	Pass	Pass	Pass	QPSK	Pass	N/A	Dec. 04, 2015
EX3DV4-SN3847	2450	Body	51.18	1.962	Pass	Pass	Pass	DSSS	N/A	Pass	Nov. 12, 2015
EX3DV4-SN3847	2450	Body	51.18	1.962	Pass	Pass	Pass	DSSS	N/A	Pass	Nov. 25, 2015
EX3DV4-SN3847	2600	Body	51.13	2.152	Pass	Pass	Pass	QPSK	Pass	N/A	Oct. 20, 2015
EX3DV4-SN3847	2600	Body	51.13	2.152	Pass	Pass	Pass	QPSK	Pass	N/A	Nov. 10, 2015
EX3DV4-SN3847	5200	Body	47.76	5.520	Pass	Pass	Pass	OFDM	N/A	Pass	Nov. 12, 2015
EX3DV4-SN3847	5200	Body	47.76	5.520	Pass	Pass	Pass	OFDM	N/A	Pass	Nov. 25, 2015
EX3DV4-SN3847	5800	Body	46.40	6.270	Pass	Pass	Pass	OFDM	N/A	Pass	Nov. 12, 2015
EX3DV4-SN3847	5800	Body	46.40	6.270	Pass	Pass	Pass	OFDM	N/A	Pass	Nov. 25, 2015



8. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit	D750V3	1004	Jul. 06, 2015	Jul. 06, 2016
SPEAG	835MHz System Validation Kit	D835V2	4d082	Jul. 06, 2015	Jul. 06, 2016
SPEAG	1750MHz System Validation Kit	D1750V2	1023	Jun. 23, 2015	Jun. 23, 2016
SPEAG	1900MHz System Validation Kit	D1900V2	5d111	Jul. 07, 2015	Jul. 07, 2016
SPEAG	2300MHz System Validation Kit	D2300V2	1005	Oct. 08, 2015	Oct. 08, 2016
SPEAG	2450MHz System Validation Kit	D2450V2	712	Mar. 12, 2015	Mar. 12, 2016
SPEAG	2600MHz System Validation Kit	D2600V2	1058	Jun. 19, 2015	Jun. 19, 2016
SPEAG	5GHz System Validation Kit	D5GHZV2	1021	Mar. 17, 2015	Mar. 17, 2016
SPEAG	Dosimetric E-Field Probe	EX3DV4	3847	Jan. 30, 2015	Jan. 30, 2016
SPEAG	Data Acquisition Electronics	DAE4	541	Feb. 03, 2015	Feb. 03, 2016
SPEAG	Device Holder	N/A	N/A	NCR	
SPEAG	Measurement Server	SE UMS 011 AA	1025	NCR	
SPEAG	Phantom	QDOVA002AA	TP-1133	NCR	
SPEAG	Robot	Staubli TX90XL	F07/564ZA1/C/01	NCR	
SPEAG	Software	DASY52 V52.8 (8)	N/A	NCR	
SPEAG	Software	SEMCAD X V14.6.10 (7331)	N/A	NCR	
Agilent	Dielectric Probe Kit	85070C	US99360094	NCR	
Agilent	ENA Series Network Analyzer	E5071B	MY42404655	Apr. 10, 2015	Apr. 10, 2016
R&S	Power Sensor	NRP-Z22	100179	Jun. 01, 2015	Jun. 01, 2016
Agilent	Power Sensor	8481H	3318A20779	Jun. 15, 2015	Jun. 15, 2016
Agilent	Power Meter	EDM Series E4418B	GB40206143	Jun. 15, 2015	Jun. 15, 2016
Anritsu	Power Meter	ML2495A	1135009	Aug. 24, 2015	Aug. 24, 2016
Agilent	MXF-G-B RF Vector Signal Generator	N5182B	MY53050382	May 28, 2015	May 28, 2016
Agilent	Dual Directional Coupler	778D	50334	NCR	
Mini-Circuits	Power Amplifier	ZHL-42W-SMA	D111103#5	NCR	
Mini-Circuits	Power Amplifier	ZVE-8G-SMA	D042005 671800514	NCR	
Aisi	Attenuator	IEAT 3dB	N/A	NCR	

Table 8. Test Equipment List



9. **Measurement Uncertainty**

Measurement uncertainties in SAR measurements are difficult to quantify due to several variables including biological, physiological, and environmental. However, we estimate the measurement uncertainties in SAR_{1g} to be less than $\pm 21.76\%$ for 300MHz ~3GHz and 3GHz ~ 6GHz $\pm 25.68\%$ [8] .

According to Std. C95.3 [9] , the overall uncertainties are difficult to assess and will vary with the type of meter and usage situation. However, accuracy's of ± 1 to 3 dB can be expected in practice, with greater uncertainties in near-field situations and at higher frequencies (shorter wavelengths), or areas where large reflecting objects are present. Under optimum measurement conditions, SAR measurement uncertainties of at least ± 2 dB can be expected.



Uncertainty of a Measure SAR of EUT with DASY System

Item	Uncertainty Component	Uncertainty Value	Prob. Dist	Div.	c_i (1g)	c_i (10g)	Std. Unc. (1-g)	Std. Unc. (10-g)	V_i or V_{eff}
Measurement System									
u1	Probe Calibration ($k=1$)	±6.0%	Normal	1	1	1	±6.0%	±6.0%	∞
u2	Axial Isotropy	±4.7%	Rectangular	$\sqrt{3}$	0.7	0.7	±1.9%	±1.9%	∞
u3	Hemispherical Isotropy	±9.6%	Rectangular	$\sqrt{3}$	0.7	0.7	±3.9%	±3.9%	
u4	Boundary Effect	±1.0%	Rectangular	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
u5	Linearity	±4.7%	Rectangular	$\sqrt{3}$	1	1	±2.7%	±2.7%	∞
u6	System Detection Limit	±1.0%	Rectangular	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
u7	Readout Electronics	±0.3%	Normal	1	1	1	±0.3%	±0.3%	∞
u8	Response Time	±0.8%	Rectangular	$\sqrt{3}$	1	1	±0.5%	±0.5%	∞
u9	Integration Time	±1.9%	Rectangular	$\sqrt{3}$	1	1	±1.1%	±1.1%	∞
u10	RF Ambient Conditions	±3.0%	Rectangular	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
u11	RF Ambient Reflections	±3.0%	Rectangular	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
u12	Probe Positioner Mechanical Tolerance	±0.4%	Rectangular	$\sqrt{3}$	1	1	±0.2%	±0.2%	∞
u13	Probe Positioning with respect to Phantom Shell	±2.9%	Rectangular	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
u14	Extrapolation, interpolation and integration Algorithms for Max. SAR Evaluation	±1.0%	Rectangular	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Test sample Related									
u15	Test sample Positioning	±3.6%	Normal	1	1	1	±3.6%	±3.6%	89
u16	Device Holder Uncertainty	±2.7%	Normal	1	1	1	±2.7%	±2.7%	5
u17	Output Power Variation - SAR drift measurement	±5.0%	Rectangular	$\sqrt{3}$	1	1	±2.9%	±2.9%	∞
Phantom and Tissue Parameters									
u18	Phantom Uncertainty (shape and thickness tolerances)	±4.0%	Rectangular	$\sqrt{3}$	1	1	±2.3%	±2.3%	∞
u19	Liquid Conductivity - deviation from target values	±5.0%	Rectangular	$\sqrt{3}$	0.64	0.43	±1.8%	±1.2%	∞
u20	Liquid Conductivity - measurement uncertainty	±2.5%	Normal	1	0.64	0.43	±1.6%	±1.08%	69
u21	Liquid Permittivity - deviation from target values	±5.0%	Rectangular	$\sqrt{3}$	0.6	0.49	±1.7%	±1.4%	∞
u22	Liquid Permittivity - measurement uncertainty	±2.5%	Normal	1	0.6	0.49	±1.5%	±1.23%	69
Combined standard uncertainty			RSS				±10.88%	±10.66%	313
Expanded uncertainty (95% CONFIDENCE LEVEL)			$k=2$				±21.76%	±21.31%	

Table 9. Uncertainty Budget for frequency range 300MHz to 3GHz



Uncertainty of a Measure SAR of EUT with DASY System

Item	Uncertainty Component	Uncertainty Value	Prob. Dist	Div.	c_i (1g)	c_i (10g)	Std. Unc. (1-g)	Std. Unc. (10-g)	V_i or V_{eff}
Measurement System									
u1	Probe Calibration ($k=1$)	±6.5%	Normal	1	1	1	±6.5%	±6.5%	∞
u2	Axial Isotropy	±4.7%	Rectangular	$\sqrt{3}$	0.7	0.7	±1.9%	±1.9%	∞
u3	Hemispherical Isotropy	±9.6%	Rectangular	$\sqrt{3}$	0.7	0.7	±3.9%	±3.9%	
u4	Boundary Effect	±2.0%	Rectangular	$\sqrt{3}$	1	1	±1.2%	±1.2%	∞
u5	Linearity	±4.7%	Rectangular	$\sqrt{3}$	1	1	±2.7%	±2.7%	∞
u6	System Detection Limit	±1.0%	Rectangular	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
u7	Readout Electronics	±0.0%	Normal	1	1	1	±0.0%	±0.0%	∞
u8	Response Time	±0.8%	Rectangular	$\sqrt{3}$	1	1	±0.5%	±0.5%	∞
u9	Integration Time	±2.8%	Rectangular	$\sqrt{3}$	1	1	±2.8%	±2.8%	∞
u10	RF Ambient Conditions	±3.0%	Rectangular	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
u11	RF Ambient Reflections	±3.0%	Rectangular	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
u12	Probe Positioner Mechanical Tolerance	±0.7%	Rectangular	$\sqrt{3}$	1	1	±0.7%	±0.7%	∞
u13	Probe Positioning with respect to Phantom Shell	±9.9%	Rectangular	$\sqrt{3}$	1	1	±5.7%	±5.7%	∞
u14	Extrapolation, interpolation and integration Algorithms for Max. SAR Evaluation	±3.0%	Rectangular	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
Test sample Related									
u15	Test sample Positioning	±3.6%	Normal	1	1	1	±3.6%	±3.6%	89
u16	Device Holder Uncertainty	±2.7%	Normal	1	1	1	±2.7%	±2.7%	5
u17	Output Power Variation - SAR drift measurement	±5.0%	Rectangular	$\sqrt{3}$	1	1	±2.9%	±2.9%	∞
Phantom and Tissue Parameters									
u18	Phantom Uncertainty (shape and thickness tolerances)	±4.0%	Rectangular	$\sqrt{3}$	1	1	±2.3%	±2.3%	∞
u19	Liquid Conductivity - deviation from target values	±5.0%	Rectangular	$\sqrt{3}$	0.64	0.43	±1.8%	±1.2%	∞
u20	Liquid Conductivity - measurement uncertainty	±2.5%	Normal	1	0.64	0.43	±1.6%	±1.08%	69
u21	Liquid Permittivity - deviation from target values	±5.0%	Rectangular	$\sqrt{3}$	0.6	0.49	±1.7%	±1.4%	∞
u22	Liquid Permittivity - measurement uncertainty	±2.5%	Normal	1	0.6	0.49	±1.5%	±1.23%	69
Combined standard uncertainty			RSS				±12.84%	±12.65%	313
Expanded uncertainty (95% CONFIDENCE LEVEL)			$k=2$				±25.68%	±25.29%	

Table 10. Uncertainty Budget for frequency range 3GHz to 6GHz



10. Measurement Procedure

The measurement procedures are as follows:

1. For WLAN function, engineering testing software installed on Notebook can provide continuous transmitting signal.
2. Measure output power through RF cable and power meter
3. Set scan area, grid size and other setting on the DASY software
4. Find out the largest SAR result on these testing positions of each band
5. Measure SAR results for other channels in worst SAR testing position if the SAR of highest power channel is larger than 0.8 W/kg

According to the test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

1. Power reference measurement
2. Area scan
3. Zoom scan
4. Power drift measurement

10.1 Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1g and 10g, as well as for user-specific masses. The DASY software includes all numerical procedures necessary to evaluate the spatial peak SAR value.

The base for the evaluation is a "cube" measurement. The measured volume must include the 1g and 10g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.

The entire evaluation of the spatial peak values is performed within the post-processing engine (SEMCAD). The system always gives the maximum values for the 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages

1. Extraction of the measured data (grid and values) from the Zoom Scan
2. Calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
3. Generation of a high-resolution mesh within the measured volume
4. Interpolation of all measured values from the measurement grid to the high-resolution grid
5. Extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
6. Calculation of the averaged SAR within masses of 1g and 10g



10.2 Area & Zoom Scan Procedures

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan measures points and step size follow as below. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g.

Grid Type	Frequency		Step size (mm)			X*Y*Z (Point)	Cube size			Step size		
			X	Y	Z		X	Y	Z	X	Y	Z
uniform grid	≤ 3GHz	≤ 2GHz	≤ 8	≤ 8	≤ 5	5*5*7	32	32	30	8	8	5
		2G - 3G	≤ 5	≤ 5	≤ 5	7*7*7	30	30	30	5	5	5
	3 - 6GHz	3 - 4GHz	≤ 5	≤ 5	≤ 4	7*7*8	30	30	28	5	5	4
		4 - 5GHz	≤ 4	≤ 4	≤ 3	8*8*10	28	28	27	4	4	3
		5 - 6GHz	≤ 4	≤ 4	≤ 2	8*8*12	28	28	22	4	4	2

(Our measure settings are refer KDB Publication 865664 D01v01r04)

10.3 Volume Scan Procedures

The volume scan is used for assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the DUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing. When all volume scan were completed, the software, SEMCAD postprocessor can combine and subsequently superpose these measurement data to calculating the multiband SAR.

10.4 SAR Averaged Methods

In DASYS, the interpolation and extrapolation are both based on the modified Quadratic Shepard's method. The interpolation scheme combines a least-square fitted function method and a weighted average method which are the two basic types of computational interpolation and approximation. Extrapolation routines are used to obtain SAR values between the lowest measurement points and the inner phantom surface. The extrapolation distance is determined by the surface detection distance and the probe sensor offset. The uncertainty increases with the extrapolation distance. To keep the uncertainty within 1% for the 1 g and 10 g cubes, the extrapolation distance should not be larger than 5 mm.

10.5 Power Drift Monitoring

All SAR testing is under the DUT install full charged battery and transmit maximum output power. In DASYS measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of DUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in dB. If the power drift more than 5%, the SAR will be retested.



11. SAR Test Results Summary

11.1 Head Measurement SAR

Evaluated head SAR is not available.

11.2 Body Measurement SAR

Evaluated body SAR refers to Hot-spot mode measurement results.

11.3 Hot-spot mode Measurement SAR

1. If actual power less than tune-up power that Scaling SAR is required.
2. The formula of Reported SAR, that represent as below:
Reported SAR = Original SAR * $10^{\frac{(Tune-up\ power - Actual\ power)}{10}}$
3. If the WWAN Band Channel's Reported SAR 1g of the position is > 0.8 W/Kg, low, middle and high channel are supposed to be tested.(2G/3G/LTE).
4. Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge,middle and lower edge of each required test channel.
5. When the highest reported SAR for 1 RB and 50% RB allocation are > 0.8 W/kg,SAR is measured for the highest output power channel in 100%RB.
6. When the maximum output power in secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.
7. Require the middle channel to be tested first, if the maximum output power variation across the required test channels is > $\frac{1}{2}$ dB, instead of the middle channel, the highest output power channel must be used.
8. When the reported SAR of the highest measured maximum output power channel is ≤ 0.8 W/kg, no further SAR testing is required for IEEE 802.11b DSSS.
9. When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg , SAR is not required for 2.4GHz OFDM configuration.
10. SAR for the initial test configuration is measured using the highest maximum output power channel.
11. When the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for the band with lower maximum output power.
12. When multiple transmission modes (IEEE 802.11a/g/n/ac) have the same specified maximum output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., IEEE 802.11a is chosen over IEEE 802.11n then IEEE 802.11ac or IEEE 802.11g is chosen over IEEE 802.11n.
13. When the highest reported SAR for the initial test configuration (when applicable, include subsequent highest output channels), according to the initial test position or fixed exposure position requirements, is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for that subsequent test configuration.



Index.	Position	Band	Ch.	Data Rate or Sub-Test	Test Position	Spacing (mm)	SAR _{1g} (W/kg)	Power Drift	Burst Avg Power	Max tune-up	Reported SAR _{1g} (W/kg)
#89	Flat	GPRS 850	190	3D2U	1	10	0.615	-0.04	32.1	33	0.76
#90	Flat		190	3D2U	2	10	0.606	-0.03	32.1	33	0.75
#87	Flat		190	3D2U	3	10	0.377	0.04	32.1	33	0.46
#88	Flat		190	3D2U	4	10	0.401	-0.02	32.1	33	0.49
#86	Flat		190	3D2U	5	10	0.124	0.09	32.1	33	0.15
#128	Flat		190	3D2U	6	10	0.045	-0.07	32.1	33	0.06
#62	Flat	GPRS 1900	512	3D2U	1	10	0.869	-0.06	28.97	30.5	1.24
#61	Flat		661	3D2U	1	10	0.83	-0.05	28.78	30.5	1.23
#63	Flat		810	3D2U	1	10	0.769	-0.13	28.62	30.5	1.19
#64	Flat		661	3D2U	2	10	0.502	-0.09	28.78	30.5	0.75
#65	Flat		661	3D2U	3	10	0.149	0.04	28.78	30.5	0.22
#66	Flat		661	3D2U	4	10	0.458	0.01	28.78	30.5	0.68
#67	Flat		661	3D2U	5	10	0.454	0.08	28.78	30.5	0.68
#127	Flat		661	3D2U	6	10	0.249	-0.12	28.78	30.5	0.37

Index.	Position	Band	Ch.	Data Rate or Sub-Test	Test Position	Spacing (mm)	SAR _{1g} (W/kg)	Power Drift	Burst Avg Power	Max tune-up	Reported SAR _{1g} (W/kg)
#110	Flat	WCDMA Band II	9262	RMC12.2K	1	10	0.782	-0.09	21.75	23	1.04
#109	Flat		9400	RMC12.2K	1	10	0.789	-0.08	21.87	23	1.02
#111	Flat		9538	RMC12.2K	1	10	0.79	-0.09	21.69	23	1.07
#112	Flat		9400	RMC12.2K	2	10	0.461	-0.05	21.87	23	0.60
#113	Flat		9400	RMC12.2K	3	10	0.146	0.14	21.87	23	0.19
#114	Flat		9400	RMC12.2K	4	10	0.527	0.01	21.87	23	0.68
#115	Flat		9400	RMC12.2K	5	10	0.495	0.05	21.87	23	0.64
#100	Flat	WCDMA Band V	4132	RMC12.2K	1	10	0.741	-0.03	22.85	24	0.97
#99	Flat		4183	RMC12.2K	1	10	0.851	-0.02	22.91	24	1.09
#101	Flat		4233	RMC12.2K	1	10	0.839	-0.02	22.78	24	1.11
#103	Flat		4132	RMC12.2K	2	10	0.695	0.02	22.85	24	0.91
#102	Flat		4183	RMC12.2K	2	10	0.876	0.01	22.91	24	1.13
#104	Flat		4233	RMC12.2K	2	10	0.873	0.02	22.78	24	1.16
#105	Flat		4183	RMC12.2K	3	10	0.428	0.01	22.91	24	0.55
#106	Flat		4183	RMC12.2K	4	10	0.408	0.01	22.91	24	0.52
#107	Flat	4183	RMC12.2K	5	10	0.142	-0.09	22.91	24	0.18	



Index.	Position	Band	Ch.	BW (MHz)	RB Size	RB Offset	Test Position	Spacing (mm)	SAR _{1g} (W/Kg)	Power Drift	Burst Avg Power	Max tune-up	Reported SAR _{1g} (W/Kg)
#91	Flat	LTE Band 2 (QPSK)	18700	20M	1	0	1	10	0.731	0.07	22.12	23.5	1.00
#51	Flat		18900	20M	1	0	1	10	0.669	0.08	22.03	23.5	0.94
#92	Flat		19100	20M	1	0	1	10	0.704	0.08	21.95	23.5	1.01
#53	Flat		18900	20M	1	0	2	10	0.426	-0.05	22.03	23.5	0.60
#55	Flat		18900	20M	1	0	3	10	0.124	0.08	22.03	23.5	0.17
#57	Flat		18900	20M	1	0	4	10	0.47	-0.01	22.03	23.5	0.66
#59	Flat		18900	20M	1	0	5	10	0.465	0.05	22.03	23.5	0.65
#52	Flat		18900	20M	50	0	1	10	0.525	0.07	21.04	22.5	0.74
#54	Flat		18900	20M	50	0	2	10	0.331	-0.04	21.04	22.5	0.46
#56	Flat		18900	20M	50	0	3	10	0.097	0.11	21.04	22.5	0.14
#58	Flat		18900	20M	50	0	4	10	0.369	-0.03	21.04	22.5	0.52
#60	Flat		18900	20M	50	0	5	10	0.353	0.07	21.04	22.5	0.49
#93	Flat		18700	20M	100	0	1	10	0.594	0.07	20.98	22.5	0.84
#95	Flat		LTE Band 4 (QPSK)	20050	20M	1	0	1	10	0.86	-0.03	21.98	23.5
#1	Flat	20175		20M	1	0	1	10	0.745	-0.01	22.05	23.5	1.04
#96	Flat	20300		20M	1	0	1	10	0.95	-0.02	22.1	23.5	1.31
#4	Flat	20175		20M	1	0	2	10	0.434	0.01	22.05	23.5	0.61
#5	Flat	20175		20M	1	0	3	10	0.109	0.08	22.05	23.5	0.15
#8	Flat	20175		20M	1	0	4	10	0.396	0.03	22.05	23.5	0.55
#9	Flat	20175		20M	1	0	5	10	0.542	0.03	22.05	23.5	0.76
#2	Flat	20175		20M	50	0	1	10	0.617	-0.03	21.45	22.5	0.79
#3	Flat	20175		20M	50	0	2	10	0.362	-0.01	21.45	22.5	0.46
#6	Flat	20175		20M	50	0	3	10	0.088	-0.02	21.45	22.5	0.11
#7	Flat	20175		20M	50	0	4	10	0.329	0.05	21.45	22.5	0.42
#10	Flat	20175		20M	50	0	5	10	0.43	0.05	21.45	22.5	0.55
#97	Flat	20300		20M	100	0	1	10	0.781	-0.03	21	22.5	1.10



Index.	Position	Band	Ch.	BW (MHz)	RB Size	RB Offset	Test Position	Spacing (mm)	SAR _{1g} (W/Kg)	Power Drift	Burst Avg Power	Max tune-up	Reported SAR _{1g} (W/Kg)
#70	Flat	LTE Band 5 (QPSK)	20450	10M	1	0	1	10	0.717	0	23	24	0.90
#69	Flat		20525	10M	1	0	1	10	0.796	-0.08	23.17	24	0.96
#71	Flat		20600	10M	1	0	1	10	0.882	0	23.44	24	1.00
#74	Flat		20450	10M	1	0	2	10	0.665	0	23	24	0.84
#73	Flat		20525	10M	1	0	2	10	0.771	0.03	23.17	24	0.93
#75	Flat		20600	10M	1	0	2	10	0.897	0.03	23.44	24	1.02
#79	Flat		20525	10M	1	0	3	10	0.423	-0.01	23.17	24	0.51
#81	Flat		20525	10M	1	0	4	10	0.362	-0.13	23.17	24	0.44
#83	Flat		20525	10M	1	0	5	10	0.141	-0.07	23.17	24	0.17
#78	Flat		20525	10M	25	0	1	10	0.655	-0.01	22.7	23.5	0.79
#77	Flat		20525	10M	25	0	2	10	0.634	0.02	22.7	23.5	0.76
#80	Flat		20525	10M	25	0	3	10	0.351	-0.02	22.7	23.5	0.42
#82	Flat		20525	10M	25	0	4	10	0.311	0.04	22.7	23.5	0.37
#84	Flat		20525	10M	25	0	5	10	0.113	-0.06	22.7	23.5	0.14
#72	Flat		20600	10M	50	0	1	10	0.785	-0.03	22.77	23.5	0.93
#76	Flat		20600	10M	50	0	2	10	0.81	0.05	22.77	23.5	0.96
#12	Flat		LTE Band 7 (QPSK)	20850	20M	1	0	1	10	1.05	-0.09	22.43	22.5
#11	Flat	21100		20M	1	0	1	10	1.06	-0.09	22.39	22.5	1.09
#13	Flat	21350		20M	1	0	1	10	1	-0.06	21.98	22.5	1.13
#18	Flat	21100		20M	1	0	2	10	0.604	0.01	22.39	22.5	0.62
#20	Flat	21100		20M	1	0	3	10	0.061	0.19	22.39	22.5	0.06
#23	Flat	21100		20M	1	0	4	10	0.226	0.05	22.39	22.5	0.23
#25	Flat	20850		20M	1	0	5	10	1.35	-0.02	22.43	22.5	1.37
#24	Flat	21100		20M	1	0	5	10	1.36	0.02	22.39	22.5	1.40
#26	Flat	21350		20M	1	0	5	10	1.25	0.15	21.98	22.5	1.41
#15	Flat	20850		20M	50	0	1	10	0.822	-0.17	21.33	22	0.96
#16	Flat	21100		20M	50	0	1	10	0.806	-0.06	20.92	22	1.03
#14	Flat	21350		20M	50	0	1	10	0.747	-0.1	20.65	22	1.02
#19	Flat	21100		20M	50	0	2	10	0.391	0.03	20.92	22	0.50
#21	Flat	21100		20M	50	0	3	10	0.052	0.12	20.92	22	0.07
#22	Flat	21100		20M	50	0	4	10	0.213	-0.04	20.92	22	0.27
#28	Flat	20850		20M	50	0	5	10	1.11	0.02	21.33	22	1.30
#29	Flat	21100		20M	50	0	5	10	1.07	0.01	20.92	22	1.37
#27	Flat	21350		20M	50	0	5	10	0.957	0.03	20.65	22	1.31
#17	Flat	20850		20M	100	0	1	10	0.776	0.01	21.24	22	0.92
#30	Flat	20850		20M	100	0	5	10	0.994	0.01	21.24	22	1.18



Index.	Position	Band	Ch.	BW (MHz)	RB Size	RB Offset	Test Position	Spacing (mm)	SAR _{1g} (W/Kg)	Power Drift	Burst Avg Power	Max tune-up	Reported SAR _{1g} (W/Kg)
#33	Flat	LTE Band 12 (QPSK)	23060	10M	1	0	1	10	0.898	0.01	24.29	24.5	0.94
#32	Flat		23095	10M	1	0	1	10	0.958	0.16	24.37	24.5	0.99
#34	Flat		23130	10M	1	0	1	10	1.02	-0.08	24.28	24.5	1.07
#39	Flat		23060	10M	1	0	2	10	0.721	-0.02	24.29	24.5	0.76
#38	Flat		23095	10M	1	0	2	10	0.77	-0.09	24.37	24.5	0.79
#40	Flat		23130	10M	1	0	2	10	0.862	0.03	24.28	24.5	0.91
#42	Flat		23095	10M	1	0	3	10	0.415	-0.04	24.37	24.5	0.43
#44	Flat		23095	10M	1	0	4	10	0.442	0.01	24.37	24.5	0.46
#46	Flat		23095	10M	1	0	5	10	0.067	-0.08	24.37	24.5	0.07
#36	Flat		23060	10M	25	0	1	10	0.72	-0.01	23.26	24.5	0.96
#35	Flat		23095	10M	25	0	1	10	0.762	0.02	23.47	24.5	0.97
#37	Flat		23130	10M	25	0	1	10	0.824	-0.03	23.39	24.5	1.06
#41	Flat		23095	10M	25	0	2	10	0.644	-0.01	23.47	24.5	0.82
#43	Flat		23095	10M	25	0	3	10	0.32	-0.02	23.47	24.5	0.41
#45	Flat		23095	10M	25	0	4	10	0.356	-0.01	23.47	24.5	0.45
#47	Flat		23095	10M	25	0	5	10	0.052	-0.16	23.47	24.5	0.07
#48	Flat		23130	10M	50	0	1	10	0.874	0.04	23.26	24	1.04
#49	Flat		23130	10M	50	0	2	10	0.713	0.03	23.26	24	0.85
#129	Flat		LTE Band 30 (QPSK)	27710	10M	1	0	1	10	0.848	-0.04	23.9	24
#131	Flat	27710		10M	1	0	2	10	0.704	-0.01	23.9	24	0.72
#133	Flat	27710		10M	1	0	3	10	0.632	-0.09	23.9	24	0.65
#135	Flat	27710		10M	1	0	4	10	0.253	-0.02	23.9	24	0.26
#137	Flat	27710		10M	1	0	5	10	0.233	-0.09	23.9	24	0.24
#130	Flat	27710		10M	25	0	1	10	0.721	-0.02	22.8	23	0.76
#132	Flat	27710		10M	25	0	2	10	0.565	-0.1	22.8	23	0.59
#134	Flat	27710		10M	25	0	3	10	0.497	-0.09	22.8	23	0.52
#136	Flat	27710		10M	25	0	4	10	0.196	-0.01	22.8	23	0.21
#138	Flat	27710		10M	25	0	5	10	0.188	-0.08	22.8	23	0.20
#139	Flat	27710		10M	50	0	1	10	0.697	-0.01	22.56	23	0.77



Index.	Position	Band	Ch.	Data Rate or Sub-Test	Test Position	Spacing (mm)	Antenna	SAR _{1g} (W/Kg)	Power Drift	Burst Avg Power	Max tune-up	Reported SAR _{1g} (W/Kg)
#129	Flat	IEEE 802.11b	6	1M	2	10	Antenna0	0.007	-0.08	8.72	10	0.01
#117	Flat		6	1M	3	10	Antenna0	0.018	-0.03	8.72	10	0.02
#130	Flat		6	1M	5	10	Antenna0	0.003	0.01	8.72	10	0.00
#131	Flat		6	1M	2	10	Antenna1	0.007	-0.05	8.66	10	0.01
#118	Flat		6	1M	3	10	Antenna1	0.017	0.02	8.66	10	0.02
#132	Flat		6	1M	5	10	Antenna1	0.004	-0.06	8.66	10	0.01
#119	Flat	IEEE 802.11a	36	6M	1	10	Antenna0	0.056	-0.14	9.79	10	0.06
#123	Flat		161	6M	1	10	Antenna0	0.060	0.02	9.39	10	0.07
#133	Flat		36	6M	2	10	Antenna0	0.023	-0.08	9.79	10	0.02
#135	Flat		161	6M	2	10	Antenna0	0.018	-0.16	9.39	10	0.02
#120	Flat		36	6M	3	10	Antenna0	0.070	0.02	9.79	10	0.07
#124	Flat		161	6M	3	10	Antenna0	0.080	-0.14	9.39	10	0.09
#134	Flat		36	6M	5	10	Antenna0	0.014	-0.04	9.79	10	0.02
#136	Flat		161	6M	5	10	Antenna0	0.024	-0.1	9.39	10	0.03
#122	Flat		36	6M	1	10	Antenna1	0.047	-0.19	9.39	10	0.05
#126	Flat		165	6M	1	10	Antenna1	0.078	-0.14	9.16	10	0.10
#137	Flat		36	6M	2	10	Antenna1	0.037	0.05	9.39	10	0.04
#138	Flat		165	6M	2	10	Antenna1	0.005	0.04	9.16	10	0.01
#121	Flat		36	6M	3	10	Antenna1	0.097	-0.06	9.39	10	0.11
#125	Flat		165	6M	3	10	Antenna1	0.132	0.15	9.16	10	0.16
#139	Flat	36	6M	5	10	Antenna1	0.022	-0.16	9.39	10	0.03	
#140	Flat	165	6M	5	10	Antenna1	0.013	-0.14	9.16	10	0.02	

11.4 Extremity Measurement SAR

Evaluated extremity SAR is not available.



11.5 SAR Measurement Variability

Detailed evaluations please refer KDB 865664 on "SAR test reduction according to KDB" section.

Index.	Band	Ch.	Side to Phantom	Spacing (mm)	Number of times	SAR _{1g} (W/Kg)	Power Drift	Burst Avg Power	Max tune-up	Reported SAR _{1g} (W/Kg)	Repeated measurement Ratio
#68	GPRS 1900	512	1	10	1	0.888	-0.06	28.78	30.5	1.32	1.02 < 1.2

- Note: 1. The original highest measured Reported SAR 1g is ≥ 0.80 W/kg, repeat that measurement once.
 2. Perform a second repeated measurement the ratio of largest to smallest SAR for the original and first repeated measurements is < 1.2, the original or repeated measurement is ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit)

Index.	Band	Ch.	Side to Phantom	Spacing (mm)	Number of times	SAR _{1g} (W/Kg)	Power Drift	Burst Avg Power	Max tune-up	Reported SAR _{1g} (W/Kg)	Repeated measurement Ratio
#116	WCDMA Band II	9538	1	10	1	0.787	-0.12	21.69	23	1.06	1.00 < 1.2
#108	WCDMA Band V	4233	2	10	1	0.864	-0.02	22.78	24	1.14	1.01 < 1.2

Index.	Band	Ch.	BW (MHz)	RB Size	RB Offset	Side to Phantom	Spacing (mm)	Number of times	SAR _{1g} (W/Kg)	Power Drift	Burst Avg Power	Max tune-up	Reported SAR _{1g} (W/Kg)	Repeated measurement Ratio
#94	LTE Band 2 (QPSK)	19100	20	1	0	1	10	1	0.715	0.08	21.95	23.5	1.02	1.02 < 1.2
#98	LTE Band 4 (QPSK)	20300	20	1	0	1	10	1	0.953	-0.04	22.1	23.5	1.32	1.00 < 1.2
#85	LTE Band 5 (QPSK)	20600	10	1	0	2	10	1	0.902	0.03	23.44	24	1.03	1.01 < 1.2
#31	LTE Band 7 (QPSK)	21350	20	1	0	5	10	1	1.29	0.14	21.98	22.5	1.45	1.03 < 1.2
#50	LTE Band 12 (QPSK)	23130	20	1	0	1	10	1	1.07	0.01	24.28	24.5	1.13	1.05 < 1.2
#140	LTE Band 30 (QPSK)	27710	10	1	0	1	10	1	0.855	-0.01	23.9	24	0.88	1.01 < 1.2



11.6 Std. C95.1-1999 RF Exposure Limit

Human Exposure	Population Uncontrolled Exposure (W/kg) or (mW/g)	Occupational Controlled Exposure (W/kg) or (mW/g)
Spatial Peak SAR* (head)	1.60	8.00
Spatial Peak SAR** (Whole Body)	0.08	0.40
Spatial Peak SAR*** (Partial-Body)	1.60	8.00
Spatial Peak SAR**** (Hands / Feet / Ankle / Wrist)	4.00	20.00

Table 11. Safety Limits for Partial Body Exposure

Notes :

- * The Spatial Peak value of the SAR averaged over any 1 gram of tissue.
(defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.
- ** The Spatial Average value of the SAR averaged over the whole – body.
- *** The Spatial Average value of the SAR averaged over the partial – body.
- **** The Spatial Peak value of the SAR averaged over any 10 grams of tissue.
(defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

Population / Uncontrolled Environments : are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

Occupational / Controlled Environments : are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation).

12. Conclusion

The SAR test values found for the portable mobile phone **Netgear Incorporated Trade Name : NETGEAR Model(s) : AC815S** is below the maximum recommended level of 1.6 W/kg (mW/g).

13. References

- [1] Std. C95.1-1999, "American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 300KHz to 100GHz", New York.
- [2] NCRP, National Council on Radiation Protection and Measurements, "Biological Effects and Exposure Criteria for Radio frequency Electromagnetic Fields", NCRP report NO. 86, 1986.
- [3] T. Schmid, O. Egger, and N. Kuster, "Automatic E-field scanning system for dosimetric assessments", IEEE Transactions on Microwave Theory and Techniques, vol. 44, pp, 105-113, Jan. 1996.
- [4] K. Pokovi^c, T. Schmid, and N. Kuster, "Robust setup for precise calibration of E-field probes in tissue simulating liquids at mobile communications frequency", in ICECOM'97, Dubrovnik, October 15-17, 1997, pp.120-124.
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- [6] N. Kuster, and Q. Balzano, "Energy absorption mechanism by biological bodies in the near field of dipole antennas above 300MHz", IEEE Transaction on Vehicular Technology, vol. 41, no. 1, Feb. 1992, pp. 17-23.
- [7] Robert J. Renka, "Multivariate Interpolation Of Large Sets Of Scattered Data", University of North Texas ACM Transactions on Mathematical Software, vol. 14, no. 2, June 1988 , pp. 139-148.
- [8] N. Kuster, R. Kastle, T. Schmid, Dosimetric evaluation of mobile communications equipment with known precision, IEEE Transaction on Communications, vol. E80-B, no. 5, May 1997, pp. 645-652.
- [9] Std. C95.3-1991, "IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields – RF and Microwave, New York: IEEE, Aug. 1992.
- [10] CENELEC CLC/SC111B, European Prestandard (prENV 50166-2), Human Exposure to Electromagnetic Fields High-frequency: 10KHz-300GHz, Jan. 1995.
- [11] IEEE Std 1528TM-2013 - IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head From Wireless Communications Devices: Measurement Techniques

Appendix A - System Performance Check

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/21 Time: PM 02:14:43

System Performance Check at 750MHz_20151021_Body

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1004

Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 1.011 \text{ S/m}$; $\epsilon_r = 54.582$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 750MHz/Area Scan (61x121x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 2.90 W/kg

System Performance Check at 750MHz/Zoom Scan (7x7x7)/Cube 0:

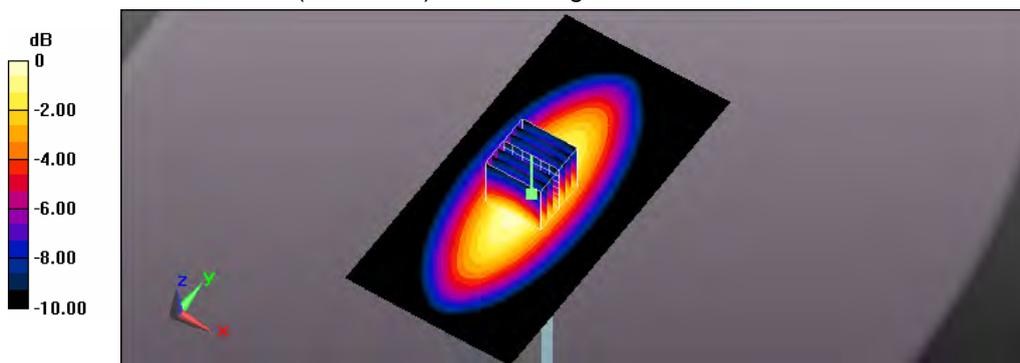
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 54.37 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 3.40 W/kg

SAR(1 g) = 2.28 W/kg; SAR(10 g) = 1.51 W/kg

Maximum value of SAR (measured) = 2.89 W/kg



0 dB = 2.89 W/kg = 4.61 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/10 Time: AM 12:23:36

System Performance Check at 750MHz_20151110_Body

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1004

Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 1.011 \text{ S/m}$; $\epsilon_r = 54.582$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 750MHz/Area Scan (61x121x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 2.92 W/kg

System Performance Check at 750MHz/Zoom Scan (7x7x7)/Cube 0:

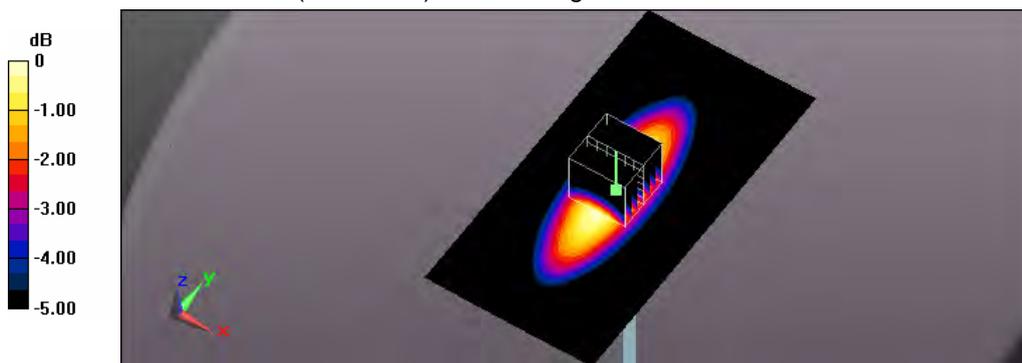
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 53.81 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.33 W/kg

SAR(1 g) = 2.24 W/kg; SAR(10 g) = 1.48 W/kg

Maximum value of SAR (measured) = 2.83 W/kg



0 dB = 2.83 W/kg = 4.52 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: PM 12:00:22

System Performance Check at 835MHz_20151023_Body

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d082

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.979 \text{ S/m}$; $\epsilon_r = 54.845$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 835MHz/Area Scan (61x121x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 3.07 W/kg

System Performance Check at 835MHz/Zoom Scan (7x7x7)/Cube 0:

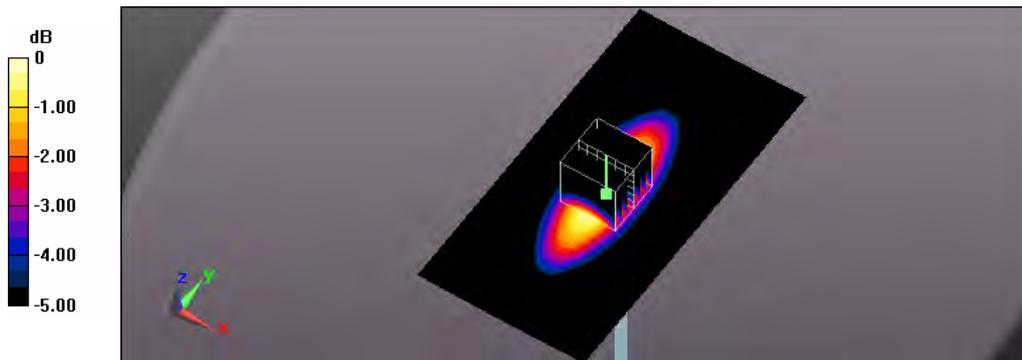
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 56.93 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.60 W/kg

SAR(1 g) = 2.41 W/kg; SAR(10 g) = 1.58 W/kg

Maximum value of SAR (measured) = 3.06 W/kg



0 dB = 3.06 W/kg = 4.86 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/5 Time: AM 02:13:51

System Performance Check at 835MHz_20151105_Body

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d082

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.979 \text{ S/m}$; $\epsilon_r = 54.845$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 835MHz/Area Scan (61x121x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 3.10 W/kg

System Performance Check at 835MHz/Zoom Scan (7x7x7)/Cube 0:

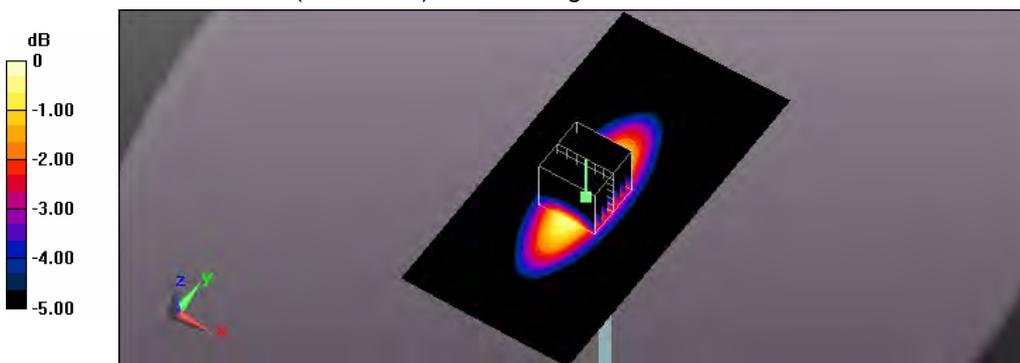
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 56.77 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 3.63 W/kg

SAR(1 g) = 2.44 W/kg; SAR(10 g) = 1.6 W/kg

Maximum value of SAR (measured) = 3.09 W/kg



0 dB = 3.09 W/kg = 4.90 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/9 Time: AM 10:44:25

System Performance Check at 835MHz_20151109_Body

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d082

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.979 \text{ S/m}$; $\epsilon_r = 54.845$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 835MHz/Area Scan (61x121x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 3.10 W/kg

System Performance Check at 835MHz/Zoom Scan (7x7x7)/Cube 0:

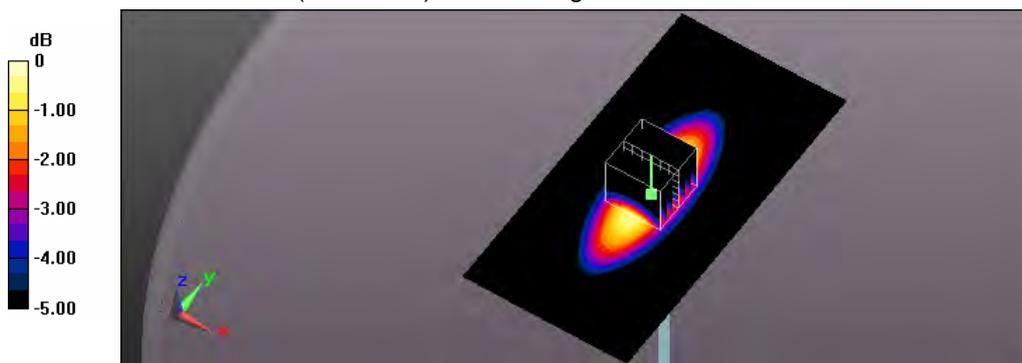
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 57.16 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 3.57 W/kg

SAR(1 g) = 2.41 W/kg; SAR(10 g) = 1.58 W/kg

Maximum value of SAR (measured) = 3.04 W/kg



0 dB = 3.04 W/kg = 4.83 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/24 Time: PM 03:06:45

System Performance Check at 835MHz_20151124_Body

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d082

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.979 \text{ S/m}$; $\epsilon_r = 54.845$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 835MHz/Area Scan (61x121x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 3.18 W/kg

System Performance Check at 835MHz/Zoom Scan (7x7x7)/Cube 0:

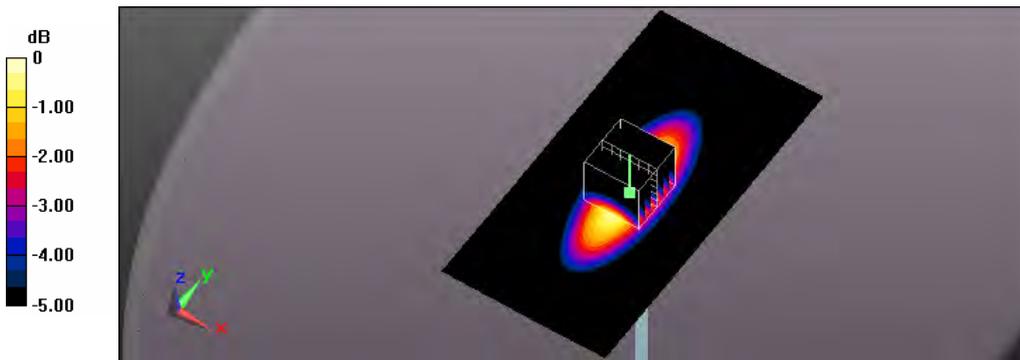
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 57.97 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 3.76 W/kg

SAR(1 g) = 2.52 W/kg; SAR(10 g) = 1.65 W/kg

Maximum value of SAR (measured) = 3.20 W/kg



0 dB = 3.20 W/kg = 5.05 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/19 Time: PM 06:16:21

System Performance Check at 1750MHz_20151019_Body

DUT: Dipole D1750V2_SN1023; Type: D1750V2; Serial: D1750V2 - SN:1023

Communication System: UID 0, CW (0); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1750 \text{ MHz}$; $\sigma = 1.522 \text{ S/m}$; $\epsilon_r = 54.021$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.65, 7.65, 7.65); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 1750MHz/Area Scan (61x61x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 13.6 W/kg

System Performance Check at 1750MHz/Zoom Scan (7x7x7)/Cube 0:

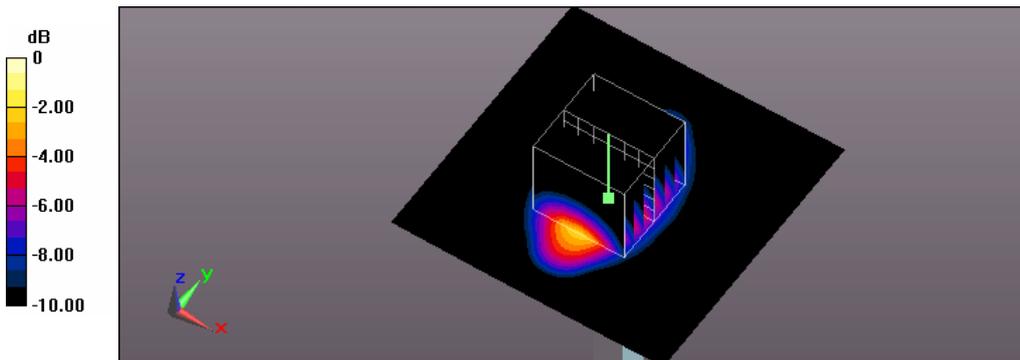
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 95.61 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 17.1 W/kg

SAR(1 g) = 9.41 W/kg; SAR(10 g) = 4.86 W/kg

Maximum value of SAR (measured) = 13.5 W/kg



0 dB = 13.5 W/kg = 11.30 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/4 Time: PM 10:15:35

System Performance Check at 1750MHz_20151104_Body

DUT: Dipole D1750V2_SN1023; Type: D1750V2; Serial: D1750V2 - SN:1023

Communication System: UID 0, CW (0); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1750 \text{ MHz}$; $\sigma = 1.522 \text{ S/m}$; $\epsilon_r = 54.021$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.65, 7.65, 7.65); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 1750MHz/Area Scan (61x61x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 13.5 W/kg

System Performance Check at 1750MHz/Zoom Scan (7x7x7)/Cube 0:

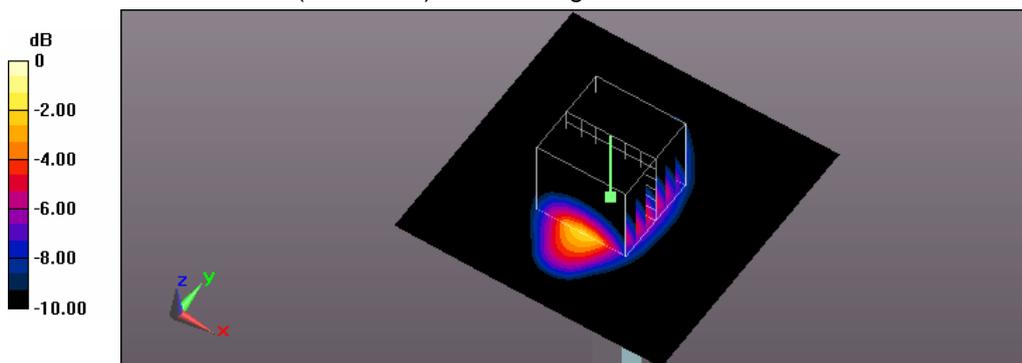
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 96.79 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 17.5 W/kg

SAR(1 g) = 9.53 W/kg; SAR(10 g) = 4.9 W/kg

Maximum value of SAR (measured) = 13.8 W/kg



0 dB = 13.8 W/kg = 11.40 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/22 Time: PM 03:06:08

System Performance Check at 1900MHz_20151022_Body

DUT: Dipole D1900V2_SN5d111; Type: D1900V2; Serial: D1900V2 - SN:5d111

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.502 \text{ S/m}$; $\epsilon_r = 54.362$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 1900MHz/Area Scan (61x61x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 14.5 W/kg

System Performance Check at 1900MHz/Zoom Scan (7x7x7)/Cube 0:

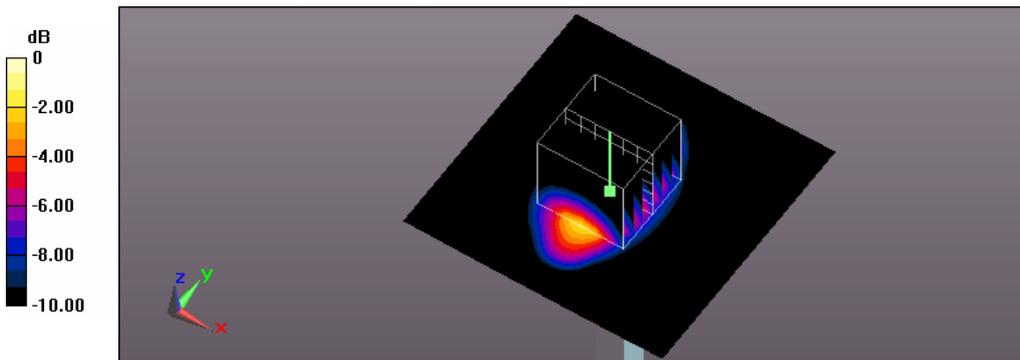
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 98.60 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 18.5 W/kg

SAR(1 g) = 10 W/kg; SAR(10 g) = 5.13 W/kg

Maximum value of SAR (measured) = 14.5 W/kg



0 dB = 14.5 W/kg = 11.61 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/4 Time: PM 08:08:30

System Performance Check at 1900MHz_20151104_Body

DUT: Dipole D1900V2_SN5d111; Type: D1900V2; Serial: D1900V2 - SN:5d111

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.502 \text{ S/m}$; $\epsilon_r = 54.362$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 1900MHz/Area Scan (61x61x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 14.7 W/kg

System Performance Check at 1900MHz/Zoom Scan (7x7x7)/Cube 0:

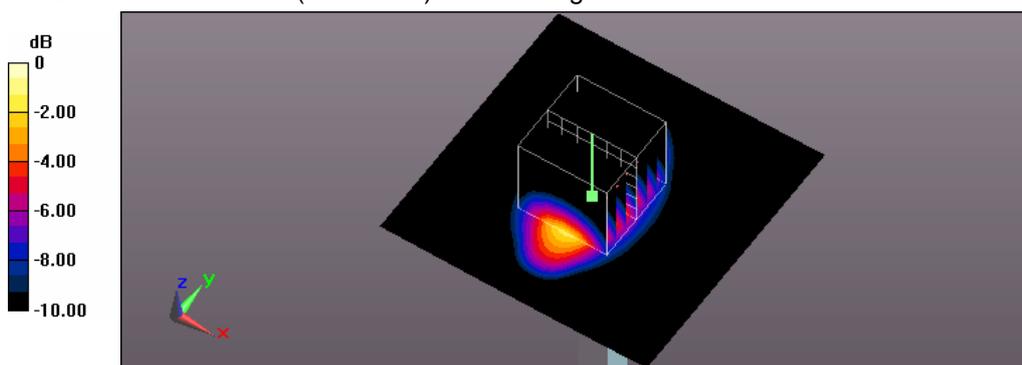
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 99.79 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 18.7 W/kg

SAR(1 g) = 10.1 W/kg; SAR(10 g) = 5.14 W/kg

Maximum value of SAR (measured) = 14.6 W/kg



0 dB = 14.6 W/kg = 11.64 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/11 Time: AM 11:21:27

System Performance Check at 1900MHz_20151111_Body

DUT: Dipole D1900V2_SN5d111; Type: D1900V2; Serial: D1900V2 - SN:5d111

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.502 \text{ S/m}$; $\epsilon_r = 54.362$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 1900MHz/Area Scan (61x61x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 14.5 W/kg

System Performance Check at 1900MHz/Zoom Scan (7x7x7)/Cube 0:

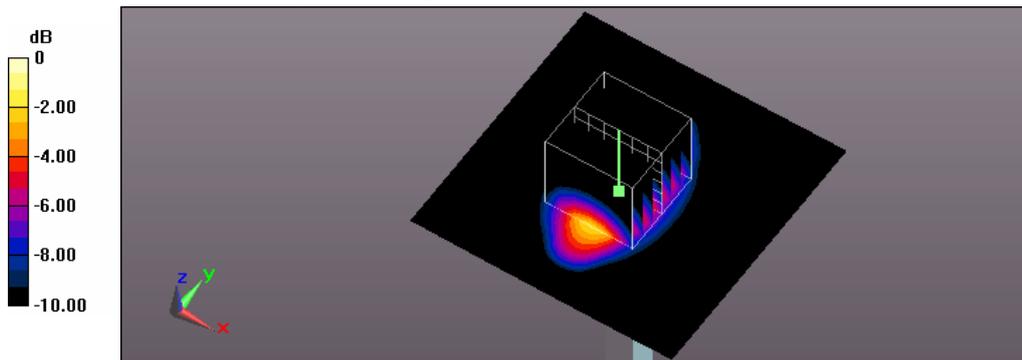
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 99.28 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 18.5 W/kg

SAR(1 g) = 9.99 W/kg; SAR(10 g) = 5.12 W/kg

Maximum value of SAR (measured) = 14.5 W/kg



0 dB = 14.5 W/kg = 11.61 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/24 Time: AM 10:21:54

System Performance Check at 1900MHz_20151124_Body

DUT: Dipole D1900V2_SN5d111; Type: D1900V2; Serial: D1900V2 - SN:5d111

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.502 \text{ S/m}$; $\epsilon_r = 54.362$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 1900MHz/Area Scan (61x61x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 14.7 W/kg

System Performance Check at 1900MHz/Zoom Scan (7x7x7)/Cube 0:

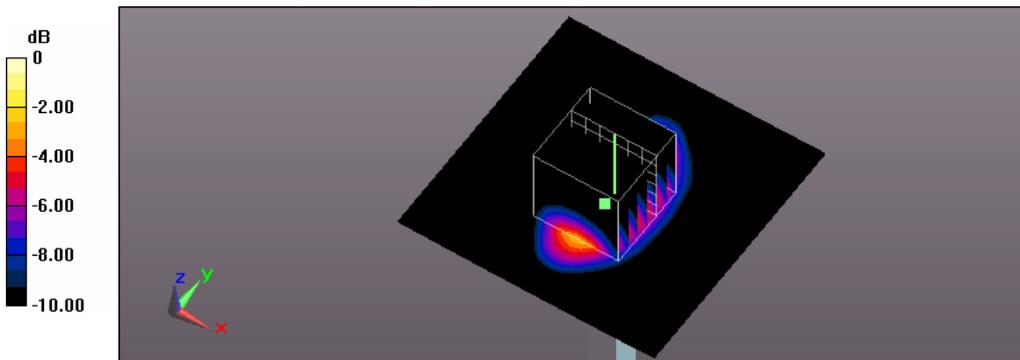
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 98.48 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 18.2 W/kg

SAR(1 g) = 9.94 W/kg; SAR(10 g) = 5.11 W/kg

Maximum value of SAR (measured) = 14.4 W/kg



0 dB = 14.4 W/kg = 11.58 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/12/4 Time: AM 11:14:55

System Performance Check at 2300MHz_20151204_Body

DUT: Dipole 2300 MHz; Type: D2300V2; Serial: D2300V2 - SN:1005

Communication System: UID 0, CW (0); Frequency: 2300 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2300 \text{ MHz}$; $\sigma = 1.738 \text{ S/m}$; $\epsilon_r = 52.027$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52); Calibrated: 2014/1/13;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 2300MHz/Area Scan (61x61x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 17.4 W/kg

System Performance Check at 2300MHz/Zoom Scan (7x7x7)/Cube 0:

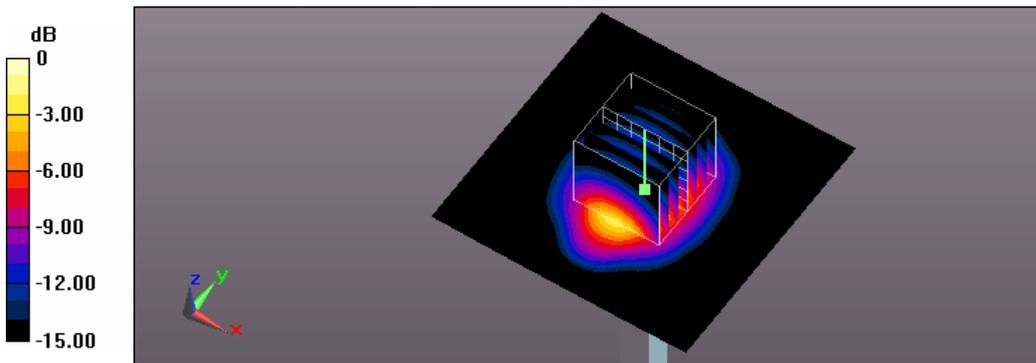
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 102.0 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 22.4 W/kg

SAR(1 g) = 11.9 W/kg; SAR(10 g) = 5.75 W/kg

Maximum value of SAR (measured) = 17.5 W/kg



0 dB = 17.5 W/kg = 12.43 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/12 Time: PM 01:05:37

System Performance Check at 2450MHz_20151112_Body

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:712

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.962 \text{ S/m}$; $\epsilon_r = 51.178$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 2450MHz/Area Scan (61x61x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 19.9 W/kg

System Performance Check at 2450MHz/Zoom Scan (7x7x7)/Cube 0:

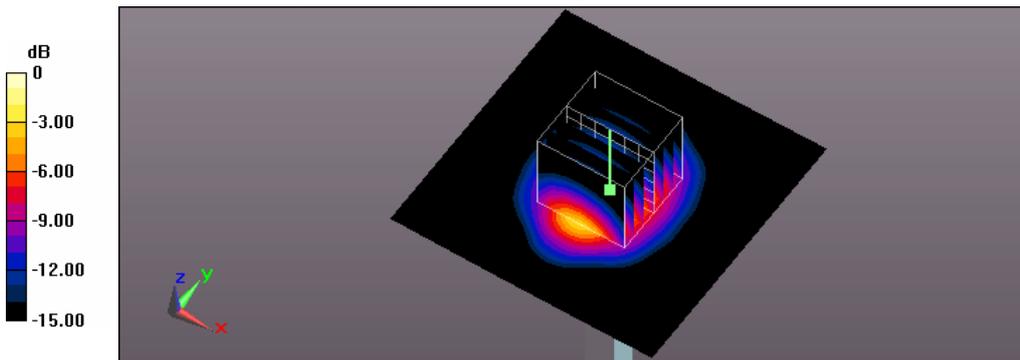
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 103.9 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 26.3 W/kg

SAR(1 g) = 13.5 W/kg; SAR(10 g) = 6.29 W/kg

Maximum value of SAR (measured) = 20.1 W/kg



0 dB = 20.1 W/kg = 13.03 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/25 Time: AM 02:19:10

System Performance Check at 2450MHz_20151125_Body

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:712

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.962 \text{ S/m}$; $\epsilon_r = 51.178$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 2450MHz/Area Scan (61x61x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 20.9 W/kg

System Performance Check at 2450MHz/Zoom Scan (7x7x7)/Cube 0:

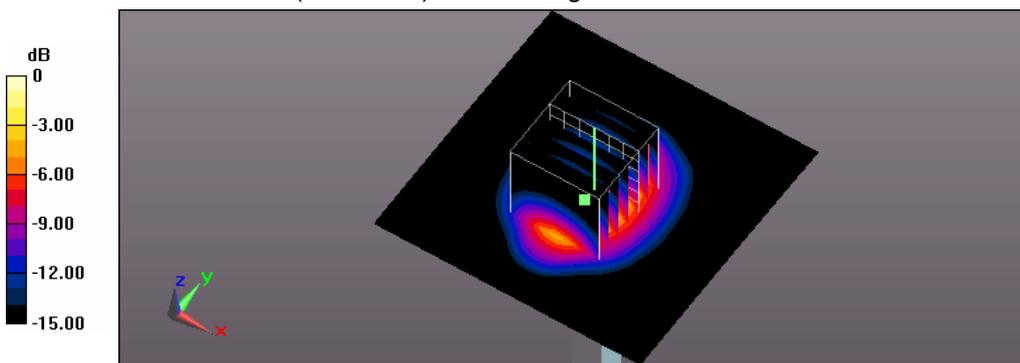
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 103.2 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 26.2 W/kg

SAR(1 g) = 13.2 W/kg; SAR(10 g) = 6.22 W/kg

Maximum value of SAR (measured) = 19.8 W/kg



0 dB = 19.8 W/kg = 12.97 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/20 Time: AM 03:19:10

System Performance Check at 2600MHz_20151020_Body

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1058

Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2600 \text{ MHz}$; $\sigma = 2.192 \text{ S/m}$; $\epsilon_r = 50.75$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.19, 7.19, 7.19); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 2600MHz/Area Scan (61x61x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 24.0 W/kg

System Performance Check at 2600MHz/Zoom Scan (7x7x7)/Cube 0:

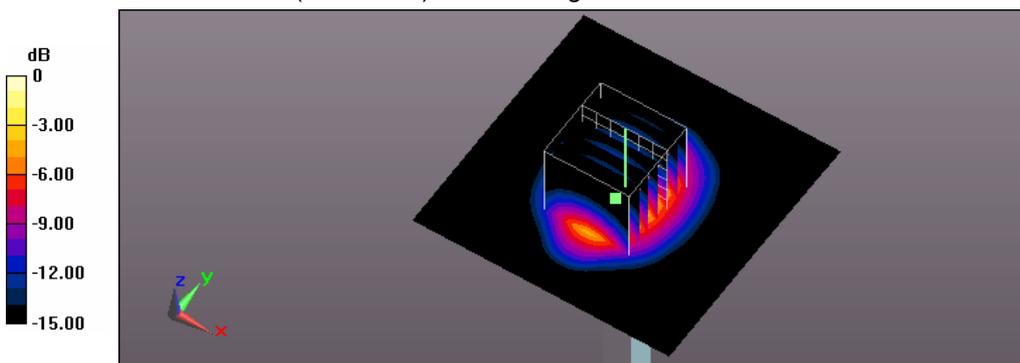
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 102.6 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 30.1 W/kg

SAR(1 g) = 14.8 W/kg; SAR(10 g) = 6.5 W/kg

Maximum value of SAR (measured) = 22.1 W/kg



0 dB = 22.1 W/kg = 13.56 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/10 Time: PM 08:19:10

System Performance Check at 2600MHz_20151110_Body

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1058

Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2600 \text{ MHz}$; $\sigma = 2.192 \text{ S/m}$; $\epsilon_r = 50.75$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.19, 7.19, 7.19); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 2600MHz/Area Scan (61x61x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 23.9 W/kg

System Performance Check at 2600MHz/Zoom Scan (7x7x7)/Cube 0:

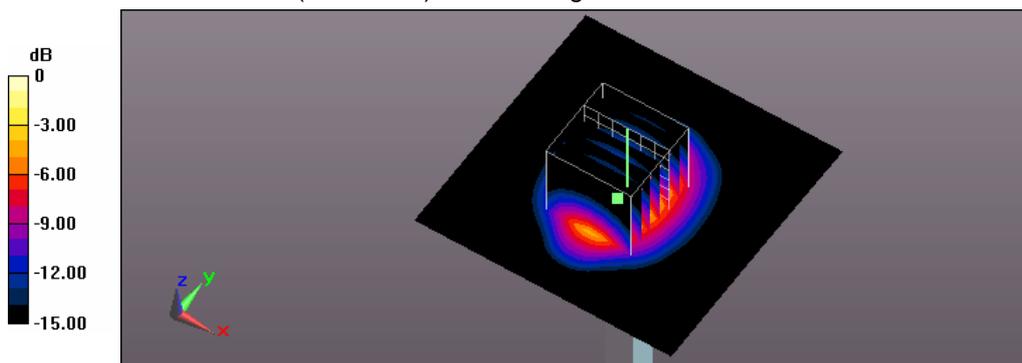
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 102.1 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 29.8 W/kg

SAR(1 g) = 14.6 W/kg; SAR(10 g) = 6.3 W/kg

Maximum value of SAR (measured) = 22.2 W/kg



0 dB = 22.2 W/kg = 13.54 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/12 Time: PM 05:17:54

System Performance Check at 5200MHz_20151112_Body

DUT: Dipole 5GHzV2; Type: D5GHz; Serial: 1021

Communication System: UID 0, CW (0); Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5200 \text{ MHz}$; $\sigma = 5.52 \text{ S/m}$; $\epsilon_r = 47.76$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(4.96, 4.96, 4.96); Calibrated: 2015/1/30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 5200MHz/Area Scan (91x91x1):

Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 18.5 W/kg

System Performance Check at 5200MHz/Zoom Scan (8x8x7)/Cube 0:

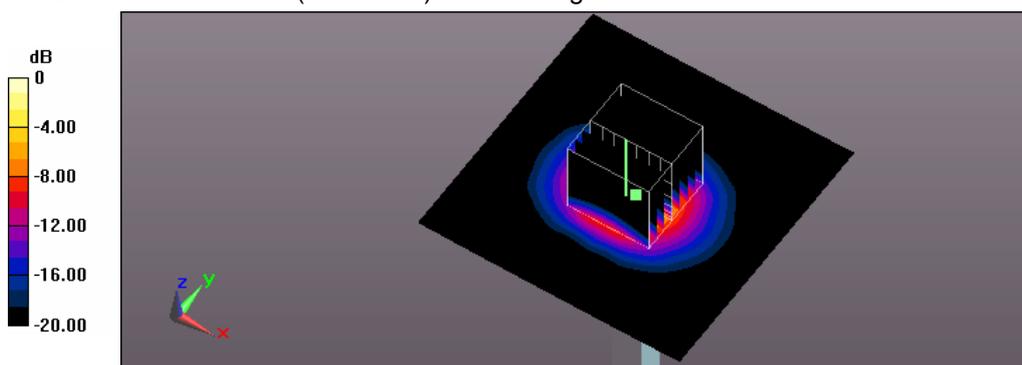
Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 55.36 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 34.5 W/kg

SAR(1 g) = 7.81 W/kg; SAR(10 g) = 2.19 W/kg

Maximum value of SAR (measured) = 19.3 W/kg



0 dB = 19.3 W/kg = 12.86 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/25 Time: AM 10:05:42

System Performance Check at 5200MHz_20151125_Body

DUT: Dipole 5GHzV2; Type: D5GHz; Serial: 1021

Communication System: UID 0, CW (0); Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5200 \text{ MHz}$; $\sigma = 5.52 \text{ S/m}$; $\epsilon_r = 47.76$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(4.96, 4.96, 4.96); Calibrated: 2015/1/30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 5200MHz/Area Scan (91x91x1):

Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 18.5 W/kg

System Performance Check at 5200MHz/Zoom Scan (8x8x7)/Cube 0:

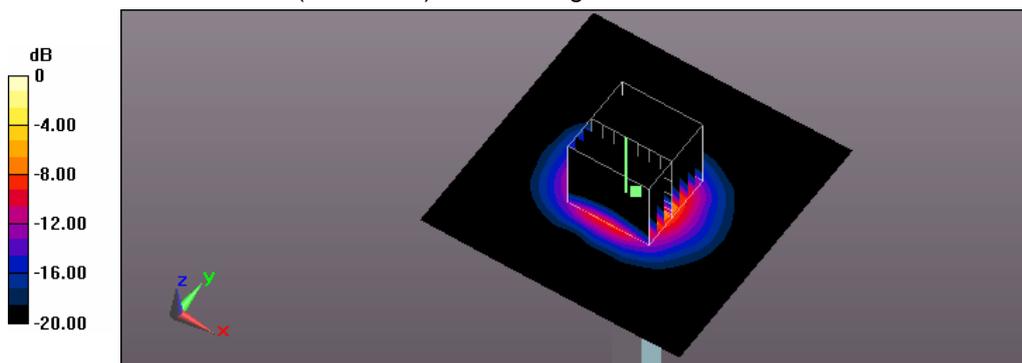
Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 55.87 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 34.9 W/kg

SAR(1 g) = 7.87 W/kg; SAR(10 g) = 2.23 W/kg

Maximum value of SAR (measured) = 19.4 W/kg



0 dB = 19.4 W/kg = 12.88 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/12 Time: PM 06:21:50

System Performance Check at 5800MHz_20151112_Body

DUT: Dipole 5GHzV2; Type: D5GHz; Serial: 1021

Communication System: UID 0, CW (0); Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5800 \text{ MHz}$; $\sigma = 6.27 \text{ S/m}$; $\epsilon_r = 46.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(4.35, 4.35, 4.35); Calibrated: 2015/1/30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 5800MHz/Area Scan (91x91x1):

Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 18.9 W/kg

System Performance Check at 5800MHz/Zoom Scan (8x8x7)/Cube 0:

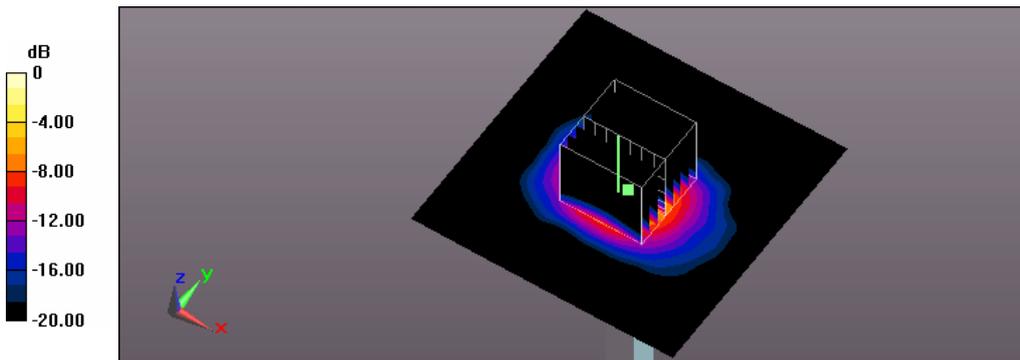
Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 53.43 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 40.4 W/kg

SAR(1 g) = 7.66 W/kg; SAR(10 g) = 2.13 W/kg

Maximum value of SAR (measured) = 19.6 W/kg



0 dB = 19.6 W/kg = 12.92 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/25 Time: AM 11:09:19

System Performance Check at 5800MHz_20151125_Body

DUT: Dipole 5GHzV2; Type: D5GHz; Serial: 1021

Communication System: UID 0, CW (0); Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5800 \text{ MHz}$; $\sigma = 6.27 \text{ S/m}$; $\epsilon_r = 46.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(4.35, 4.35, 4.35); Calibrated: 2015/1/30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 5800MHz/Area Scan (91x91x1):

Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 19.7 W/kg

System Performance Check at 5800MHz/Zoom Scan (8x8x7)/Cube 0:

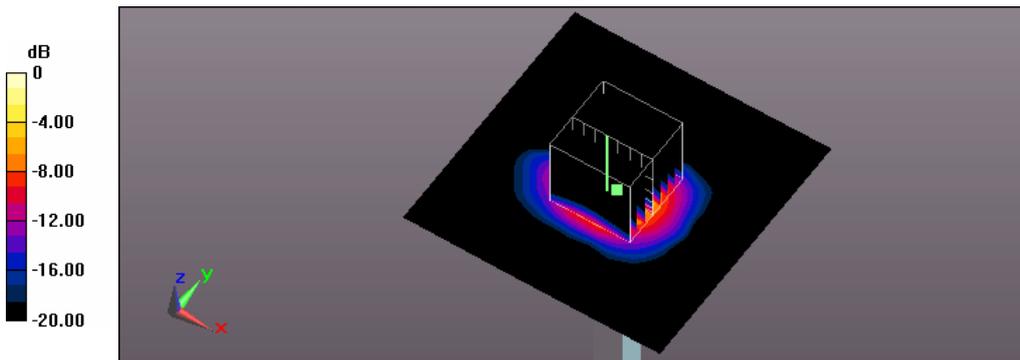
Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 53.36 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 40.1 W/kg

SAR(1 g) = 7.57 W/kg; SAR(10 g) = 2.09 W/kg

Maximum value of SAR (measured) = 19.4 W/kg



0 dB = 19.4 W/kg = 12.88 dBW/kg

Appendix B - SAR Measurement Data

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/5 Time: PM 01:47:02

89_GPRS 850 CH190_3D2U_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, GPRS 850 (3Down, 2Up) (0); Frequency: 836.6 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 837$ MHz; $\sigma = 0.981$ S/m; $\epsilon_r = 54.873$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.755 W/kg

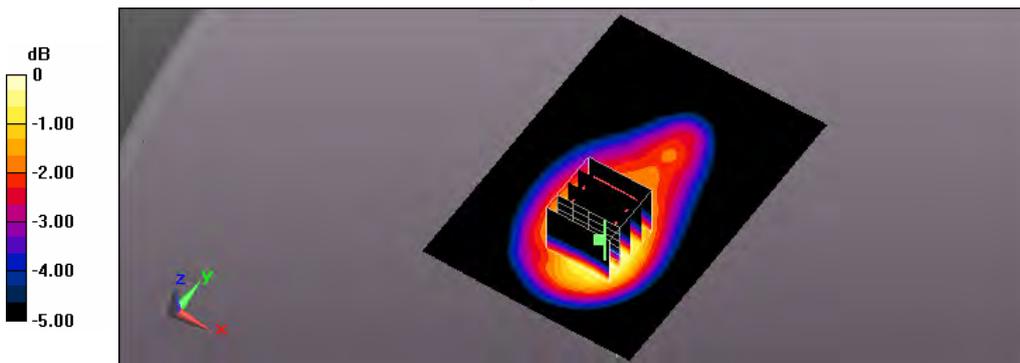
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 28.35 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.899 W/kg

SAR(1 g) = 0.615 W/kg; SAR(10 g) = 0.436 W/kg

Maximum value of SAR (measured) = 0.752 W/kg



0 dB = 0.752 W/kg = -1.24 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/5 Time: PM 02:05:45

90_GPRS 850 CH190_3D2U_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, GPRS 850 (3Down, 2Up) (0); Frequency: 836.6 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 837$ MHz; $\sigma = 0.981$ S/m; $\epsilon_r = 54.873$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.710 W/kg

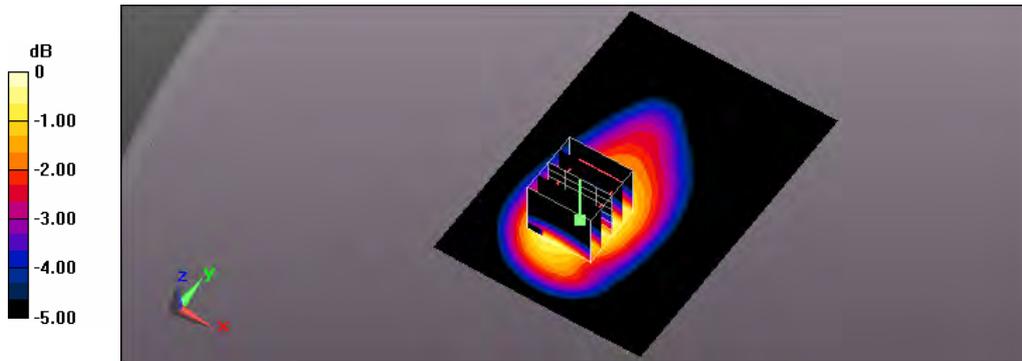
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 27.32 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.927 W/kg

SAR(1 g) = 0.606 W/kg; SAR(10 g) = 0.426 W/kg

Maximum value of SAR (measured) = 0.709 W/kg



0 dB = 0.709 W/kg = -1.49 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/5 Time: PM 02:26:44

87_GPRS 850 CH190_3D2U_side3_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, GPRS 850 (3Down, 2Up) (0); Frequency: 836.6 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 837$ MHz; $\sigma = 0.981$ S/m; $\epsilon_r = 54.873$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.453 W/kg

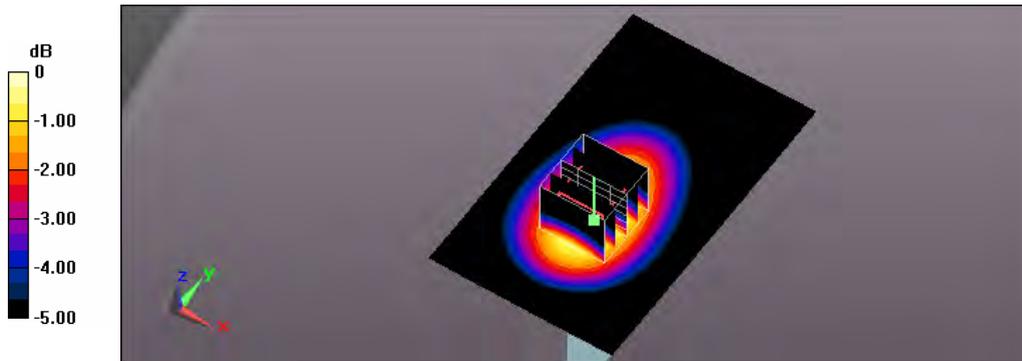
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.79 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.517 W/kg

SAR(1 g) = 0.377 W/kg; SAR(10 g) = 0.269 W/kg

Maximum value of SAR (measured) = 0.454 W/kg



0 dB = 0.454 W/kg = -3.43 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/9 Time: AM 11:18:51

88_GPRS 850 CH190_3D2U_side4_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, GPRS 850 (3Down, 2Up) (0); Frequency: 836.6 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 837 \text{ MHz}$; $\sigma = 0.981 \text{ S/m}$; $\epsilon_r = 54.873$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.491 W/kg

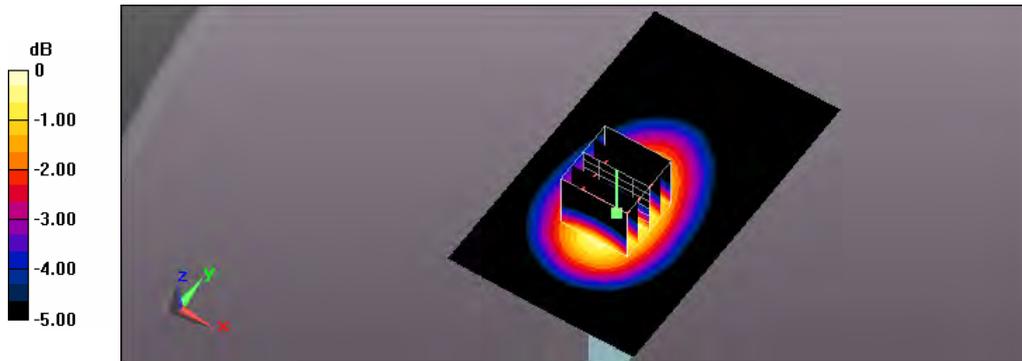
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 22.64 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.542 W/kg

SAR(1 g) = 0.401 W/kg; SAR(10 g) = 0.286 W/kg

Maximum value of SAR (measured) = 0.480 W/kg



0 dB = 0.480 W/kg = -3.19 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/9 Time: AM 11:58:13

86_GPRS 850 CH190_3D2U_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, GPRS 850 (3Down, 2Up) (0); Frequency: 836.6 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 837 \text{ MHz}$; $\sigma = 0.981 \text{ S/m}$; $\epsilon_r = 54.873$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (41x81x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.155 W/kg

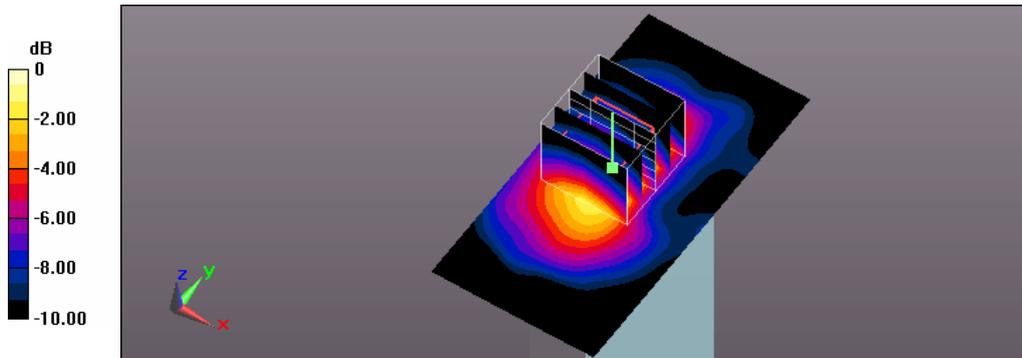
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.93 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.202 W/kg

SAR(1 g) = 0.124 W/kg; SAR(10 g) = 0.072 W/kg

Maximum value of SAR (measured) = 0.167 W/kg



0 dB = 0.167 W/kg = -7.77 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/24 Time: PM 03:42:50

128_GPRS 850 CH190_3D2U_side6_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, GPRS 850 (3Down, 2Up) (0); Frequency: 836.6 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 837 \text{ MHz}$; $\sigma = 0.981 \text{ S/m}$; $\epsilon_r = 54.873$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (41x81x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0527 W/kg

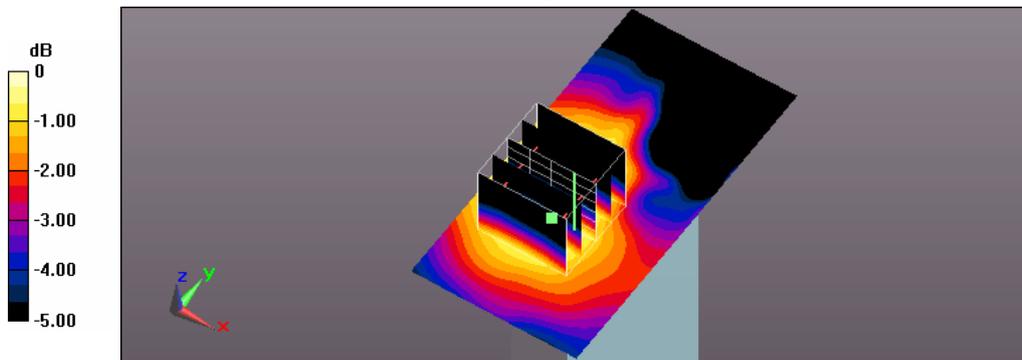
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.472 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.0610 W/kg

SAR(1 g) = 0.045 W/kg; SAR(10 g) = 0.032 W/kg

Maximum value of SAR (measured) = 0.0531 W/kg



0 dB = 0.0531 W/kg = -12.75 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/22 Time: PM 10:28:17

62_GPRS 1900 CH512_3D2U_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, GPRS PCS (3Down,2Up) (0); Frequency: 1850.2 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.46$ S/m; $\epsilon_r = 54.608$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.16 W/kg

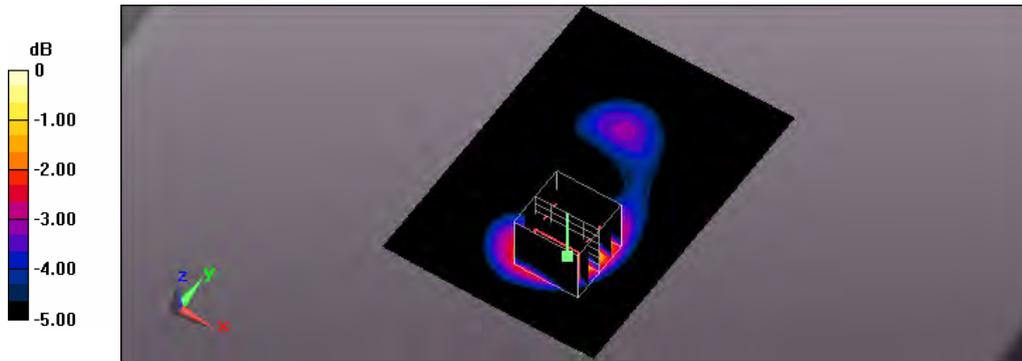
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.29 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.40 W/kg

SAR(1 g) = 0.869 W/kg; SAR(10 g) = 0.511 W/kg

Maximum value of SAR (measured) = 1.15 W/kg



0 dB = 1.15 W/kg = 0.61 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/22 Time: PM 10:08:08

61_GPRS 1900 CH661_3D2U_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, GPRS PCS (3Down,2Up) (0); Frequency: 1880 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.48$ S/m; $\epsilon_r = 54.534$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.15 W/kg

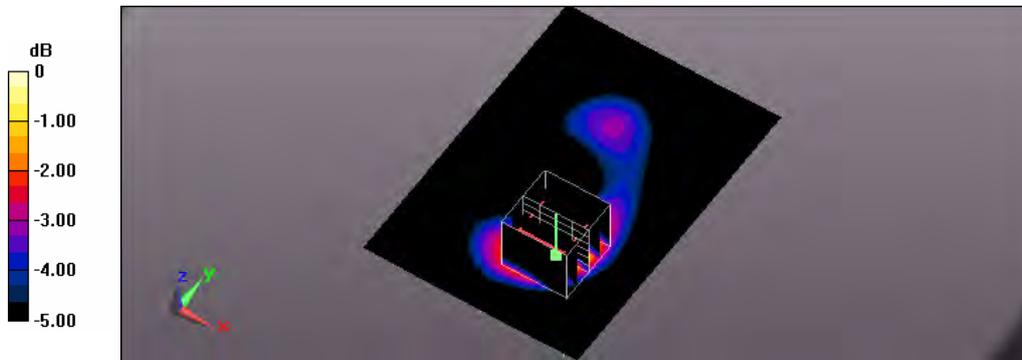
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 25.74 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.830 W/kg; SAR(10 g) = 0.488 W/kg

Maximum value of SAR (measured) = 1.09 W/kg



0 dB = 1.09 W/kg = 0.37 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/22 Time: PM 10:46:42

63_GPRS 1900 CH810_3D2U_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, GPRS PCS (3Down,2Up) (0); Frequency: 1909.8 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.518$ S/m; $\epsilon_r = 54.314$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.05 W/kg

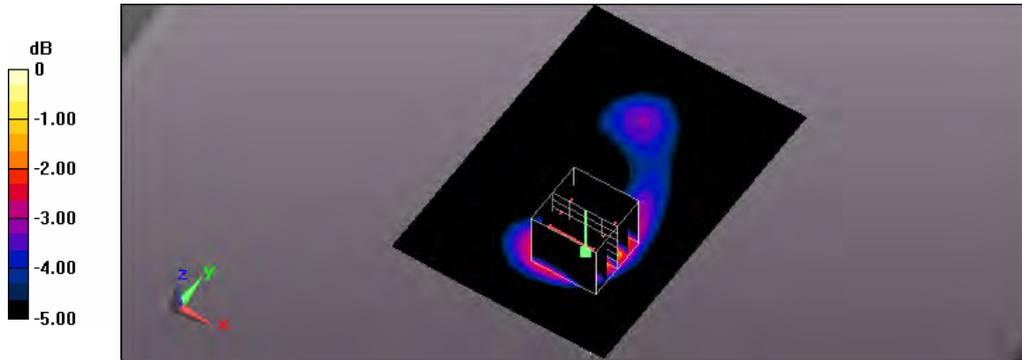
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.76 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 0.769 W/kg; SAR(10 g) = 0.450 W/kg

Maximum value of SAR (measured) = 1.02 W/kg



0 dB = 1.02 W/kg = 0.09 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: AM 12:09:47

64_GPRS 1900 CH661_3D2U_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, GPRS PCS (3Down,2Up) (0); Frequency: 1880 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.48 \text{ S/m}$; $\epsilon_r = 54.534$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.680 W/kg

Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 20.06 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.796 W/kg

SAR(1 g) = 0.502 W/kg; SAR(10 g) = 0.305 W/kg

Maximum value of SAR (measured) = 0.656 W/kg

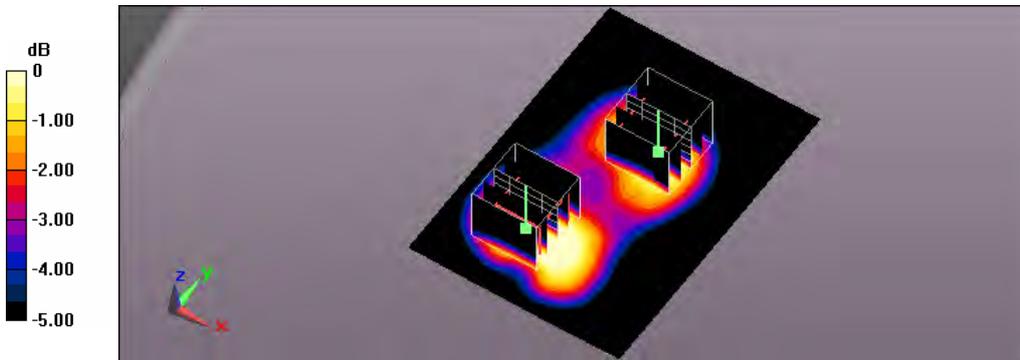
Flat/Zoom Scan (5x5x7)/Cube 1: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 20.06 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.568 W/kg

SAR(1 g) = 0.373 W/kg; SAR(10 g) = 0.240 W/kg

Maximum value of SAR (measured) = 0.476 W/kg



0 dB = 0.476 W/kg = -3.22 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: AM 12:36:51

65_GPRS 1900 CH661_3D2U_side3_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, GPRS PCS (3Down,2Up) (0); Frequency: 1880 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.48 \text{ S/m}$; $\epsilon_r = 54.534$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.192 W/kg

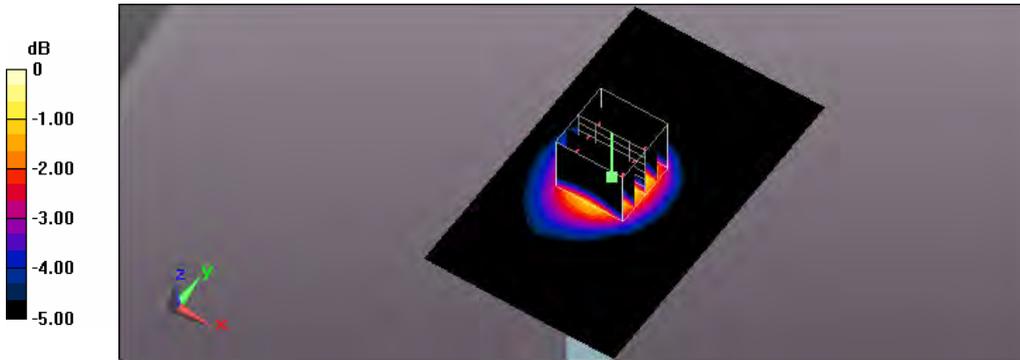
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.27 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.233 W/kg

SAR(1 g) = 0.149 W/kg; SAR(10 g) = 0.093 W/kg

Maximum value of SAR (measured) = 0.194 W/kg



0 dB = 0.194 W/kg = -7.12 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: AM 12:53:50

66_GPRS 1900 CH661_3D2U_side4_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, GPRS PCS (3Down,2Up) (0); Frequency: 1880 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.48 \text{ S/m}$; $\epsilon_r = 54.534$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.604 W/kg

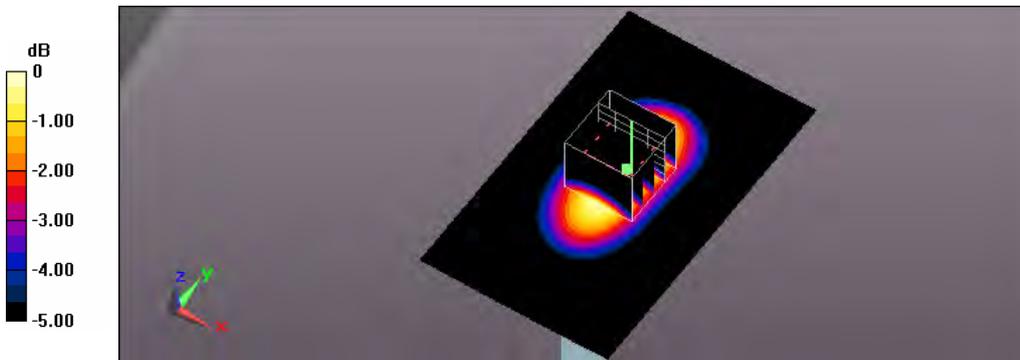
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 20.43 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.721 W/kg

SAR(1 g) = 0.458 W/kg; SAR(10 g) = 0.286 W/kg

Maximum value of SAR (measured) = 0.597 W/kg



0 dB = 0.597 W/kg = -2.24 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: AM 01:21:12

67_GPRS 1900 CH661_3D2U_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, GPRS PCS (3Down,2Up) (0); Frequency: 1880 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.48 \text{ S/m}$; $\epsilon_r = 54.534$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (41x81x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.648 W/kg

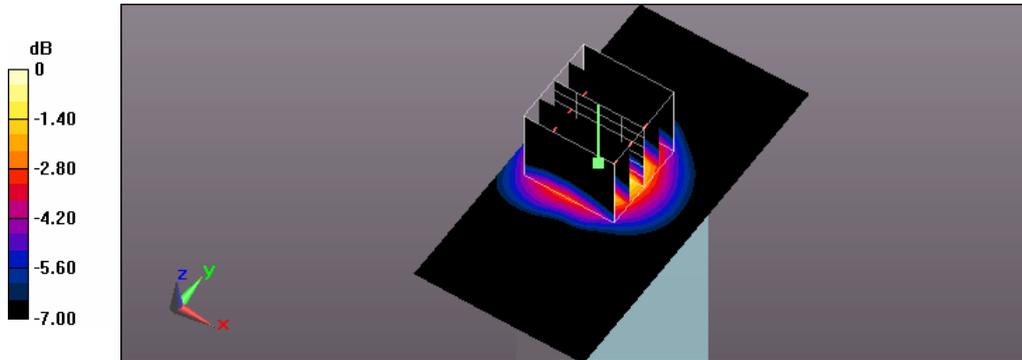
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 19.13 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.784 W/kg

SAR(1 g) = 0.454 W/kg; SAR(10 g) = 0.255 W/kg

Maximum value of SAR (measured) = 0.626 W/kg



0 dB = 0.626 W/kg = -2.03 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/24 Time: PM 02:01:41

127_GPRS 1900 CH661_3D2U_side6_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, GPRS PCS (3Down,2Up) (0); Frequency: 1880 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.48$ S/m; $\epsilon_r = 54.534$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.293 W/kg

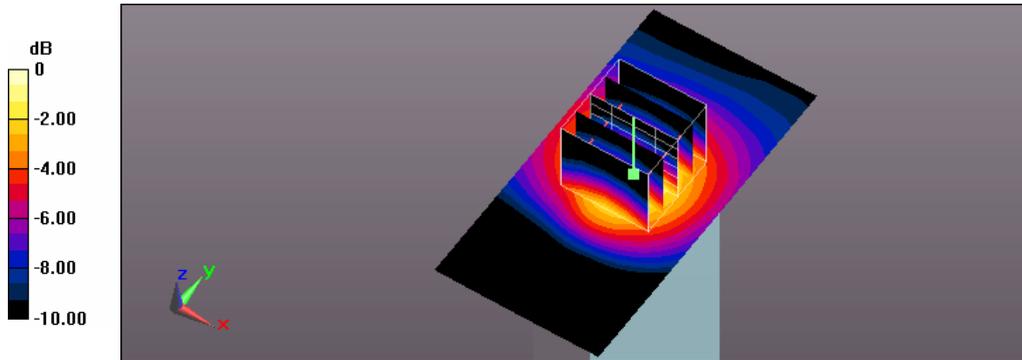
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.07 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.397 W/kg

SAR(1 g) = 0.249 W/kg; SAR(10 g) = 0.151 W/kg

Maximum value of SAR (measured) = 0.328 W/kg



0 dB = 0.328 W/kg = -4.84 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: AM 01:45:29

68_GPRS 1900 CH512_3D2U_side 1_10mm_original 62_measurement once

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, GPRS PCS (3Down,2Up) (0); Frequency: 1850.2 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.46$ S/m; $\epsilon_r = 54.608$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.19 W/kg

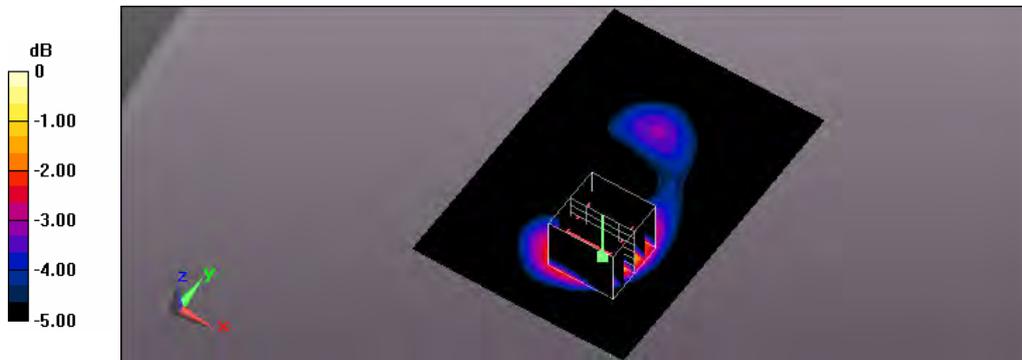
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.49 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 0.888 W/kg; SAR(10 g) = 0.524 W/kg

Maximum value of SAR (measured) = 1.18 W/kg



0 dB = 1.18 W/kg = 0.72 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/11 Time: PM 08:36:23

110_WCDMA BandII CH9262_RMC-12.2K_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, WCDMA Band II (0); Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1852.4 \text{ MHz}$; $\sigma = 1.462 \text{ S/m}$; $\epsilon_r = 54.612$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.06 W/kg

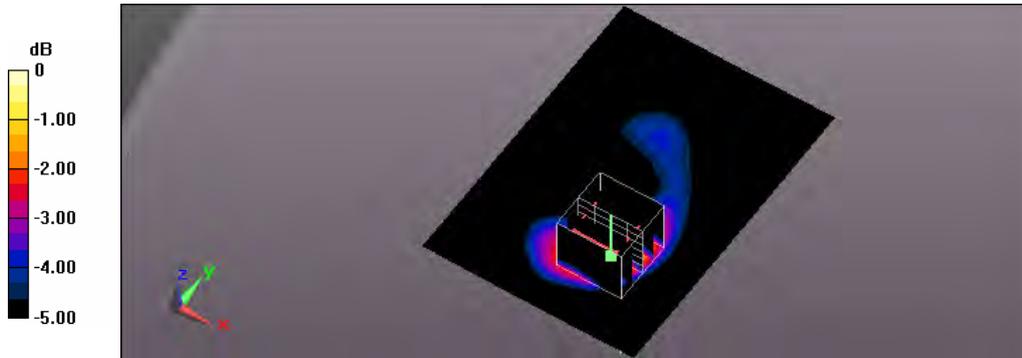
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 24.73 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.27 W/kg

SAR(1 g) = 0.782 W/kg; SAR(10 g) = 0.457 W/kg

Maximum value of SAR (measured) = 1.03 W/kg



0 dB = 1.03 W/kg = 0.13 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/11 Time: PM 08:13:38

109_WCDMA BandII CH9400_RMC-12.2K_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, WCDMA Band II (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.48$ S/m; $\epsilon_r = 54.534$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.06 W/kg

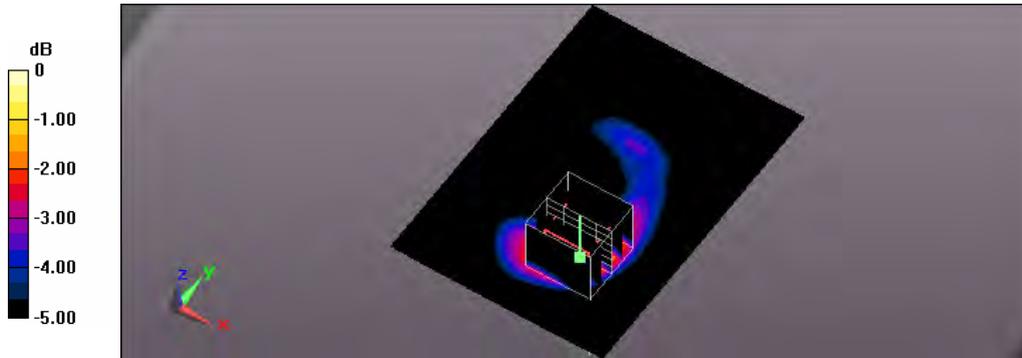
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.55 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.789 W/kg; SAR(10 g) = 0.459 W/kg

Maximum value of SAR (measured) = 1.05 W/kg



0 dB = 1.05 W/kg = 0.21 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/11 Time: PM 08:57:27

111_WCDMA BandII CH9538_RMC-12.2K_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, WCDMA Band II (0); Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1908 \text{ MHz}$; $\sigma = 1.514 \text{ S/m}$; $\epsilon_r = 54.324$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.10 W/kg

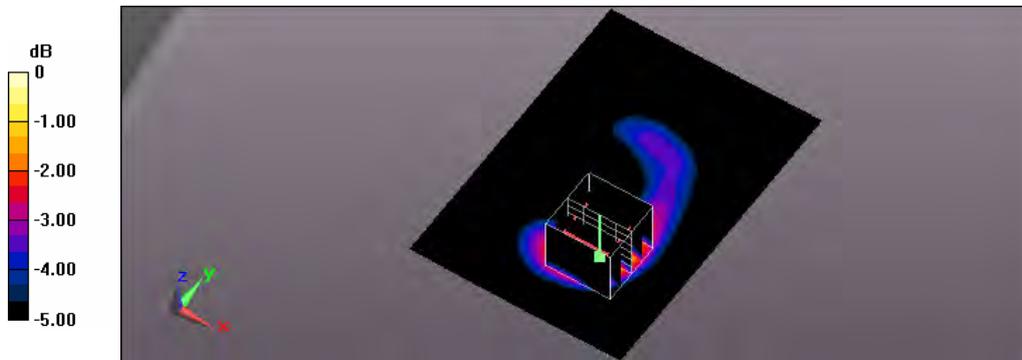
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 24.75 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.790 W/kg; SAR(10 g) = 0.458 W/kg

Maximum value of SAR (measured) = 1.06 W/kg



0 dB = 1.06 W/kg = 0.25 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/11 Time: PM 09:45:12

112_WCDMA BandII CH9400_RMC-12.2K_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, WCDMA Band II (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.48$ S/m; $\epsilon_r = 54.534$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.622 W/kg

Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.28 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.747 W/kg

SAR(1 g) = 0.461 W/kg; SAR(10 g) = 0.277 W/kg

Maximum value of SAR (measured) = 0.612 W/kg

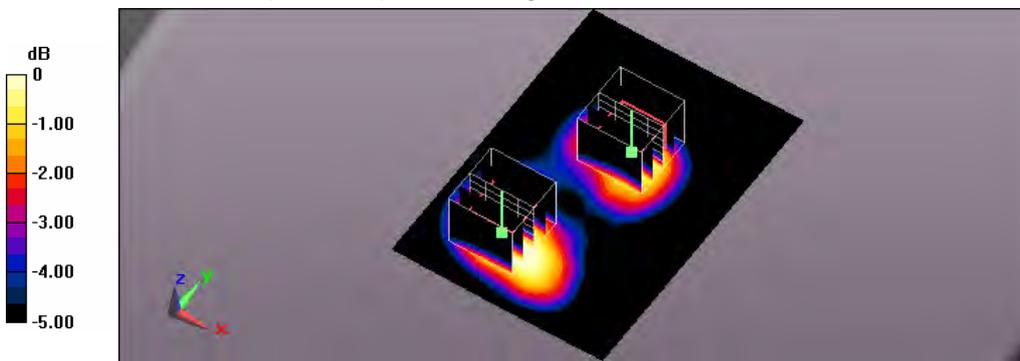
Flat/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.28 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.588 W/kg

SAR(1 g) = 0.385 W/kg; SAR(10 g) = 0.242 W/kg

Maximum value of SAR (measured) = 0.492 W/kg



0 dB = 0.492 W/kg = -3.08 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/11 Time: PM 10:21:31

113_WCDMA BandII CH9400_RMC-12.2K_side3_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, WCDMA Band II (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.48 \text{ S/m}$; $\epsilon_r = 54.534$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.187 W/kg

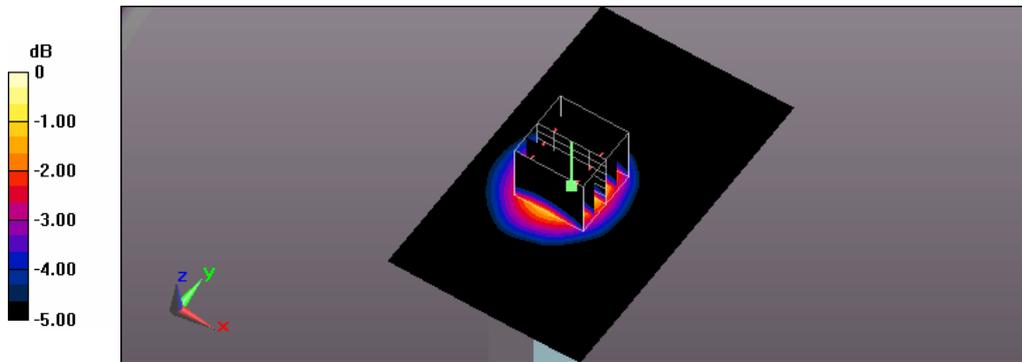
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.75 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.226 W/kg

SAR(1 g) = 0.146 W/kg; SAR(10 g) = 0.091 W/kg

Maximum value of SAR (measured) = 0.189 W/kg



0 dB = 0.189 W/kg = -7.24 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/12 Time: AM 12:27:39

114_WCDMA BandII CH9400_RMC-12.2K_side4_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, WCDMA Band II (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.48$ S/m; $\epsilon_r = 54.534$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.704 W/kg

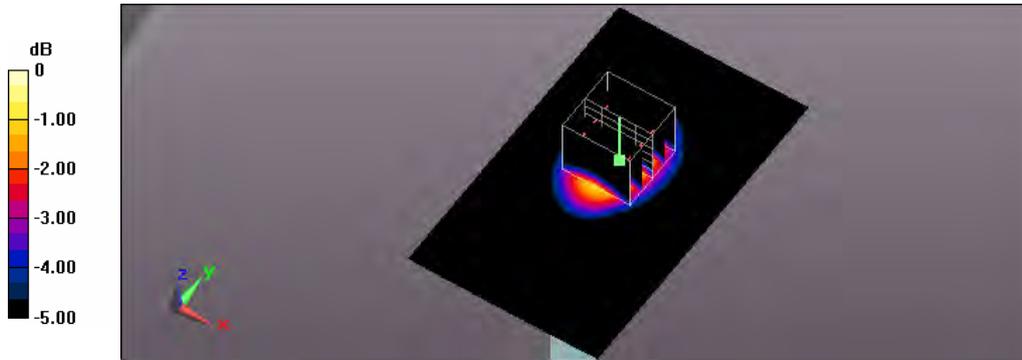
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.83 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.838 W/kg

SAR(1 g) = 0.527 W/kg; SAR(10 g) = 0.320 W/kg

Maximum value of SAR (measured) = 0.694 W/kg



0 dB = 0.694 W/kg = -1.59 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/12 Time: AM 12:49:16

115_WCDMA BandII CH9400_RMC-12.2K_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, WCDMA Band II (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.48 \text{ S/m}$; $\epsilon_r = 54.534$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (41x81x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.713 W/kg

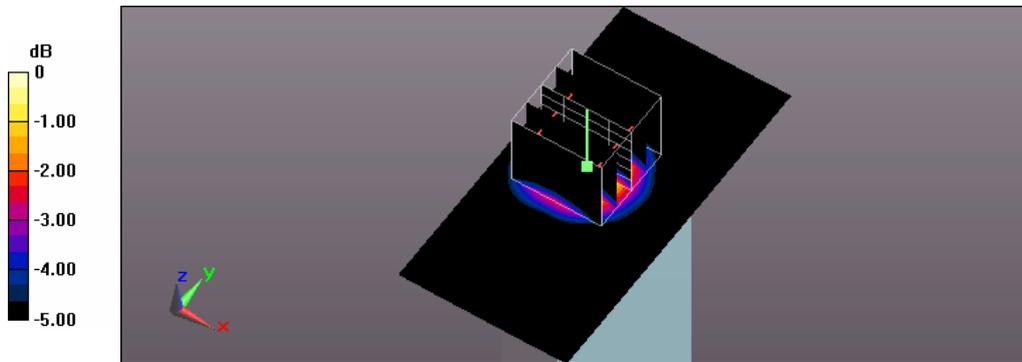
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 20.26 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.848 W/kg

SAR(1 g) = 0.495 W/kg; SAR(10 g) = 0.279 W/kg

Maximum value of SAR (measured) = 0.680 W/kg



0 dB = 0.680 W/kg = -1.67 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/9 Time: PM 02:55:14

100_WCDMA BandV CH4132_RMC-12.2K_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, WCDMA Band V (0); Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.968$ S/m; $\epsilon_r = 54.796$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.896 W/kg

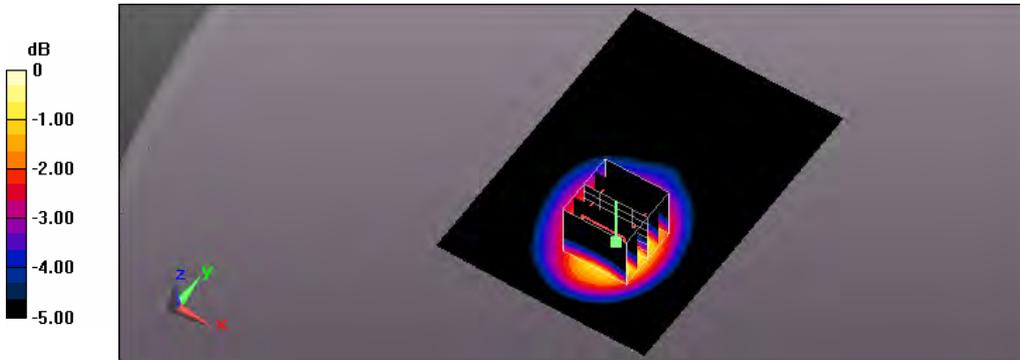
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 31.11 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.06 W/kg

SAR(1 g) = 0.741 W/kg; SAR(10 g) = 0.516 W/kg

Maximum value of SAR (measured) = 0.908 W/kg



0 dB = 0.908 W/kg = -0.42 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/9 Time: PM 02:37:27

99_WCDMA BandV CH4183_RMC-12.2K_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, WCDMA Band V (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837 \text{ MHz}$; $\sigma = 0.981 \text{ S/m}$; $\epsilon_r = 54.873$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.02 W/kg

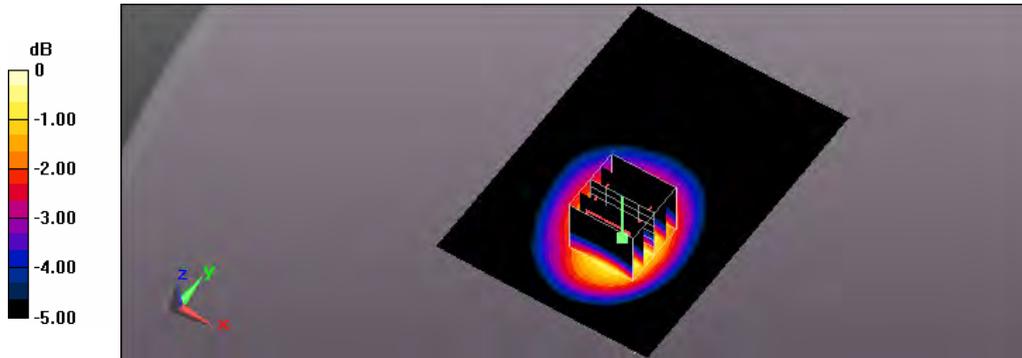
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 33.08 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.851 W/kg; SAR(10 g) = 0.603 W/kg

Maximum value of SAR (measured) = 1.03 W/kg



0 dB = 1.03 W/kg = 0.13 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/9 Time: PM 03:24:44

101_WCDMA BandV CH4233_RMC-12.2K_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, WCDMA Band V (0); Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 847 \text{ MHz}$; $\sigma = 0.995 \text{ S/m}$; $\epsilon_r = 54.871$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.01 W/kg

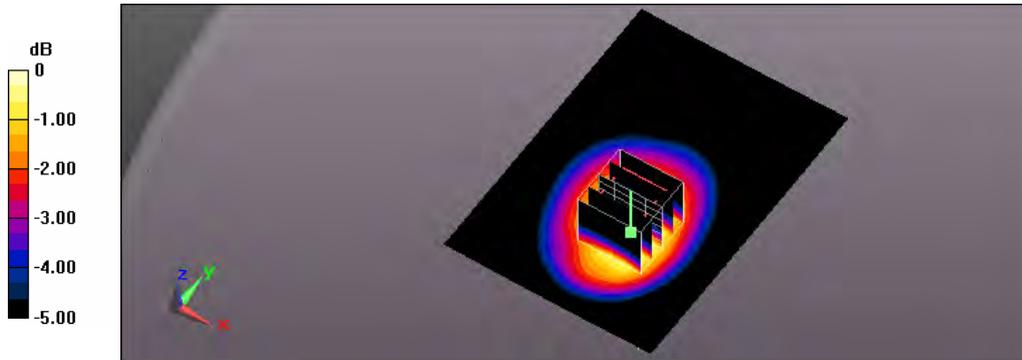
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 32.20 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.16 W/kg

SAR(1 g) = 0.839 W/kg; SAR(10 g) = 0.602 W/kg

Maximum value of SAR (measured) = 1.01 W/kg



0 dB = 1.01 W/kg = 0.04 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/9 Time: PM 04:16:14

103_WCDMA BandV CH4132_RMC-12.2K_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, WCDMA Band V (0); Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.968$ S/m; $\epsilon_r = 54.796$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.831 W/kg

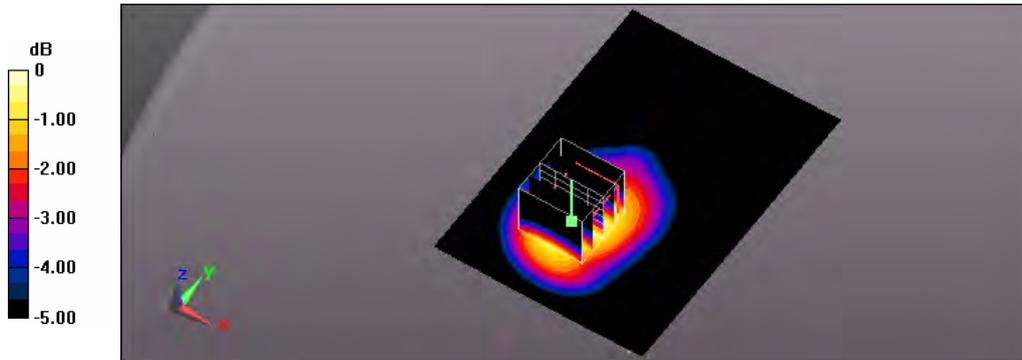
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 29.77 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.952 W/kg

SAR(1 g) = 0.695 W/kg; SAR(10 g) = 0.493 W/kg

Maximum value of SAR (measured) = 0.836 W/kg



0 dB = 0.836 W/kg = -0.78 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/9 Time: PM 03:50:06

102_WCDMA BandV CH4183_RMC-12.2K_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, WCDMA Band V (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837 \text{ MHz}$; $\sigma = 0.981 \text{ S/m}$; $\epsilon_r = 54.873$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.01 W/kg

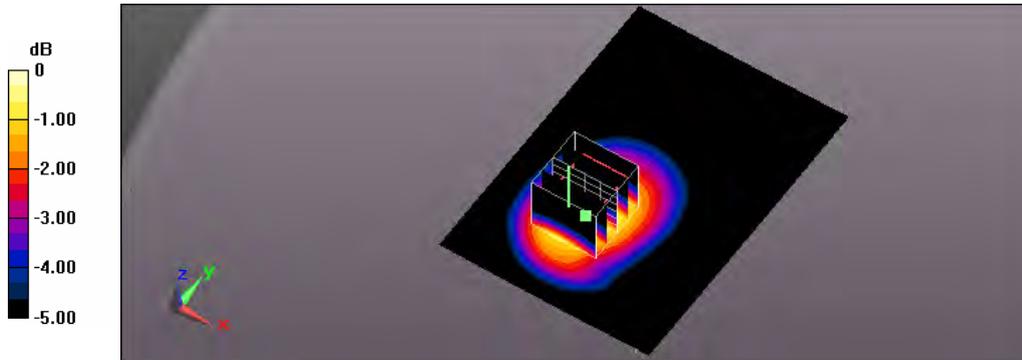
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 32.70 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.22 W/kg

SAR(1 g) = 0.876 W/kg; SAR(10 g) = 0.622 W/kg

Maximum value of SAR (measured) = 1.07 W/kg



0 dB = 1.07 W/kg = 0.29 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/9 Time: PM 04:45:30

104_WCDMA BandV CH4233_RMC-12.2K_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, WCDMA Band V (0); Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 847 \text{ MHz}$; $\sigma = 0.995 \text{ S/m}$; $\epsilon_r = 54.871$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.03 W/kg

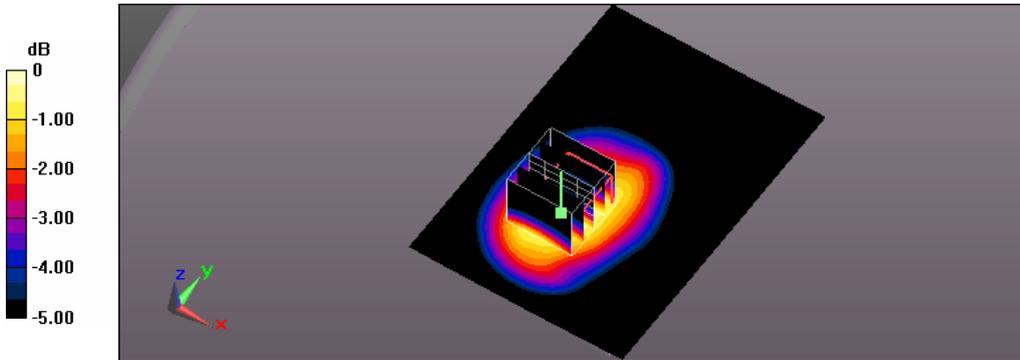
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 32.62 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.873 W/kg; SAR(10 g) = 0.636 W/kg

Maximum value of SAR (measured) = 1.04 W/kg



0 dB = 1.04 W/kg = 0.17 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/9 Time: PM 09:03:44

105_WCDMA BandV CH4183_RMC-12.2K_side3_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, WCDMA Band V (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837 \text{ MHz}$; $\sigma = 0.981 \text{ S/m}$; $\epsilon_r = 54.873$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.512 W/kg

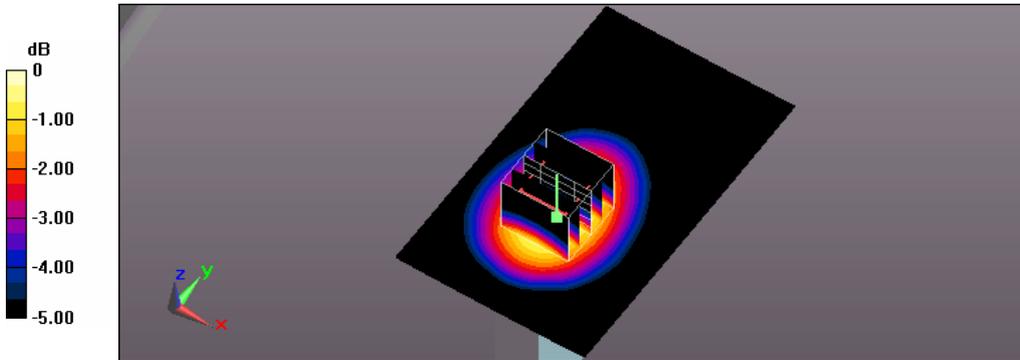
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 22.96 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.579 W/kg

SAR(1 g) = 0.428 W/kg; SAR(10 g) = 0.306 W/kg

Maximum value of SAR (measured) = 0.512 W/kg



0 dB = 0.512 W/kg = -2.91 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/9 Time: PM 09:25:10

106_WCDMA BandV CH4183_RMC-12.2K_side4_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, WCDMA Band V (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837 \text{ MHz}$; $\sigma = 0.981 \text{ S/m}$; $\epsilon_r = 54.873$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.547 W/kg

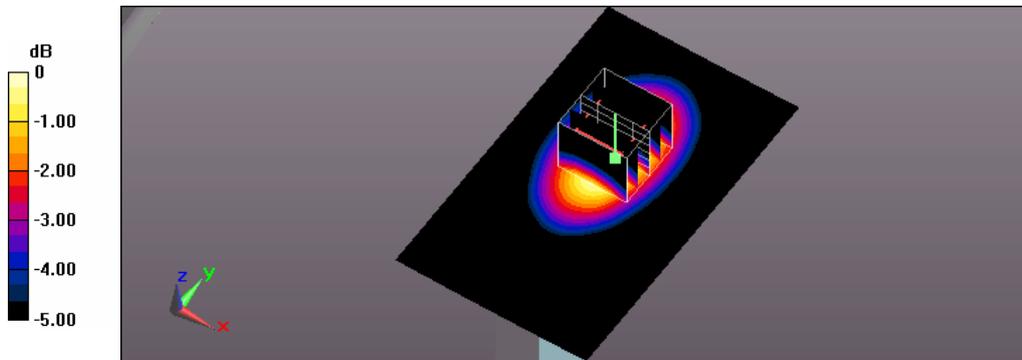
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 22.84 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.568 W/kg

SAR(1 g) = 0.408 W/kg; SAR(10 g) = 0.283 W/kg

Maximum value of SAR (measured) = 0.493 W/kg



0 dB = 0.493 W/kg = -3.07 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/9 Time: PM 09:55:16

107_WCDMA BandV CH4183_RMC-12.2K_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, WCDMA Band V (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837 \text{ MHz}$; $\sigma = 0.981 \text{ S/m}$; $\epsilon_r = 54.873$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (41x81x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.183 W/kg

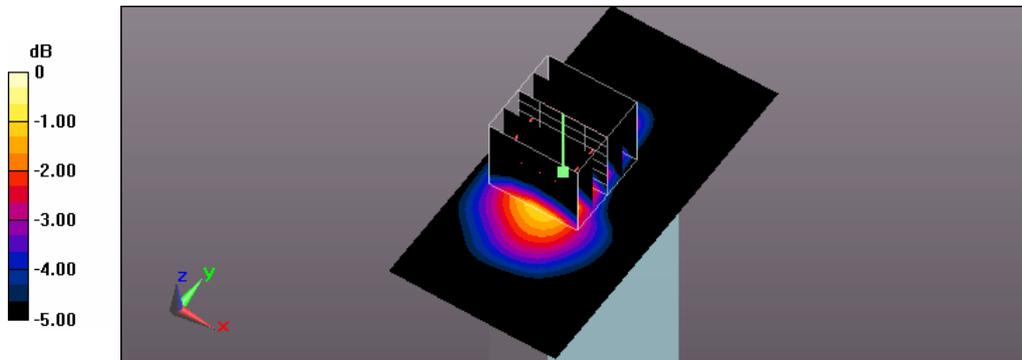
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.33 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.228 W/kg

SAR(1 g) = 0.142 W/kg; SAR(10 g) = 0.088 W/kg

Maximum value of SAR (measured) = 0.189 W/kg



0 dB = 0.189 W/kg = -7.24 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/4 Time: PM 08:37:08

91_LTE Band2 CH18700_QPSK_BW 20MHz_1RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1860$ MHz; $\sigma = 1.467$ S/m; $\epsilon_r = 54.624$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.986 W/kg

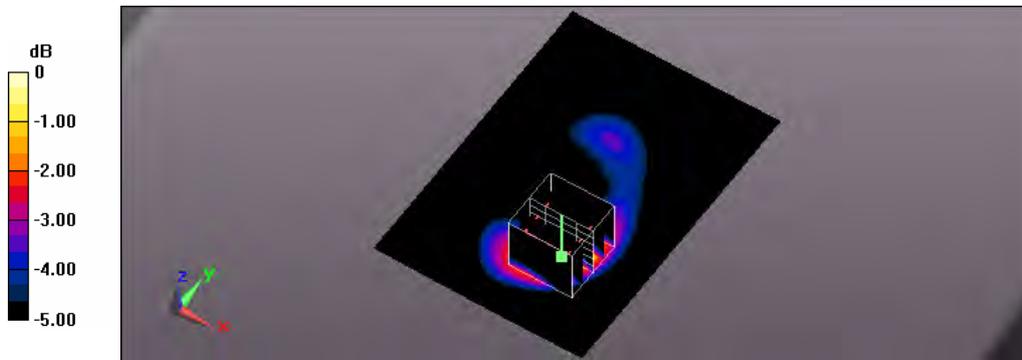
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.25 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.731 W/kg; SAR(10 g) = 0.426 W/kg

Maximum value of SAR (measured) = 0.976 W/kg



0 dB = 0.976 W/kg = -0.11 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/22 Time: PM 04:00:45

51_LTE Band2 CH18900_QPSK_BW 20MHz_1RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.48$ S/m; $\epsilon_r = 54.534$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.900 W/kg

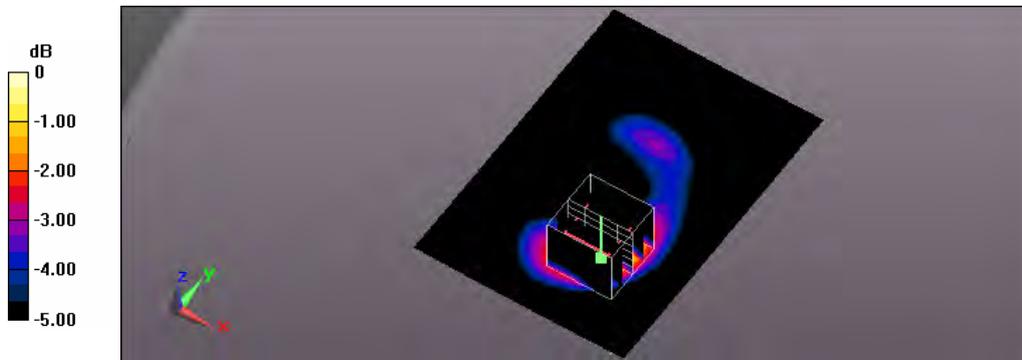
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.05 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.08 W/kg

SAR(1 g) = 0.669 W/kg; SAR(10 g) = 0.393 W/kg

Maximum value of SAR (measured) = 0.886 W/kg



0 dB = 0.886 W/kg = -0.53 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/4 Time: PM 08:53:59

92_LTE Band2 CH19100_QPSK_BW 20MHz_1RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.502$ S/m; $\epsilon_r = 54.362$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.944 W/kg

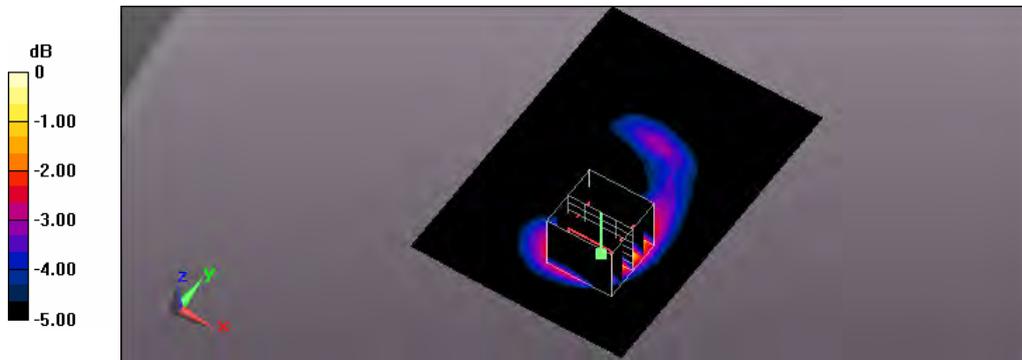
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.80 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.15 W/kg

SAR(1 g) = 0.704 W/kg; SAR(10 g) = 0.409 W/kg

Maximum value of SAR (measured) = 0.936 W/kg



0 dB = 0.936 W/kg = -0.29 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/22 Time: PM 05:05:31

53_LTE Band2 CH18900_QPSK_BW 20MHz_1RB Size 0RB Offset_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.48$ S/m; $\epsilon_r = 54.534$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.570 W/kg

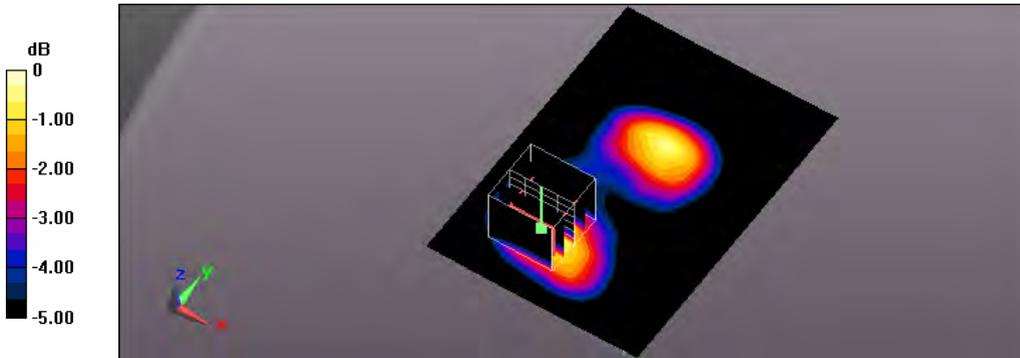
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.97 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.685 W/kg

SAR(1 g) = 0.426 W/kg; SAR(10 g) = 0.258 W/kg

Maximum value of SAR (measured) = 0.562 W/kg



0 dB = 0.562 W/kg = -2.50 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/22 Time: PM 05:54:19

55_LTE Band2 CH18900_QPSK_BW 20MHz_1RB Size 0RB Offset_side3_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.48 \text{ S/m}$; $\epsilon_r = 54.534$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.166 W/kg

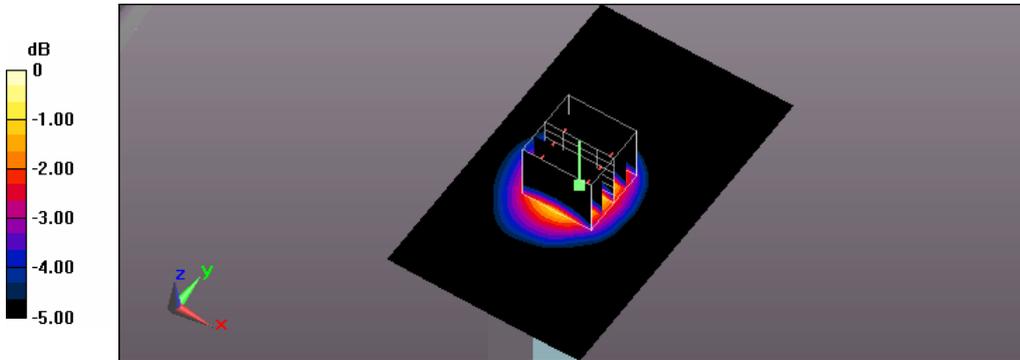
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.48 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.195 W/kg

SAR(1 g) = 0.124 W/kg; SAR(10 g) = 0.078 W/kg

Maximum value of SAR (measured) = 0.161 W/kg



0 dB = 0.161 W/kg = -7.93 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/22 Time: PM 06:41:27

57_LTE Band2 CH18900_QPSK_BW 20MHz_1RB Size 0RB Offset_side4_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.48$ S/m; $\epsilon_r = 54.534$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.617 W/kg

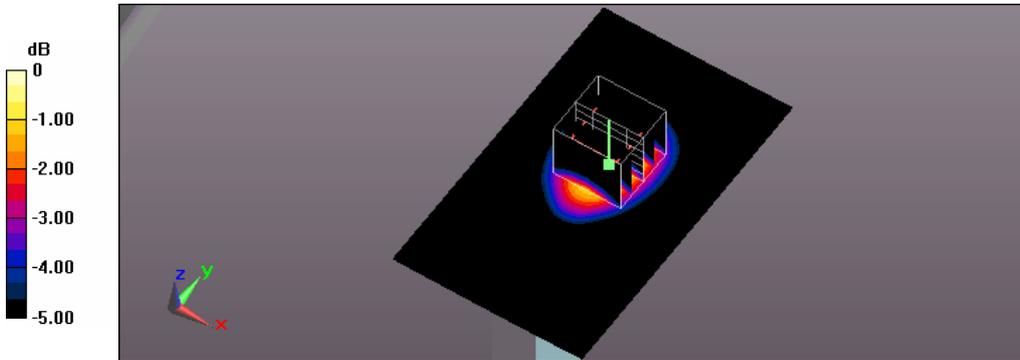
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.73 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.744 W/kg

SAR(1 g) = 0.470 W/kg; SAR(10 g) = 0.287 W/kg

Maximum value of SAR (measured) = 0.616 W/kg



0 dB = 0.616 W/kg = -2.10 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/22 Time: PM 07:39:27

59_LTE Band2 CH18900_QPSK_BW 20MHz_1RB Size 0RB Offset_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.48$ S/m; $\epsilon_r = 54.534$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.665 W/kg

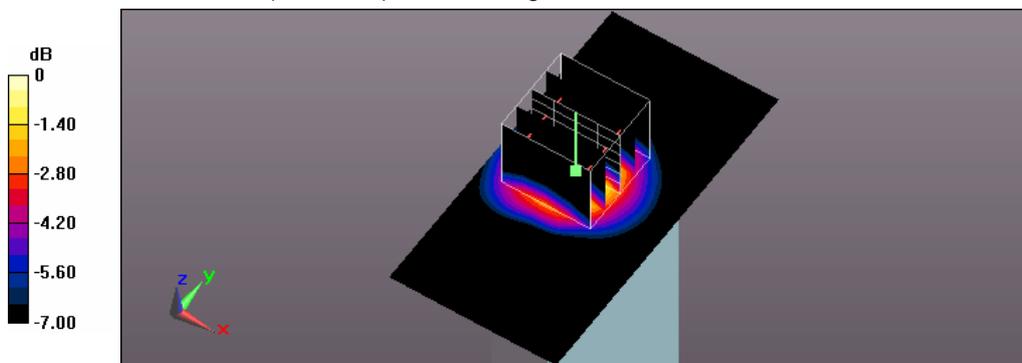
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.72 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.791 W/kg

SAR(1 g) = 0.465 W/kg; SAR(10 g) = 0.261 W/kg

Maximum value of SAR (measured) = 0.634 W/kg



0 dB = 0.634 W/kg = -1.98 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/22 Time: PM 04:21:12

52_LTE Band2 CH18900_QPSK_BW 20MHz_50RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.48 \text{ S/m}$; $\epsilon_r = 54.534$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.715 W/kg

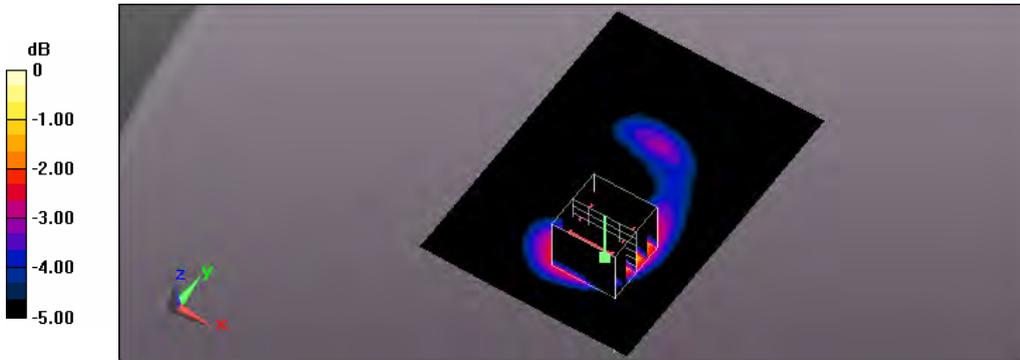
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 20.48 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.849 W/kg

SAR(1 g) = 0.525 W/kg; SAR(10 g) = 0.308 W/kg

Maximum value of SAR (measured) = 0.695 W/kg



0 dB = 0.695 W/kg = -1.58 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/22 Time: PM 05:29:43

54_LTE Band2 CH18900_QPSK_BW 20MHz_50RB Size 0RB Offset_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.48 \text{ S/m}$; $\epsilon_r = 54.534$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.445 W/kg

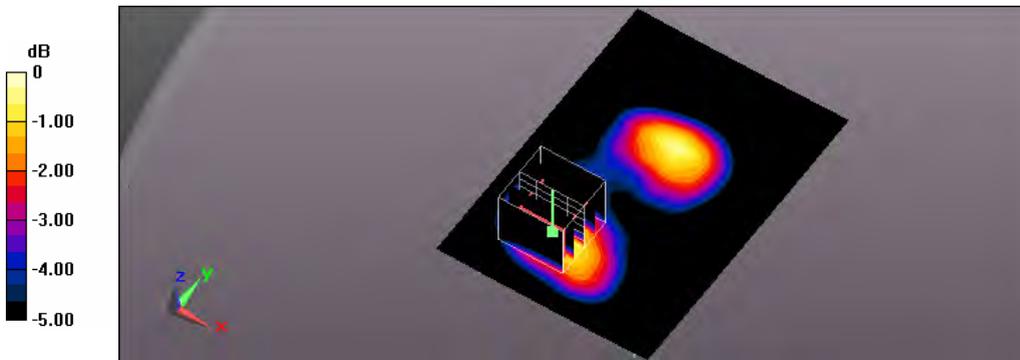
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 16.69 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.531 W/kg

SAR(1 g) = 0.331 W/kg; SAR(10 g) = 0.200 W/kg

Maximum value of SAR (measured) = 0.434 W/kg



0 dB = 0.434 W/kg = -3.63 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/22 Time: PM 06:13:24

56_LTE Band2 CH18900_QPSK_BW 20MHz_50RB Size 0RB Offset_side3_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.48 \text{ S/m}$; $\epsilon_r = 54.534$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.127 W/kg

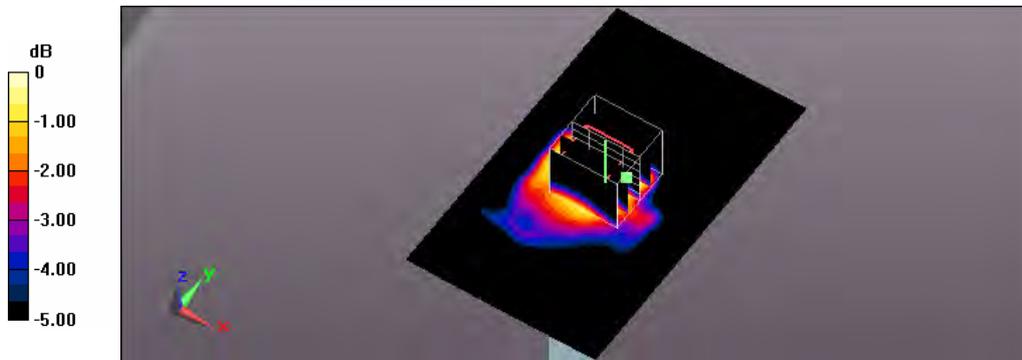
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.203 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.152 W/kg

SAR(1 g) = 0.097 W/kg; SAR(10 g) = 0.061 W/kg

Maximum value of SAR (measured) = 0.123 W/kg



0 dB = 0.123 W/kg = -9.10 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/22 Time: PM 06:57:35

58_LTE Band2 CH18900_QPSK_BW 20MHz_50RB Size 0RB Offset_side4_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, Generic LTE (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.48$ S/m; $\epsilon_r = 54.534$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.486 W/kg

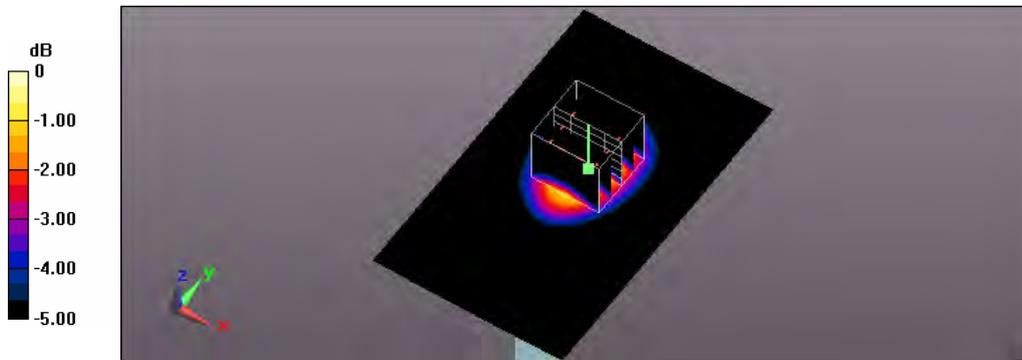
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.39 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.585 W/kg

SAR(1 g) = 0.369 W/kg; SAR(10 g) = 0.225 W/kg

Maximum value of SAR (measured) = 0.484 W/kg



0 dB = 0.484 W/kg = -3.15 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/22 Time: PM 07:53:59

60_LTE Band2 CH18900_QPSK_BW 20MHz_50RB Size 0RB Offset_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.48$ S/m; $\epsilon_r = 54.534$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.504 W/kg

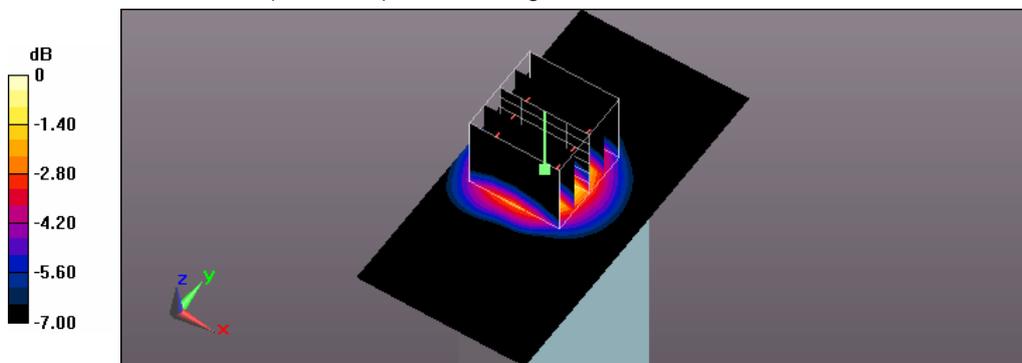
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.18 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.600 W/kg

SAR(1 g) = 0.353 W/kg; SAR(10 g) = 0.199 W/kg

Maximum value of SAR (measured) = 0.482 W/kg



0 dB = 0.482 W/kg = -3.17 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/4 Time: PM 09:12:24

93_LTE Band2 CH18700_QPSK_BW 20MHz_100RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1860 \text{ MHz}$; $\sigma = 1.467 \text{ S/m}$; $\epsilon_r = 54.624$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.810 W/kg

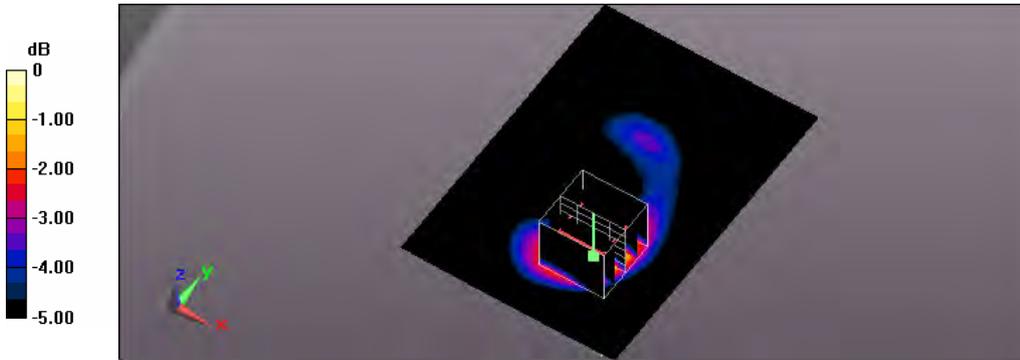
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 21.91 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.967 W/kg

SAR(1 g) = 0.594 W/kg; SAR(10 g) = 0.345 W/kg

Maximum value of SAR (measured) = 0.794 W/kg



0 dB = 0.794 W/kg = -1.00 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/5 Time: AM 12:02:51

95_LTE Band4 CH20050_QPSK_BW 20MHz_1RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1720$ MHz; $\sigma = 1.498$ S/m; $\epsilon_r = 54.154$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.65, 7.65, 7.65); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.18 W/kg

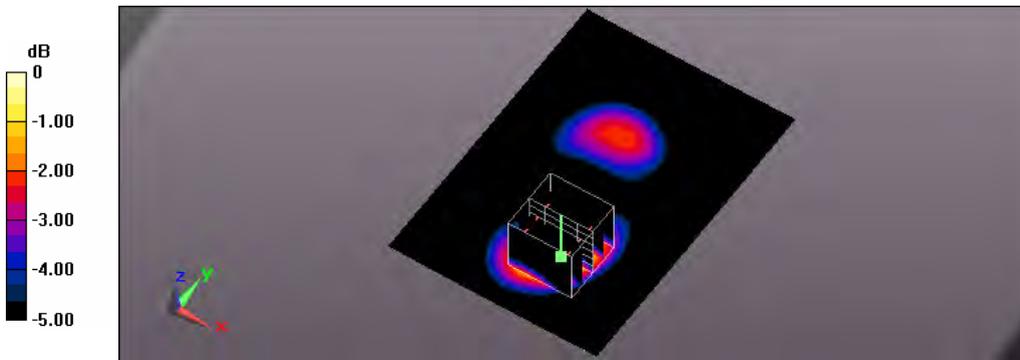
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 27.66 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.42 W/kg

SAR(1 g) = 0.860 W/kg; SAR(10 g) = 0.498 W/kg

Maximum value of SAR (measured) = 1.16 W/kg



0 dB = 1.16 W/kg = 0.64 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/19 Time: PM 08:20:22

1_LTE Band4 CH20175_QPSK_BW 20MHz_1RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5 \text{ MHz}$; $\sigma = 1.512 \text{ S/m}$; $\epsilon_r = 54.118$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.65, 7.65, 7.65); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.01 W/kg

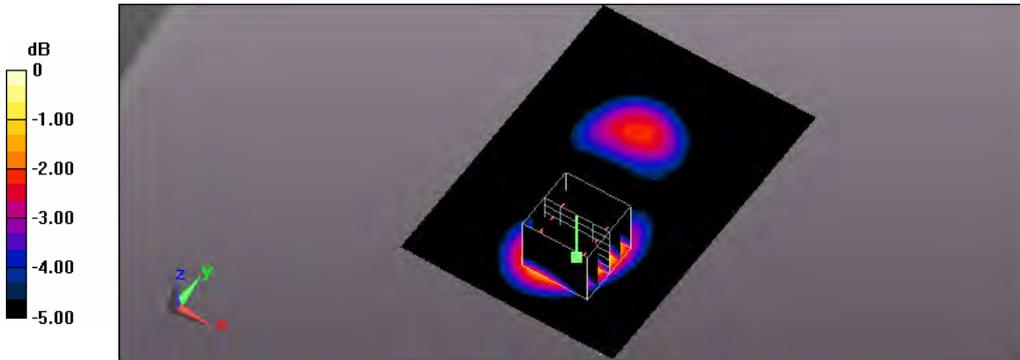
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 25.44 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.22 W/kg

SAR(1 g) = 0.745 W/kg; SAR(10 g) = 0.439 W/kg

Maximum value of SAR (measured) = 0.998 W/kg



0 dB = 0.998 W/kg = -0.01 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/5 Time: AM 12:19:45

96_LTE Band4 CH20300_QPSK_BW 20MHz_1RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1745 \text{ MHz}$; $\sigma = 1.52 \text{ S/m}$; $\epsilon_r = 54.05$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.65, 7.65, 7.65); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.31 W/kg

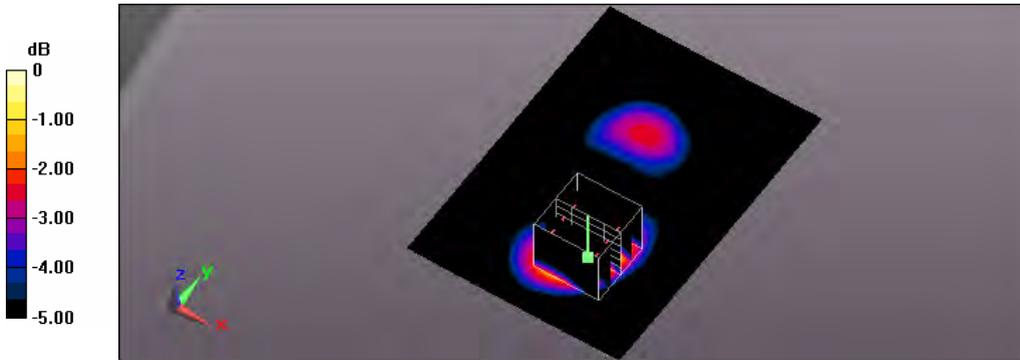
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 28.29 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.57 W/kg

SAR(1 g) = 0.950 W/kg; SAR(10 g) = 0.549 W/kg

Maximum value of SAR (measured) = 1.28 W/kg



0 dB = 1.28 W/kg = 1.07 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/19 Time: PM 09:25:41

4_LTE Band4 CH20175_QPSK_BW 20MHz_1RB Size 0RB Offset_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.512$ S/m; $\epsilon_r = 54.118$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.65, 7.65, 7.65); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.578 W/kg

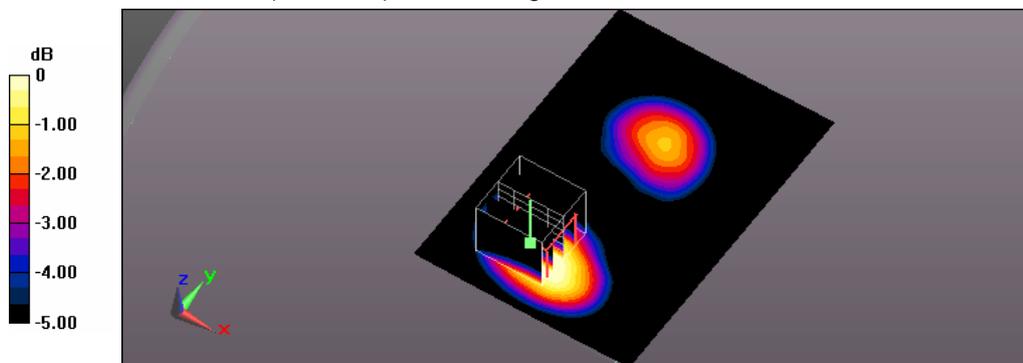
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.42 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.675 W/kg

SAR(1 g) = 0.434 W/kg; SAR(10 g) = 0.274 W/kg

Maximum value of SAR (measured) = 0.555 W/kg



0 dB = 0.555 W/kg = -2.56 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/19 Time: PM 09:53:27

5_LTE Band4 CH20175_QPSK_BW 20MHz_1RB Size 0RB Offset_side3_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.512$ S/m; $\epsilon_r = 54.118$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.65, 7.65, 7.65); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.143 W/kg

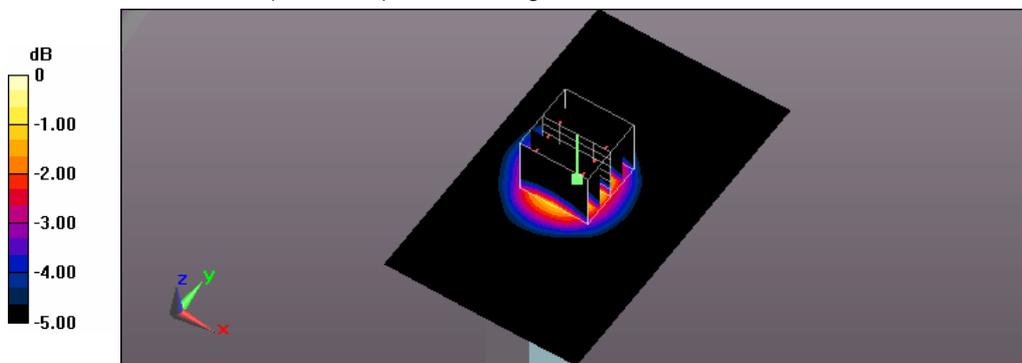
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.397 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.168 W/kg

SAR(1 g) = 0.109 W/kg; SAR(10 g) = 0.068 W/kg

Maximum value of SAR (measured) = 0.141 W/kg



0 dB = 0.141 W/kg = -8.51 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/19 Time: PM 10:53:55

8_LTE Band4 CH20175_QPSK_BW 20MHz_1RB Size 0RB Offset_side4_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.512$ S/m; $\epsilon_r = 54.118$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.65, 7.65, 7.65); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.534 W/kg

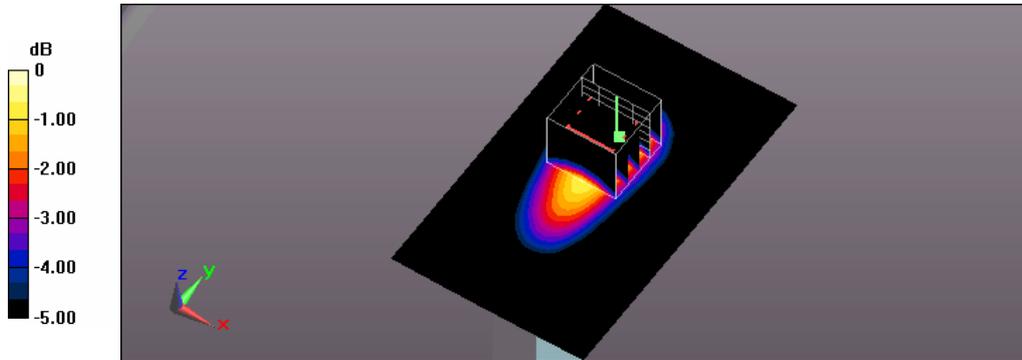
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.31 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.622 W/kg

SAR(1 g) = 0.396 W/kg; SAR(10 g) = 0.242 W/kg

Maximum value of SAR (measured) = 0.512 W/kg



0 dB = 0.512 W/kg = -2.91 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/19 Time: PM 11:19:33

9_LTE Band4 CH20175_QPSK_BW 20MHz_1RB Size 0RB Offset_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.512$ S/m; $\epsilon_r = 54.118$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.65, 7.65, 7.65); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.756 W/kg

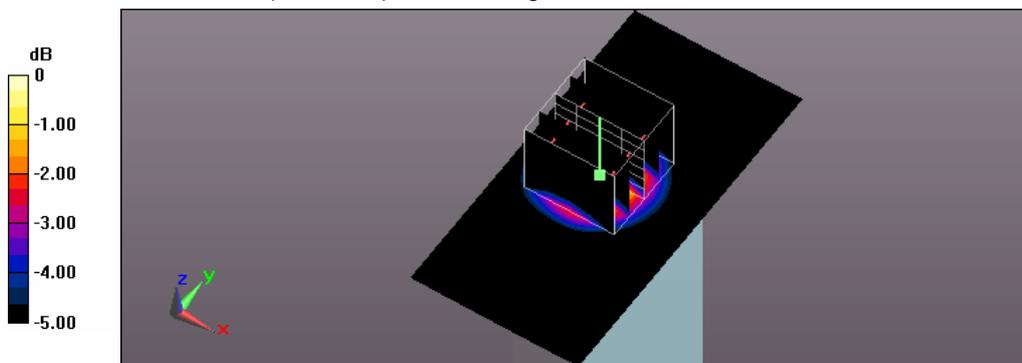
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.64 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.909 W/kg

SAR(1 g) = 0.542 W/kg; SAR(10 g) = 0.309 W/kg

Maximum value of SAR (measured) = 0.737 W/kg



0 dB = 0.737 W/kg = -1.33 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/19 Time: PM 08:47:06

2_LTE Band4 CH20175_QPSK_BW 20MHz_50RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.512$ S/m; $\epsilon_r = 54.118$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.65, 7.65, 7.65); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.841 W/kg

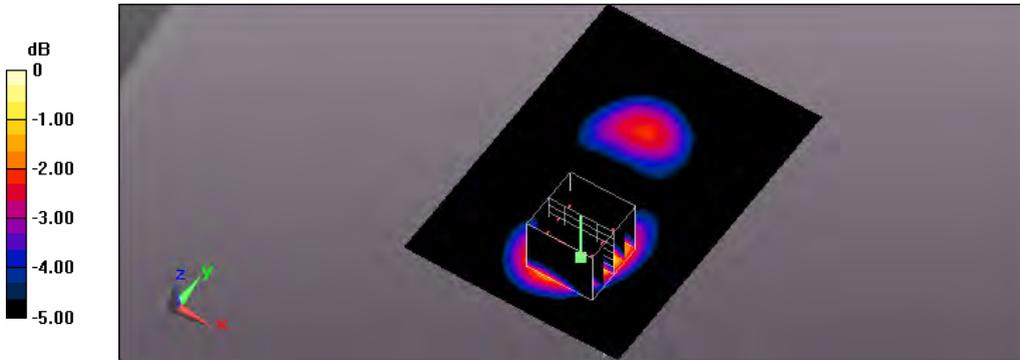
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.15 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.617 W/kg; SAR(10 g) = 0.364 W/kg

Maximum value of SAR (measured) = 0.825 W/kg



0 dB = 0.825 W/kg = -0.84 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/19 Time: PM 09:08:13

3_LTE Band4 CH20175_QPSK_BW 20MHz_50RB Size 0RB Offset_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.512$ S/m; $\epsilon_r = 54.118$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.65, 7.65, 7.65); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.480 W/kg

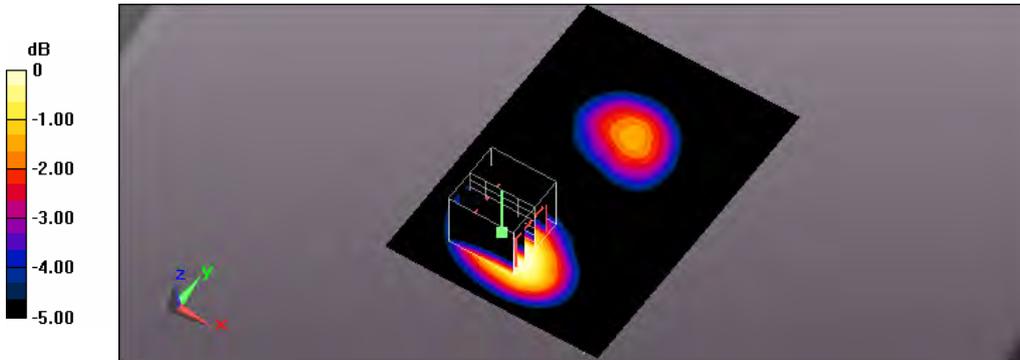
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.66 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.564 W/kg

SAR(1 g) = 0.362 W/kg; SAR(10 g) = 0.228 W/kg

Maximum value of SAR (measured) = 0.466 W/kg



0 dB = 0.466 W/kg = -3.32 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/19 Time: PM 10:09:34

6_LTE Band4 CH20175_QPSK_BW 20MHz_50RB Size 0RB Offset_side3_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.512$ S/m; $\epsilon_r = 54.118$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.65, 7.65, 7.65); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.114 W/kg

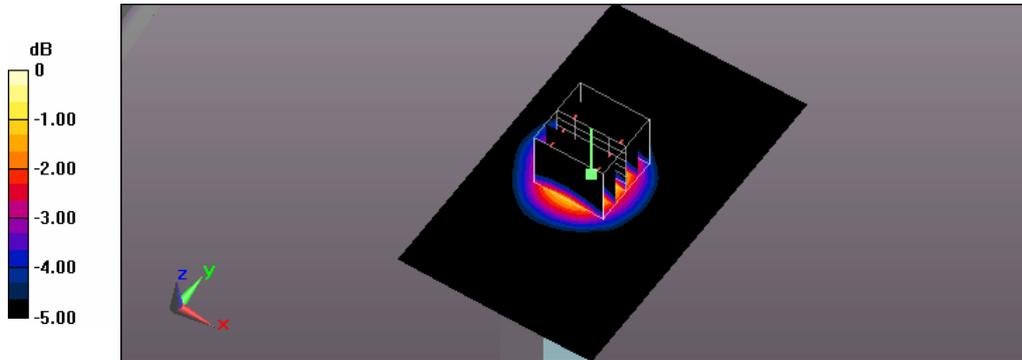
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.514 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.136 W/kg

SAR(1 g) = 0.088 W/kg; SAR(10 g) = 0.055 W/kg

Maximum value of SAR (measured) = 0.113 W/kg



0 dB = 0.113 W/kg = -9.47 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/19 Time: PM 10:27:43

7_LTE Band4 CH20175_QPSK_BW 20MHz_50RB Size 0RB Offset_side4_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.512$ S/m; $\epsilon_r = 54.118$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.65, 7.65, 7.65); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.446 W/kg

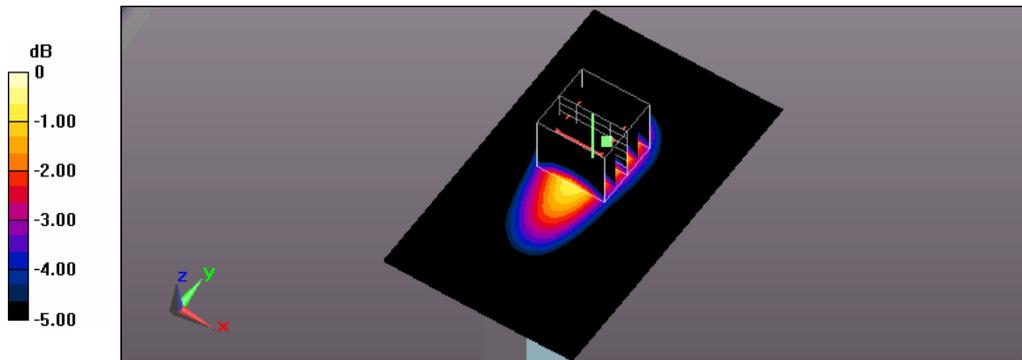
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.68 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.517 W/kg

SAR(1 g) = 0.329 W/kg; SAR(10 g) = 0.201 W/kg

Maximum value of SAR (measured) = 0.426 W/kg



0 dB = 0.426 W/kg = -3.71 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/19 Time: PM 11:36:16

10_LTE Band4 CH20175_QPSK_BW 20MHz_50RB Size 0RB Offset_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.512$ S/m; $\epsilon_r = 54.118$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.65, 7.65, 7.65); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.598 W/kg

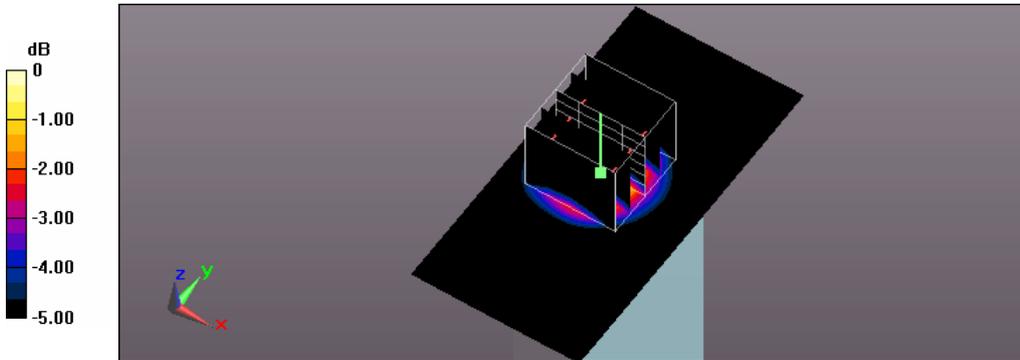
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.23 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.724 W/kg

SAR(1 g) = 0.430 W/kg; SAR(10 g) = 0.244 W/kg

Maximum value of SAR (measured) = 0.585 W/kg



0 dB = 0.585 W/kg = -2.33 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/5 Time: AM 12:36:36

97_LTE Band4 CH20300_QPSK_BW 20MHz_100RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1745 \text{ MHz}$; $\sigma = 1.52 \text{ S/m}$; $\epsilon_r = 54.05$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.65, 7.65, 7.65); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.08 W/kg

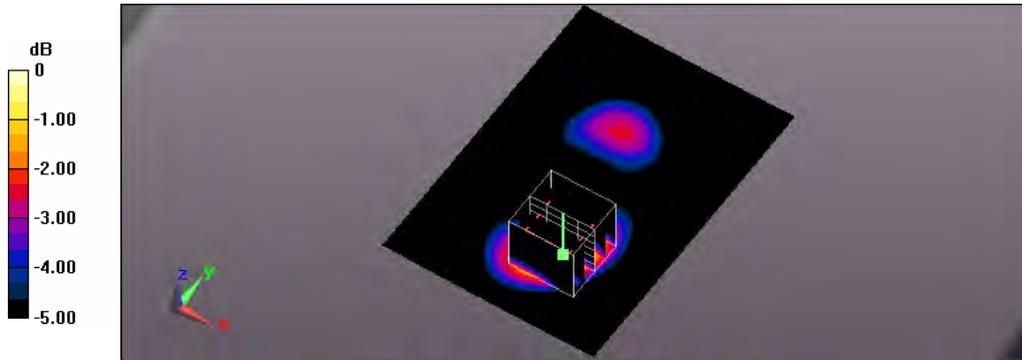
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 25.59 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.30 W/kg

SAR(1 g) = 0.781 W/kg; SAR(10 g) = 0.451 W/kg

Maximum value of SAR (measured) = 1.05 W/kg



0 dB = 1.05 W/kg = 0.21 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: PM 02:20:38

70_LTE Band5 CH20450_QPSK_BW 10MHz_1RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 829 \text{ MHz}$; $\sigma = 0.971 \text{ S/m}$; $\epsilon_r = 54.804$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.869 W/kg

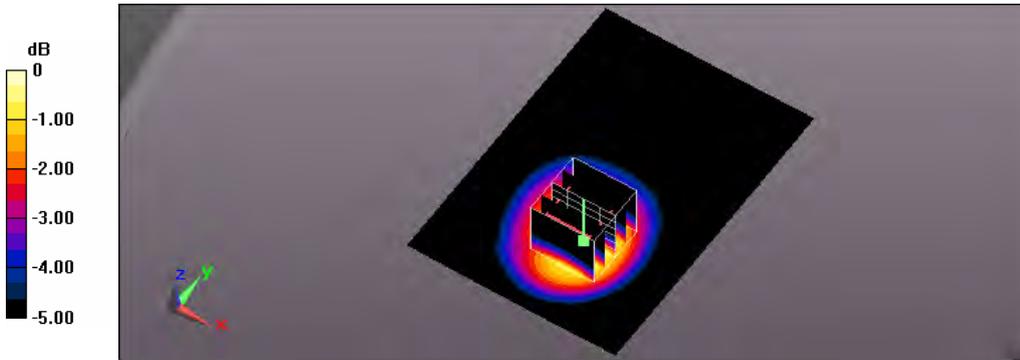
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 30.57 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.717 W/kg; SAR(10 g) = 0.502 W/kg

Maximum value of SAR (measured) = 0.875 W/kg



0 dB = 0.875 W/kg = -0.58 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: PM 02:01:51

69_LTE Band5 CH20525_QPSK_BW 10MHz_1RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 836.5 \text{ MHz}$; $\sigma = 0.981 \text{ S/m}$; $\epsilon_r = 54.857$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.976 W/kg

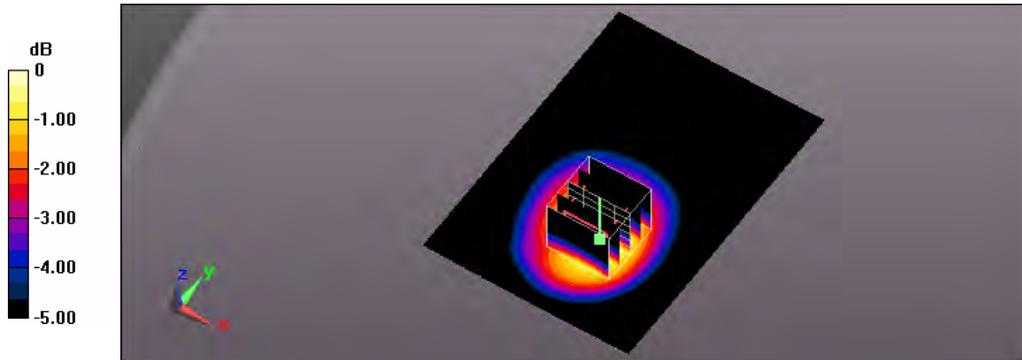
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 32.32 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.796 W/kg; SAR(10 g) = 0.564 W/kg

Maximum value of SAR (measured) = 0.967 W/kg



0 dB = 0.967 W/kg = -0.15 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: PM 02:44:02

71_LTE Band5 CH20600_QPSK_BW 10MHz_1RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 844 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 844 \text{ MHz}$; $\sigma = 0.991 \text{ S/m}$; $\epsilon_r = 54.871$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.06 W/kg

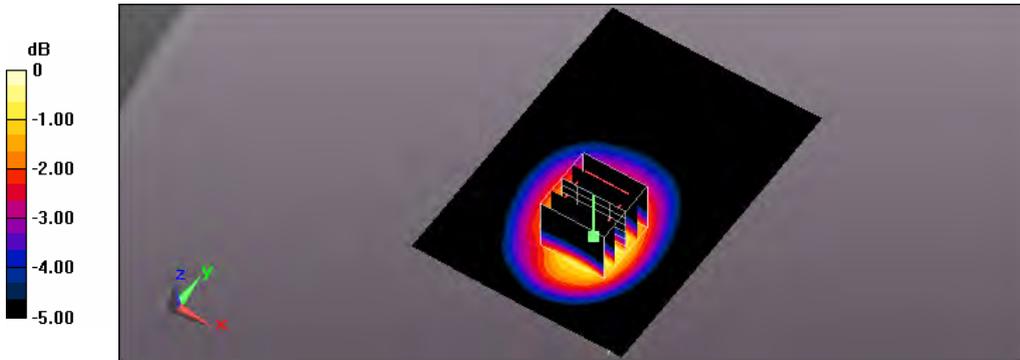
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 33.38 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.23 W/kg

SAR(1 g) = 0.882 W/kg; SAR(10 g) = 0.631 W/kg

Maximum value of SAR (measured) = 1.07 W/kg



0 dB = 1.07 W/kg = 0.29 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: PM 03:47:17

74_LTE Band5 CH20450_QPSK_BW 10MHz_1RB Size 0RB Offset_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 829 \text{ MHz}$; $\sigma = 0.971 \text{ S/m}$; $\epsilon_r = 54.804$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.801 W/kg

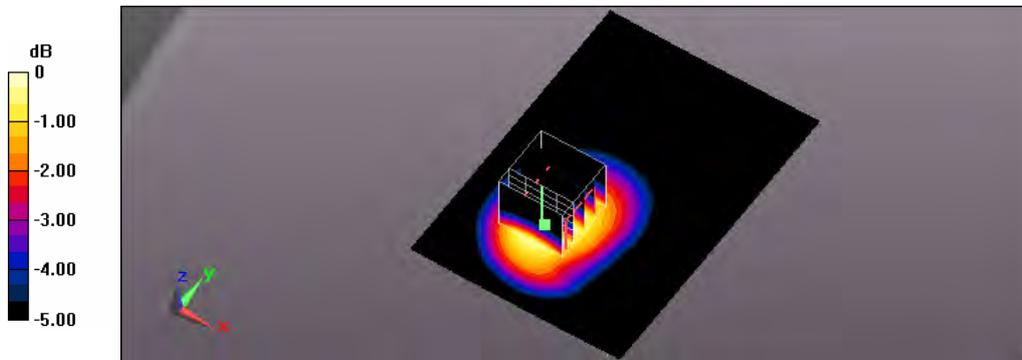
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 29.09 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.919 W/kg

SAR(1 g) = 0.665 W/kg; SAR(10 g) = 0.470 W/kg

Maximum value of SAR (measured) = 0.798 W/kg



0 dB = 0.798 W/kg = -0.98 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: PM 03:26:34

73_LTE Band5 CH20525_QPSK_BW 10MHz_1RB Size 0RB Offset_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 836.5 \text{ MHz}$; $\sigma = 0.981 \text{ S/m}$; $\epsilon_r = 54.857$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.915 W/kg

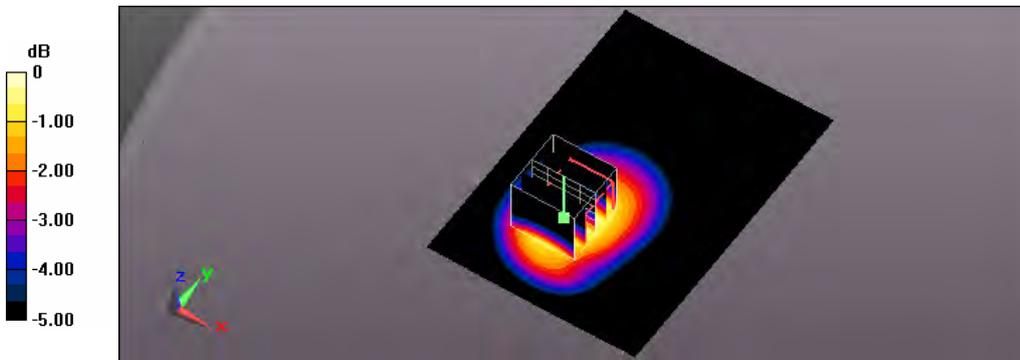
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 31.06 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.771 W/kg; SAR(10 g) = 0.549 W/kg

Maximum value of SAR (measured) = 0.923 W/kg



0 dB = 0.923 W/kg = -0.35 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: PM 04:17:30

75_LTE Band5 CH20600_QPSK_BW 10MHz_1RB Size 0RB Offset_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 844 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 844 \text{ MHz}$; $\sigma = 0.991 \text{ S/m}$; $\epsilon_r = 54.871$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.07 W/kg

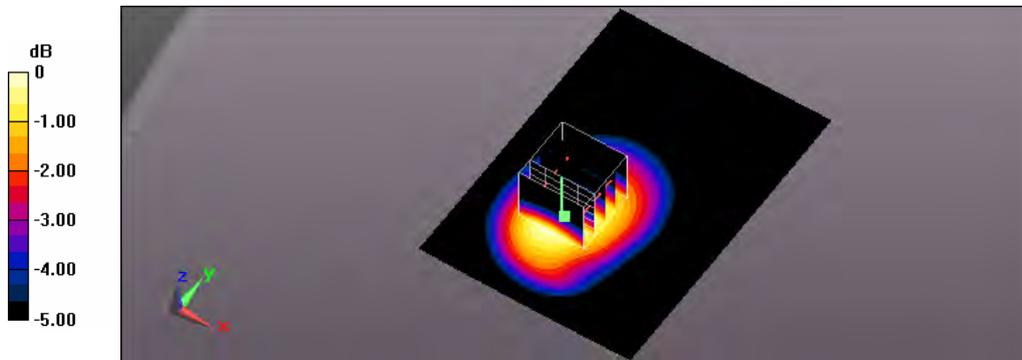
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 33.17 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.22 W/kg

SAR(1 g) = 0.897 W/kg; SAR(10 g) = 0.643 W/kg

Maximum value of SAR (measured) = 1.07 W/kg



0 dB = 1.07 W/kg = 0.29 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: PM 05:51:25

79_LTE Band5 CH20525_QPSK_BW 10MHz_1RB Size 0RB Offset_side3_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.981$ S/m; $\epsilon_r = 54.857$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.509 W/kg

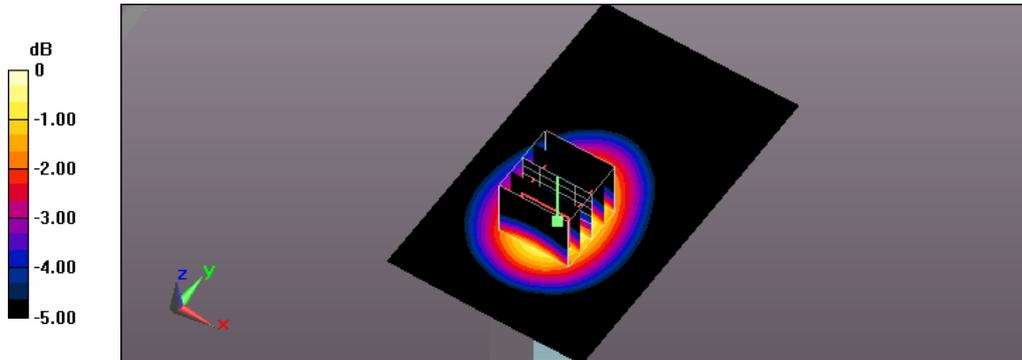
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.07 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.573 W/kg

SAR(1 g) = 0.423 W/kg; SAR(10 g) = 0.302 W/kg

Maximum value of SAR (measured) = 0.505 W/kg



0 dB = 0.505 W/kg = -2.97 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: PM 06:26:36

81_LTE Band5 CH20525_QPSK_BW 10MHz_1RB Size 0RB Offset_side4_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.981$ S/m; $\epsilon_r = 54.857$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.446 W/kg

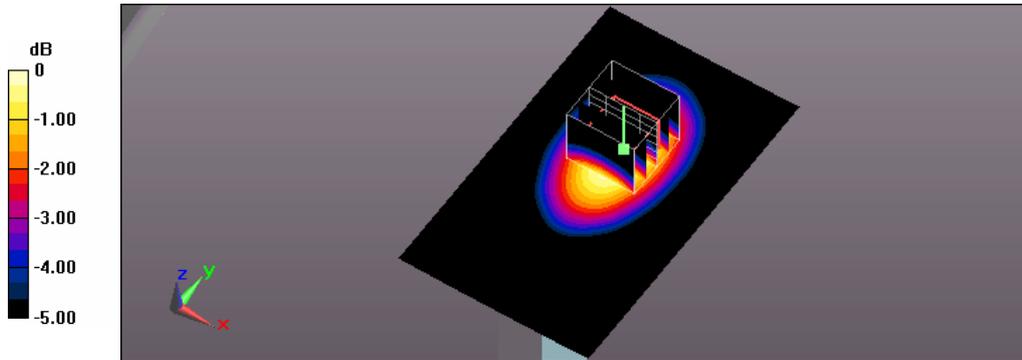
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.91 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.506 W/kg

SAR(1 g) = 0.362 W/kg; SAR(10 g) = 0.252 W/kg

Maximum value of SAR (measured) = 0.438 W/kg



0 dB = 0.438 W/kg = -3.59 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: PM 07:00:53

83_LTE Band5 CH20525_QPSK_BW 10MHz_1RB Size 0RB Offset_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.981$ S/m; $\epsilon_r = 54.857$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.173 W/kg

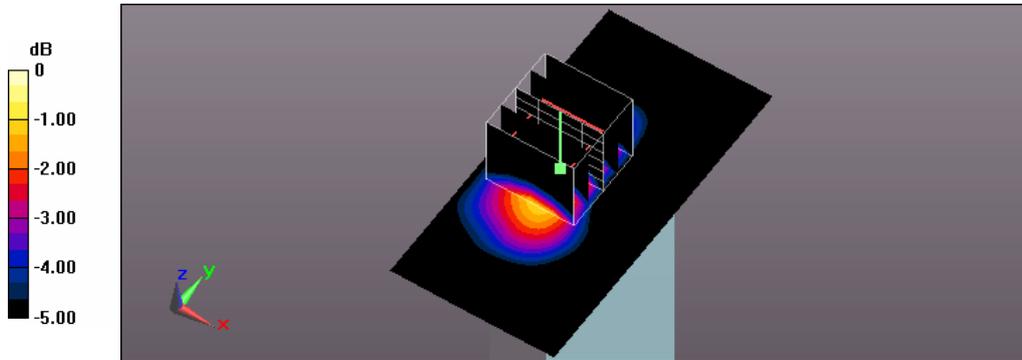
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.70 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.229 W/kg

SAR(1 g) = 0.141 W/kg; SAR(10 g) = 0.085 W/kg

Maximum value of SAR (measured) = 0.189 W/kg



0 dB = 0.189 W/kg = -7.24 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: PM 05:26:26

78_LTE Band5 CH20525_QPSK_BW 10MHz_25RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.981$ S/m; $\epsilon_r = 54.857$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.798 W/kg

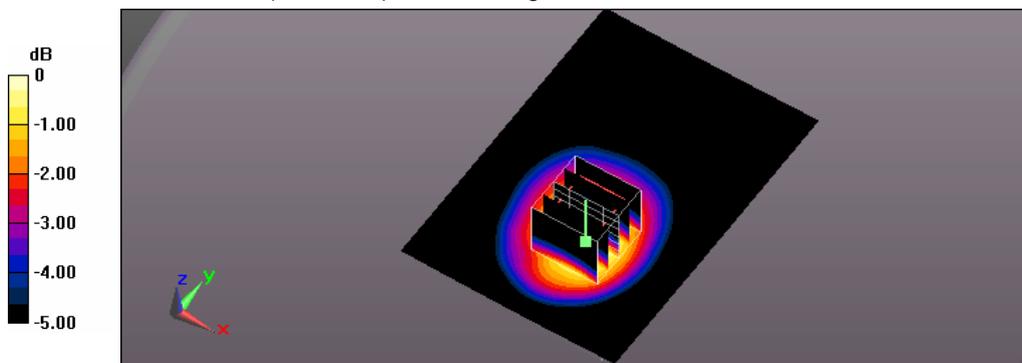
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 29.04 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.923 W/kg

SAR(1 g) = 0.655 W/kg; SAR(10 g) = 0.464 W/kg

Maximum value of SAR (measured) = 0.796 W/kg



0 dB = 0.796 W/kg = -0.99 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: PM 05:03:57

77_LTE Band5 CH20525_QPSK_BW 10MHz_25RB Size 0RB Offset_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.981$ S/m; $\epsilon_r = 54.857$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.756 W/kg

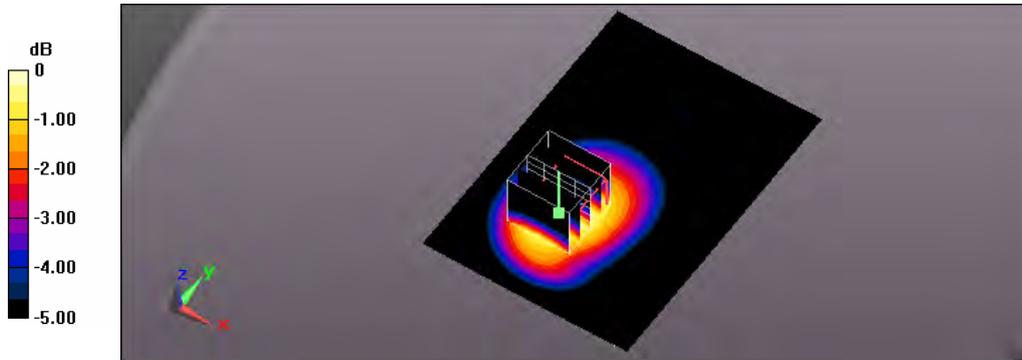
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 28.11 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.864 W/kg

SAR(1 g) = 0.634 W/kg; SAR(10 g) = 0.452 W/kg

Maximum value of SAR (measured) = 0.759 W/kg



0 dB = 0.759 W/kg = -1.20 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: PM 06:07:33

80_LTE Band5 CH20525_QPSK_BW 10MHz_25RB Size 0RB Offset_side3_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.981$ S/m; $\epsilon_r = 54.857$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.420 W/kg

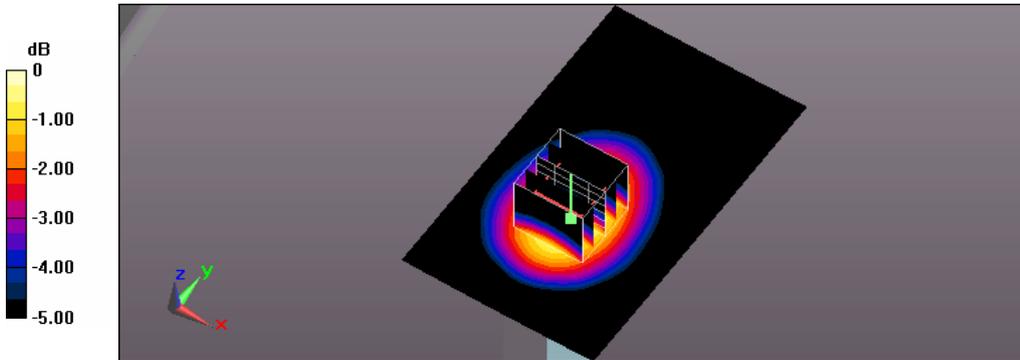
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.07 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.477 W/kg

SAR(1 g) = 0.351 W/kg; SAR(10 g) = 0.250 W/kg

Maximum value of SAR (measured) = 0.421 W/kg



0 dB = 0.421 W/kg = -3.76 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: PM 06:42:26

82_LTE Band5 CH20525_QPSK_BW 10MHz_25RB Size 0RB Offset_side4_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.981$ S/m; $\epsilon_r = 54.857$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.374 W/kg

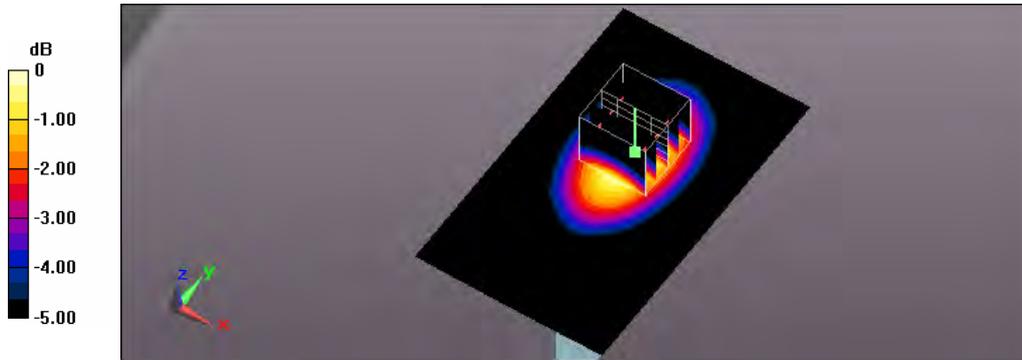
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.01 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.432 W/kg

SAR(1 g) = 0.311 W/kg; SAR(10 g) = 0.216 W/kg

Maximum value of SAR (measured) = 0.378 W/kg



0 dB = 0.378 W/kg = -4.23 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: PM 07:14:00

84_LTE Band5 CH20525_QPSK_BW 10MHz_25RB Size 0RB Offset_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.981$ S/m; $\epsilon_r = 54.857$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.138 W/kg

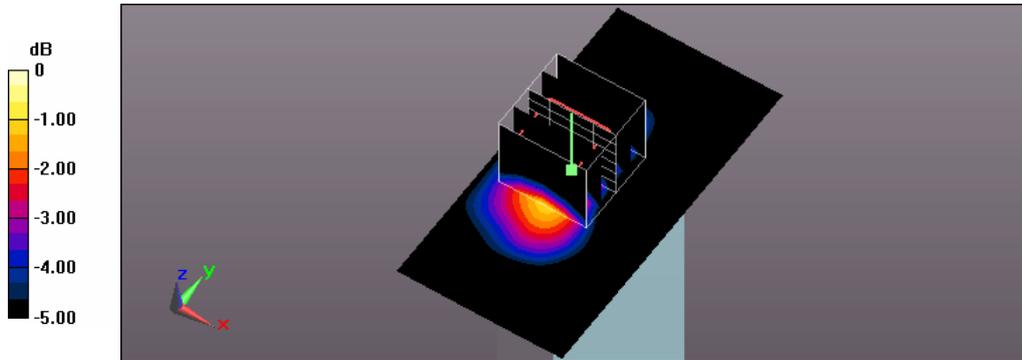
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.38 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.184 W/kg

SAR(1 g) = 0.113 W/kg; SAR(10 g) = 0.068 W/kg

Maximum value of SAR (measured) = 0.151 W/kg



0 dB = 0.151 W/kg = -8.21 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/5 Time: PM 01:02:39

72_LTE Band5 CH20600_QPSK_BW 10MHz_50RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, Generic LTE (0); Frequency: 844 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 844 \text{ MHz}$; $\sigma = 0.991 \text{ S/m}$; $\epsilon_r = 54.871$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.930 W/kg

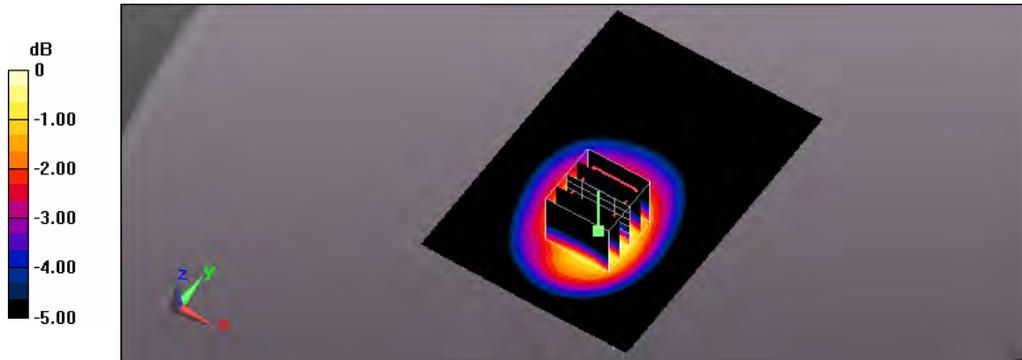
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 31.56 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.10 W/kg

SAR(1 g) = 0.785 W/kg; SAR(10 g) = 0.560 W/kg

Maximum value of SAR (measured) = 0.946 W/kg



0 dB = 0.946 W/kg = -0.24 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/5 Time: PM 01:22:57

76_LTE Band5 CH20600_QPSK_BW 10MHz_50RB Size 0RB Offset_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 844 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 844 \text{ MHz}$; $\sigma = 0.991 \text{ S/m}$; $\epsilon_r = 54.871$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.948 W/kg

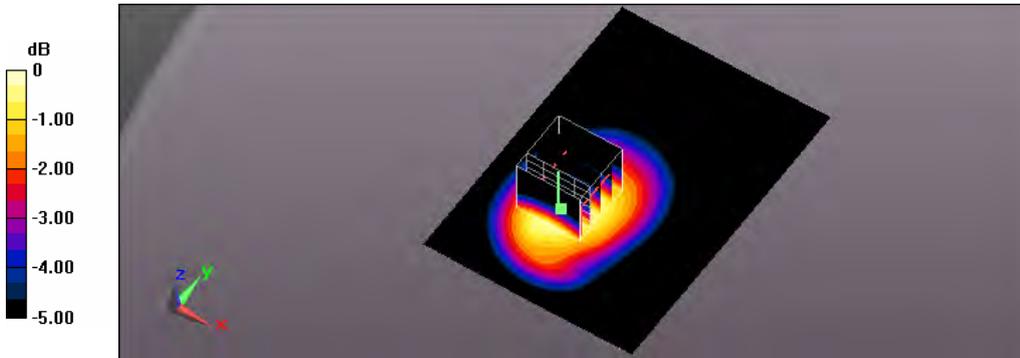
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 31.18 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.10 W/kg

SAR(1 g) = 0.810 W/kg; SAR(10 g) = 0.581 W/kg

Maximum value of SAR (measured) = 0.965 W/kg



0 dB = 0.965 W/kg = -0.15 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/20 Time: AM 10:57:55

12_LTE Band7 CH20850_QPSK_BW 20MHz_1RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2510 \text{ MHz}$; $\sigma = 2.096 \text{ S/m}$; $\epsilon_r = 51.179$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (101x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 1.53 W/kg

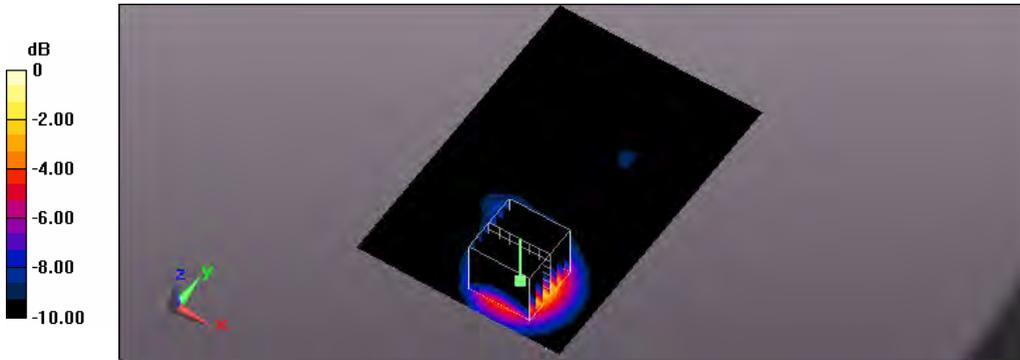
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 26.00 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.95 W/kg

SAR(1 g) = 1.05 W/kg; SAR(10 g) = 0.521 W/kg

Maximum value of SAR (measured) = 1.52 W/kg



0 dB = 1.52 W/kg = 1.82 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/20 Time: AM 10:12:27

11_LTE Band7 CH21100_QPSK_BW 20MHz_1RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535 \text{ MHz}$; $\sigma = 2.134 \text{ S/m}$; $\epsilon_r = 51.104$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (101x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 1.60 W/kg

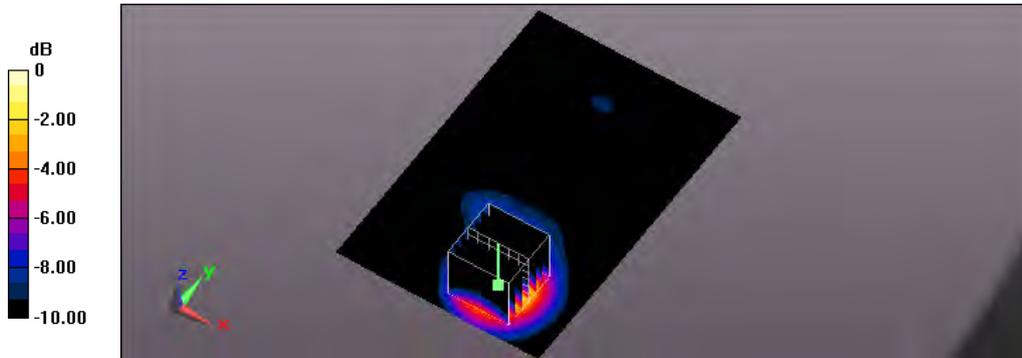
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 26.05 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.97 W/kg

SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.520 W/kg

Maximum value of SAR (measured) = 1.54 W/kg



0 dB = 1.54 W/kg = 1.88 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/20 Time: AM 11:36:31

13_LTE Band7 CH21350_QPSK_BW 20MHz_1RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2560$ MHz; $\sigma = 2.166$ S/m; $\epsilon_r = 51.085$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.19, 7.19, 7.19); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (101x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.50 W/kg

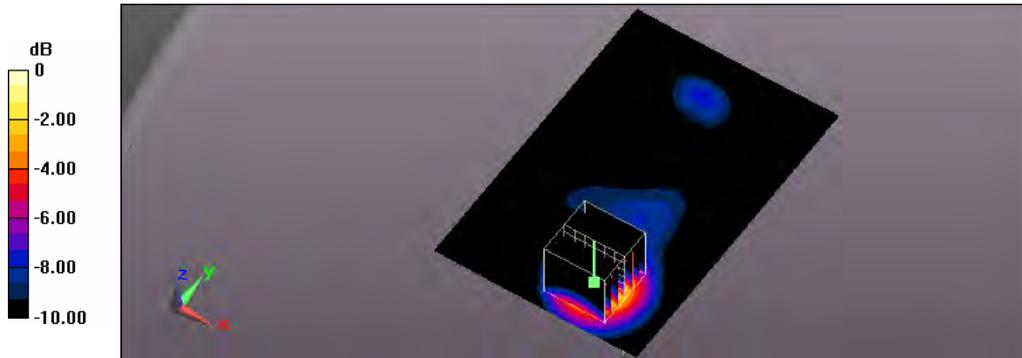
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.84 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.92 W/kg

SAR(1 g) = 1 W/kg; SAR(10 g) = 0.486 W/kg

Maximum value of SAR (measured) = 1.47 W/kg



0 dB = 1.47 W/kg = 1.67 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/20 Time: PM 04:01:09

18_LTE Band7 CH21100_QPSK_BW 20MHz_1RB Size 0RB Offset_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535 \text{ MHz}$; $\sigma = 2.134 \text{ S/m}$; $\epsilon_r = 51.104$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (101x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.926 W/kg

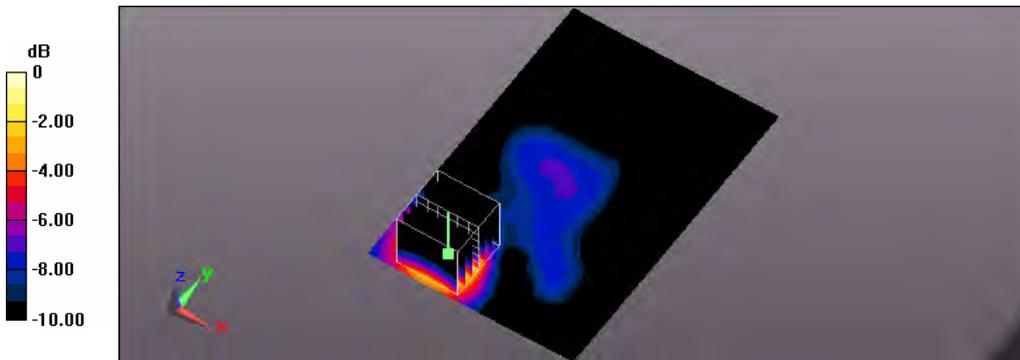
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 20.36 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.604 W/kg; SAR(10 g) = 0.310 W/kg

Maximum value of SAR (measured) = 0.860 W/kg



0 dB = 0.860 W/kg = -0.66 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/20 Time: PM 05:44:19

20_LTE Band7 CH21100_QPSK_BW 20MHz_1RB Size 0RB Offset_side3_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535 \text{ MHz}$; $\sigma = 2.134 \text{ S/m}$; $\epsilon_r = 51.104$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0857 W/kg

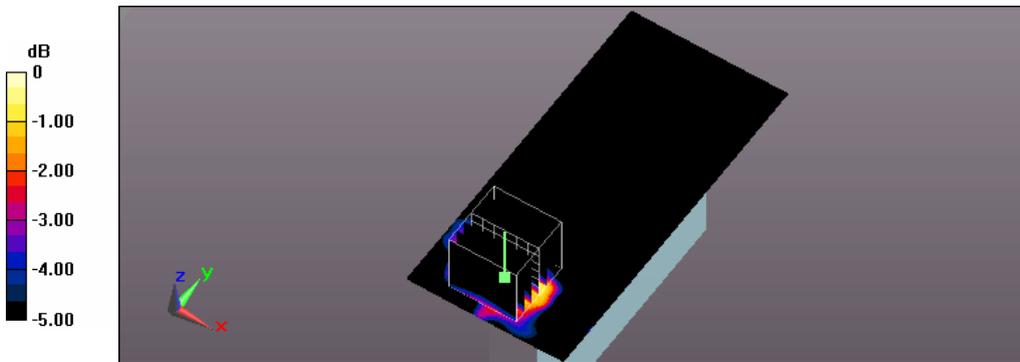
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 6.452 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.109 W/kg

SAR(1 g) = 0.061 W/kg; SAR(10 g) = 0.034 W/kg

Maximum value of SAR (measured) = 0.0845 W/kg



0 dB = 0.0845 W/kg = -10.73 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/20 Time: PM 07:48:56

23_LTE Band7 CH21100_QPSK_BW 20MHz_1RB Size 0RB Offset_side4_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535 \text{ MHz}$; $\sigma = 2.134 \text{ S/m}$; $\epsilon_r = 51.104$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.298 W/kg

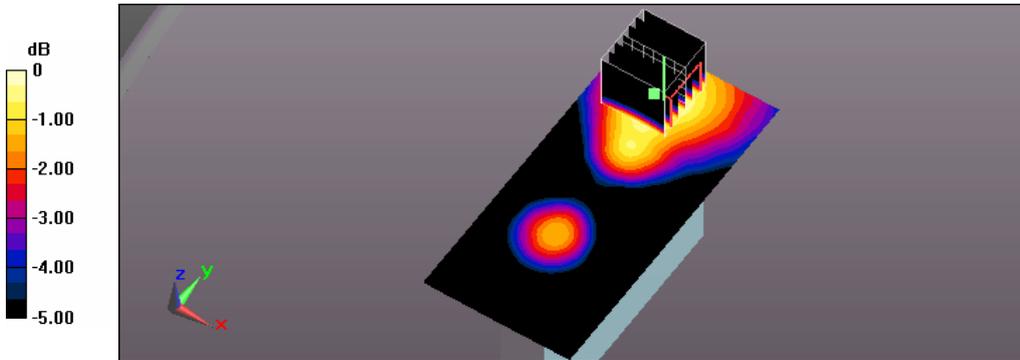
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.24 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.385 W/kg

SAR(1 g) = 0.226 W/kg; SAR(10 g) = 0.135 W/kg

Maximum value of SAR (measured) = 0.306 W/kg



0 dB = 0.306 W/kg = -5.14 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/20 Time: PM 09:12:35

25_LTE Band7 CH20850_QPSK_BW 20MHz_1RB Size 0RB Offset_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2510$ MHz; $\sigma = 2.096$ S/m; $\epsilon_r = 51.179$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.98 W/kg

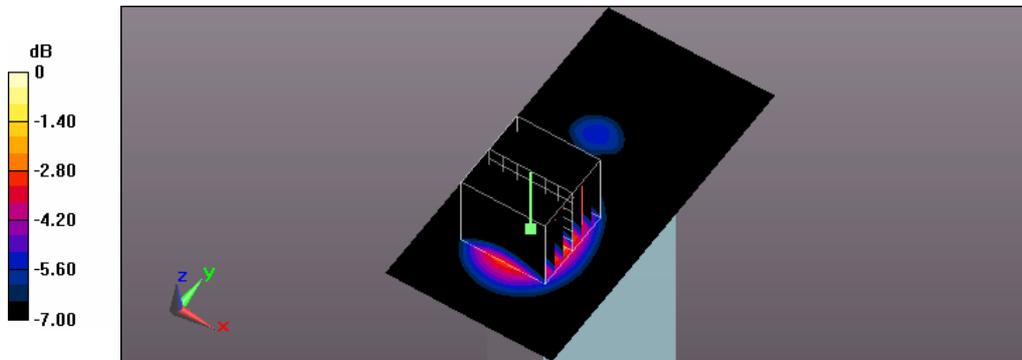
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 30.81 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 2.47 W/kg

SAR(1 g) = 1.35 W/kg; SAR(10 g) = 0.678 W/kg

Maximum value of SAR (measured) = 1.94 W/kg



0 dB = 1.94 W/kg = 2.88 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/20 Time: PM 08:48:53

24_LTE Band7 CH21100_QPSK_BW 20MHz_1RB Size 0RB Offset_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535 \text{ MHz}$; $\sigma = 2.134 \text{ S/m}$; $\epsilon_r = 51.104$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 1.99 W/kg

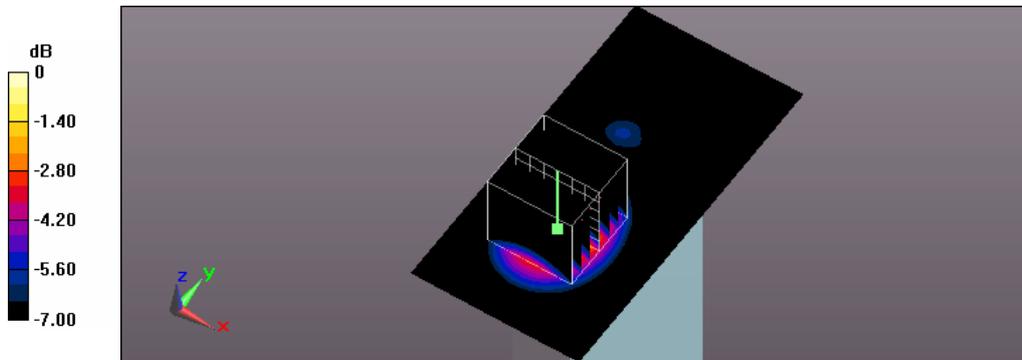
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 30.60 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 2.52 W/kg

SAR(1 g) = 1.36 W/kg; SAR(10 g) = 0.673 W/kg

Maximum value of SAR (measured) = 1.97 W/kg



0 dB = 1.97 W/kg = 2.94 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/20 Time: PM 09:35:59

26_LTE Band7 CH21350_QPSK_BW 20MHz_1RB Size 0RB Offset_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2560$ MHz; $\sigma = 2.166$ S/m; $\epsilon_r = 51.085$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.19, 7.19, 7.19); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.83 W/kg

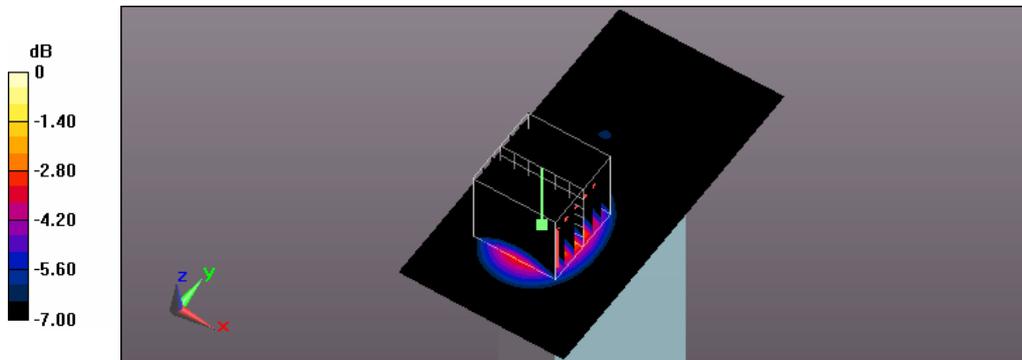
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 29.06 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 2.35 W/kg

SAR(1 g) = 1.25 W/kg; SAR(10 g) = 0.613 W/kg

Maximum value of SAR (measured) = 1.80 W/kg



0 dB = 1.80 W/kg = 2.55 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/20 Time: PM 02:04:56

15_LTE Band7 CH20850_QPSK_BW 20MHz_50RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2510$ MHz; $\sigma = 2.096$ S/m; $\epsilon_r = 51.179$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (101x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.23 W/kg

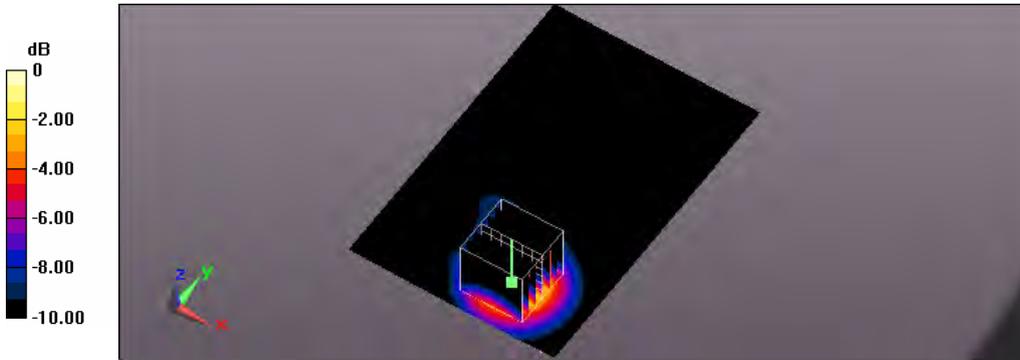
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.68 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 0.822 W/kg; SAR(10 g) = 0.408 W/kg

Maximum value of SAR (measured) = 1.19 W/kg



0 dB = 1.19 W/kg = 0.76 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/20 Time: PM 02:43:38

16_LTE Band7 CH21100_QPSK_BW 20MHz_50RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, Generic LTE (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535 \text{ MHz}$; $\sigma = 2.134 \text{ S/m}$; $\epsilon_r = 51.104$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (101x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 1.20 W/kg

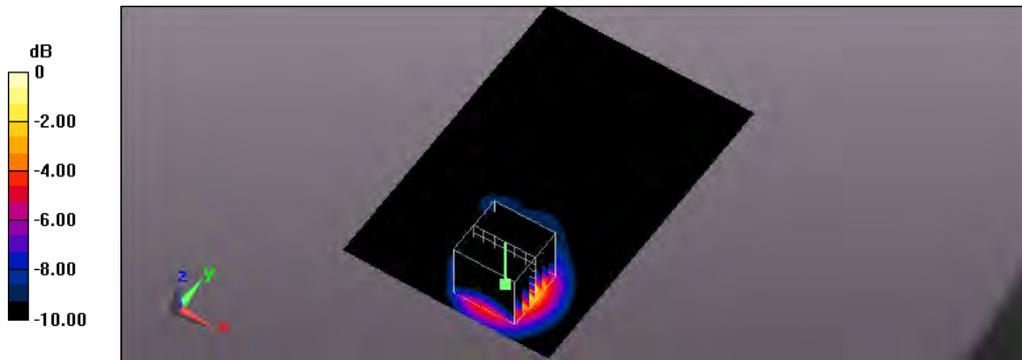
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 23.19 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.51 W/kg

SAR(1 g) = 0.806 W/kg; SAR(10 g) = 0.395 W/kg

Maximum value of SAR (measured) = 1.17 W/kg



0 dB = 1.17 W/kg = 0.68 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/20 Time: PM 01:04:41

14_LTE Band7 CH21350_QPSK_BW 20MHz_50RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2560$ MHz; $\sigma = 2.166$ S/m; $\epsilon_r = 51.085$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.19, 7.19, 7.19); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (101x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.13 W/kg

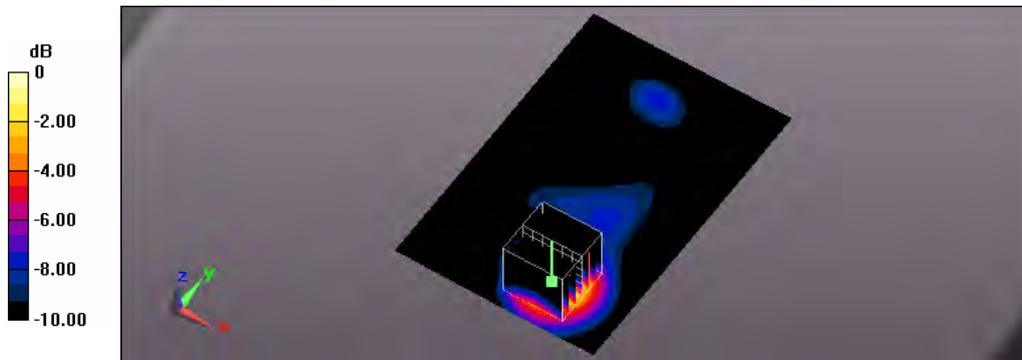
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.70 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 0.747 W/kg; SAR(10 g) = 0.363 W/kg

Maximum value of SAR (measured) = 1.10 W/kg



0 dB = 1.10 W/kg = 0.41 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/11 Time: AM 12:44:13

19_LTE Band7 CH21100_QPSK_BW 20MHz_50RB Size 0RB Offset_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535 \text{ MHz}$; $\sigma = 2.134 \text{ S/m}$; $\epsilon_r = 51.104$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (101x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.574 W/kg

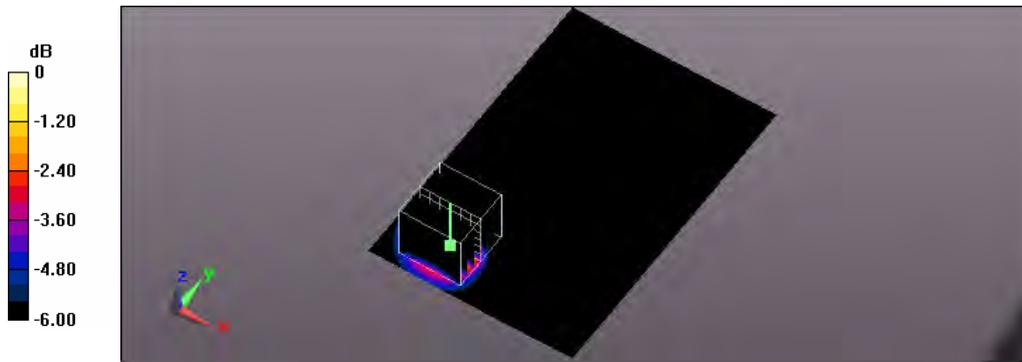
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 16.19 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.726 W/kg

SAR(1 g) = 0.391 W/kg; SAR(10 g) = 0.199 W/kg

Maximum value of SAR (measured) = 0.562 W/kg



0 dB = 0.562 W/kg = -2.50 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/10 Time: PM 10:01:23

21_LTE Band7 CH21100_QPSK_BW 20MHz_50RB Size 0RB Offset_side3_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, Generic LTE (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535 \text{ MHz}$; $\sigma = 2.134 \text{ S/m}$; $\epsilon_r = 51.104$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0763 W/kg

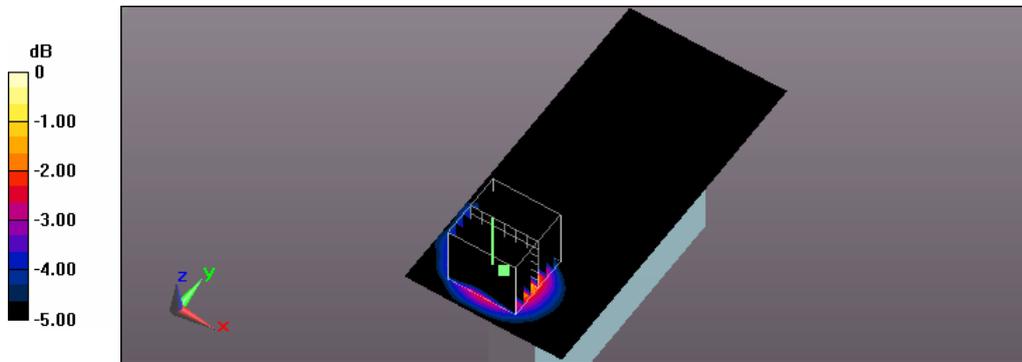
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.903 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.0980 W/kg

SAR(1 g) = 0.052 W/kg; SAR(10 g) = 0.028 W/kg

Maximum value of SAR (measured) = 0.0746 W/kg



0 dB = 0.0746 W/kg = -11.27 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/10 Time: PM 10:29:56

22_LTE Band7 CH21100_QPSK_BW 20MHz_50RB Size 0RB Offset_side4_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535 \text{ MHz}$; $\sigma = 2.134 \text{ S/m}$; $\epsilon_r = 51.104$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.290 W/kg

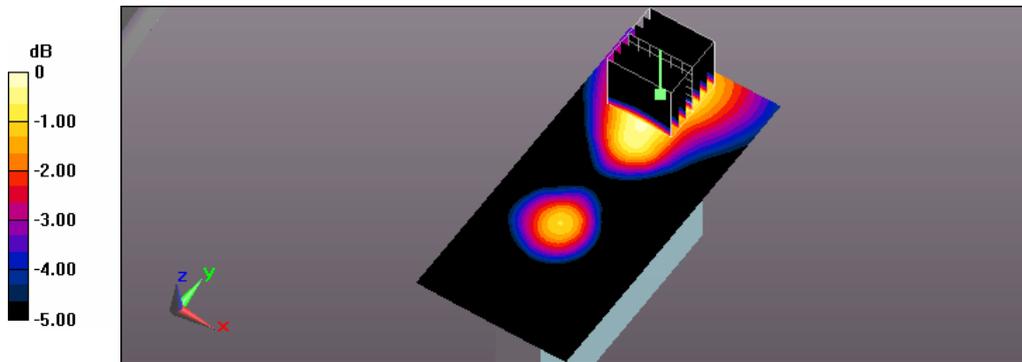
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.01 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.373 W/kg

SAR(1 g) = 0.213 W/kg; SAR(10 g) = 0.124 W/kg

Maximum value of SAR (measured) = 0.293 W/kg



0 dB = 0.293 W/kg = -5.33 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/20 Time: PM 10:21:54

28_LTE Band7 CH20850_QPSK_BW 20MHz_50RB Size 0RB Offset_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2510 \text{ MHz}$; $\sigma = 2.096 \text{ S/m}$; $\epsilon_r = 51.179$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 1.61 W/kg

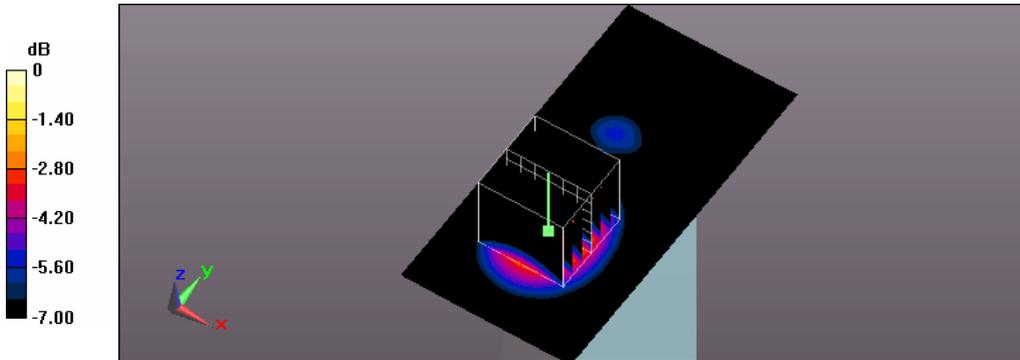
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 27.85 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 2.03 W/kg

SAR(1 g) = 1.11 W/kg; SAR(10 g) = 0.553 W/kg

Maximum value of SAR (measured) = 1.59 W/kg



0 dB = 1.59 W/kg = 2.01 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/21 Time: AM 12:37:07

29_LTE Band7 CH21100_QPSK_BW 20MHz_50RB Size 0RB Offset_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, Generic LTE (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535 \text{ MHz}$; $\sigma = 2.134 \text{ S/m}$; $\epsilon_r = 51.104$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 1.56 W/kg

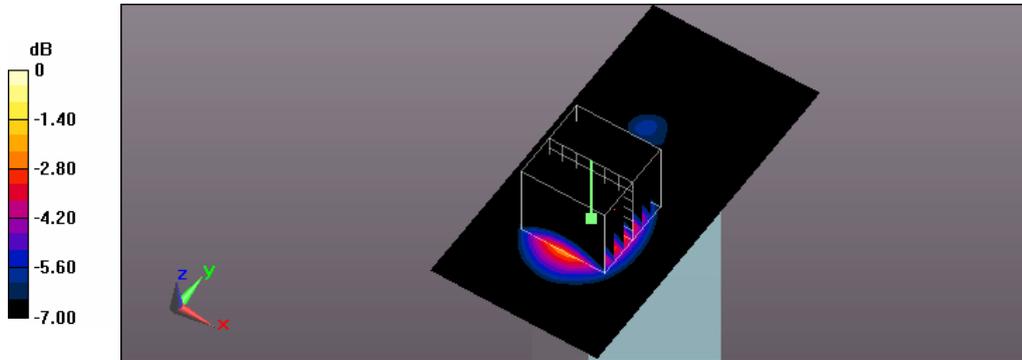
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 27.61 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 2.00 W/kg

SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.530 W/kg

Maximum value of SAR (measured) = 1.55 W/kg



0 dB = 1.55 W/kg = 1.90 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/20 Time: PM 09:58:50

27_LTE Band7 CH21350_QPSK_BW 20MHz_50RB Size 0RB Offset_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2560$ MHz; $\sigma = 2.166$ S/m; $\epsilon_r = 51.085$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.19, 7.19, 7.19); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.42 W/kg

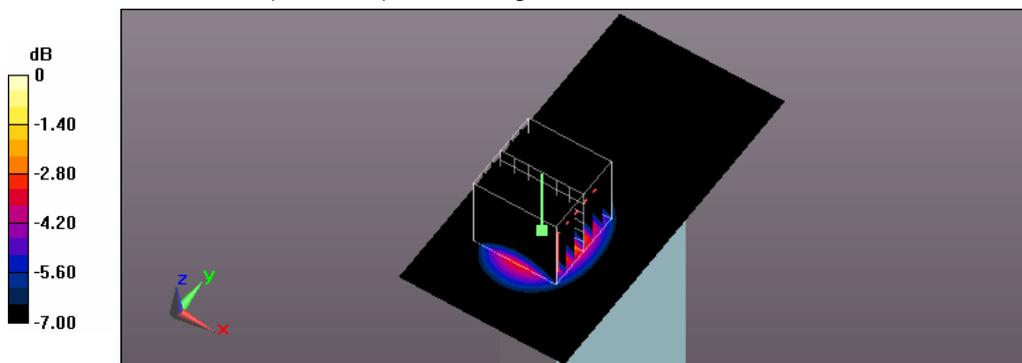
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.55 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.82 W/kg

SAR(1 g) = 0.957 W/kg; SAR(10 g) = 0.468 W/kg

Maximum value of SAR (measured) = 1.39 W/kg



0 dB = 1.39 W/kg = 1.43 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/11 Time: AM 01:21:54

17_LTE Band7 CH20850_QPSK_BW 20MHz_100RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2510$ MHz; $\sigma = 2.096$ S/m; $\epsilon_r = 51.179$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (101x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.14 W/kg

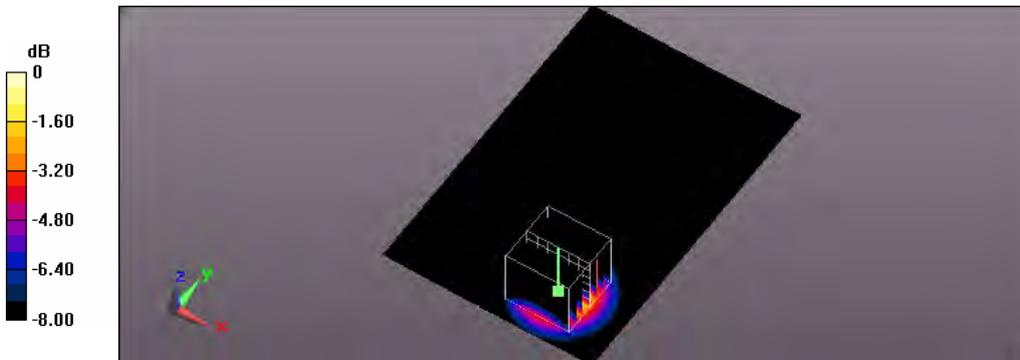
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.02 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 0.776 W/kg; SAR(10 g) = 0.382 W/kg

Maximum value of SAR (measured) = 1.12 W/kg



0 dB = 1.12 W/kg = 0.49 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/11 Time: AM 12:15:44

30_LTE Band7 CH20850_QPSK_BW 20MHz_100RB Size 0RB Offset_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2510$ MHz; $\sigma = 2.096$ S/m; $\epsilon_r = 51.179$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.44 W/kg

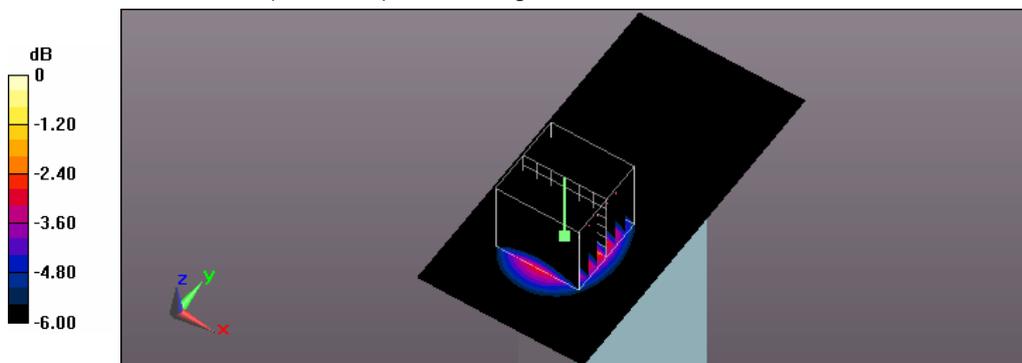
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.66 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.84 W/kg

SAR(1 g) = 0.994 W/kg; SAR(10 g) = 0.500 W/kg

Maximum value of SAR (measured) = 1.43 W/kg



0 dB = 1.43 W/kg = 1.55 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/21 Time: PM 03:33:21

33_LTE Band12 CH23060_QPSK_BW 10MHz_1RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 704 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 704 \text{ MHz}$; $\sigma = 0.95 \text{ S/m}$; $\epsilon_r = 54.723$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.08 W/kg

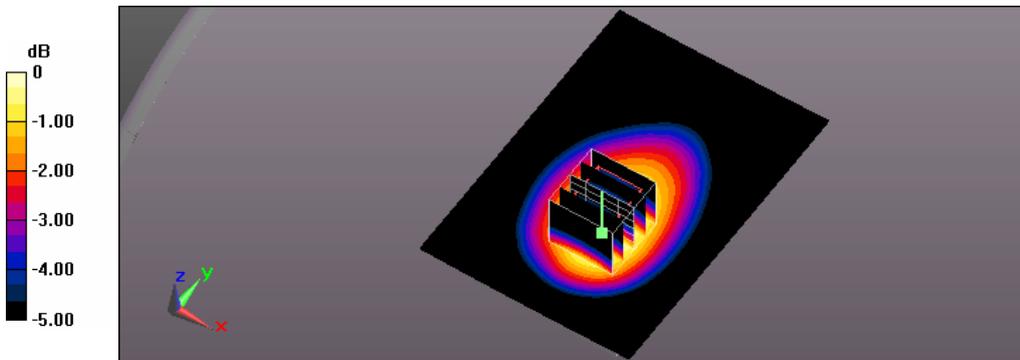
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 33.88 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.898 W/kg; SAR(10 g) = 0.661 W/kg

Maximum value of SAR (measured) = 1.05 W/kg



0 dB = 1.05 W/kg = 0.21 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/21 Time: PM 03:04:16

32_LTE Band12 CH23095_QPSK_BW 10MHz_1RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 707.5 \text{ MHz}$; $\sigma = 0.954 \text{ S/m}$; $\epsilon_r = 54.61$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.12 W/kg

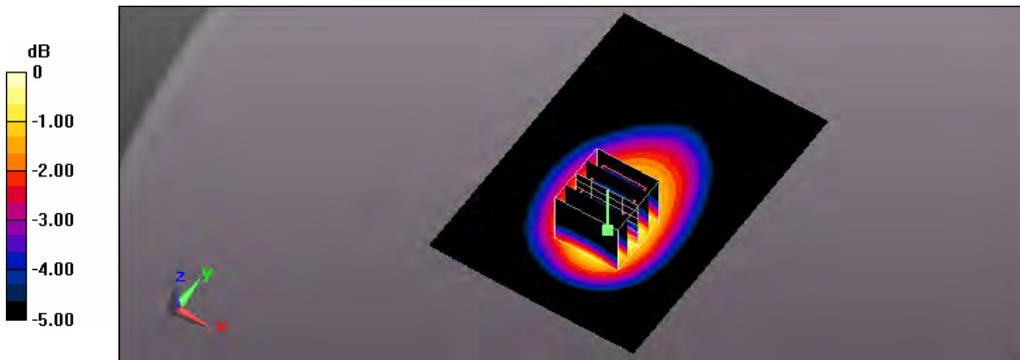
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 34.49 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.958 W/kg; SAR(10 g) = 0.705 W/kg

Maximum value of SAR (measured) = 1.14 W/kg



0 dB = 1.14 W/kg = 0.57 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/21 Time: PM 04:03:46

34_LTE Band12 CH23130_QPSK_BW 10MHz_1RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 711 \text{ MHz}$; $\sigma = 0.958 \text{ S/m}$; $\epsilon_r = 54.522$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.21 W/kg

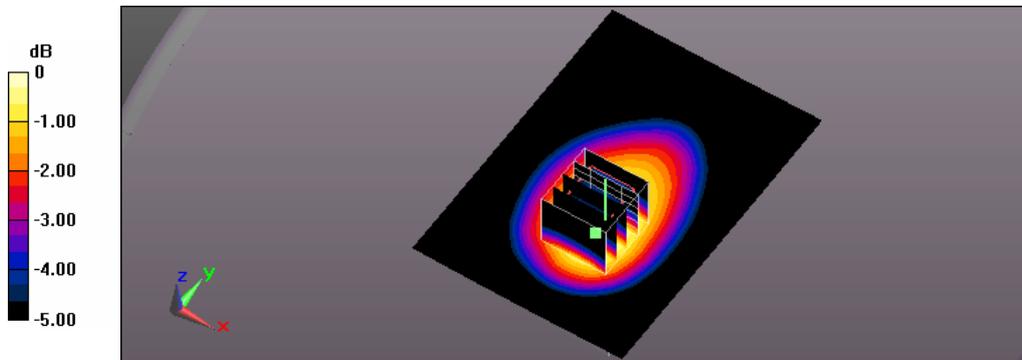
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 35.90 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.749 W/kg

Maximum value of SAR (measured) = 1.19 W/kg



0 dB = 1.19 W/kg = 0.76 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/21 Time: PM 07:43:41

39_LTE Band12 CH23060_QPSK_BW 10MHz_1RB Size 0RB Offset_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 704 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 704 \text{ MHz}$; $\sigma = 0.95 \text{ S/m}$; $\epsilon_r = 54.723$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.860 W/kg

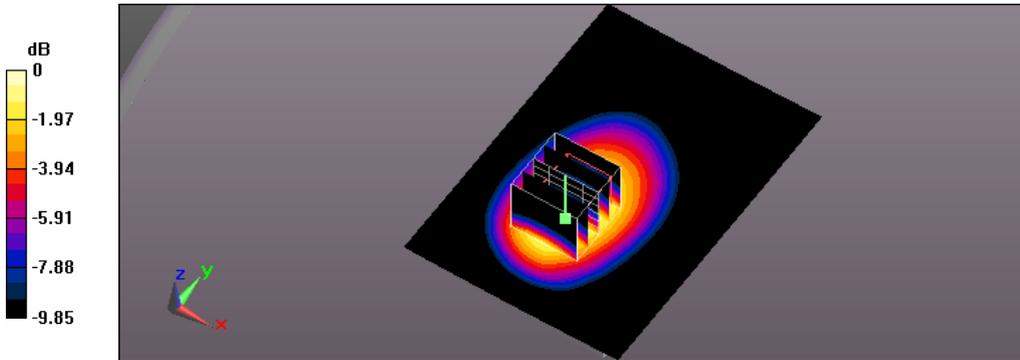
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 30.28 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.963 W/kg

SAR(1 g) = 0.721 W/kg; SAR(10 g) = 0.528 W/kg

Maximum value of SAR (measured) = 0.857 W/kg



0 dB = 0.857 W/kg = -0.67 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/21 Time: PM 07:21:12

38_LTE Band12 CH23095_QPSK_BW 10MHz_1RB Size 0RB Offset_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 707.5$ MHz; $\sigma = 0.954$ S/m; $\epsilon_r = 54.61$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.928 W/kg

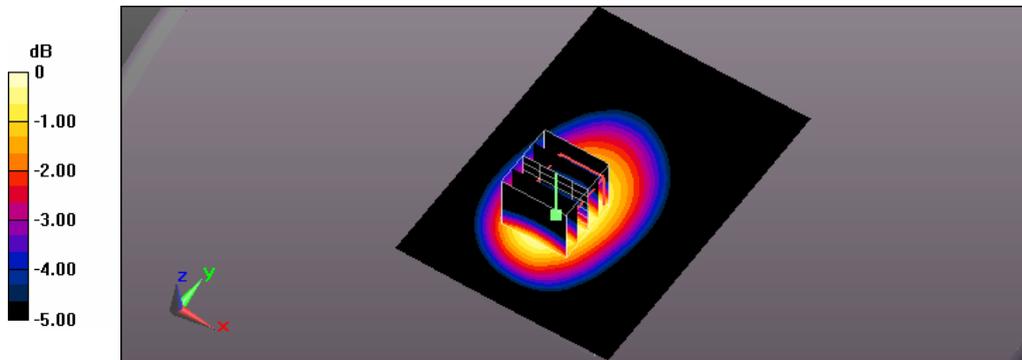
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 31.57 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.770 W/kg; SAR(10 g) = 0.567 W/kg

Maximum value of SAR (measured) = 0.901 W/kg



0 dB = 0.901 W/kg = -0.45 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/21 Time: PM 08:04:19

40_LTE Band12 CH23130_QPSK_BW 10MHz_1RB Size 0RB Offset_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 711 \text{ MHz}$; $\sigma = 0.958 \text{ S/m}$; $\epsilon_r = 54.522$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.03 W/kg

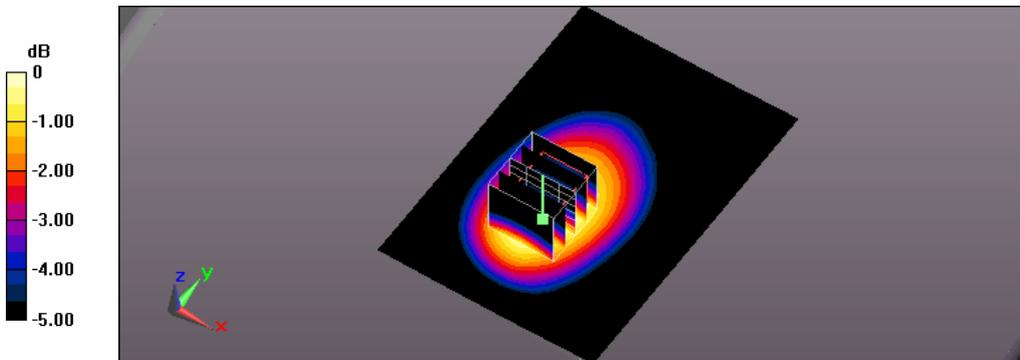
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 32.90 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.14 W/kg

SAR(1 g) = 0.862 W/kg; SAR(10 g) = 0.634 W/kg

Maximum value of SAR (measured) = 1.02 W/kg



0 dB = 1.02 W/kg = 0.09 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/21 Time: PM 09:07:25

42_LTE Band12 CH23095_QPSK_BW 10MHz_1RB Size 0RB Offset_side3_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 707.5$ MHz; $\sigma = 0.954$ S/m; $\epsilon_r = 54.61$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.487 W/kg

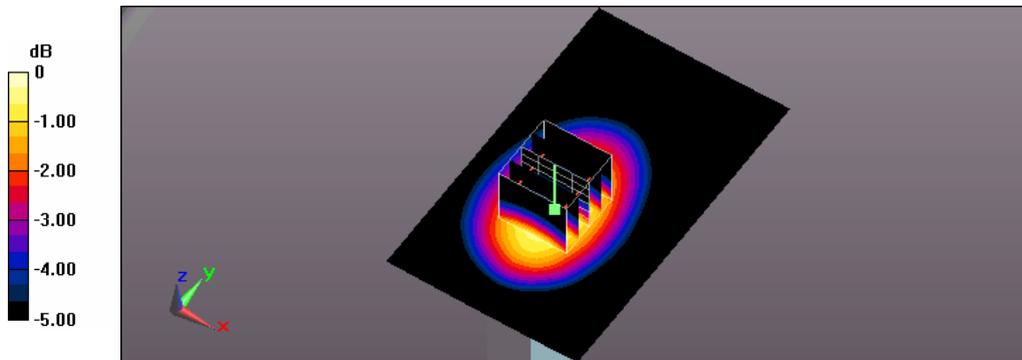
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.96 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.563 W/kg

SAR(1 g) = 0.415 W/kg; SAR(10 g) = 0.298 W/kg

Maximum value of SAR (measured) = 0.498 W/kg



0 dB = 0.498 W/kg = -3.03 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/21 Time: PM 09:43:44

44_LTE Band12 CH23095_QPSK_BW 10MHz_1RB Size 0RB Offset_side4_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 707.5$ MHz; $\sigma = 0.954$ S/m; $\epsilon_r = 54.61$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.539 W/kg

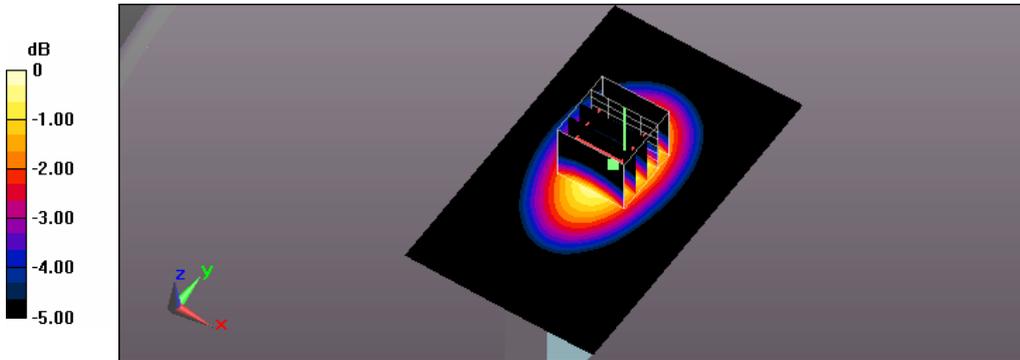
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.96 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.601 W/kg

SAR(1 g) = 0.442 W/kg; SAR(10 g) = 0.313 W/kg

Maximum value of SAR (measured) = 0.530 W/kg



0 dB = 0.530 W/kg = -2.76 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/21 Time: PM 10:22:55

46_LTE Band12 CH23095_QPSK_BW 10MHz_1RB Size 0RB Offset_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 707.5$ MHz; $\sigma = 0.954$ S/m; $\epsilon_r = 54.61$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.0858 W/kg

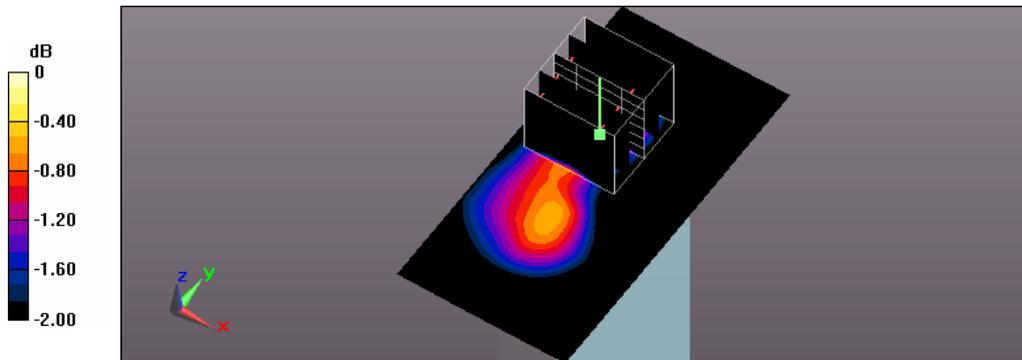
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.336 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.115 W/kg

SAR(1 g) = 0.067 W/kg; SAR(10 g) = 0.042 W/kg

Maximum value of SAR (measured) = 0.0895 W/kg



0 dB = 0.0895 W/kg = -10.48 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/21 Time: PM 06:31:26

36_LTE Band12 CH23060_QPSK_BW 10MHz_25RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 704 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 704 \text{ MHz}$; $\sigma = 0.95 \text{ S/m}$; $\epsilon_r = 54.723$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.866 W/kg

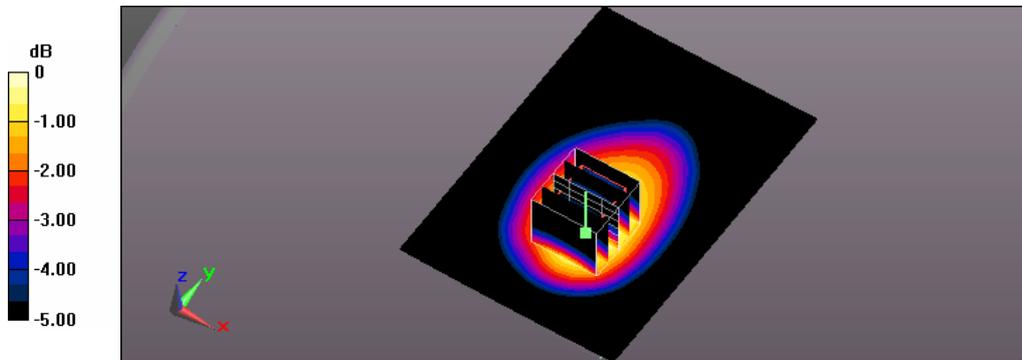
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 30.30 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.966 W/kg

SAR(1 g) = 0.720 W/kg; SAR(10 g) = 0.529 W/kg

Maximum value of SAR (measured) = 0.853 W/kg



0 dB = 0.853 W/kg = -0.69 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/21 Time: PM 04:41:11

35_LTE Band12 CH23095_QPSK_BW 10MHz_25RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 707.5$ MHz; $\sigma = 0.954$ S/m; $\epsilon_r = 54.61$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.892 W/kg

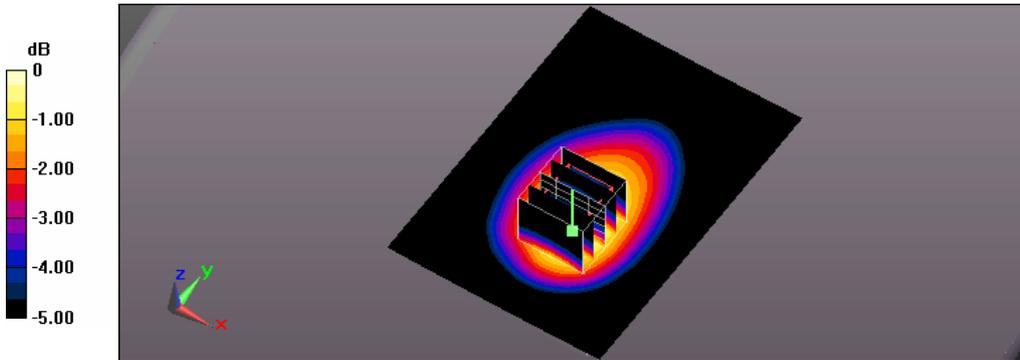
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 30.95 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.762 W/kg; SAR(10 g) = 0.559 W/kg

Maximum value of SAR (measured) = 0.902 W/kg



0 dB = 0.902 W/kg = -0.45 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/21 Time: PM 06:54:07

37_LTE Band12 CH23130_QPSK_BW 10MHz_25RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 711 \text{ MHz}$; $\sigma = 0.958 \text{ S/m}$; $\epsilon_r = 54.522$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.981 W/kg

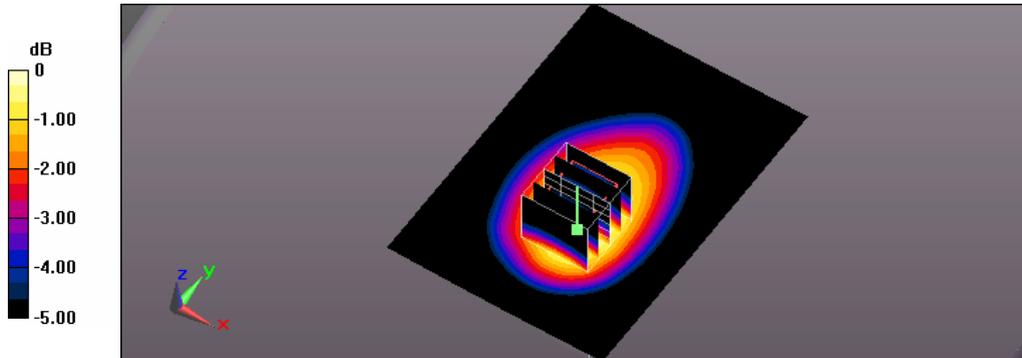
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 32.31 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.10 W/kg

SAR(1 g) = 0.824 W/kg; SAR(10 g) = 0.608 W/kg

Maximum value of SAR (measured) = 0.969 W/kg



0 dB = 0.969 W/kg = -0.14 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/21 Time: PM 08:23:33

41_LTE Band12 CH23095_QPSK_BW 10MHz_25RB Size 0RB Offset_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 707.5 \text{ MHz}$; $\sigma = 0.954 \text{ S/m}$; $\epsilon_r = 54.61$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.764 W/kg

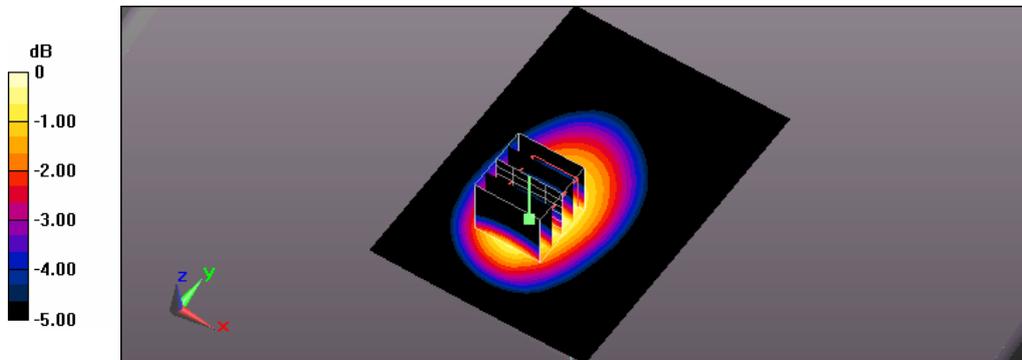
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 28.57 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.854 W/kg

SAR(1 g) = 0.644 W/kg; SAR(10 g) = 0.473 W/kg

Maximum value of SAR (measured) = 0.759 W/kg



0 dB = 0.759 W/kg = -1.20 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/21 Time: PM 09:24:10

43_LTE Band12 CH23095_QPSK_BW 10MHz_25RB Size 0RB Offset_side3_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 707.5$ MHz; $\sigma = 0.954$ S/m; $\epsilon_r = 54.61$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.385 W/kg

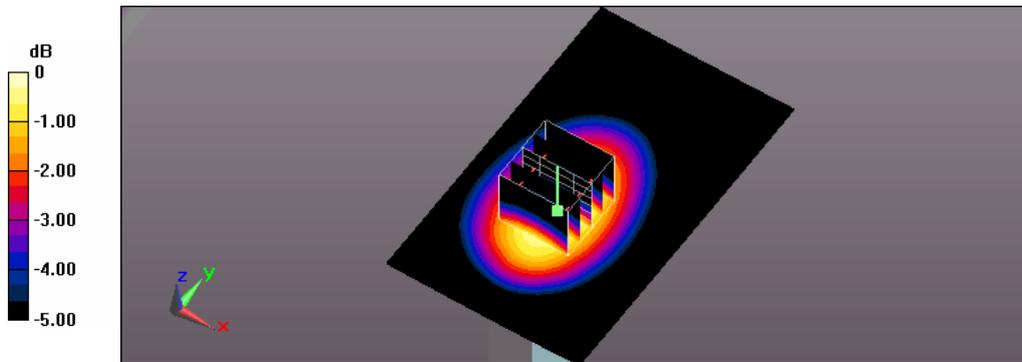
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.22 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.433 W/kg

SAR(1 g) = 0.320 W/kg; SAR(10 g) = 0.230 W/kg

Maximum value of SAR (measured) = 0.382 W/kg



0 dB = 0.382 W/kg = -4.18 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/21 Time: PM 10:01:12

45_LTE Band12 CH23095_QPSK_BW 10MHz_25RB Size 0RB Offset_side4_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 707.5$ MHz; $\sigma = 0.954$ S/m; $\epsilon_r = 54.61$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.432 W/kg

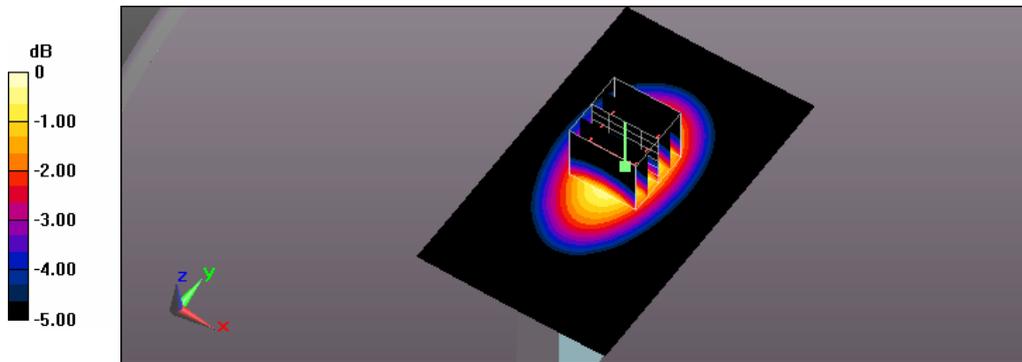
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.56 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.492 W/kg

SAR(1 g) = 0.356 W/kg; SAR(10 g) = 0.252 W/kg

Maximum value of SAR (measured) = 0.431 W/kg



0 dB = 0.431 W/kg = -3.66 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/21 Time: PM 10:37:26

47_LTE Band12 CH23095_QPSK_BW 10MHz_25RB Size 0RB Offset_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 707.5 \text{ MHz}$; $\sigma = 0.954 \text{ S/m}$; $\epsilon_r = 54.61$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (41x81x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0653 W/kg

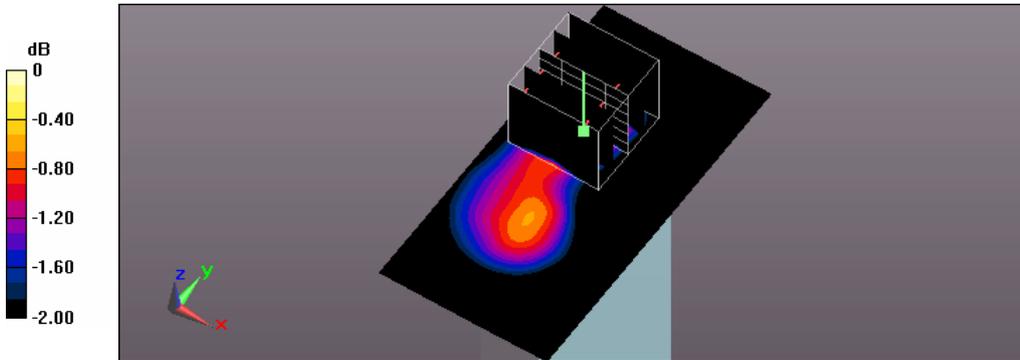
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 8.244 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.0890 W/kg

SAR(1 g) = 0.052 W/kg; SAR(10 g) = 0.033 W/kg

Maximum value of SAR (measured) = 0.0697 W/kg



0 dB = 0.0697 W/kg = -11.57 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/10 Time: AM 09:27:40

48_LTE Band12 CH23130_QPSK_BW 10MHz_50RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 711 \text{ MHz}$; $\sigma = 0.958 \text{ S/m}$; $\epsilon_r = 54.522$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.03 W/kg

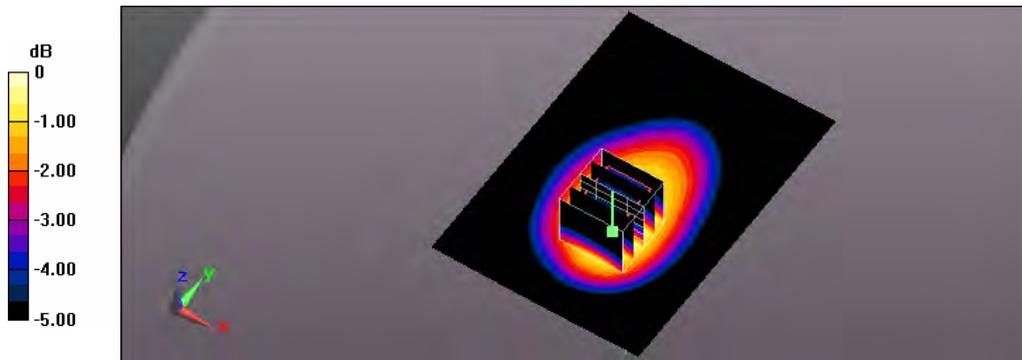
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 32.98 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.16 W/kg

SAR(1 g) = 0.874 W/kg; SAR(10 g) = 0.647 W/kg

Maximum value of SAR (measured) = 1.02 W/kg



0 dB = 1.02 W/kg = 0.09 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/10 Time: AM 09:49:31

49_LTE Band12 CH23130_QPSK_BW 10MHz_50RB Size 0RB Offset_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 711 \text{ MHz}$; $\sigma = 0.958 \text{ S/m}$; $\epsilon_r = 54.522$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.829 W/kg

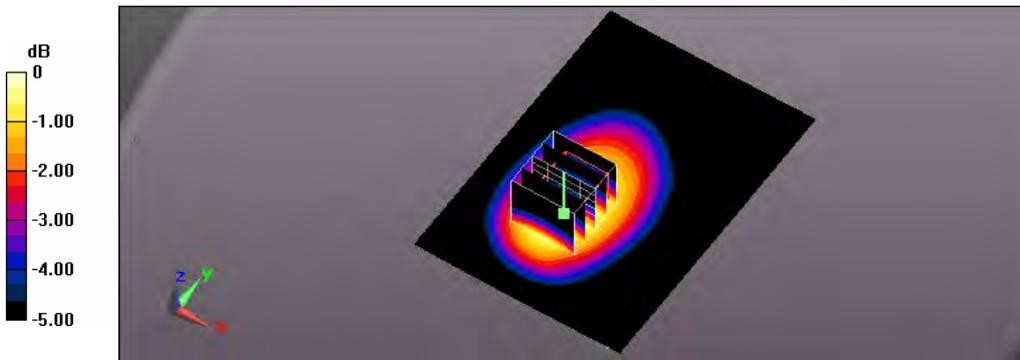
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 29.91 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.932 W/kg

SAR(1 g) = 0.713 W/kg; SAR(10 g) = 0.528 W/kg

Maximum value of SAR (measured) = 0.837 W/kg



0 dB = 0.837 W/kg = -0.77 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/11 Time: PM 09:24:42

116_WCDMA BandII CH9538_RMC-12.2K_original 111_side 1 surface to phantom 10mm_measurement once

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, WCDMA Band II (0); Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1908$ MHz; $\sigma = 1.514$ S/m; $\epsilon_r = 54.324$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.08 W/kg

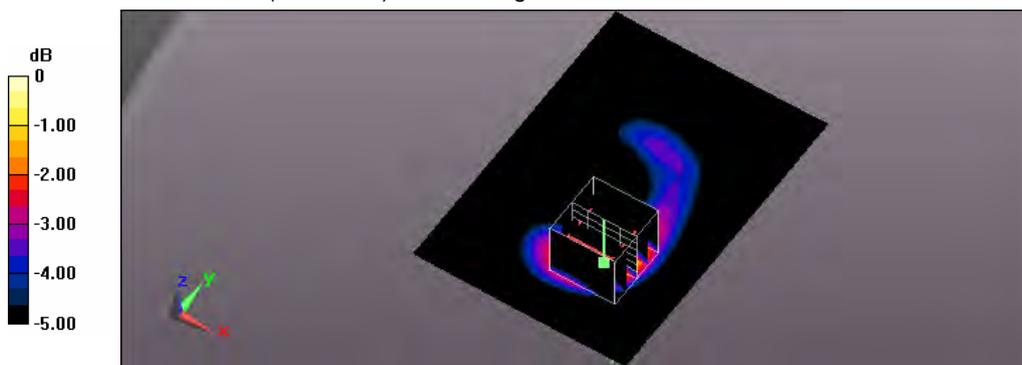
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.78 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.787 W/kg; SAR(10 g) = 0.457 W/kg

Maximum value of SAR (measured) = 1.05 W/kg



0 dB = 1.05 W/kg = 0.21 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/9 Time: PM 10:21:22

108_WCDMA BandV CH4233_RMC-12.2K_original 104_side 2 surface to phantom 10mm_measurement once

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, WCDMA Band V (0); Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 847 \text{ MHz}$; $\sigma = 0.995 \text{ S/m}$; $\epsilon_r = 54.871$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.03 W/kg

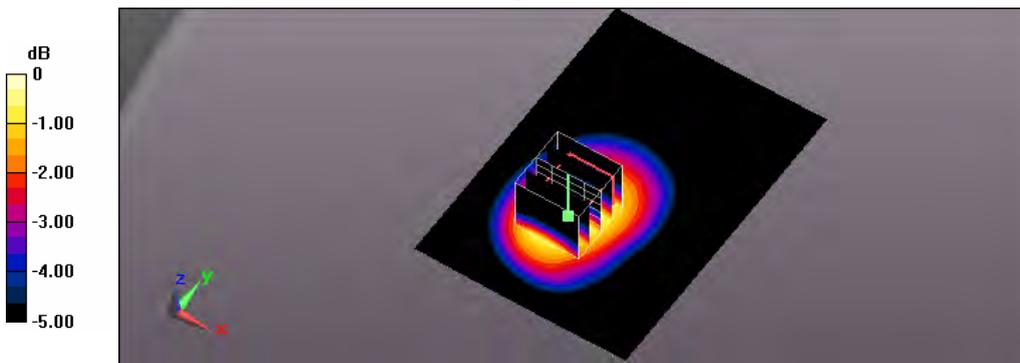
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 32.48 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.864 W/kg; SAR(10 g) = 0.619 W/kg

Maximum value of SAR (measured) = 1.03 W/kg



0 dB = 1.03 W/kg = 0.13 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/4 Time: PM 09:31:06

94_LTE Band2 CH19100_QPSK_BW 20MHz_1RB Size 0RB Offset_original 92_side 1 surface to phantom 10mm_measurement onece

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, Generic LTE (0); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.502$ S/m; $\epsilon_r = 54.362$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.46, 7.46, 7.46); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.987 W/kg

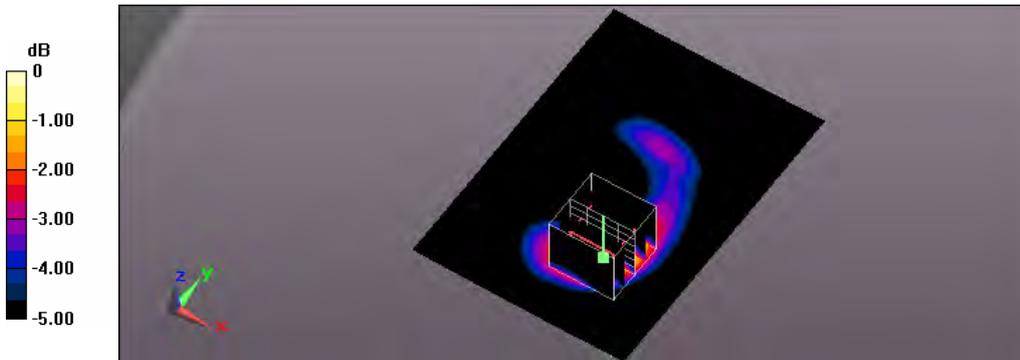
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.09 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.16 W/kg

SAR(1 g) = 0.715 W/kg; SAR(10 g) = 0.416 W/kg

Maximum value of SAR (measured) = 0.956 W/kg



0 dB = 0.956 W/kg = -0.20 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/5 Time: AM 12:53:53

98_LTE Band4 CH20300_QPSK_BW 20MHz_1RB Size 0RB Offset_original 96_side 1 surface to phantom 10mm_measurement onece

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1745 \text{ MHz}$; $\sigma = 1.52 \text{ S/m}$; $\epsilon_r = 54.05$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.65, 7.65, 7.65); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.32 W/kg

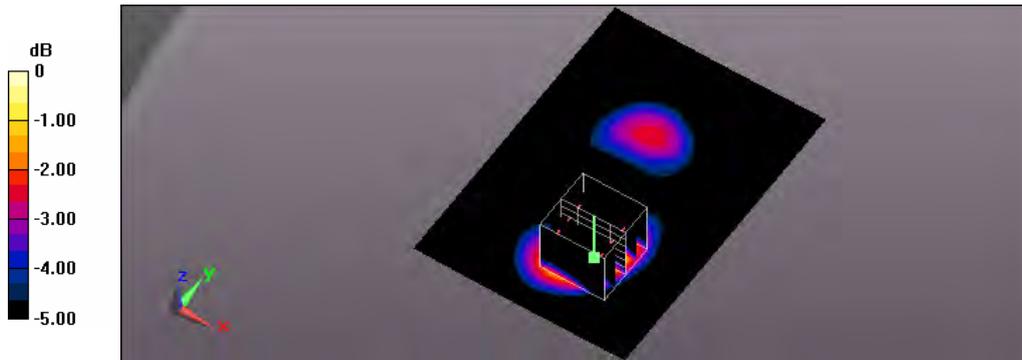
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 28.42 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.58 W/kg

SAR(1 g) = 0.953 W/kg; SAR(10 g) = 0.551 W/kg

Maximum value of SAR (measured) = 1.28 W/kg



0 dB = 1.28 W/kg = 1.07 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/23 Time: PM 07:27:54

85_LTE Band5 CH20600_QPSK_BW 10MHz_1RB Size 0RB Offset_original 75_side 2 surface to phantom 10mm_measurement onece

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 844 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 844 \text{ MHz}$; $\sigma = 0.991 \text{ S/m}$; $\epsilon_r = 54.871$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.42, 9.42, 9.42); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.07 W/kg

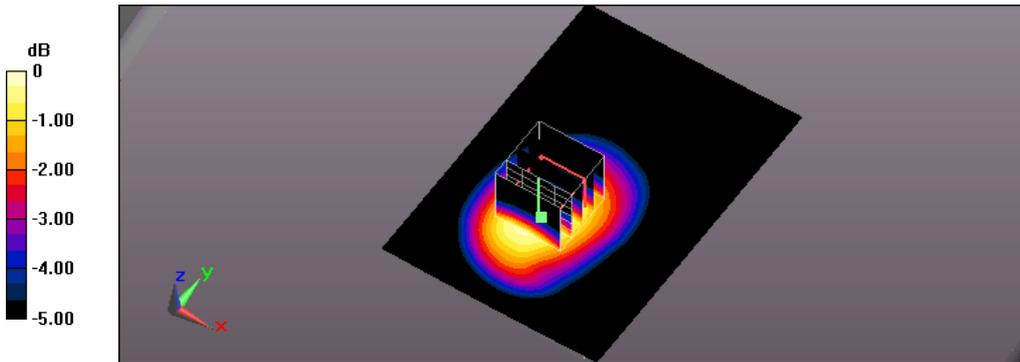
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 33.40 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.22 W/kg

SAR(1 g) = 0.902 W/kg; SAR(10 g) = 0.645 W/kg

Maximum value of SAR (measured) = 1.08 W/kg



0 dB = 1.08 W/kg = 0.33 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/11 Time: AM 02:17:54

31_LTE Band7 CH21350_QPSK_BW 20MHz_1RB Size 0RB Offset_original 26_side 5 surface to phantom 10mm_measurement onece

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2560 \text{ MHz}$; $\sigma = 2.166 \text{ S/m}$; $\epsilon_r = 51.085$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.19, 7.19, 7.19); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 1.90 W/kg

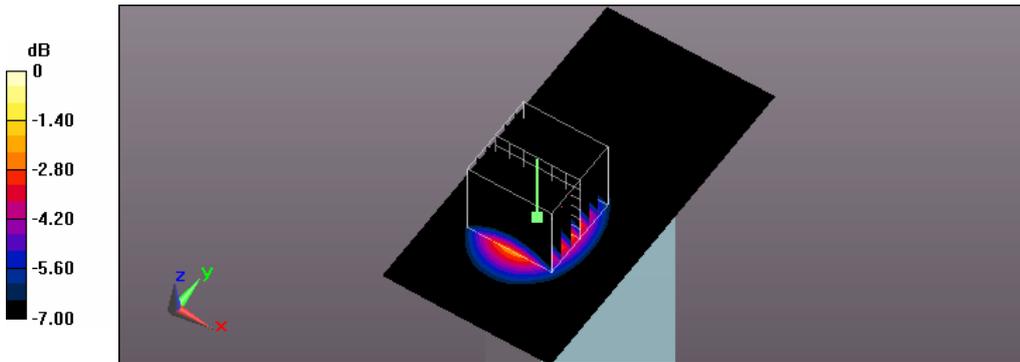
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 28.96 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 2.47 W/kg

SAR(1 g) = 1.29 W/kg; SAR(10 g) = 0.628 W/kg

Maximum value of SAR (measured) = 1.86 W/kg



0 dB = 1.86 W/kg = 2.70 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/10/22 Time: AM 12:23:29

50_LTE Band12 CH23130_QPSK_BW 10MHz_1RB Size 0RB Offset_original 34_side 1 surface to phantom 10mm_measurement onece

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, Generic LTE (0); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 711 \text{ MHz}$; $\sigma = 0.958 \text{ S/m}$; $\epsilon_r = 54.522$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.53, 9.53, 9.53); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.26 W/kg

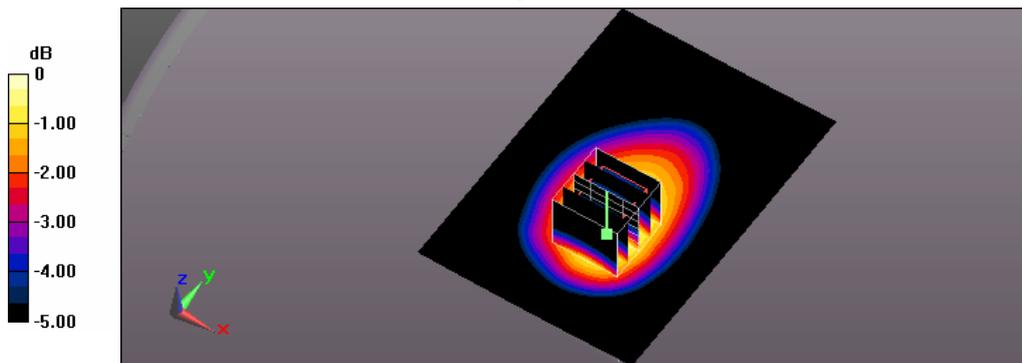
Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 36.57 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.789 W/kg

Maximum value of SAR (measured) = 1.27 W/kg



0 dB = 1.27 W/kg = 1.04 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/12/4 Time: PM 01:11:08

141_LTE Band30 CH27710_QPSK_BW 10MHz_1RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2310$ MHz; $\sigma = 1.756$ S/m; $\epsilon_r = 51.961$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52); Calibrated: 2014/1/13;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (101x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.18 W/kg

Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.36 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.46 W/kg

SAR(1 g) = 0.848 W/kg; SAR(10 g) = 0.479 W/kg

Maximum value of SAR (measured) = 1.16 W/kg

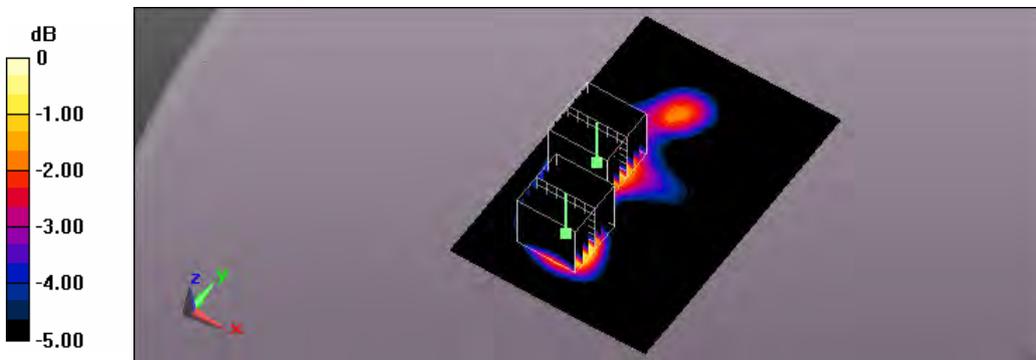
Flat/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.36 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.684 W/kg; SAR(10 g) = 0.406 W/kg

Maximum value of SAR (measured) = 0.909 W/kg



0 dB = 0.909 W/kg = -0.41 dBW/kg



Test Laboratory: A Test Lab Techno Corp.

Date: 2015/12/4 Time: PM 05:34:18

143_LTE Band30 CH27710_QPSK_BW 10MHz_1RB Size 0RB Offset_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2310$ MHz; $\sigma = 1.756$ S/m; $\epsilon_r = 51.961$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52); Calibrated: 2014/1/13;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (101x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.991 W/kg

Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.52 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.22 W/kg

SAR(1 g) = 0.704 W/kg; SAR(10 g) = 0.397 W/kg

Maximum value of SAR (measured) = 0.972 W/kg

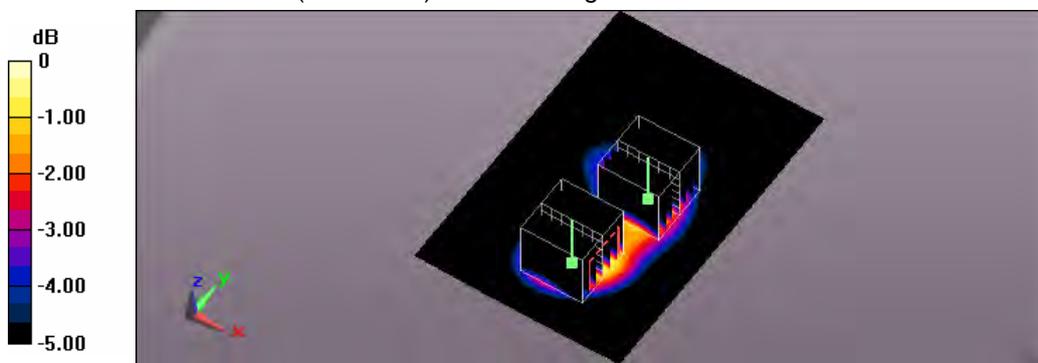
Flat/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.52 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.16 W/kg

SAR(1 g) = 0.719 W/kg; SAR(10 g) = 0.425 W/kg

Maximum value of SAR (measured) = 0.954 W/kg



0 dB = 0.954 W/kg = -0.20 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/12/4 Time: PM 07:29:25

145_LTE Band30 CH27710_QPSK_BW 10MHz_1RB Size 0RB Offset_side3_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2310$ MHz; $\sigma = 1.756$ S/m; $\epsilon_r = 51.961$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52); Calibrated: 2014/1/13;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (91x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.841 W/kg

Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.31 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.632 W/kg; SAR(10 g) = 0.371 W/kg

Maximum value of SAR (measured) = 0.838 W/kg

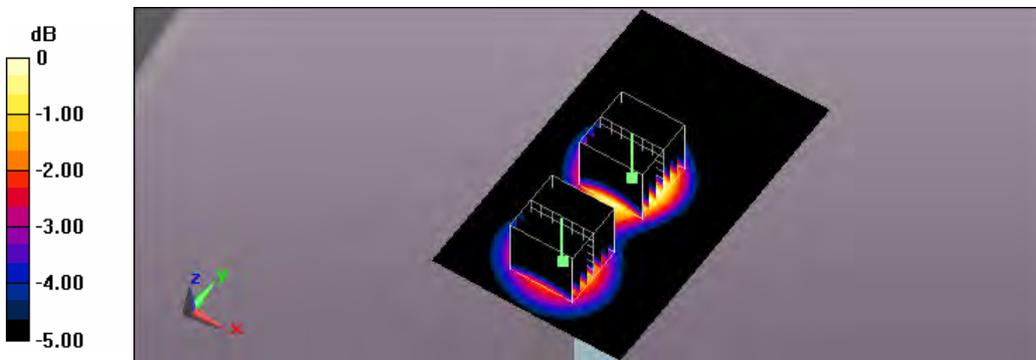
Flat/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.31 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.744 W/kg

SAR(1 g) = 0.446 W/kg; SAR(10 g) = 0.260 W/kg

Maximum value of SAR (measured) = 0.601 W/kg



0 dB = 0.601 W/kg = -2.21 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/12/4 Time: PM 08:45:09

147_LTE Band30 CH27710_QPSK_BW 10MHz_1RB Size 0RB Offset_side4_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2310$ MHz; $\sigma = 1.756$ S/m; $\epsilon_r = 51.961$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52); Calibrated: 2014/1/13;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (91x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.343 W/kg

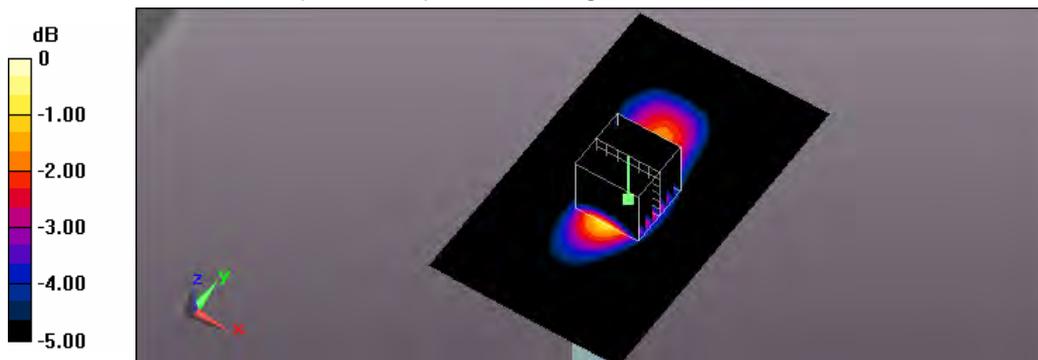
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.09 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.424 W/kg

SAR(1 g) = 0.253 W/kg; SAR(10 g) = 0.144 W/kg

Maximum value of SAR (measured) = 0.342 W/kg



0 dB = 0.342 W/kg = -4.66 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/12/4 Time: PM 09:53:43

149_LTE Band30 CH27710_QPSK_BW 10MHz_1RB Size 0RB Offset_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, Generic LTE (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2310$ MHz; $\sigma = 1.756$ S/m; $\epsilon_r = 51.961$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52); Calibrated: 2014/1/13;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.314 W/kg

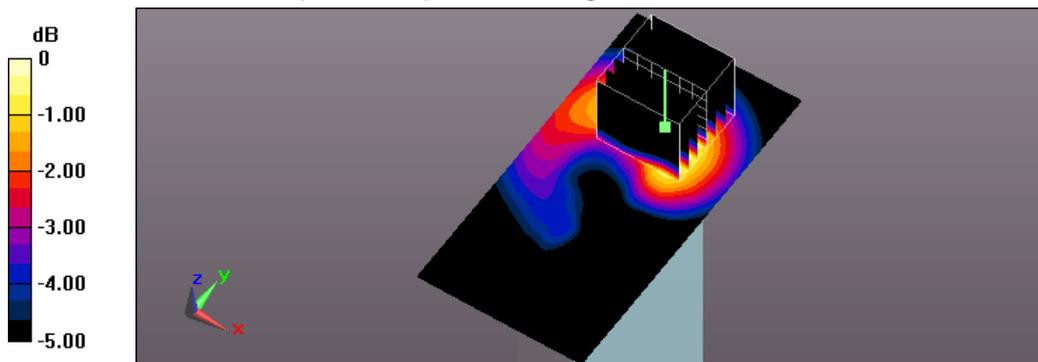
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.80 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.395 W/kg

SAR(1 g) = 0.233 W/kg; SAR(10 g) = 0.137 W/kg

Maximum value of SAR (measured) = 0.316 W/kg



0 dB = 0.316 W/kg = -5.00 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/12/4 Time: PM 04:23:12

142_LTE Band30 CH27710_QPSK_BW 10MHz_25RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2310$ MHz; $\sigma = 1.756$ S/m; $\epsilon_r = 51.961$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52); Calibrated: 2014/1/13;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (101x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.01 W/kg

Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.10 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.23 W/kg

SAR(1 g) = 0.721 W/kg; SAR(10 g) = 0.407 W/kg

Maximum value of SAR (measured) = 0.981 W/kg

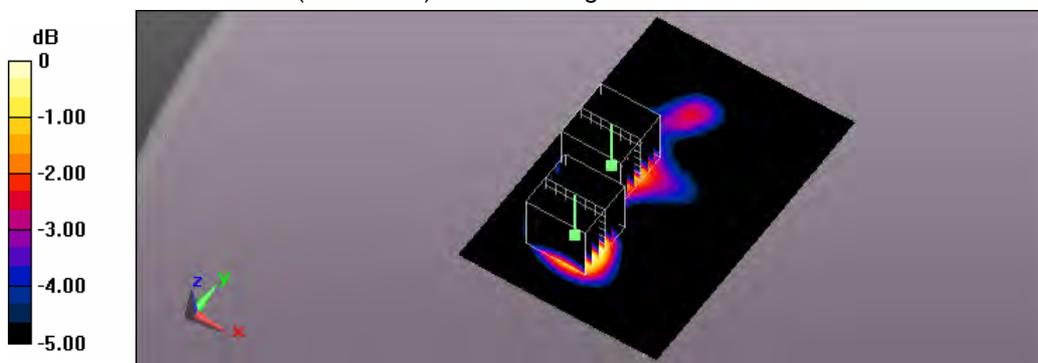
Flat/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.10 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.925 W/kg

SAR(1 g) = 0.564 W/kg; SAR(10 g) = 0.335 W/kg

Maximum value of SAR (measured) = 0.753 W/kg



0 dB = 0.753 W/kg = -1.23 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/12/4 Time: PM 06:26:06

144_LTE Band30 CH27710_QPSK_BW 10MHz_25RB Size 0RB Offset_side2_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2310$ MHz; $\sigma = 1.756$ S/m; $\epsilon_r = 51.961$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52); Calibrated: 2014/1/13;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (101x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.791 W/kg

Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.97 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.976 W/kg

SAR(1 g) = 0.565 W/kg; SAR(10 g) = 0.318 W/kg

Maximum value of SAR (measured) = 0.777 W/kg

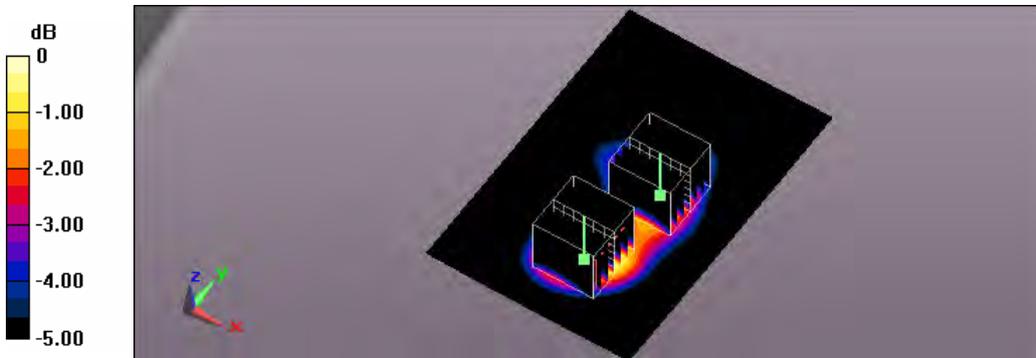
Flat/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.97 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.910 W/kg

SAR(1 g) = 0.557 W/kg; SAR(10 g) = 0.330 W/kg

Maximum value of SAR (measured) = 0.743 W/kg



0 dB = 0.743 W/kg = -1.29 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/12/4 Time: PM 08:12:20

146_LTE Band30 CH27710_QPSK_BW 10MHz_25RB Size 0RB Offset_side3_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2310$ MHz; $\sigma = 1.756$ S/m; $\epsilon_r = 51.961$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52); Calibrated: 2014/1/13;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (91x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.663 W/kg

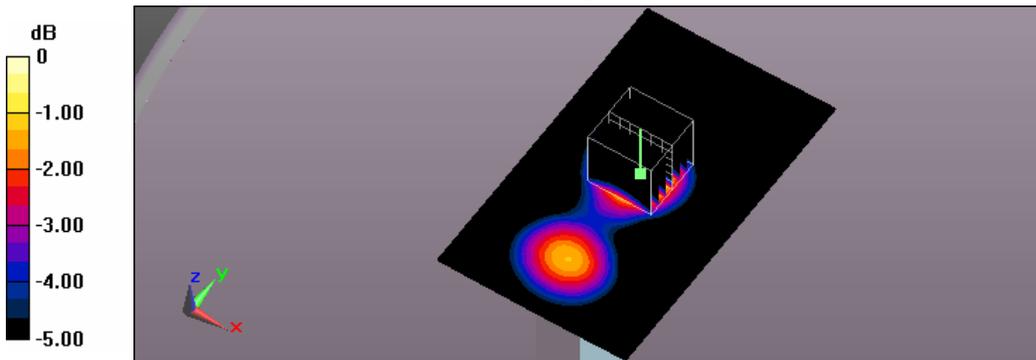
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.83 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.801 W/kg

SAR(1 g) = 0.497 W/kg; SAR(10 g) = 0.291 W/kg

Maximum value of SAR (measured) = 0.659 W/kg



0 dB = 0.659 W/kg = -1.81 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/12/4 Time: PM 09:16:45

148_LTE Band30 CH27710_QPSK_BW 10MHz_25RB Size 0RB Offset_side4_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2310$ MHz; $\sigma = 1.756$ S/m; $\epsilon_r = 51.961$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52); Calibrated: 2014/1/13;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (91x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.265 W/kg

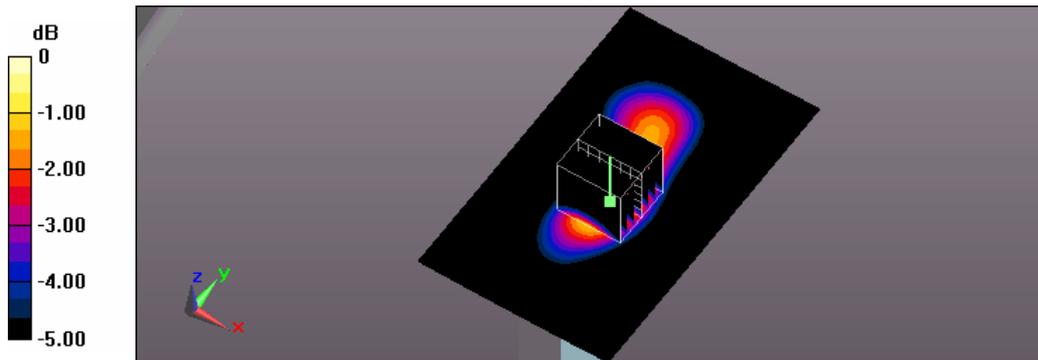
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.40 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.330 W/kg

SAR(1 g) = 0.196 W/kg; SAR(10 g) = 0.112 W/kg

Maximum value of SAR (measured) = 0.265 W/kg



0 dB = 0.265 W/kg = -5.77 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/12/4 Time: PM 10:17:05

150_LTE Band30 CH27710_QPSK_BW 10MHz_25RB Size 0RB Offset_side5_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2310$ MHz; $\sigma = 1.756$ S/m; $\epsilon_r = 51.961$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52); Calibrated: 2014/1/13;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.250 W/kg

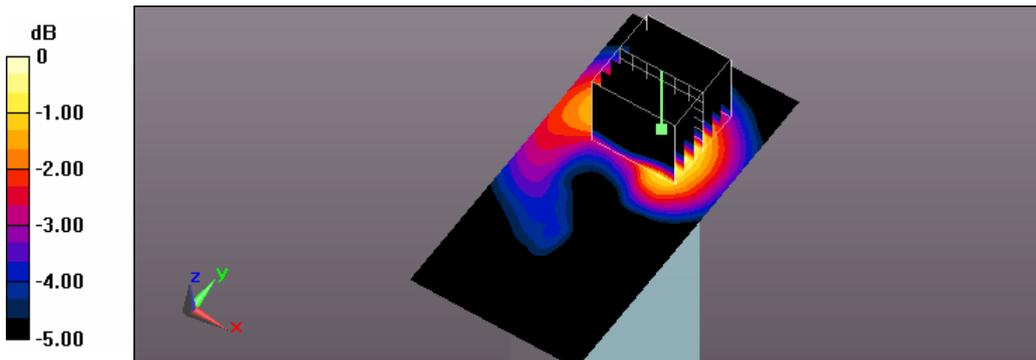
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.38 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.316 W/kg

SAR(1 g) = 0.188 W/kg; SAR(10 g) = 0.110 W/kg

Maximum value of SAR (measured) = 0.252 W/kg



0 dB = 0.252 W/kg = -5.99 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/12/4 Time: PM 11:50:21

151_LTE Band30 CH27710_QPSK_BW 10MHz_50RB Size 0RB Offset_side1_10mm

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2310$ MHz; $\sigma = 1.756$ S/m; $\epsilon_r = 51.961$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52); Calibrated: 2014/1/13;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (101x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.977 W/kg

Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.01 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.697 W/kg; SAR(10 g) = 0.391 W/kg

Maximum value of SAR (measured) = 0.955 W/kg

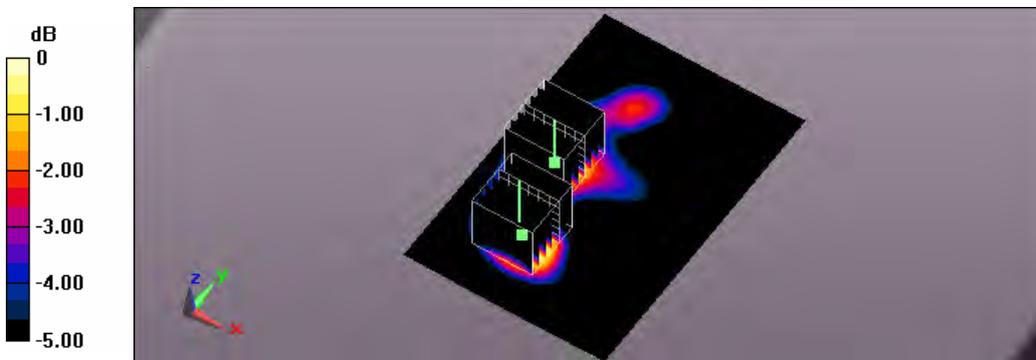
Flat/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.01 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.902 W/kg

SAR(1 g) = 0.547 W/kg; SAR(10 g) = 0.321 W/kg

Maximum value of SAR (measured) = 0.734 W/kg



0 dB = 0.734 W/kg = -1.34 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/12/5 Time: AM 12:37:39

152_LTE Band30 CH27710_QPSK_BW 10MHz_1RB Size 0RB Offset_original 129_side 1 surface to phantom 10mm_measurement once

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, Generic LTE (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2310$ MHz; $\sigma = 1.756$ S/m; $\epsilon_r = 51.961$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52); Calibrated: 2014/1/13;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (101x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.20 W/kg

Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.70 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.47 W/kg

SAR(1 g) = 0.855 W/kg; SAR(10 g) = 0.481 W/kg

Maximum value of SAR (measured) = 1.17 W/kg

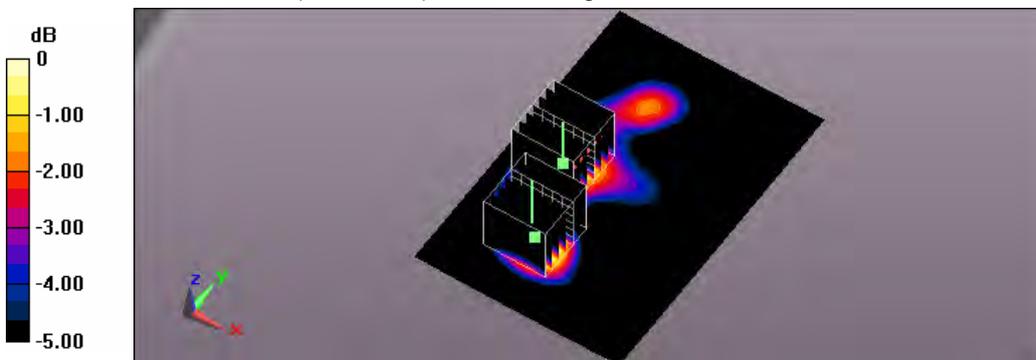
Flat/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.70 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.718 W/kg; SAR(10 g) = 0.424 W/kg

Maximum value of SAR (measured) = 0.959 W/kg



0 dB = 0.959 W/kg = -0.18 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/25 Time: AM 03:34:14

129_802.11b CH6_1M_side2_10mm_Antenna0

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.944 \text{ S/m}$; $\epsilon_r = 51.158$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (101x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0130 W/kg

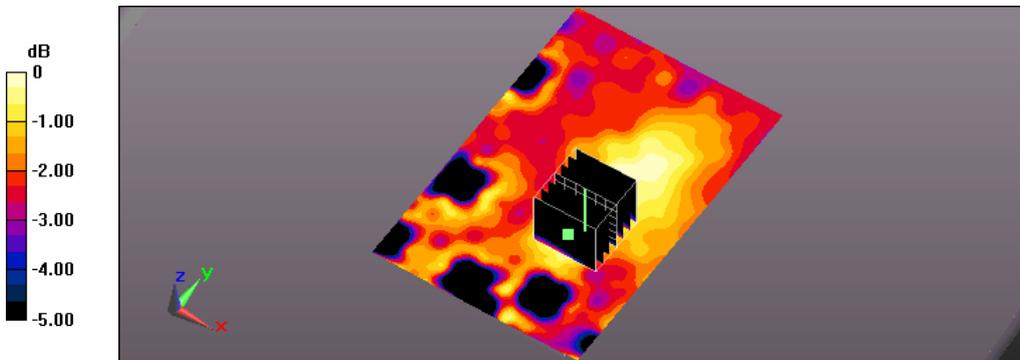
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.264 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.0160 W/kg

SAR(1 g) = 0.00705 W/kg; SAR(10 g) = 0.00392 W/kg

Maximum value of SAR (measured) = 0.0106 W/kg



0 dB = 0.0106 W/kg = -19.75 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/12 Time: PM 03:10:34

117_802.11b CH6_1M_side3_10mm_Antenna0

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.944 \text{ S/m}$; $\epsilon_r = 51.158$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (91x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0615 W/kg

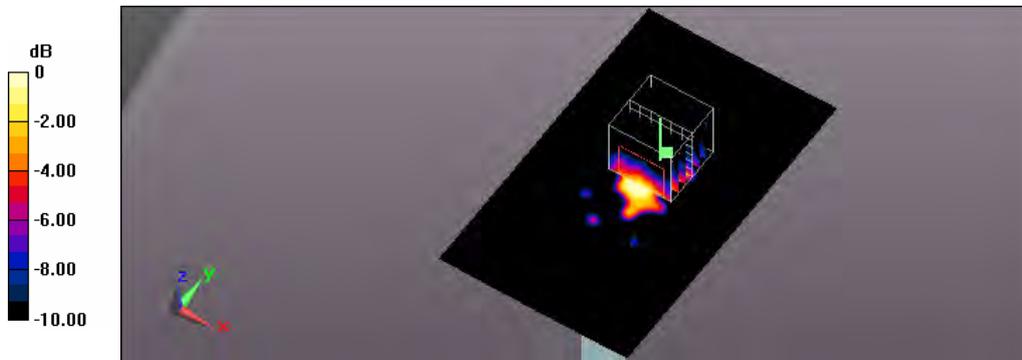
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.217 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.0280 W/kg

SAR(1 g) = 0.018 W/kg; SAR(10 g) = 0.00729 W/kg

Maximum value of SAR (measured) = 0.0254 W/kg



0 dB = 0.0254 W/kg = -15.95 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/25 Time: AM 04:54:28

130_802.11b CH6_1M_side5_10mm_Antenna0

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.944 \text{ S/m}$; $\epsilon_r = 51.158$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0112 W/kg

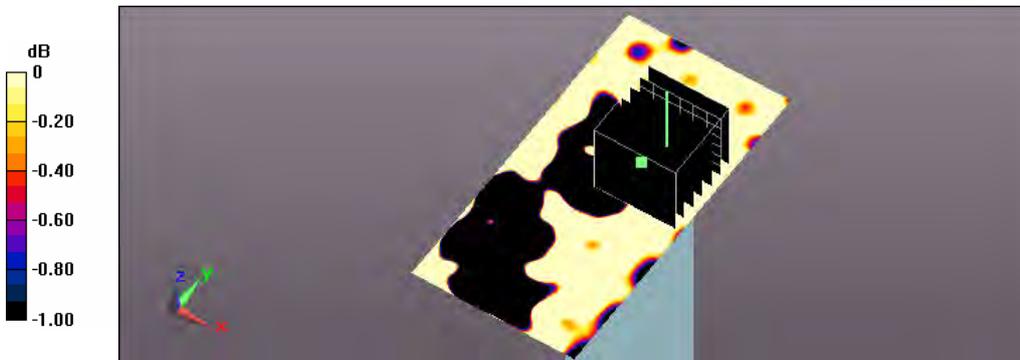
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 1.589 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.00776 W/kg

SAR(1 g) = 0.00304 W/kg; SAR(10 g) = 0.00147 W/kg

Maximum value of SAR (measured) = 0.00452 W/kg



0 dB = 0.00452 W/kg = -23.45 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/25 Time: AM 08:15:43

131_802.11b CH6_1M_side2_10mm_Antenna1

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.944 \text{ S/m}$; $\epsilon_r = 51.158$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (101x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0221 W/kg

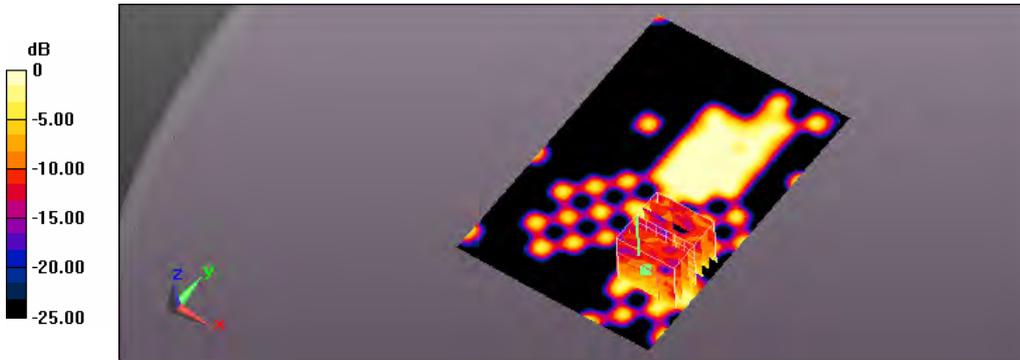
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.441 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.0240 W/kg

SAR(1 g) = 0.00687 W/kg; SAR(10 g) = 0.00281 W/kg

Maximum value of SAR (measured) = 0.0118 W/kg



0 dB = 0.0118 W/kg = -19.28 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/12 Time: PM 04:14:46

118_802.11b CH6_1M_side3_10mm_Antenna1

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.944 \text{ S/m}$; $\epsilon_r = 51.158$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (91x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0328 W/kg

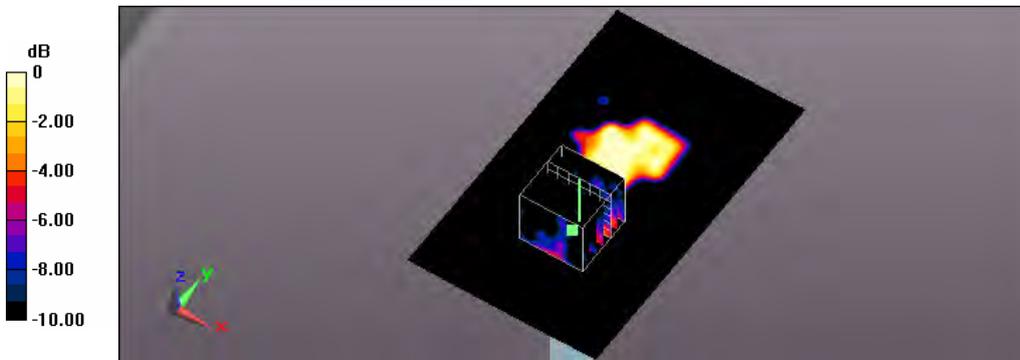
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.874 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.0410 W/kg

SAR(1 g) = 0.017 W/kg; SAR(10 g) = 0.00596 W/kg

Maximum value of SAR (measured) = 0.0246 W/kg



0 dB = 0.0246 W/kg = -16.09 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/25 Time: AM 06:18:27

132_802.11b CH6_1M_side5_10mm_Antenna1

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.944 \text{ S/m}$; $\epsilon_r = 51.158$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.29, 7.29, 7.29); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (61x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0133 W/kg

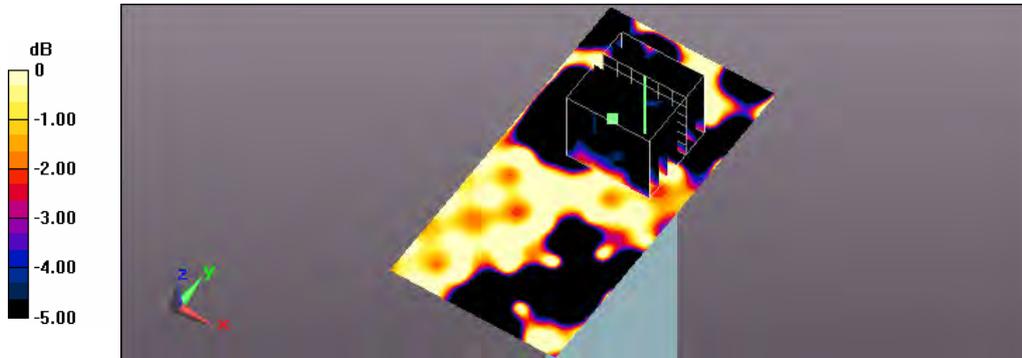
Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 1.364 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.00722 W/kg

SAR(1 g) = 0.00395 W/kg; SAR(10 g) = 0.00224 W/kg

Maximum value of SAR (measured) = 0.00538 W/kg



0 dB = 0.00538 W/kg = -22.69 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/12 Time: PM 09:30:41

119_802.11a_CH36_6M_side1_10mm_Antenna0

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5180 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5180$ MHz; $\sigma = 5.496$ S/m; $\epsilon_r = 47.812$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(4.96, 4.96, 4.96); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (121x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.0847 W/kg

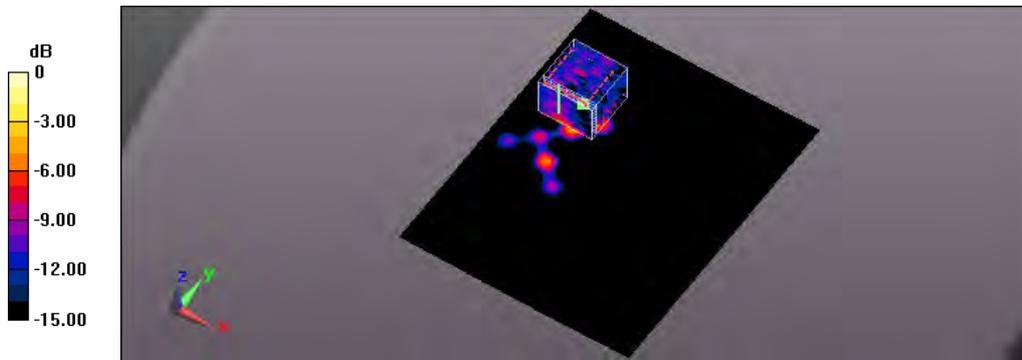
Flat/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.680 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.709 W/kg

SAR(1 g) = 0.056 W/kg; SAR(10 g) = 0.016 W/kg

Maximum value of SAR (measured) = 0.127 W/kg



0 dB = 0.127 W/kg = -8.96 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/13 Time: AM 03:37:42

123_802.11a_CH161_6M_side1_10mm_Antenna0

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5805 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5805 \text{ MHz}$; $\sigma = 6.272 \text{ S/m}$; $\epsilon_r = 46.395$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(4.35, 4.35, 4.35); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (121x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.140 W/kg

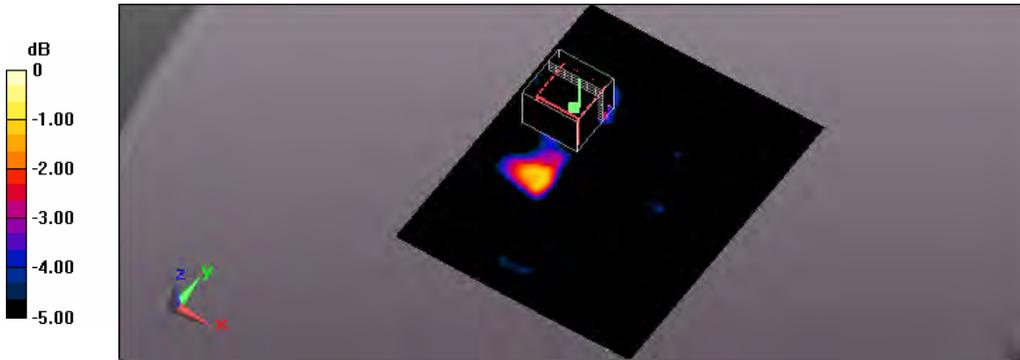
Flat/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 4.387 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.628 W/kg

SAR(1 g) = 0.060 W/kg; SAR(10 g) = 0.024 W/kg

Maximum value of SAR (measured) = 0.121 W/kg



0 dB = 0.121 W/kg = -9.17 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/25 Time: PM 12:46:40

133_802.11a_CH36_6M_side2_10mm_Antenna0

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5180 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5180 \text{ MHz}$; $\sigma = 5.496 \text{ S/m}$; $\epsilon_r = 47.812$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(4.96, 4.96, 4.96); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (121x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0473 W/kg

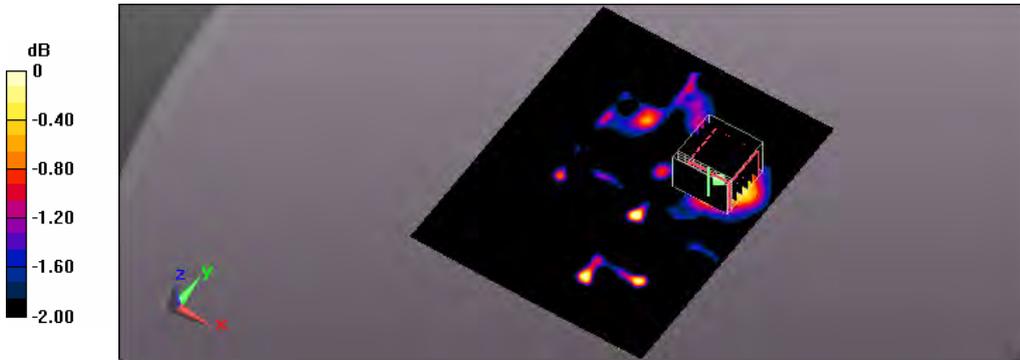
Flat/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 3.348 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.167 W/kg

SAR(1 g) = 0.023 W/kg; SAR(10 g) = 0.00919 W/kg

Maximum value of SAR (measured) = 0.0444 W/kg



0 dB = 0.0444 W/kg = -13.53 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/25 Time: PM 06:32:35

135_802.11a_CH161_6M_side2_10mm_Antenna0

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5805 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5805 \text{ MHz}$; $\sigma = 6.272 \text{ S/m}$; $\epsilon_r = 46.395$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(4.35, 4.35, 4.35); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (121x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.182 W/kg

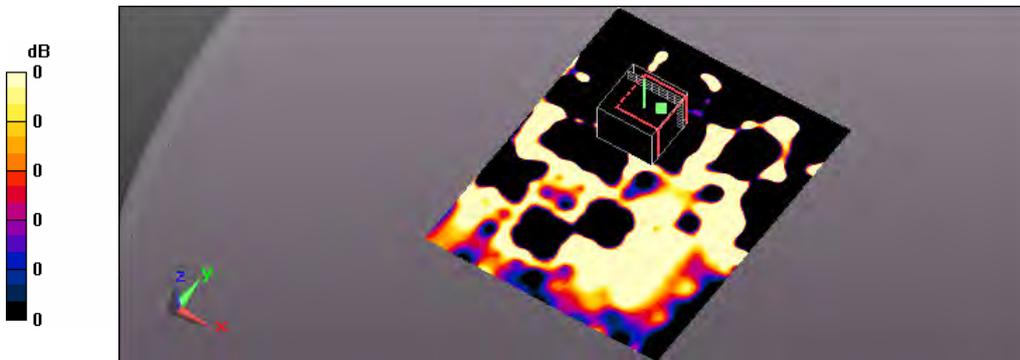
Flat/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 3.266 V/m; Power Drift = -0.16

Peak SAR (extrapolated) = 0.260 W/kg

SAR(1 g) = 0.018 W/kg; SAR(10 g) = 0.00771 W/kg

Maximum value of SAR (measured) = 0.0320 W/kg



0 dB = 0.0320 W/kg = -14.95 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/12 Time: PM 10:25:23

120_802.11a_CH36_6M_side3_10mm_Antenna0

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5180 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5180 \text{ MHz}$; $\sigma = 5.496 \text{ S/m}$; $\epsilon_r = 47.812$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(4.96, 4.96, 4.96); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (91x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.141 W/kg

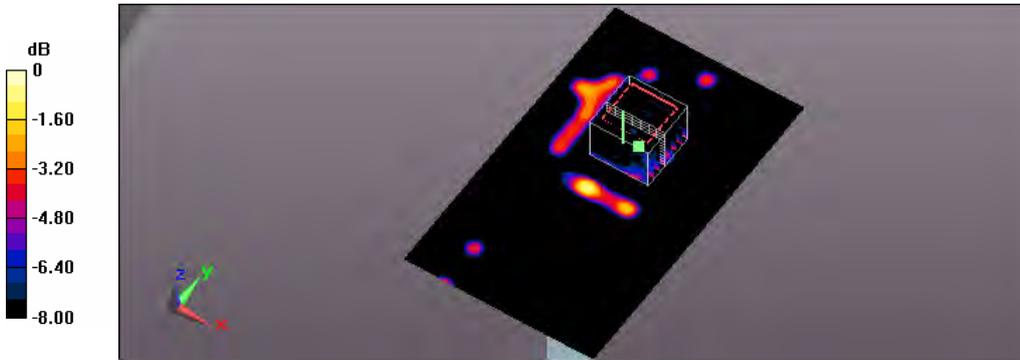
Flat/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 4.724 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.901 W/kg

SAR(1 g) = 0.070 W/kg; SAR(10 g) = 0.022 W/kg

Maximum value of SAR (measured) = 0.129 W/kg



0 dB = 0.129 W/kg = -8.89 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/13 Time: AM 04:48:15

124_802.11a_CH161_6M_side3_10mm_Antenna0

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5805 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5805$ MHz; $\sigma = 6.272$ S/m; $\epsilon_r = 46.395$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(4.35, 4.35, 4.35); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (91x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.186 W/kg

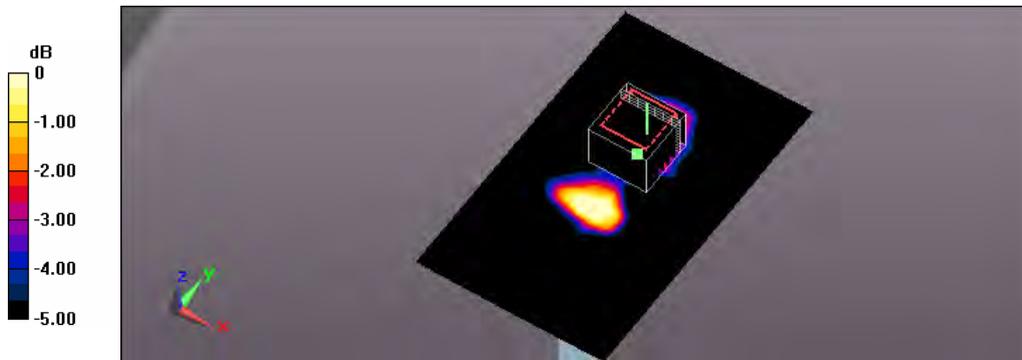
Flat/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.170 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.316 W/kg

SAR(1 g) = 0.080 W/kg; SAR(10 g) = 0.036 W/kg

Maximum value of SAR (measured) = 0.154 W/kg



0 dB = 0.154 W/kg = -8.12 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/25 Time: PM 02:03:49

134_802.11a_CH36_6M_side5_10mm_Antenna0

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5180 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5180 \text{ MHz}$; $\sigma = 5.496 \text{ S/m}$; $\epsilon_r = 47.812$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(4.96, 4.96, 4.96); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0540 W/kg

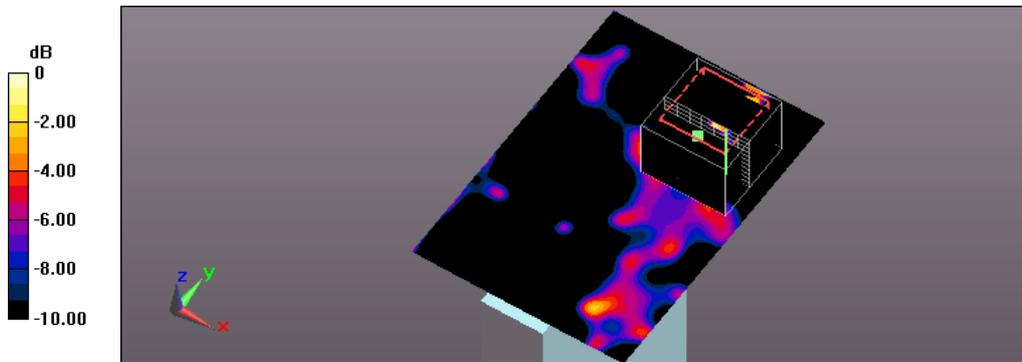
Flat/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 1.401 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.372 W/kg

SAR(1 g) = 0.014 W/kg; SAR(10 g) = 0.00332 W/kg

Maximum value of SAR (measured) = 0.0862 W/kg



0 dB = 0.0862 W/kg = -10.64 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/25 Time: PM 07:43:09

136_802.11a_CH161_6M_side5_10mm_Antenna0

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5805 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5805 \text{ MHz}$; $\sigma = 6.272 \text{ S/m}$; $\epsilon_r = 46.395$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(4.35, 4.35, 4.35); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0759 W/kg

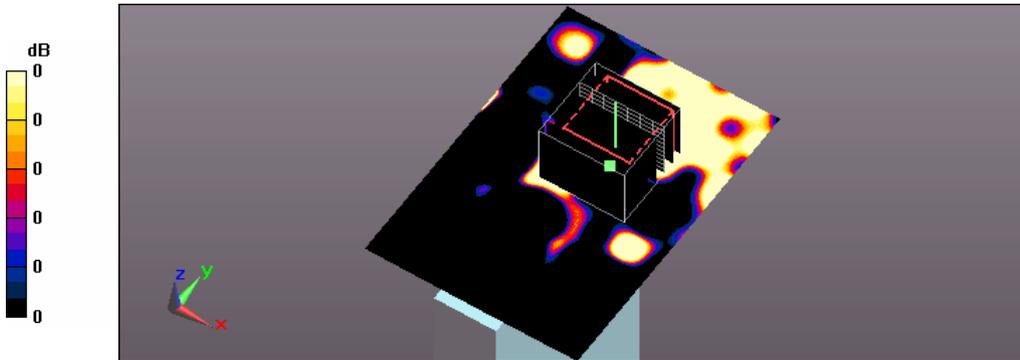
20151125/Flat/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 1.312 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.115 W/kg

SAR(1 g) = 0.024 W/kg; SAR(10 g) = 0.013 W/kg

Maximum value of SAR (measured) = 0.0377 W/kg



0 dB = 0.0377 W/kg = -14.24 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/13 Time: AM 12:39:26

122_802.11a_CH36_6M_side1_10mm_Antenna1

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5180 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5180 \text{ MHz}$; $\sigma = 5.496 \text{ S/m}$; $\epsilon_r = 47.812$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(4.96, 4.96, 4.96); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (121x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0844 W/kg

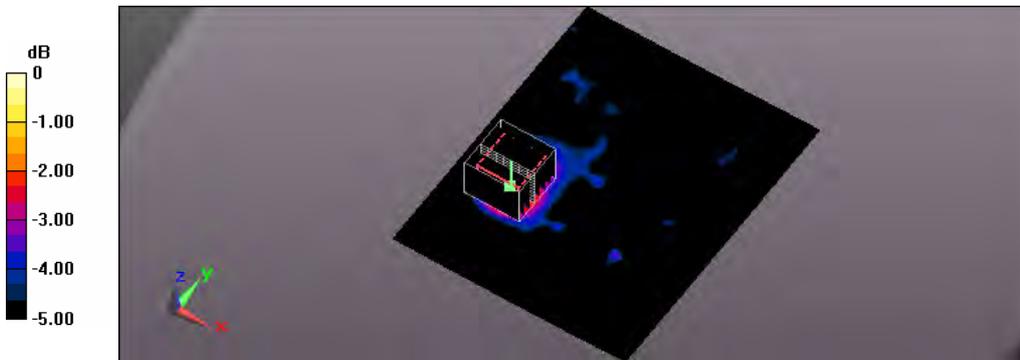
Flat/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 4.215 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.232 W/kg

SAR(1 g) = 0.047 W/kg; SAR(10 g) = 0.021 W/kg

Maximum value of SAR (measured) = 0.0837 W/kg



0 dB = 0.0837 W/kg = -10.77 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/13 Time: AM 06:34:11

126_802.11a_CH165_6M_side1_10mm_Antenna1

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5825 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5825 \text{ MHz}$; $\sigma = 6.28 \text{ S/m}$; $\epsilon_r = 46.375$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(4.35, 4.35, 4.35); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (121x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.148 W/kg

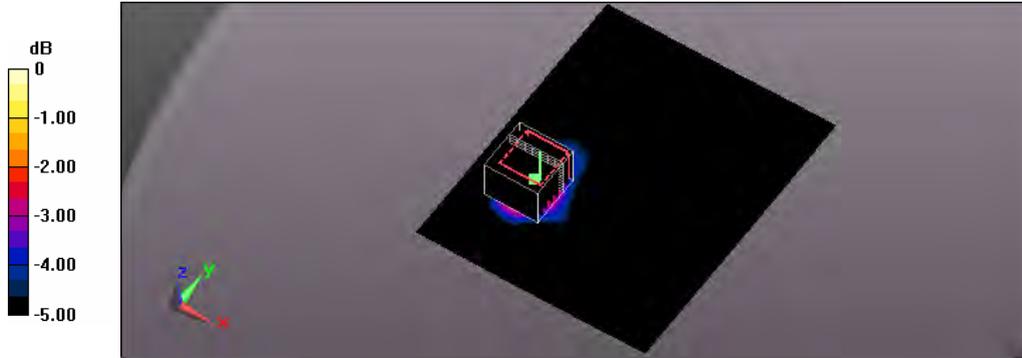
Flat/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 4.707 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.404 W/kg

SAR(1 g) = 0.078 W/kg; SAR(10 g) = 0.034 W/kg

Maximum value of SAR (measured) = 0.144 W/kg



0 dB = 0.144 W/kg = -8.42 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/25 Time: PM 03:42:08

137_802.11a_CH36_6M_side2_10mm_Antenna1

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5180 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5180 \text{ MHz}$; $\sigma = 5.496 \text{ S/m}$; $\epsilon_r = 47.812$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(4.96, 4.96, 4.96); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (121x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0825 W/kg

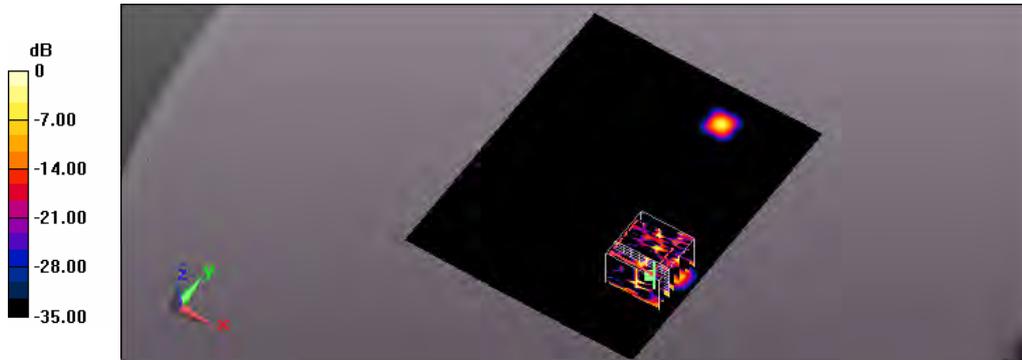
Flat/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 3.008 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.489 W/kg

SAR(1 g) = 0.037 W/kg; SAR(10 g) = 0.013 W/kg

Maximum value of SAR (measured) = 0.0865 W/kg



0 dB = 0.0865 W/kg = -10.63 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/25 Time: PM 09:26:05

138_802.11a_CH165_6M_side2_10mm_Antenna1

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5825 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5825$ MHz; $\sigma = 6.28$ S/m; $\epsilon_r = 46.375$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(4.35, 4.35, 4.35); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (121x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.113 W/kg

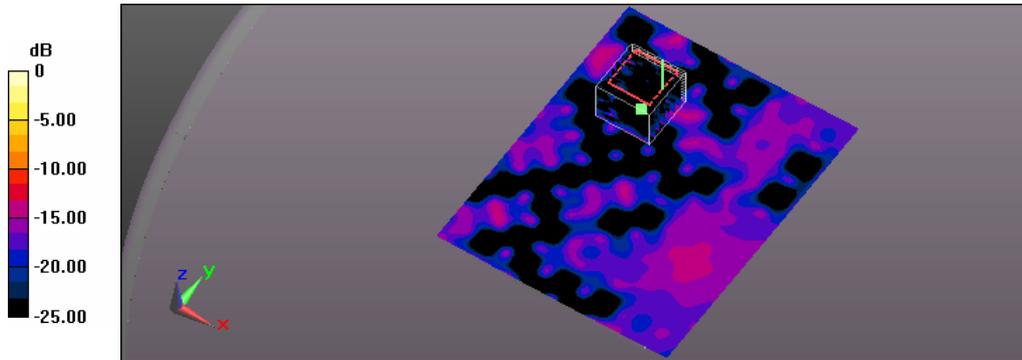
Flat/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.859; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 2.37 W/kg

SAR(1 g) = 0.00488 W/kg; SAR(10 g) = 0.000615 W/kg

Maximum value of SAR (measured) = 2.37 W/kg



0 dB = 2.37 W/kg = 3.75 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/13 Time: AM 01:51:20

121_802.11a_CH36_6M_side3_10mm_Antenna1

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5180 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5180 \text{ MHz}$; $\sigma = 5.496 \text{ S/m}$; $\epsilon_r = 47.812$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(4.96, 4.96, 4.96); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (91x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.215 W/kg

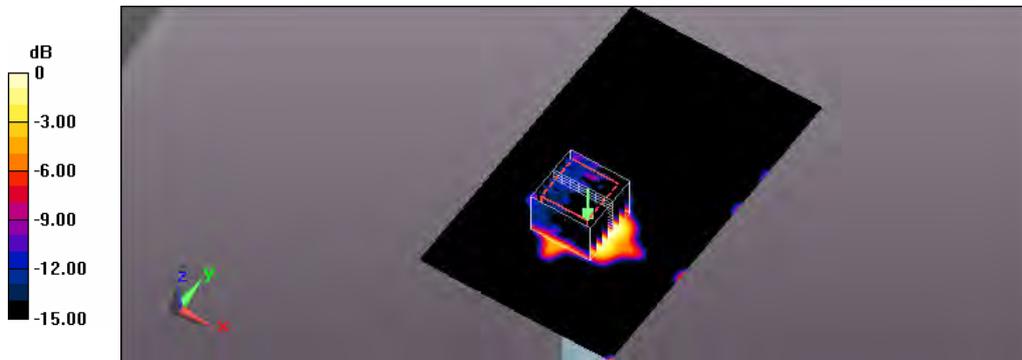
Flat/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 5.867 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.461 W/kg

SAR(1 g) = 0.097 W/kg; SAR(10 g) = 0.038 W/kg

Maximum value of SAR (measured) = 0.182 W/kg



0 dB = 0.182 W/kg = -7.40 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/13 Time: AM 07:45:00

125_802.11a CH165_6M_side3_10mm_Antenna1

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5825 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5825 \text{ MHz}$; $\sigma = 6.28 \text{ S/m}$; $\epsilon_r = 46.375$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(4.35, 4.35, 4.35); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (91x151x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.263 W/kg

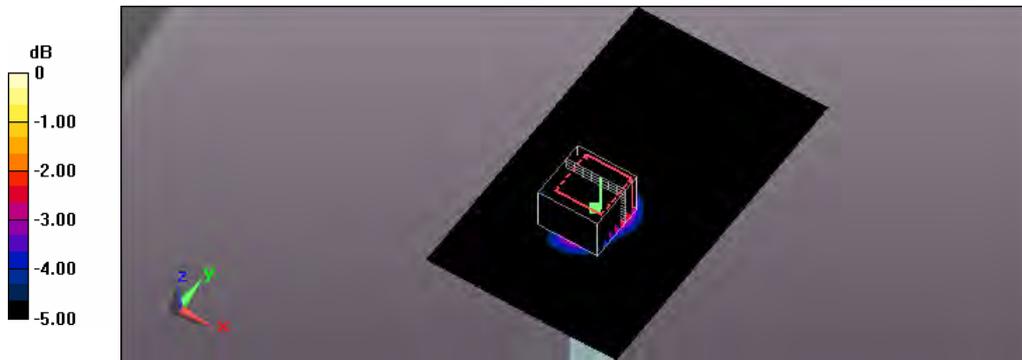
Flat/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 6.613 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.508 W/kg

SAR(1 g) = 0.132 W/kg; SAR(10 g) = 0.054 W/kg

Maximum value of SAR (measured) = 0.258 W/kg



0 dB = 0.258 W/kg = -5.88 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/25 Time: PM 04:49:42

139_802.11a_CH36_6M_side5_10mm_Antenna1

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 014475000001006

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5180 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5180 \text{ MHz}$; $\sigma = 5.496 \text{ S/m}$; $\epsilon_r = 47.812$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(4.96, 4.96, 4.96); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.122 W/kg

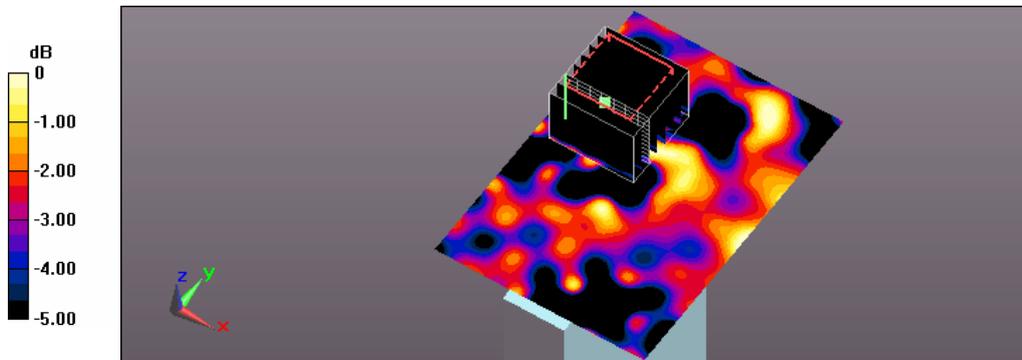
Flat/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 3.881; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.152 W/kg

SAR(1 g) = 0.022 W/kg; SAR(10 g) = 0.00727 W/kg

Maximum value of SAR (measured) = 0.0858 W/kg



0 dB = 0.0858 W/kg = -10.67 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2015/11/25 Time: PM 10:40:11

140_802.11a_CH165_6M_side5_10mm_Antenna1

DUT: AC815S; Type: AirCard 815S Mobile Hotspot; Serial: 01447500001006

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5825 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5825$ MHz; $\sigma = 6.28$ S/m; $\epsilon_r = 46.375$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(4.35, 4.35, 4.35); Calibrated: 2015/1/30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2015/2/3
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1133
- Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Flat/Area Scan (71x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.150 W/kg

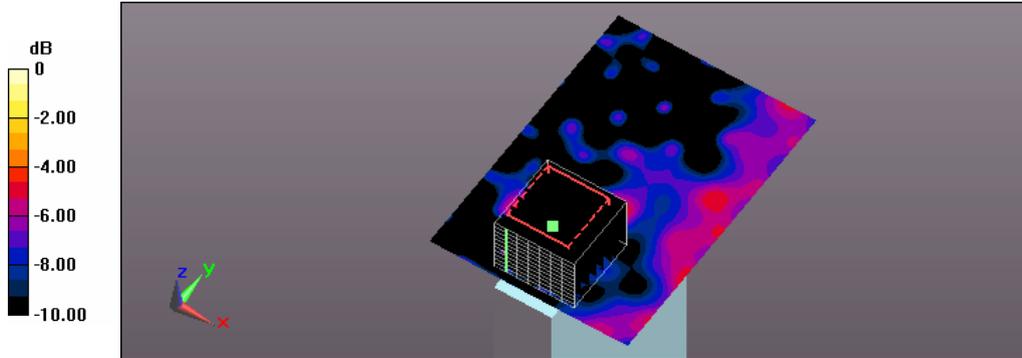
Flat/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.635 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.392 W/kg

SAR(1 g) = 0.013 W/kg; SAR(10 g) = 0.0024 W/kg

Maximum value of SAR (measured) = 0.392 W/kg



0 dB = 0.392 W/kg = -4.07 dBW/kg