Asset: A1322 - Checked by [illegible] 21/02/2011

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 108

Client RFI

Certificate No: D2450V2-725_Feb11

CALIBRATION CERTIFICATE

Object: D2450V2 - SN: 725

Calibration procedure(s): QA CAL-05.v8
Calibration procedure for dipole validation kits

Calibration date: February 08, 2011

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter EPM-442A	GB37480704	06-Oct-10 (No. 217-01266)	Oct-11
Power sensor HP 8481A	US37292783	06-Oct-10 (No. 217-01266)	Oct-11
Reference 20 dB Attenuator	SN: 5086 (20g)	30-Mar-10 (No. 217-01158)	Mar-11
Type-N mismatch combination	SN: 5047.2 / 06327	30-Mar-10 (No. 217-01162)	Mar-11
Reference Probe ES3DV3	SN: 3205	30-Apr-10 (No. ES3-3205_Apr10)	Apr-11
DAE4	SN: 601	10-Jun-10 (No. DAE4-601_Jun10)	Jun-11

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power sensor HP 8481A	MY41092317	18-Oct-02 (in house check Oct-09)	In house check: Oct-11
RF generator R&S SMT-06	100005	4-Aug-99 (in house check Oct-09)	In house check: Oct-11
Network Analyzer HP 8753E	US37390585 S4206	18-Oct-01 (in house check Oct-10)	In house check: Oct-11

	Name	Function	Signature
Calibrated by:	Dimce Iliev	Laboratory Technician	D. Iliev
Approved by:	Katja Pokovic	Technical Manager	

Issued: February 8, 2011

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
c) Federal Communications Commission Office of Engineering & Technology (FCC OET), "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields; Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radiofrequency Emissions", Supplement C (Edition 01-01) to Bulletin 65

Additional Documentation:

d) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.6
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom V5.0	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2450 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Head TSL parameters	22.0 °C	39.2	1.80 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	39.1 ± 6 %	1.73 mho/m ± 6 %
Head TSL temperature during test	(21.0 ± 0.2) °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm^3 (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	13.0 mW / g
SAR normalized	normalized to 1W	52.0 mW / g
SAR for nominal Head TSL parameters	normalized to 1W	**52.9 mW /g ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.13 mW / g
SAR normalized	normalized to 1W	24.5 mW / g
SAR for nominal Head TSL parameters	normalized to 1W	**24.7 mW /g ± 16.5 % (k=2)**

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	52.7	1.95 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	52.2 ± 6 %	1.94 mho/m ± 6 %
Body TSL temperature during test	(21.0 ± 0.2) °C	----	----

SAR result with Body TSL

SAR averaged over 1 cm^3 (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	13.0 mW / g
SAR normalized	normalized to 1W	52.0 mW / g
SAR for nominal Body TSL parameters	normalized to 1W	**51.9 mW / g ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Body TSL	condition	
SAR measured	250 mW input power	6.04 mW / g
SAR normalized	normalized to 1W	24.2 mW / g
SAR for nominal Body TSL parameters	normalized to 1W	**24.1 mW / g ± 16.5 % (k=2)**

Appendix

Antenna Parameters with Head TSL

Impedance, transformed to feed point	45.6 Ω + 7.9 jΩ
Return Loss	- 20.5 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	49.5 Ω + 9.7 jΩ
Return Loss	- 20.2 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.152 ns

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals.
No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	October 16, 2002

DASY5 Validation Report for Head TSL

Date/Time: 07.02.2011 14:34:55

Test Laboratory: SPEAG, Zurich, Switzerland

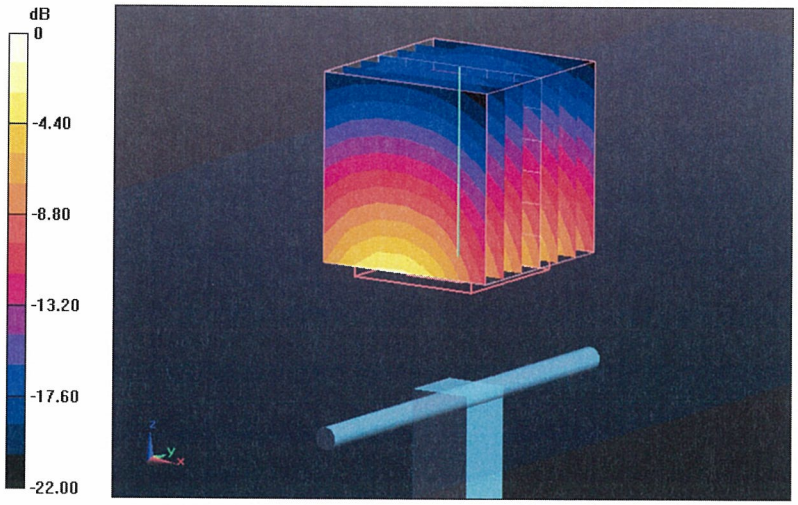
DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:725

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: HSL U12 BB
Medium parameters used: f = 2450 MHz; σ = 1.74 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

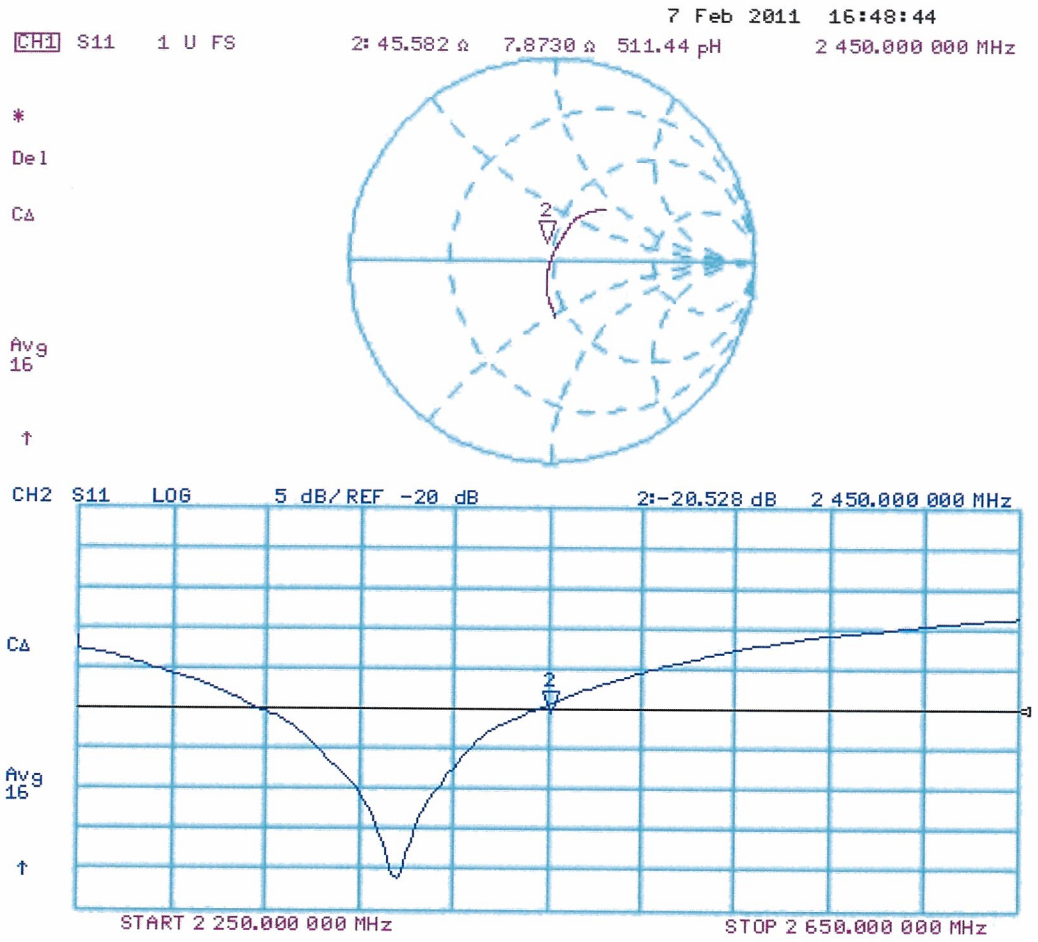
- Probe: ES3DV3 - SN3205; ConvF(4.53, 4.53, 4.53); Calibrated: 30.04.2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 10.06.2010
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- Measurement SW: DASY52, V52.6.1 Build (408)
- Postprocessing SW: SEMCAD X, V14.4.2 Build (2595)

Pin=250 mW /d=10mm, dist=3.0mm (ES-Probe)/Zoom Scan (7x7x7) /Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 101.3 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 26.701 W/kg
SAR(1 g) = 13 mW/g; SAR(10 g) = 6.13 mW/g
Maximum value of SAR (measured) = 16.608 mW/g



0 dB = 16.610mW/g

Impedance Measurement Plot for Head TSL



DASY5 Validation Report for Body TSL

Date/Time: 08.02.2011 12:48:13

Test Laboratory: SPEAG, Zurich, Switzerland

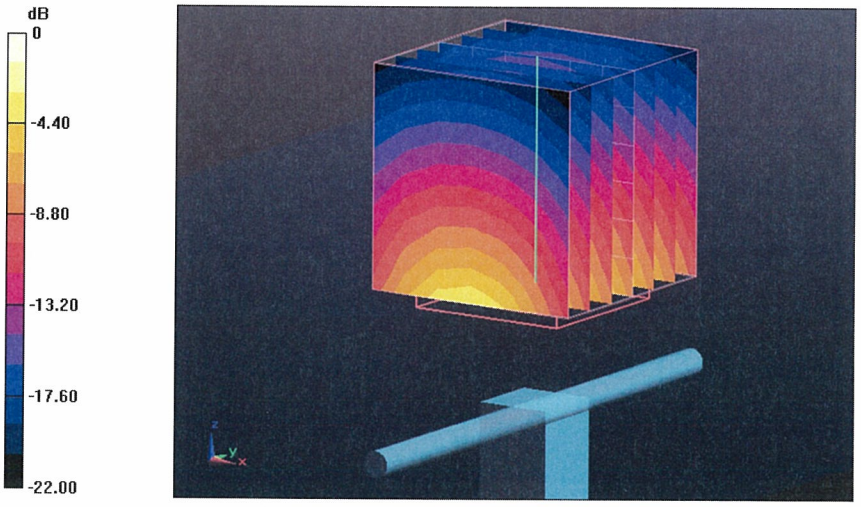
DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:725

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: MSL U12 BB
Medium parameters used: f = 2450 MHz; σ = 1.95 mho/m; ε_r = 52.4; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

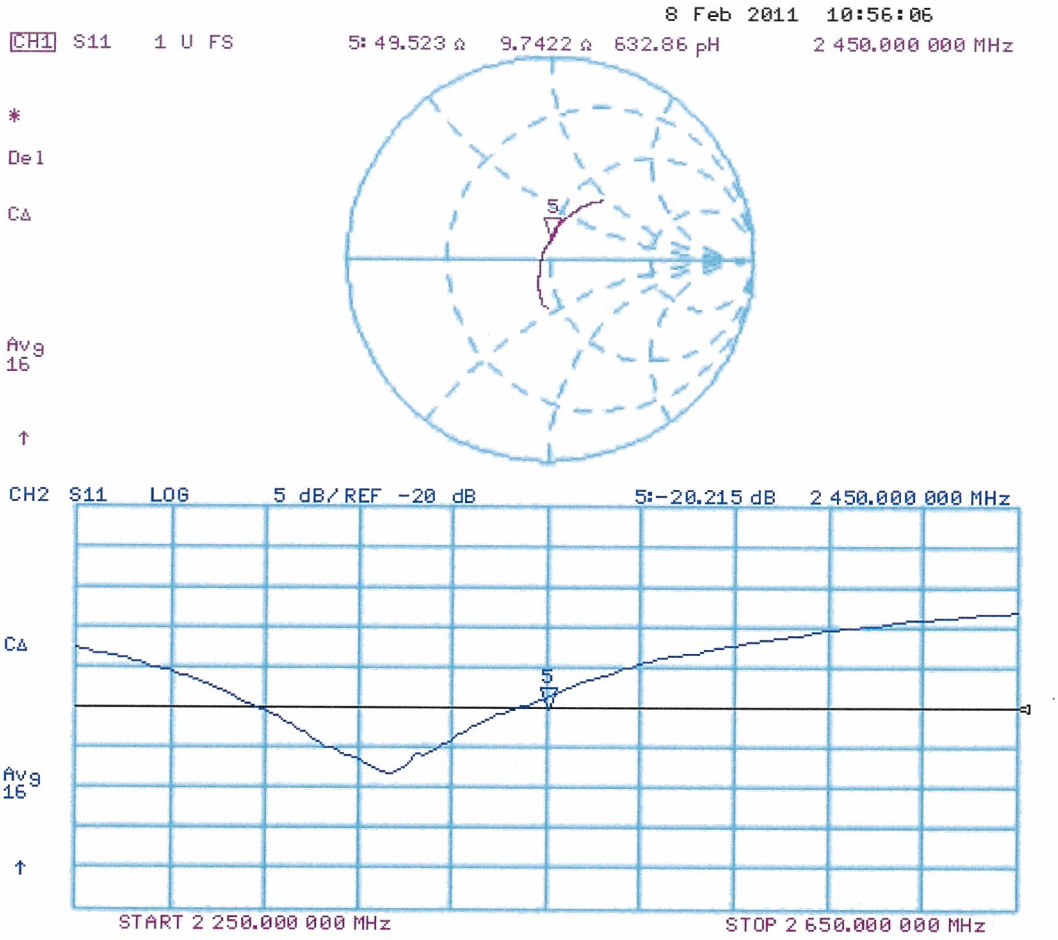
- Probe: ES3DV3 - SN3205; ConvF(4.31, 4.31, 4.31); Calibrated: 30.04.2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 10.06.2010
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- Measurement SW: DASY52, V52.6.1 Build (408)
- Postprocessing SW: SEMCAD X, V14.4.2 Build (2595)

Pin=250 mW /d=10mm, dist=3.0mm (ES-Probe)/Zoom Scan (7x7x7) /Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 96.406 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 27.401 W/kg
SAR(1 g) = 13 mW/g; SAR(10 g) = 6.04 mW/g
Maximum value of SAR (measured) = 17.121 mW/g



0 dB = 17.120mW/g

Impedance Measurement Plot for Body TSL



Appendix 2. Measurement Methods

A.2.1. Evaluation Procedure

The Specific Absorption Rate (SAR) evaluation was performed in the following manner:

a) (i) The evaluation was performed in an applicable area of the phantom depending on the type of device being tested. For devices worn about the ear during normal operation, both the left and right ear positions were evaluated at the centre frequency of the band at maximum power. The side, which produced the greatest SAR, determined which side of the phantom would be used for the entire evaluation. The positioning of the head worn device relative to the phantom was dictated by the test specification identified in section 3.1 of this report.

(ii) For body worn devices or devices which can be operated within 20 cm of the body, the flat section of the SAM phantom was used were the size of the device(s) is normal. for bigger devices and base station the 2mm Oval phantom is used for evaluation. The type of device being evaluated dictated the distance of the EUT to the outer surface of the phantom flat section.

b) The SAR was determined by a pre-defined procedure within the DASY4 software. The exposed region of the phantom was scanned near the inner surface with a grid spacing of 20mm x 20mm or appropriate resolution.

c) A 5x5x7 matrix was performed around the greatest spatial SAR distribution found during the area scan of the applicable exposed region. SAR values were then calculated using a 3-D spline interpolation algorithm and averaged over spatial volumes of 1 and 10 grams.

d) If the EUT had any appreciable drift over the course of the evaluation, then the EUT was re-evaluated. Any unusual anomalies over the course of the test also warranted a re-evaluation.

A.2.2. Specific Absorption Rate (SAR) Measurements to OET Bulletin 65 Supplement C: (2001-01)

Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields

SAR measurements were performed in accordance with Appendix D of the standard FCC OET Bulletin 65 Supplement C: 2001, IEEE 1528 and FCC KDB procedures, against appropriate limits for each measurement position in accordance with the standard. In some cases the FCC was contacted using a PBA or KDB process to ensure test is performed correctly.

The test was performed in a shielded enclosure with the temperature controlled to remain between +18.0ºC and +25.0ºC. The tissue equivalent material fluid temperature was controlled to give a maximum variation of ± 2.0ºC

Prior to any SAR measurements on the EUT, system validation and material dielectric property measurements were conducted. In the absence of a detailed procedure within the specification, system validation and material dielectric property measurements were performed in accordance with Appendix C and Appendix D of FCC OET Bulletin 65 Supplement C: 2001 and FCC KDB publication 450824.

Following the successful system validation and material dielectric property measurements, a SAR versus time sweep shall be performed within 10 mm of the phantom inner surface. If the EUT power output is stable after three minutes then the measurement probe will perform a coarse surface level scan at each test position in order to ascertain the location of the maximum local SAR level. Once this area had been established, a 5x5x7 cube of 175 points (5 mm spacing in each axis ≈ 27g) will be centred at the area of concern. Extrapolation and interpolation will then be carried out on the 27g of tissue and the highest averaged SAR over a 10g cube determined.

Once the maximum interpolated SAR measurement is complete; the coarse scan is visually assessed to check for secondary peaks within 50% of the maximum SAR level. If there are any further SAR measurements required, extra 5x5x7 cubes shall be centred on each of these extra local SAR maxima.

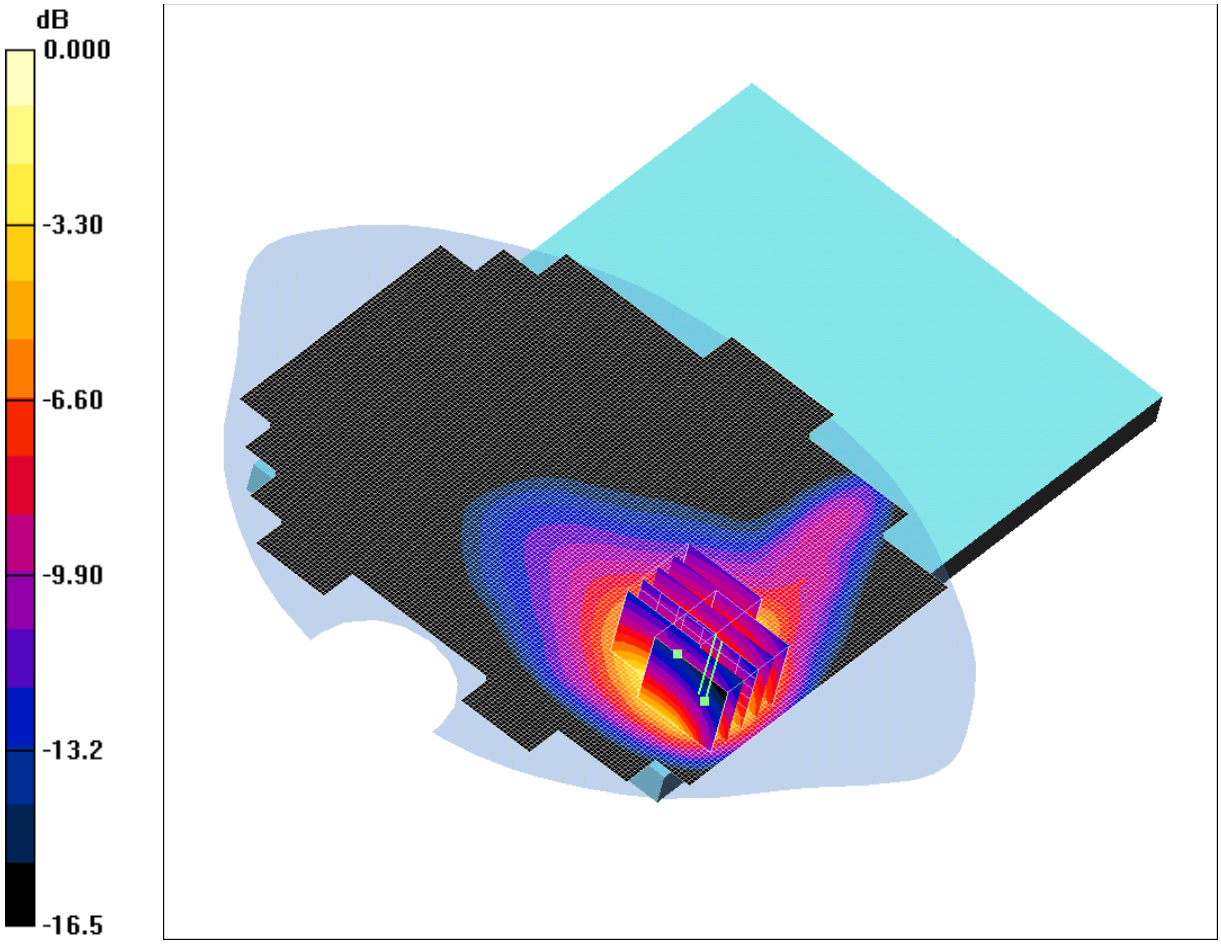
At the end of each position test case a second time sweep shall be performed to check whether the EUT has remained stable throughout the test.

Appendix 3. SAR Distribution Scans

This appendix contains SAR distribution scans which are not included in the total number of pages for this report.

Scan Ref Number	Title
SCN/87983JD02A/001	Base of EUT Antenna Retracted Facing Phantom FDD V CH4183
SCN/87983JD02A/002	Base of EUT Antenna Retracted Facing Phantom FDD V CH4132
SCN/87983JD02A/003	Base of EUT Antenna Retracted Facing Phantom FDD V CH4233
SCN/87983JD02A/004	Base of EUT Antenna Extended Facing Phantom FDD V CH4183
SCN/87983JD02A/005	Base of EUT Antenna Extended Facing Phantom FDD V CH4132
SCN/87983JD02A/006	Base of EUT Antenna Extended Facing Phantom FDD V CH4233
SCN/87983JD02A/007	Secondary Edge Landscape of EUT Antenna Retracted Facing Phantom FDD V CH4183
SCN/87983JD02A/008	Secondary Edge Landscape of EUT Antenna Extended Facing Phantom FDD V CH4183
SCN/87983JD02A/009	Secondary Edge Portrait of EUT Antenna Retracted Facing Phantom FDD V CH4183
SCN/87983JD02A/010	Base of EUT Antenna Retracted Facing Phantom Wi-Fi 802.11b 1Mbps CH6
SCN/87983JD02A/011	Base of EUT Antenna Extended Facing Phantom Wi-Fi 802.11b 1Mbps CH6
SCN/87983JD02A/012	Base of EUT Antenna Retracted Facing Phantom Wi-Fi 802.11b 1Mbps CH1
SCN/87983JD02A/013	Base of EUT Antenna Extended Facing Phantom Wi-Fi 802.11b 1Mbps CH1
SCN/87983JD02A/014	Base of EUT Antenna Retracted Facing Phantom Wi-Fi 802.11b 1Mbps CH11
SCN/87983JD02A/015	Base of EUT Antenna Extended Facing Phantom Wi-Fi 802.11b 1Mbps CH11
SCN/87983JD02A/016	Secondary Edge Landscape of EUT Antenna Retracted Facing Phantom Wi-Fi 802.11b 1Mbps CH6
SCN/87983JD02A/017	Secondary Edge Landscape of EUT Antenna Extended Facing Phantom Wi-Fi 802.11b 1Mbps CH6
SCN/87983JD02A/018	Primary Edge Portrait of EUT Antenna Retracted Facing Phantom Wi-Fi 802.11b 1Mbps CH6
SCN/87983JD02A/019	System Performance Check 900MHz Body 31 05 12
SCN/87983JD02A/020	System Performance Check 2450MHz Body 31 05 12
(For Information Purpose Only)	
Scan Ref Number	**Title**
SCN/87983JD02A/021	Base of EUT (Region 1) Antenna Retracted Facing Phantom FDD V CH4183
SCN/87983JD02A/022	Base of EUT (Region 2) Antenna Retracted Facing Phantom FDD V CH4183
SCN/87983JD02A/023	Base of EUT (Region 1) Antenna Retracted Facing Phantom Wi-Fi 802.11b 1Mbps CH6
SCN/87983JD02A/024	Base of EUT (Region 2) Antenna Retracted Facing Phantom Wi-Fi 802.11b 1Mbps CH6

SCN/87983JD02A/001: Base of EUT Antenna Retracted Facing Phantom FDD V CH4183
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369



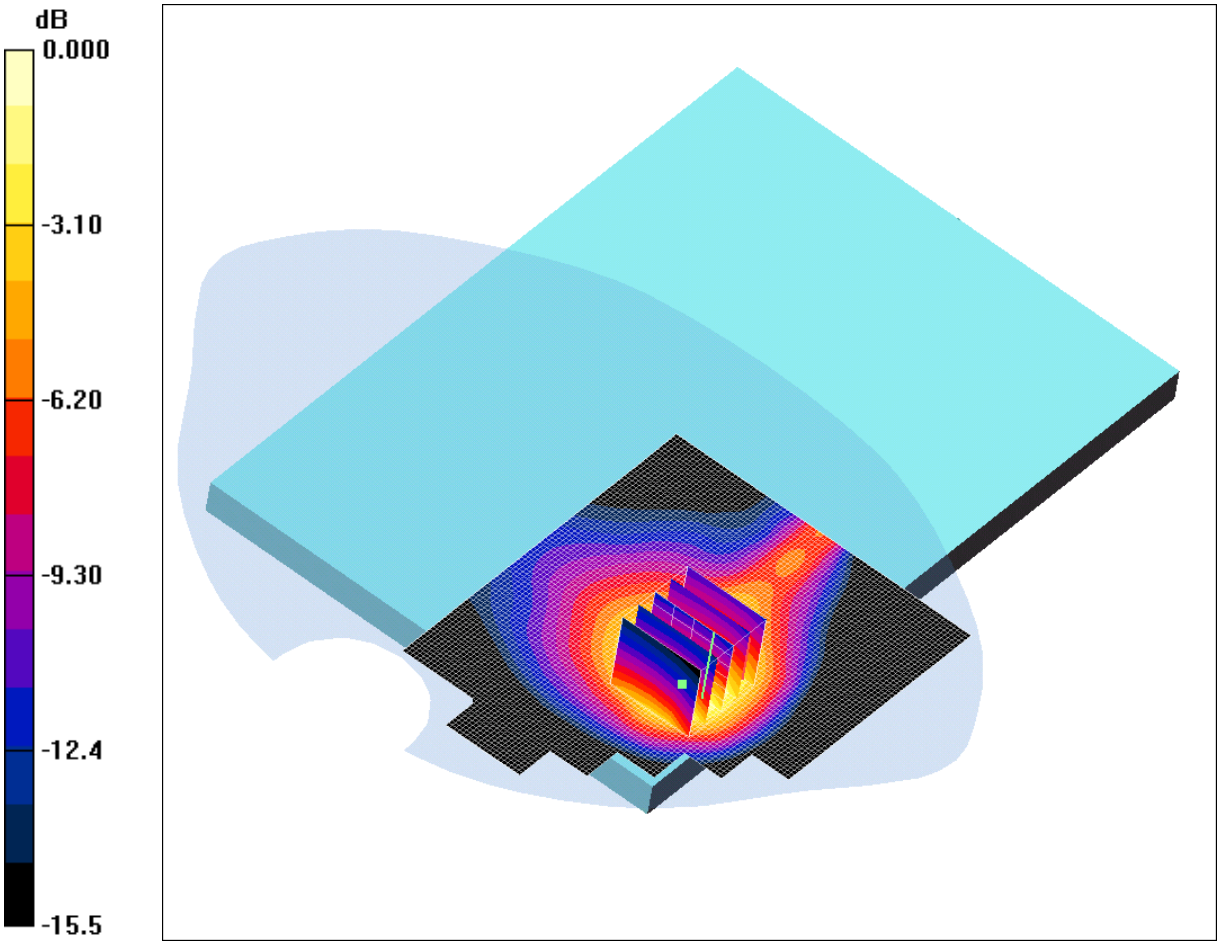
0 dB = 1.38mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium: 900 MHz MSL Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.971 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(8.92, 8.92, 8.92); Calibrated: 22/09/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Base of EUT(Region 2) Antenna Retracted Facing Phantom - Middle/Area Scan (131x141x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.42 mW/g
Base of EUT(Region 2) Antenna Retracted Facing Phantom - Middle/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 1:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.7 V/m; Power Drift = -0.038 dB; Peak SAR (extrapolated) = 1.64 W/kg
SAR(1 g) = 0.974 mW/g; SAR(10 g) = 0.631 mW/g
Maximum value of SAR (measured) = 1.27 mW/g
Base of EUT(Region 2) Antenna Retracted Facing Phantom - Middle/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.7 V/m; Power Drift = -0.038 dB; Peak SAR (extrapolated) = 1.84 W/kg
SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.657 mW/g
Maximum value of SAR (measured) = 1.38 mW/g

Note: DASY system is configured to measure any secondary maxima that are within 2dB of the measured SAR level.

SCN/87983JD02A/002: Base of EUT Antenna Retracted Facing Phantom FDD V CH4132
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369

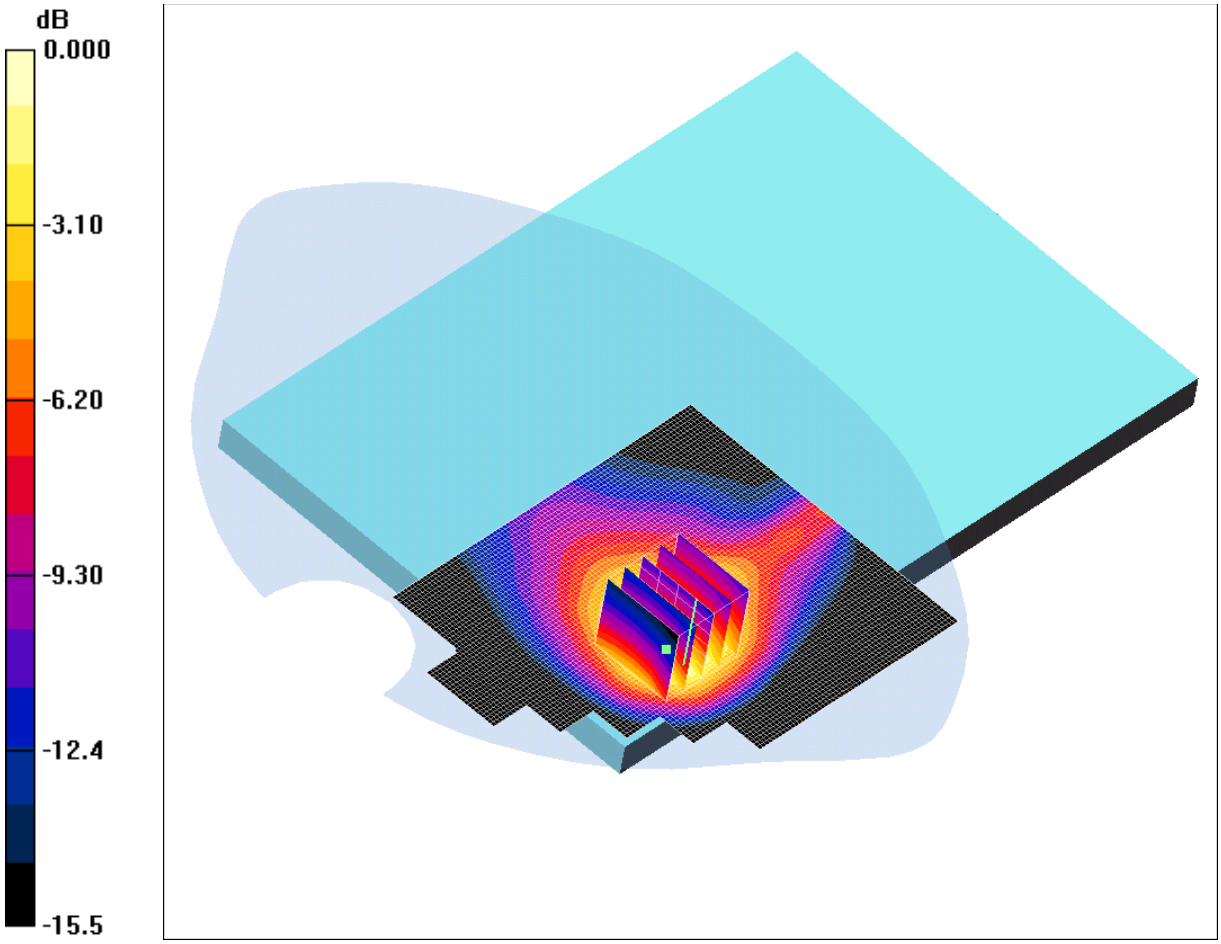


0 dB = 1.37mW/g

Communication System: UMTS-FDD V; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium: 900 MHz MSL Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.966 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(8.92, 8.92, 8.92); Calibrated: 22/09/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Base of EUT Antenna Retracted Facing Phantom - Low/Area Scan (101x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.54 mW/g
Base of EUT Antenna Retracted Facing Phantom - Low/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.8 V/m; Power Drift = 0.038 dB
Peak SAR (extrapolated) = 1.87 W/kg
SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.644 mW/g
Maximum value of SAR (measured) = 1.37 mW/g

SCN/87983JD02A/003: Base of EUT Antenna Retracted Facing Phantom FDD V CH4233
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369

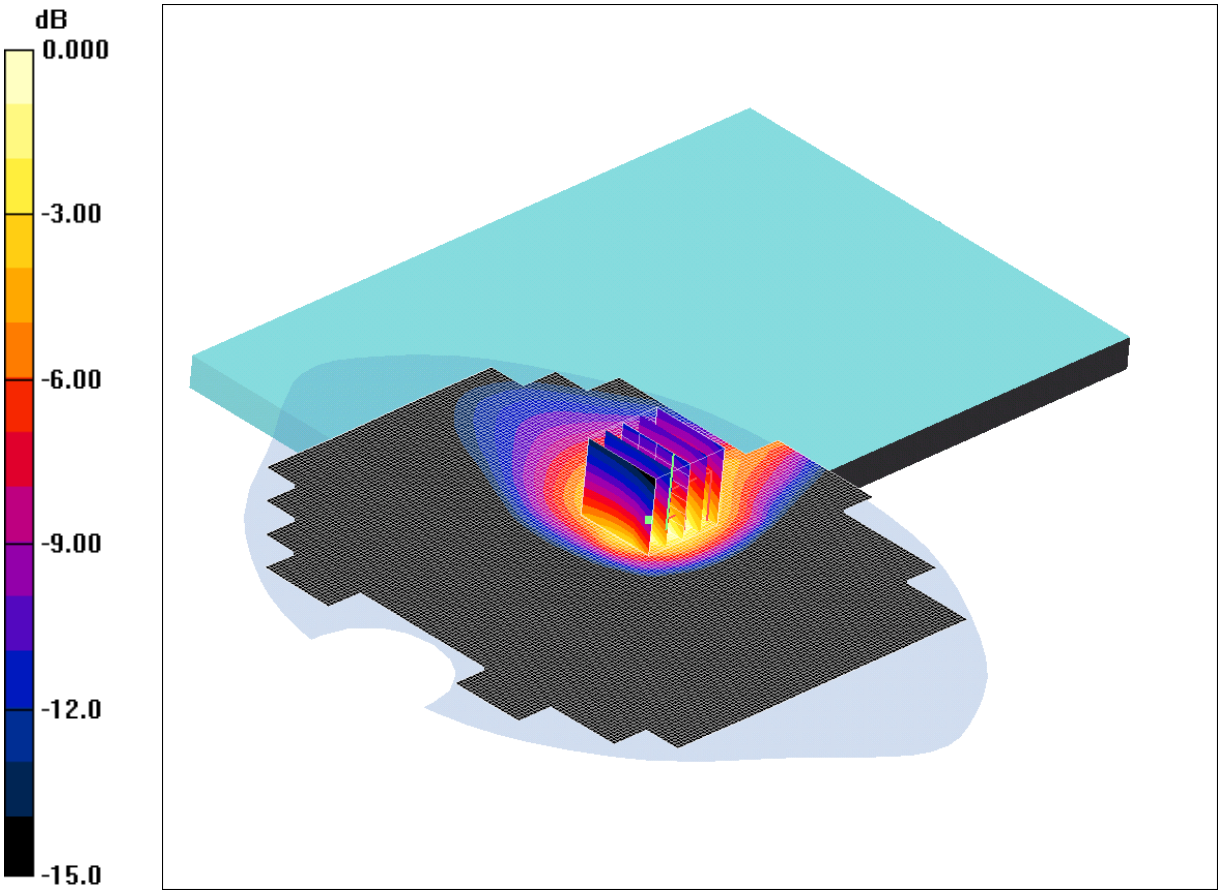


0 dB = 1.37mW/g

Communication System: UMTS-FDD V; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: 900 MHz MSL Medium parameters used (interpolated): f = 846.6 MHz; σ = 0.976 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(8.92, 8.92, 8.92); Calibrated: 22/09/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Base of EUT Antenna Retracted Facing Phantom - High/Area Scan (101x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.59 mW/g
Base of EUT Antenna Retracted Facing Phantom - High/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.6 V/m; Power Drift = 0.052 dB
Peak SAR (extrapolated) = 1.86 W/kg
SAR(1 g) = 1.07 mW/g; SAR(10 g) = 0.675 mW/g
Maximum value of SAR (measured) = 1.37 mW/g

SCN/87983JD02A/004: Base of EUT Antenna Extended Facing Phantom FDD V CH4183
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369

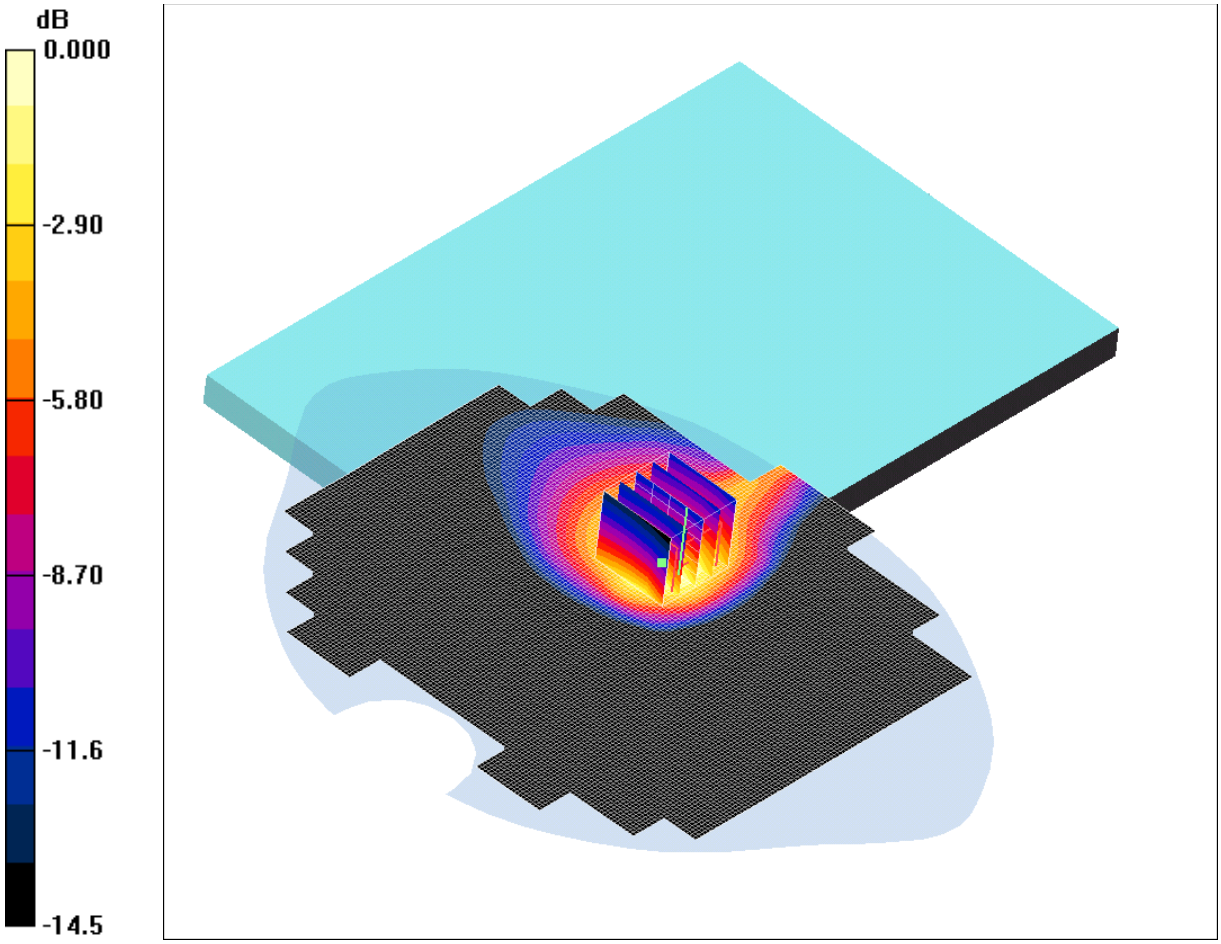


0 dB = 1.37mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium: 900 MHz MSL Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.971 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(8.92, 8.92, 8.92); Calibrated: 22/09/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Base of EUTAntenna Extended Facing Phantom - Middle/Area Scan (131x141x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.43 mW/g
Base of EUTAntenna Extended Facing Phantom - Middle/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.6 V/m; Power Drift = 0.028 dB
Peak SAR (extrapolated) = 1.82 W/kg
SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.643 mW/g
Maximum value of SAR (measured) = 1.37 mW/g

SCN/87983JD02A/005: Base of EUT Antenna Extended Facing Phantom FDD V CH4132
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369

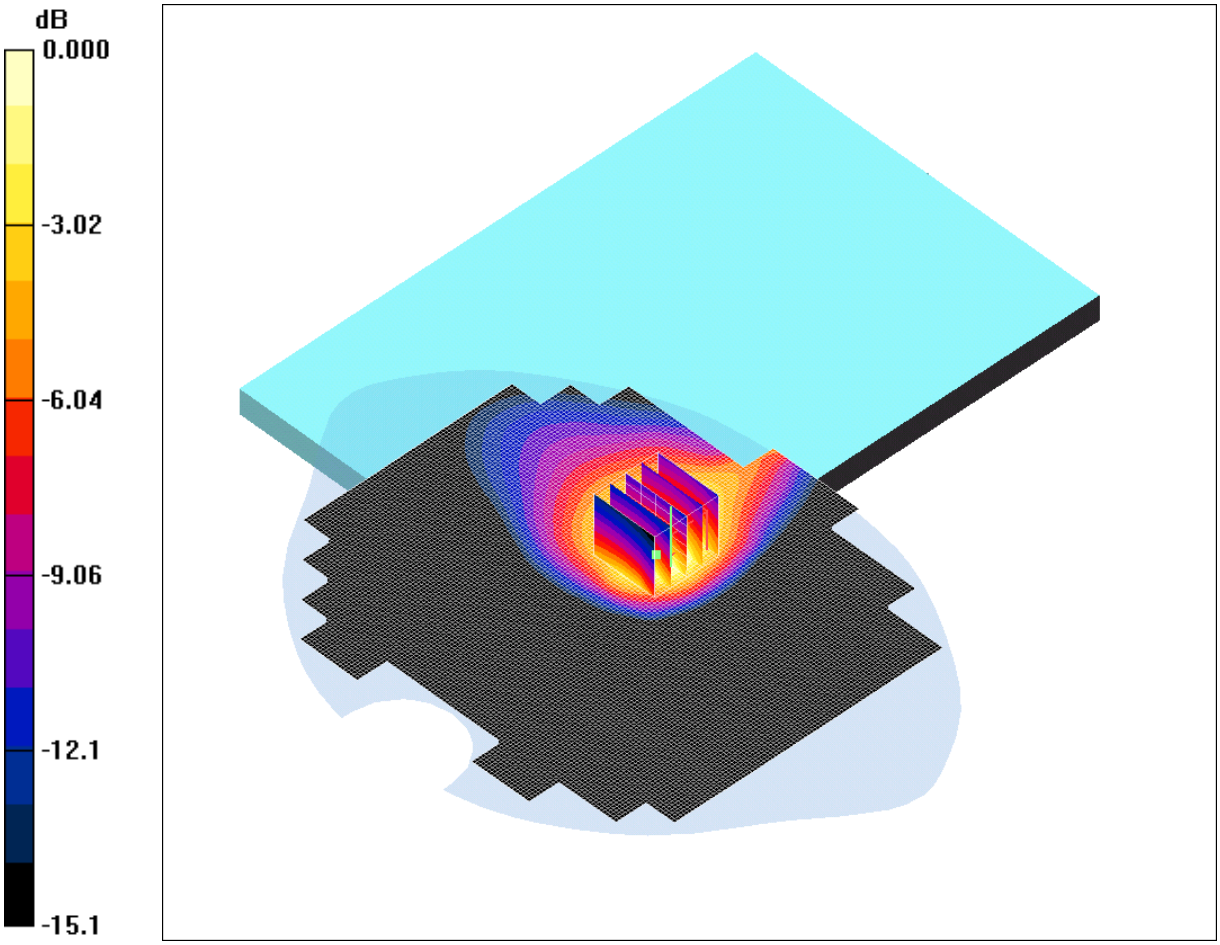


0 dB = 1.36mW/g

Communication System: UMTS-FDD V; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium: 900 MHz MSL Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.966 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(8.92, 8.92, 8.92); Calibrated: 22/09/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Base of EUTAntenna Extended Facing Phantom - Low/Area Scan (131x141x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.44 mW/g
Base of EUTAntenna Extended Facing Phantom - Low/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.2 V/m; Power Drift = 0.008 dB
Peak SAR (extrapolated) = 1.85 W/kg
SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.640 mW/g
Maximum value of SAR (measured) = 1.36 mW/g

SCN/87983JD02A/006: Base of EUT Antenna Extended Facing Phantom FDD V CH4233
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369

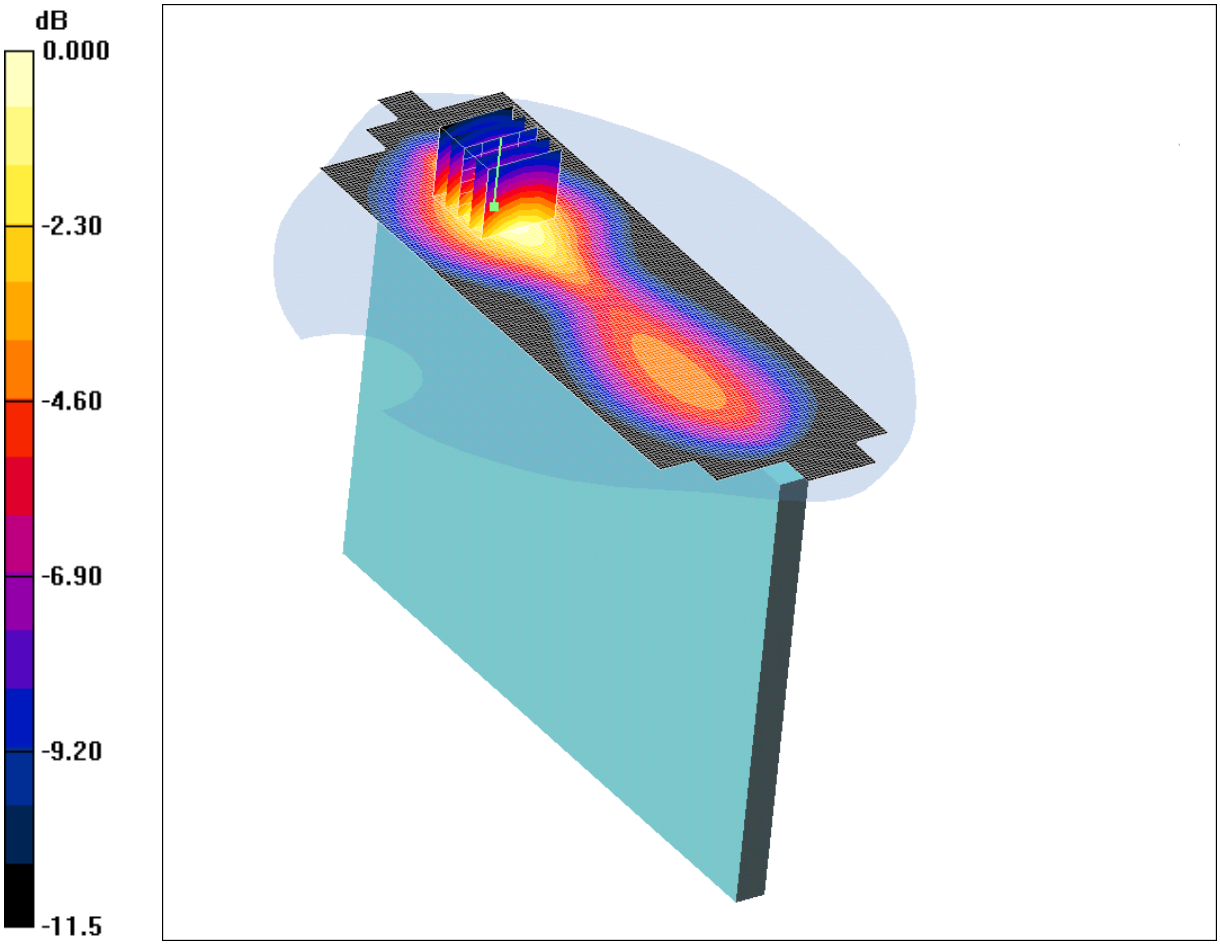


0 dB = 1.33mW/g

Communication System: UMTS-FDD V; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: 900 MHz MSL Medium parameters used (interpolated): f = 846.6 MHz; σ = 0.976 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(8.92, 8.92, 8.92); Calibrated: 22/09/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Base of EUTAntenna Extended Facing Phantom - High/Area Scan (131x141x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.50 mW/g
Base of EUTAntenna Extended Facing Phantom - High/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.7 V/m; Power Drift = 0.013 dB
Peak SAR (extrapolated) = 1.83 W/kg
SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.661 mW/g
Maximum value of SAR (measured) = 1.33 mW/g

SCN/87983JD02A/007: Secondary Edge Landscape of EUT Antenna Retracted Facing Phantom FDD V CH4183
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369



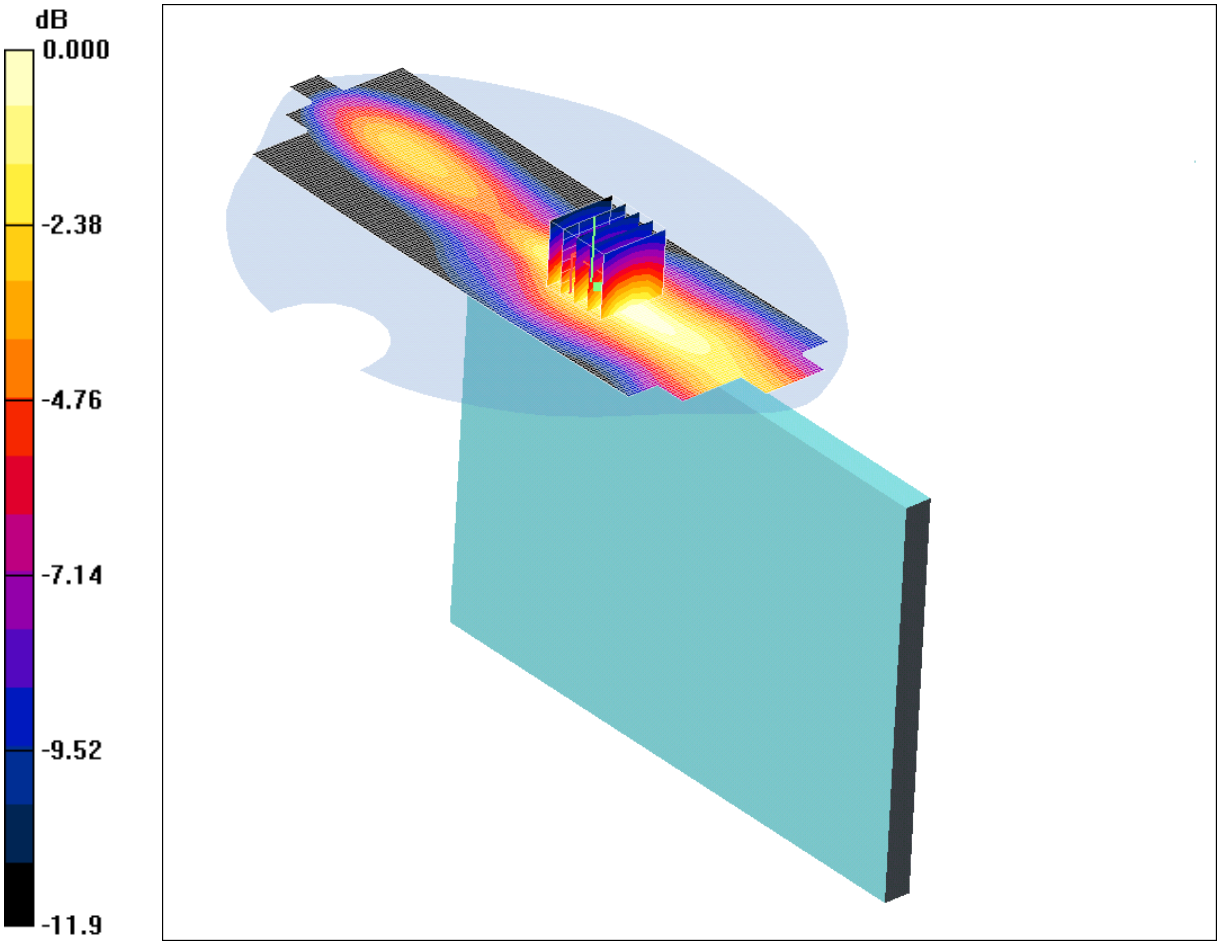
0 dB = 0.247mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium: 900 MHz MSL Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.971 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(8.92, 8.92, 8.92); Calibrated: 22/09/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Secondary Edge Landscape Antenna Retracted Facing Phantom - Middle/Area Scan (61x191x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.247 mW/g

Secondary Edge Landscape Antenna Retracted Facing Phantom - Middle/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.5 V/m; Power Drift = -0.034 dB
Peak SAR (extrapolated) = 0.353 W/kg
SAR(1 g) = 0.225 mW/g; SAR(10 g) = 0.143 mW/g
Maximum value of SAR (measured) = 0.247 mW/g

SCN/87983JD02A/008: Secondary Edge Landscape of EUT Antenna Extended Facing Phantom FDD V CH4183
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369

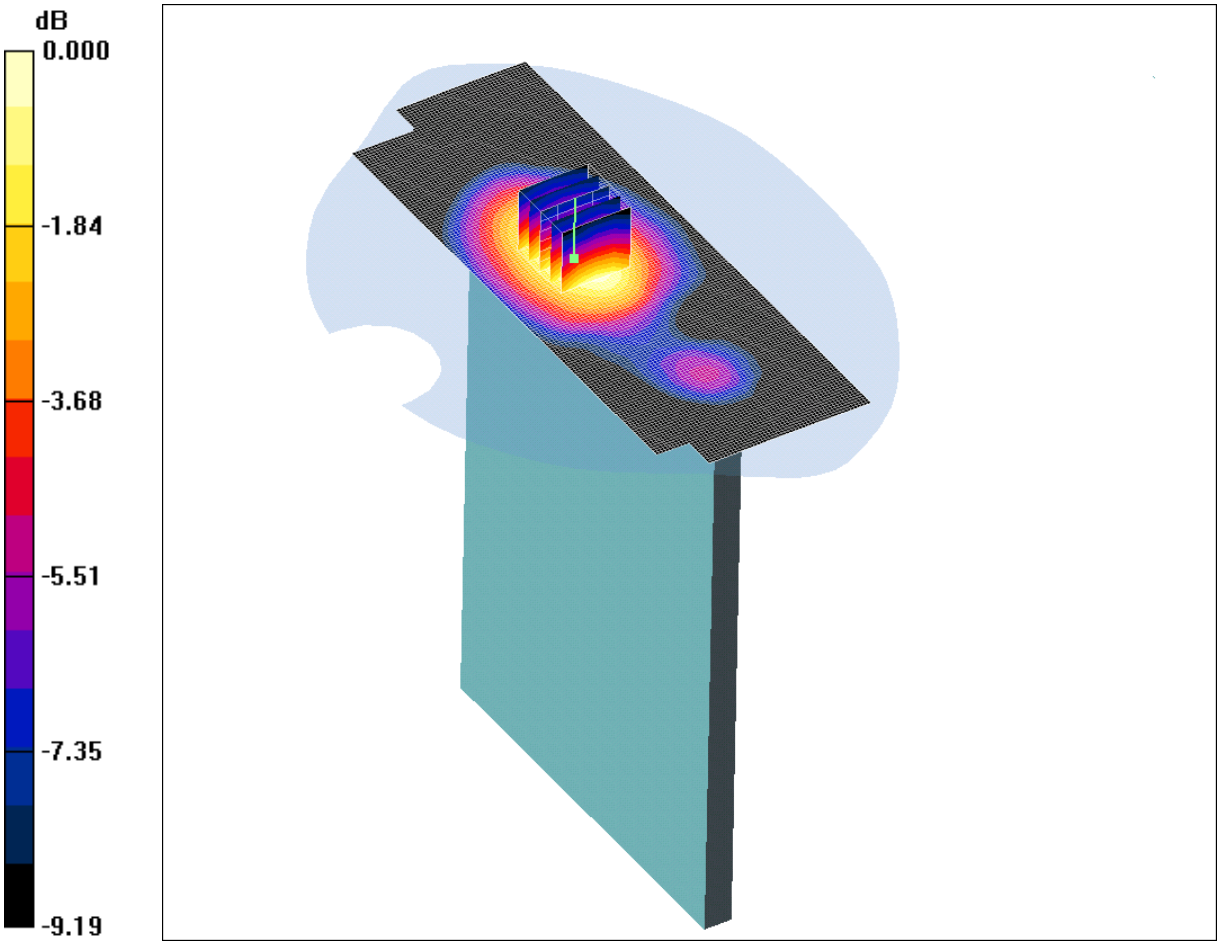


0 dB = 0.152mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium: 900 MHz MSL Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.971 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(8.92, 8.92, 8.92); Calibrated: 22/09/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Secondary Edge Landscape Antenna Extended Facing Phantom - Middle/Area Scan (61x191x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.159 mW/g
Secondary Edge Landscape Antenna Extended Facing Phantom - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.7 V/m; Power Drift = -0.026 dB
Peak SAR (extrapolated) = 0.241 W/kg
SAR(1 g) = 0.138 mW/g; SAR(10 g) = 0.087 mW/g
Maximum value of SAR (measured) = 0.152 mW/g

SCN/87983JD02A/009: Secondary Edge Portrait of EUT Antenna Retracted Facing Phantom FDD V CH4183
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369



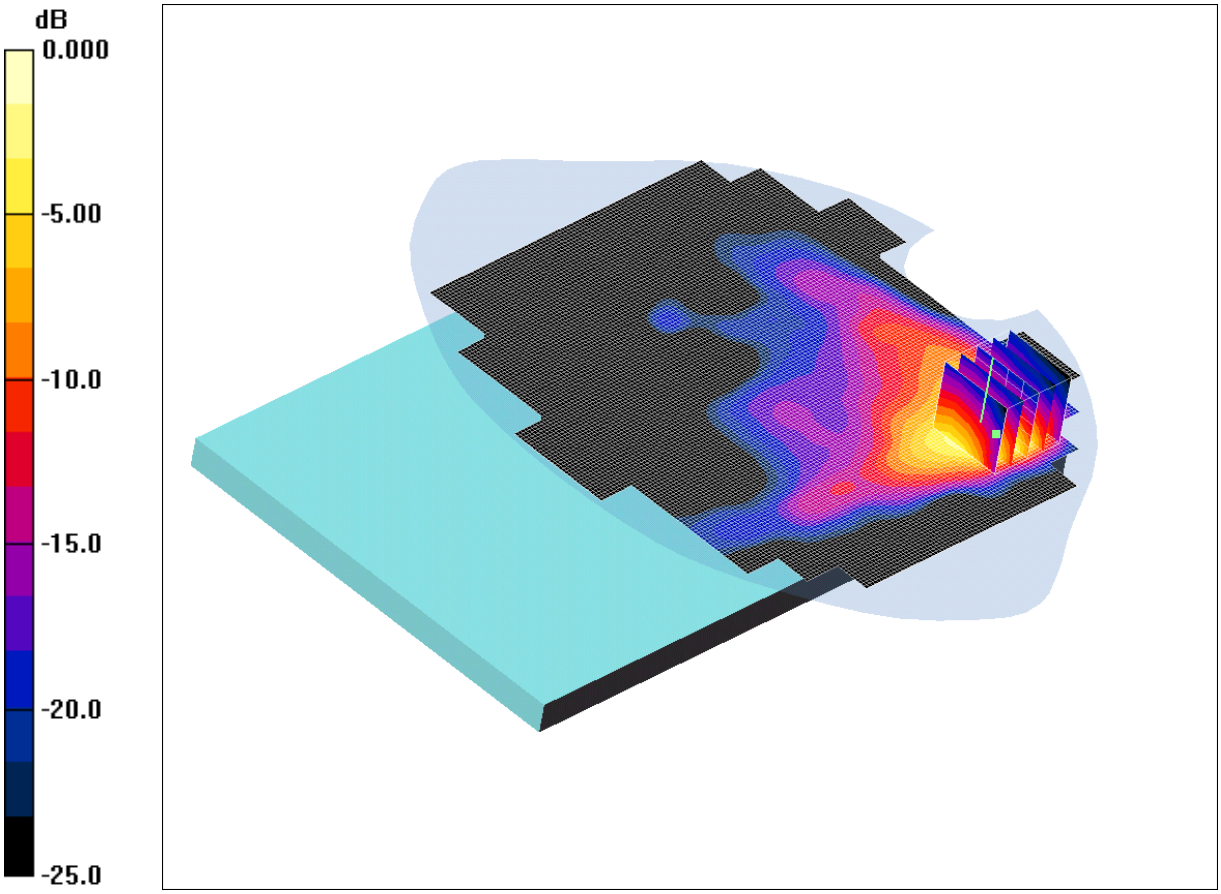
0 dB = 0.087mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium: 900 MHz MSL Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.971 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(8.92, 8.92, 8.92); Calibrated: 22/09/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Secondary Edge Porttrait Antenna Retracted Facing Phantom - Middle/Area Scan (61x171x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.089 mW/g

Secondary Edge Porttrait Antenna Retracted Facing Phantom - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.18 V/m; Power Drift = -0.191 dB
Peak SAR (extrapolated) = 0.114 W/kg
SAR(1 g) = 0.081 mW/g; SAR(10 g) = 0.057 mW/g
Maximum value of SAR (measured) = 0.087 mW/g

SCN/87983JD02A/010: Base of EUT Antenna Retracted Facing Phantom Wi-Fi 802.11b 1Mbps CH6
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369

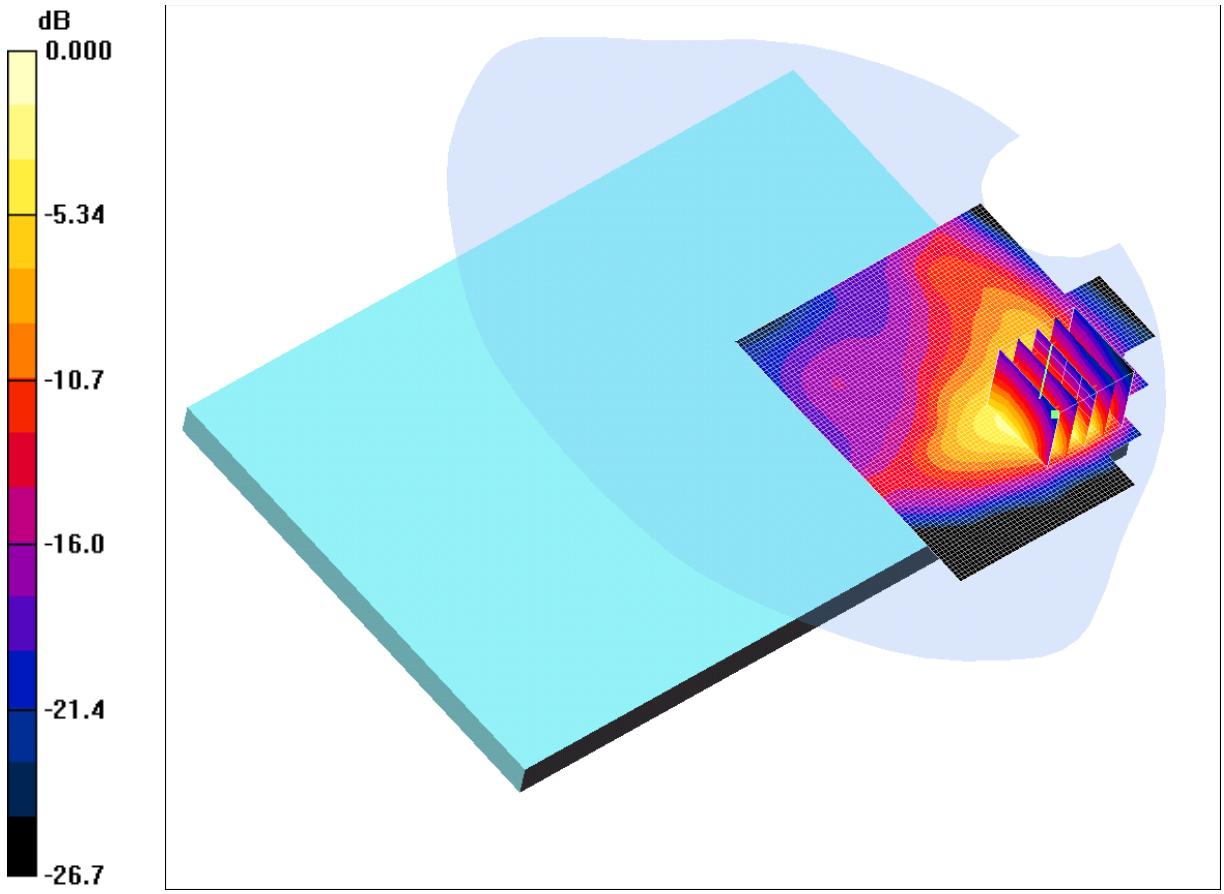


0 dB = 1.15mW/g

Communication System: WLAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: 2450 MHz MSL Medium parameters used (interpolated): f = 2437 MHz; σ = 2.01 mho/m; ε_r = 50.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(7.15, 7.15, 7.15); Calibrated: 22/09/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Base of EUT Antenna Retracted Facing Phantom - Middle/Area Scan (131x141x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.84 mW/g
Base of EUT Antenna Retracted Facing Phantom - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.7 V/m; Power Drift = -0.045 dB
Peak SAR (extrapolated) = 1.92 W/kg
SAR(1 g) = 0.836 mW/g; SAR(10 g) = 0.400 mW/g
Maximum value of SAR (measured) = 1.15 mW/g

SCN/87983JD02A/011: Base of EUT Antenna Extended Facing Phantom Wi-Fi 802.11b 1Mbps CH6
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369

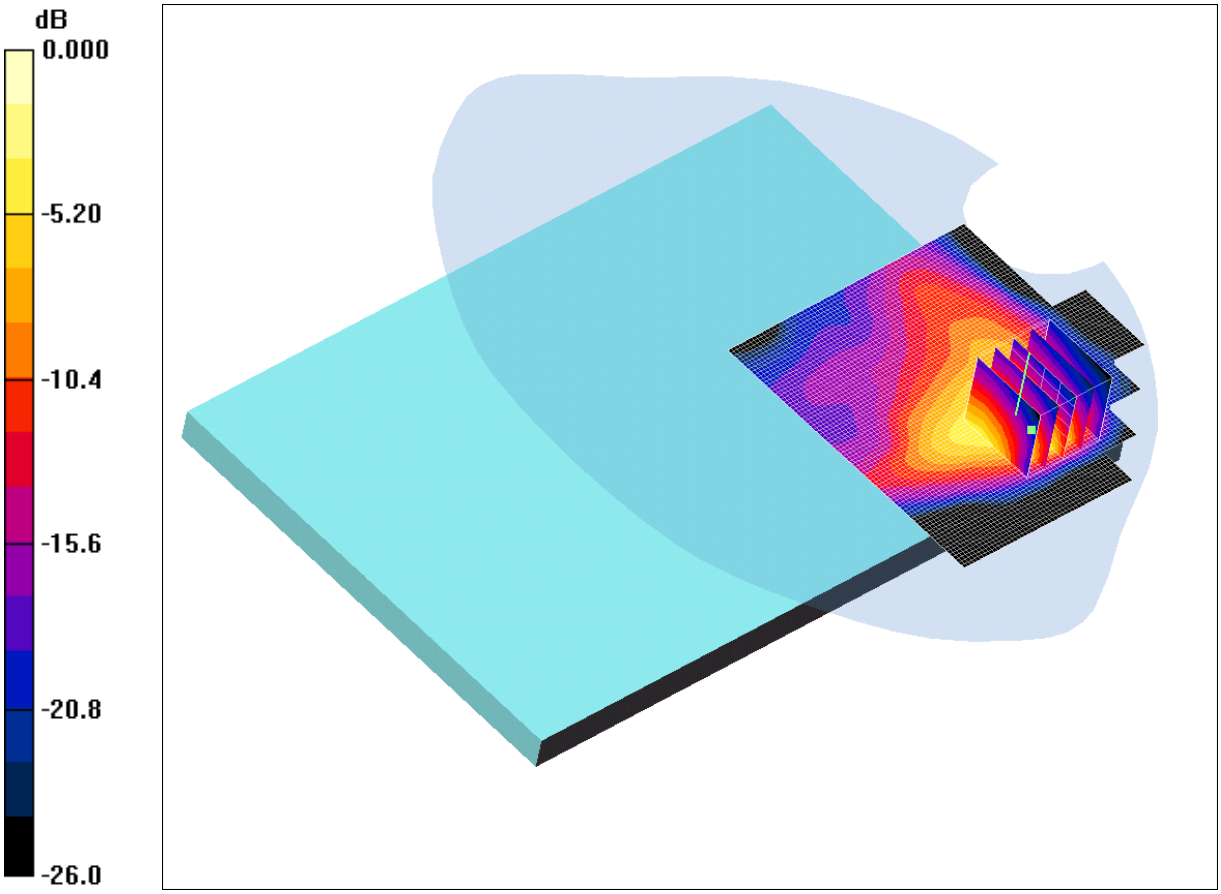


0 dB = 1.15mW/g

Communication System: WLAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: 2450 MHz MSL Medium parameters used (interpolated): f = 2437 MHz; σ = 2.01 mho/m; ε_r = 50.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(7.15, 7.15, 7.15); Calibrated: 22/09/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Base of EUT Antenna Extended Facing Phantom - Middle/Area Scan (81x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.86 mW/g
Base of EUT Antenna Extended Facing Phantom - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.7 V/m; Power Drift = 0.039 dB
Peak SAR (extrapolated) = 1.95 W/kg
SAR(1 g) = 0.840 mW/g; SAR(10 g) = 0.403 mW/g
Maximum value of SAR (measured) = 1.15 mW/g

SCN/87983JD02A/012: Base of EUT Antenna Retracted Facing Phantom Wi-Fi 802.11b 1Mbps CH1
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369

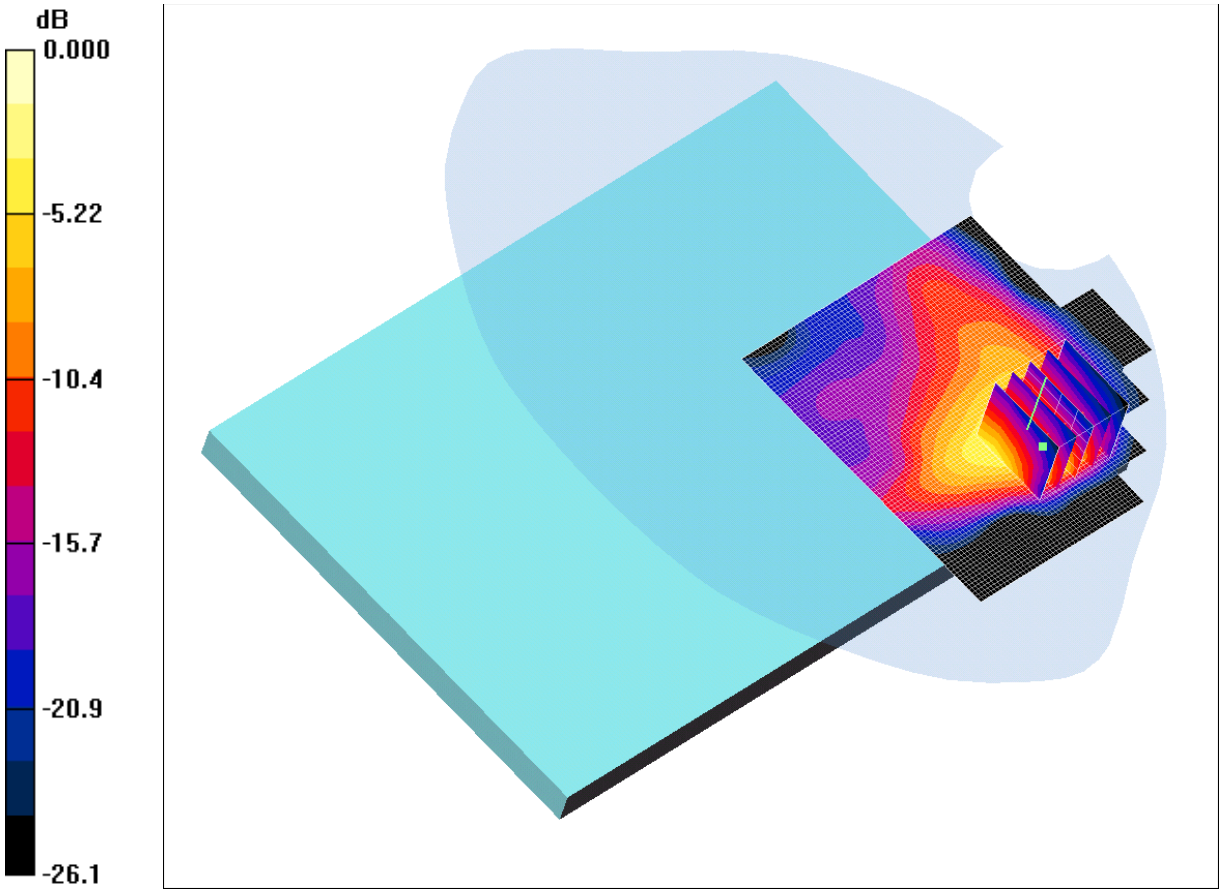


0 dB = 1.15mW/g

Communication System: WLAN; Frequency: 2412 MHz;Duty Cycle: 1:1
Medium: 2450 MHz MSL Medium parameters used (interpolated): f = 2412 MHz; σ = 1.98 mho/m; ε_r = 50.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(7.15, 7.15, 7.15); Calibrated: 22/09/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Base of EUT Antenna Retracted Facing Phantom - Low/Area Scan (81x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.64 mW/g
Base of EUT Antenna Retracted Facing Phantom - Low/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.8 V/m; Power Drift = -0.105 dB
Peak SAR (extrapolated) = 2.05 W/kg
SAR(1 g) = 0.854 mW/g; SAR(10 g) = 0.394 mW/g
Maximum value of SAR (measured) = 1.15 mW/g

SCN/87983JD02A/013: Base of EUT Antenna Extended Facing Phantom Wi-Fi 802.11b 1Mbps CH1
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369

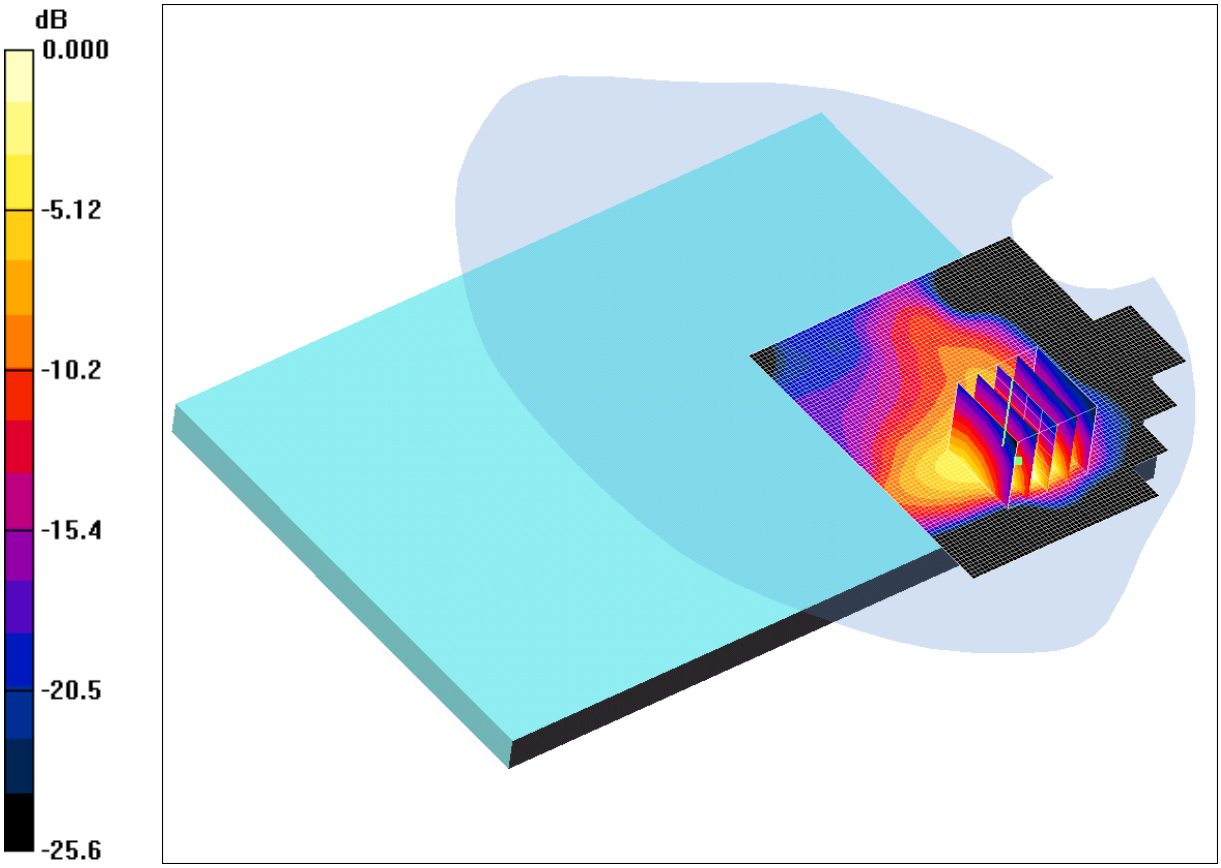


0 dB = 1.15mW/g

Communication System: WLAN; Frequency: 2412 MHz;Duty Cycle: 1:1
Medium: 2450 MHz MSL Medium parameters used (interpolated): f = 2412 MHz; σ = 1.98 mho/m; ε_r = 50.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(7.15, 7.15, 7.15); Calibrated: 22/09/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Base of EUT Antenna Extended Facing Phantom - Low/Area Scan (81x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.65 mW/g
Base of EUT(Region 1) Antenna Extended Facing Phantom - Low/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.8 V/m; Power Drift = -0.064 dB
Peak SAR (extrapolated) = 2.04 W/kg
SAR(1 g) = 0.850 mW/g; SAR(10 g) = 0.392 mW/g
Maximum value of SAR (measured) = 1.15 mW/g

SCN/87983JD02A/014: Base of EUT Antenna Retracted Facing Phantom Wi-Fi 802.11b 1Mbps CH11
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369

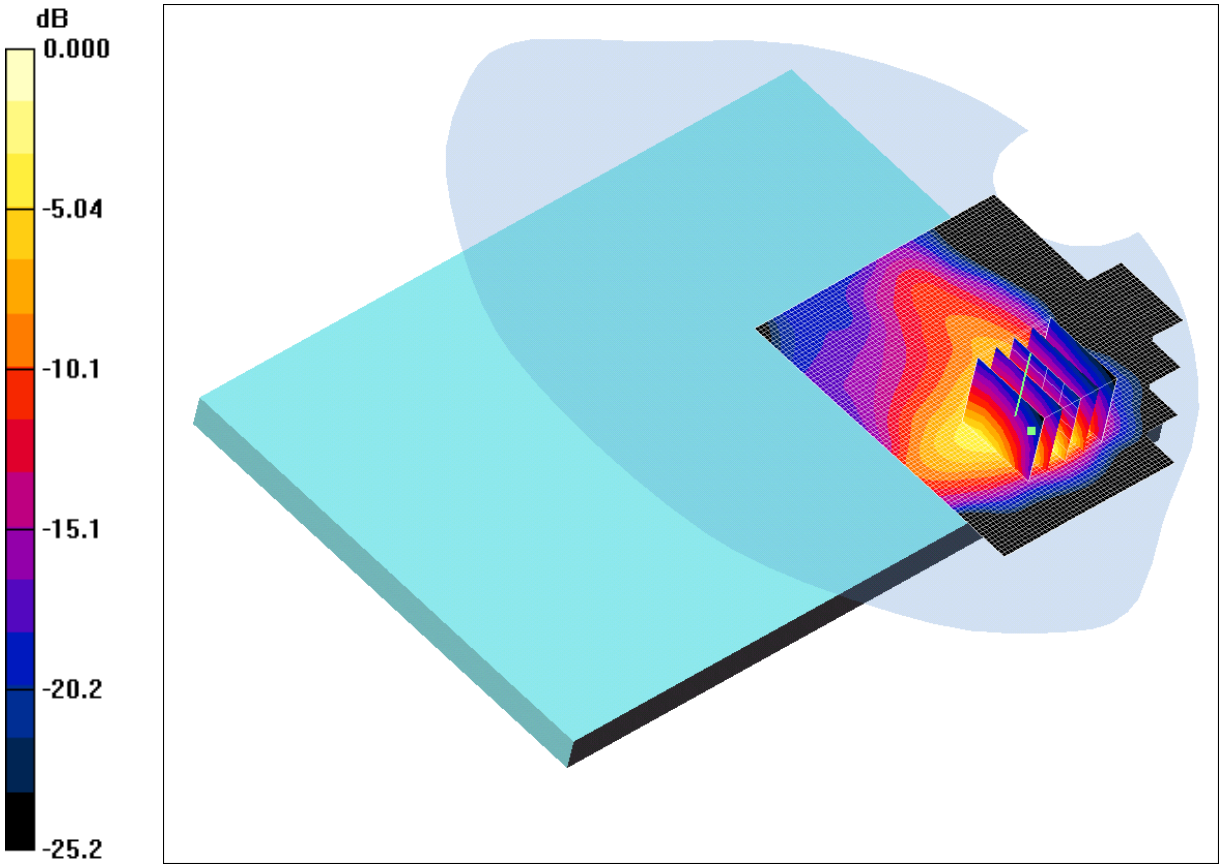


0 dB = 1.04mW/g

Communication System: WLAN; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium: 2450 MHz MSL Medium parameters used (interpolated): f = 2462 MHz; σ = 2.04 mho/m; ε_r = 50.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(7.15, 7.15, 7.15); Calibrated: 22/09/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Base of EUT Antenna Retracted Facing Phantom - High/Area Scan (81x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.95 mW/g
Base of EUT(Region 1) Antenna Retracted Facing Phantom - High/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.76 V/m; Power Drift = 0.000 dB
Peak SAR (extrapolated) = 1.91 W/kg
SAR(1 g) = 0.804 mW/g; SAR(10 g) = 0.381 mW/g
Maximum value of SAR (measured) = 1.04 mW/g

SCN/87983JD02A/015: Base of EUT Antenna Extended Facing Phantom Wi-Fi 802.11b 1Mbps CH11
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369

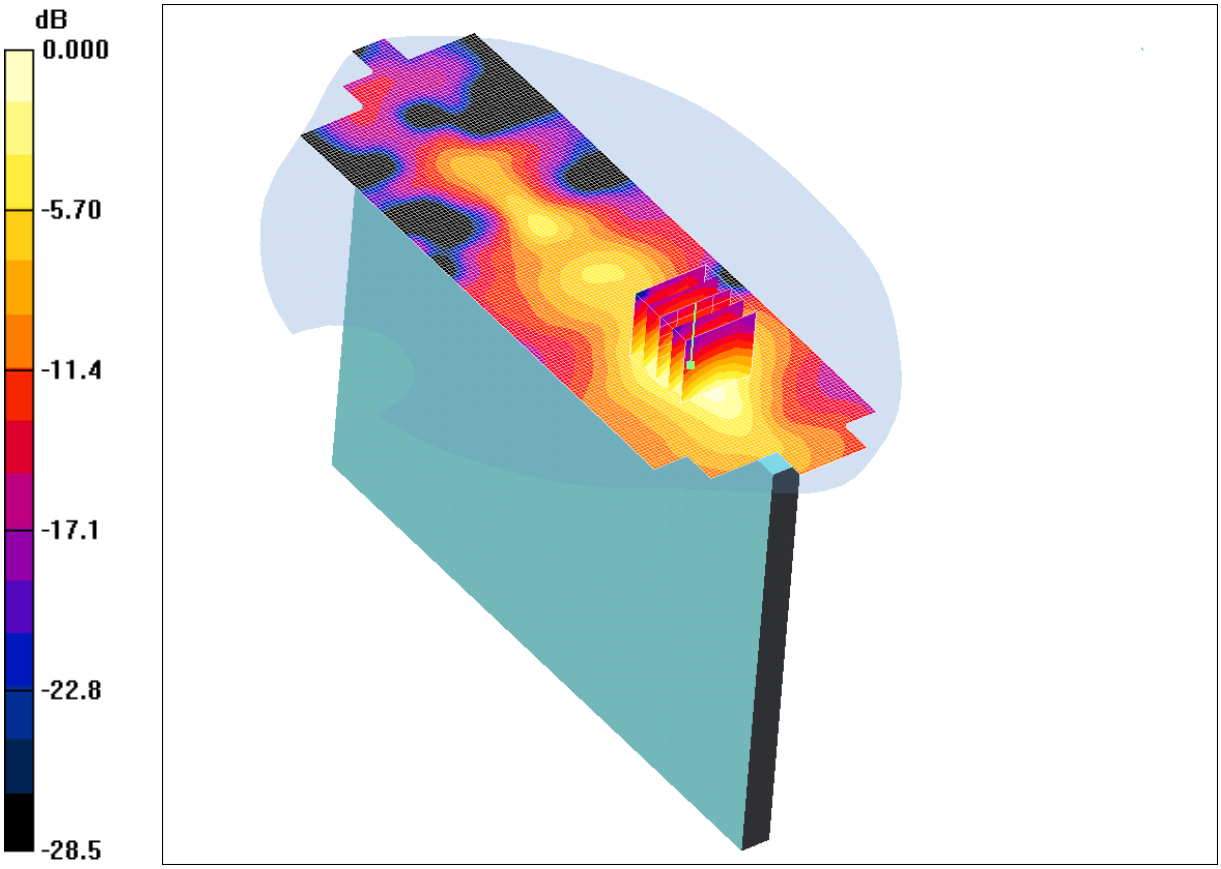


0 dB = 1.03mW/g

Communication System: WLAN; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium: 2450 MHz MSL Medium parameters used (interpolated): f = 2462 MHz; σ = 2.04 mho/m; ε_r = 50.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(7.15, 7.15, 7.15); Calibrated: 22/09/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Base of EUT Antenna Extended Facing Phantom - High/Area Scan (81x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.73 mW/g
Base of EUT(Region 1) Antenna Extended Facing Phantom - High/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.81 V/m; Power Drift = 0.019 dB
Peak SAR (extrapolated) = 1.90 W/kg
SAR(1 g) = 0.799 mW/g; SAR(10 g) = 0.379 mW/g
Maximum value of SAR (measured) = 1.03 mW/g

SCN/87983JD02A/016: Secondary Edge Landscape of EUT Antenna Retracted Facing Phantom Wi-Fi 802.11b 1Mbps CH6
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369

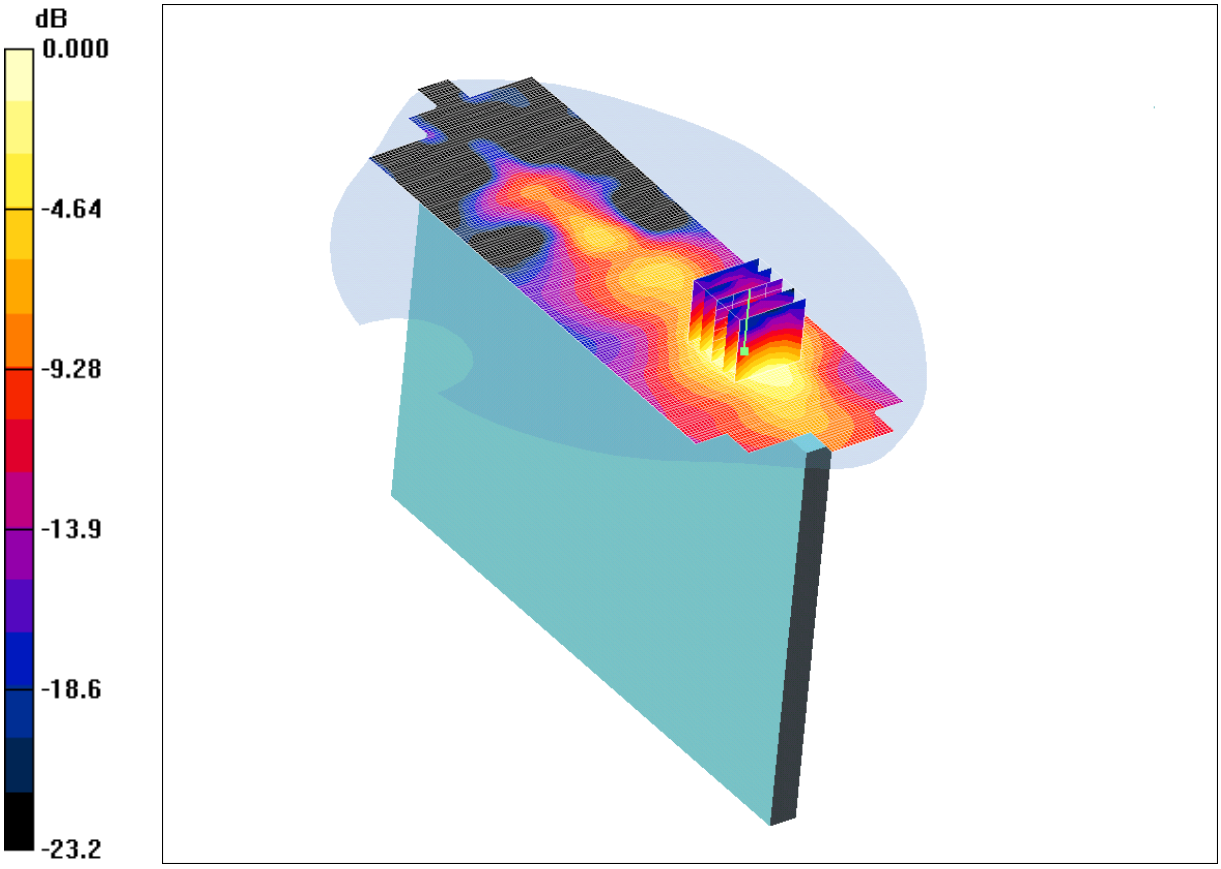


0 dB = 0.139mW/g

Communication System: WLAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: 2450 MHz MSL Medium parameters used (interpolated): f = 2437 MHz; σ = 2.01 mho/m; ε_r = 50.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(7.15, 7.15, 7.15); Calibrated: 22/09/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Secondary Edge Landscape Antenna Retracted Facing Phantom - Middle/Area Scan (61x191x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.142 mW/g
Secondary Edge Landscape Antenna Retracted Facing Phantom - Middle/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.28 V/m; Power Drift = 0.037 dB
Peak SAR (extrapolated) = 0.228 W/kg
SAR(1 g) = 0.124 mW/g; SAR(10 g) = 0.066 mW/g
Maximum value of SAR (measured) = 0.139 mW/g

SCN/87983JD02A/017: Secondary Edge Landscape of EUT Antenna Extended Facing Phantom Wi-Fi 802.11b 1Mbps CH6
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369

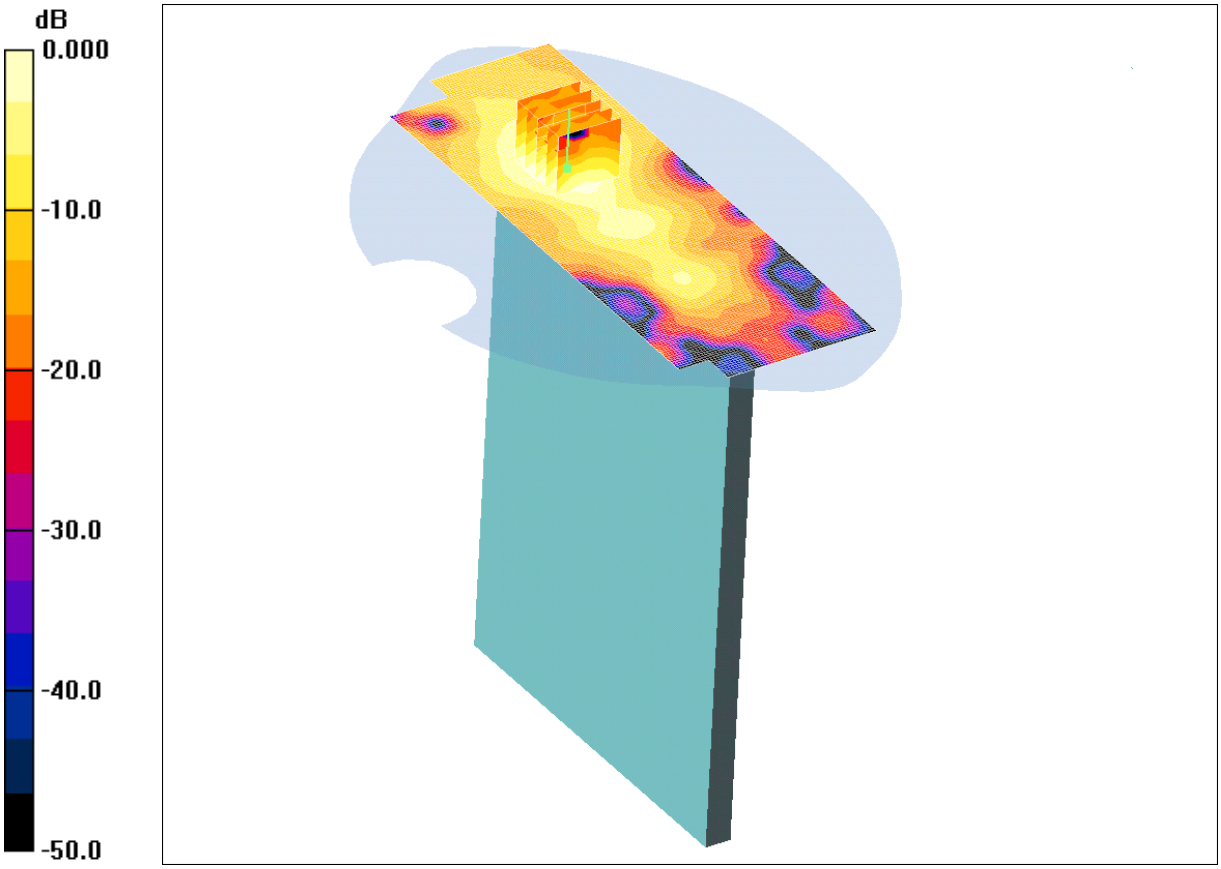


0 dB = 0.137mW/g

Communication System: WLAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: 2450 MHz MSL Medium parameters used (interpolated): f = 2437 MHz; σ = 2.01 mho/m; ε_r = 50.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(7.15, 7.15, 7.15); Calibrated: 22/09/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Secondary Edge Landscape Antenna Extended Facing Phantom - Middle/Area Scan (61x191x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.132 mW/g
Secondary Edge Landscape Antenna Extended Facing Phantom - Middle/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.19 V/m; Power Drift = -0.006 dB
Peak SAR (extrapolated) = 0.221 W/kg
SAR(1 g) = 0.123 mW/g; SAR(10 g) = 0.065 mW/g
Maximum value of SAR (measured) = 0.137 mW/g

SCN/87983JD02A/018: Primary Edge Portrait of EUT Antenna Retracted Facing Phantom Wi-Fi 802.11b 1Mbps CH6
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369

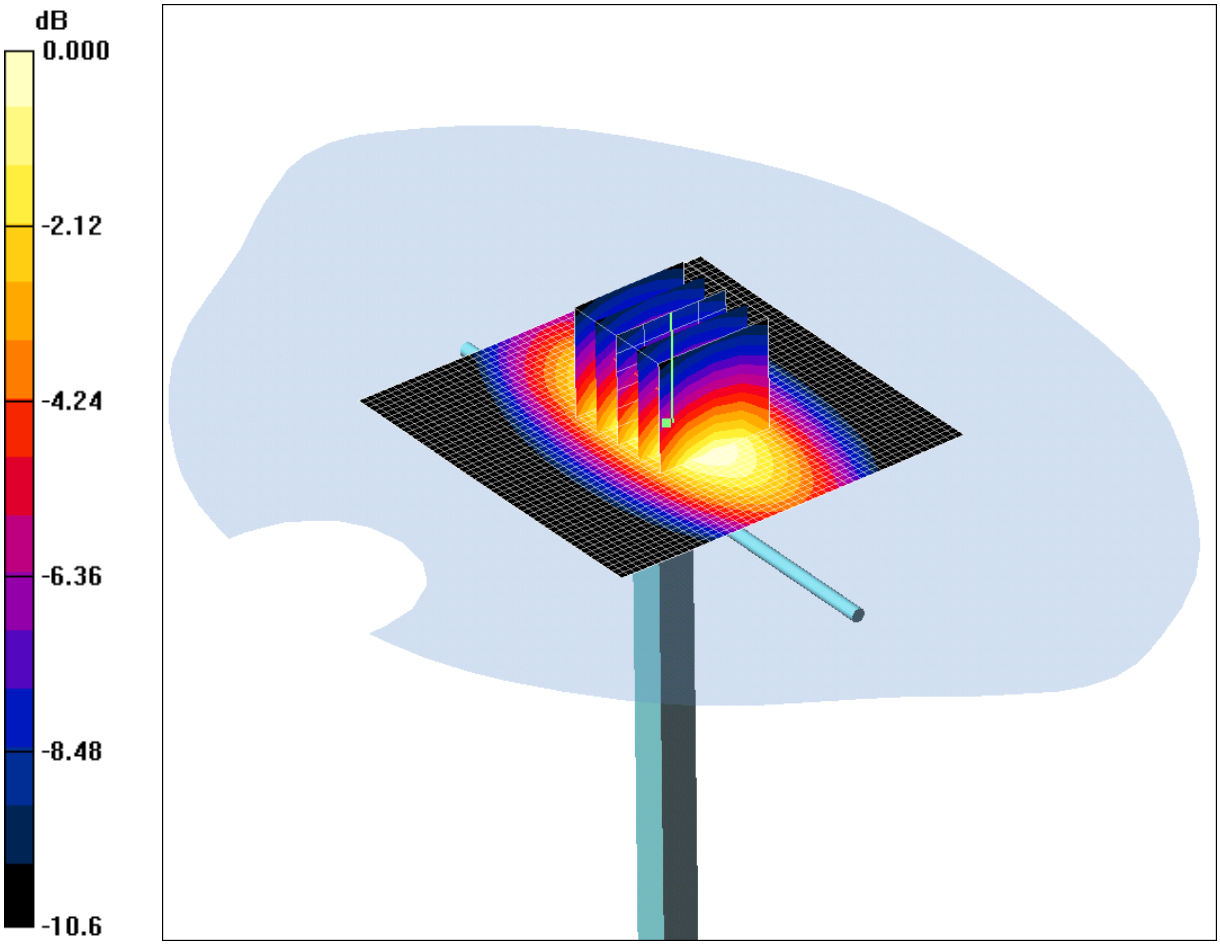


0 dB = 0.095mW/g

Communication System: WLAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: 2450 MHz MSL Medium parameters used (interpolated): f = 2437 MHz; σ = 2.01 mho/m; ε_r = 50.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(7.15, 7.15, 7.15); Calibrated: 22/09/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Primary Edge Porttrait Antenna Retracted Facing Phantom - Middle/Area Scan (61x171x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.100 mW/g
Primary Edge Porttrait Antenna Retracted Facing Phantom - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.12 V/m; Power Drift = 0.027 dB
Peak SAR (extrapolated) = 0.163 W/kg
SAR(1 g) = 0.087 mW/g; SAR(10 g) = 0.045 mW/g
Maximum value of SAR (measured) = 0.095 mW/g

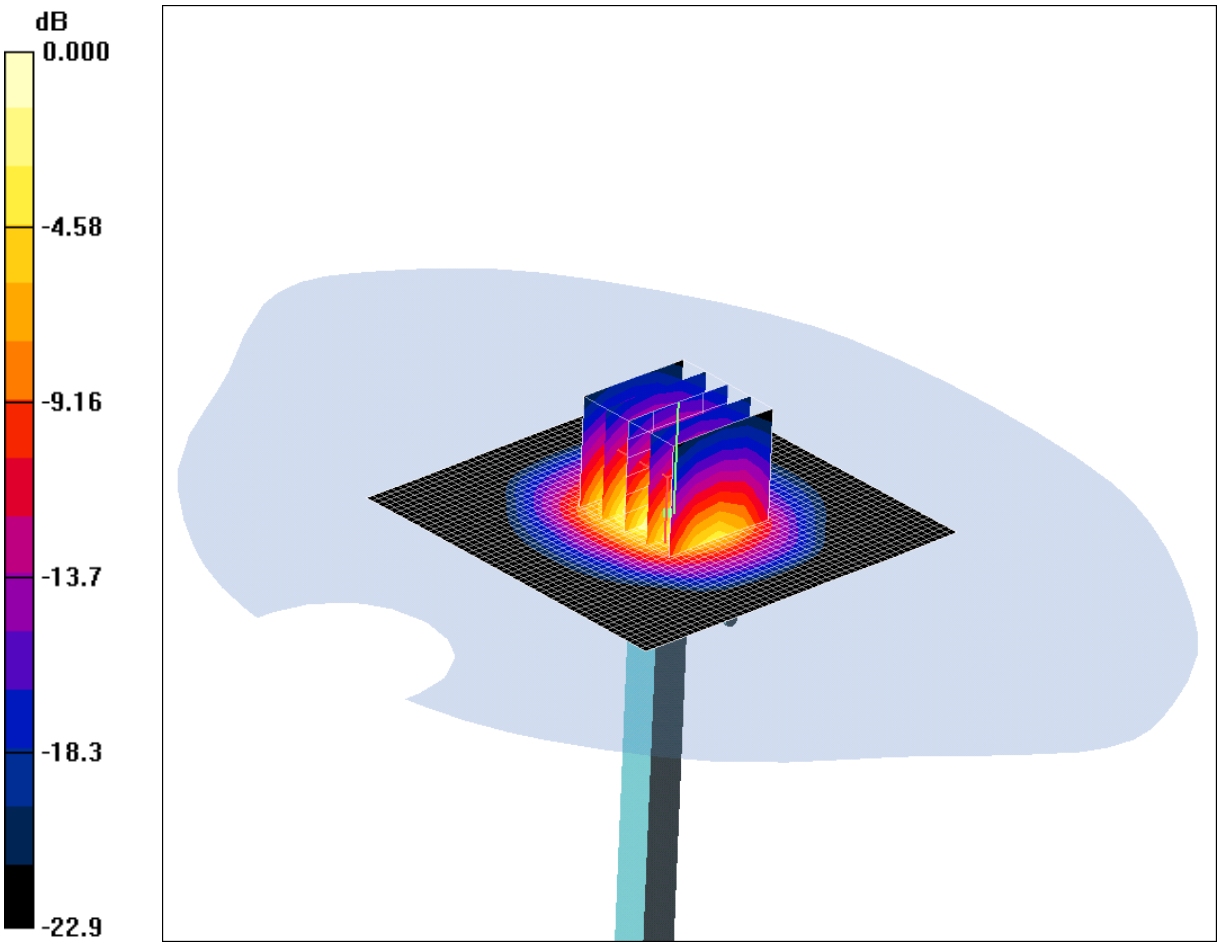
SCN/87983JD02A/019: System Performance Check 900MHz Body 31 05 12
Date: 31/05/2012
DUT: Dipole 900 MHz; SN: 124; Type: D900V2; Serial: SN124



0 dB = 3.04mW/g

Communication System: CW; Frequency: 900 MHz;Duty Cycle: 1:1
Medium: 900 MHz MSL Medium parameters used: f = 900 MHz; σ = 1.01 mho/m; ε_r = 55.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(8.92, 8.92, 8.92); Calibrated: 22/09/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176
d=15mm, Pin=250mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 3.20 mW/g
d=15mm, Pin=250mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 54.4 V/m; Power Drift = 0.040 dB
Peak SAR (extrapolated) = 4.23 W/kg
SAR(1 g) = 2.82 mW/g; SAR(10 g) = 1.84 mW/g
Maximum value of SAR (measured) = 3.04 mW/g

SCN/87983JD02A/020: System Performance Check 2450MHz Body 31 05 12
Date: 31/05/2012
DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:725

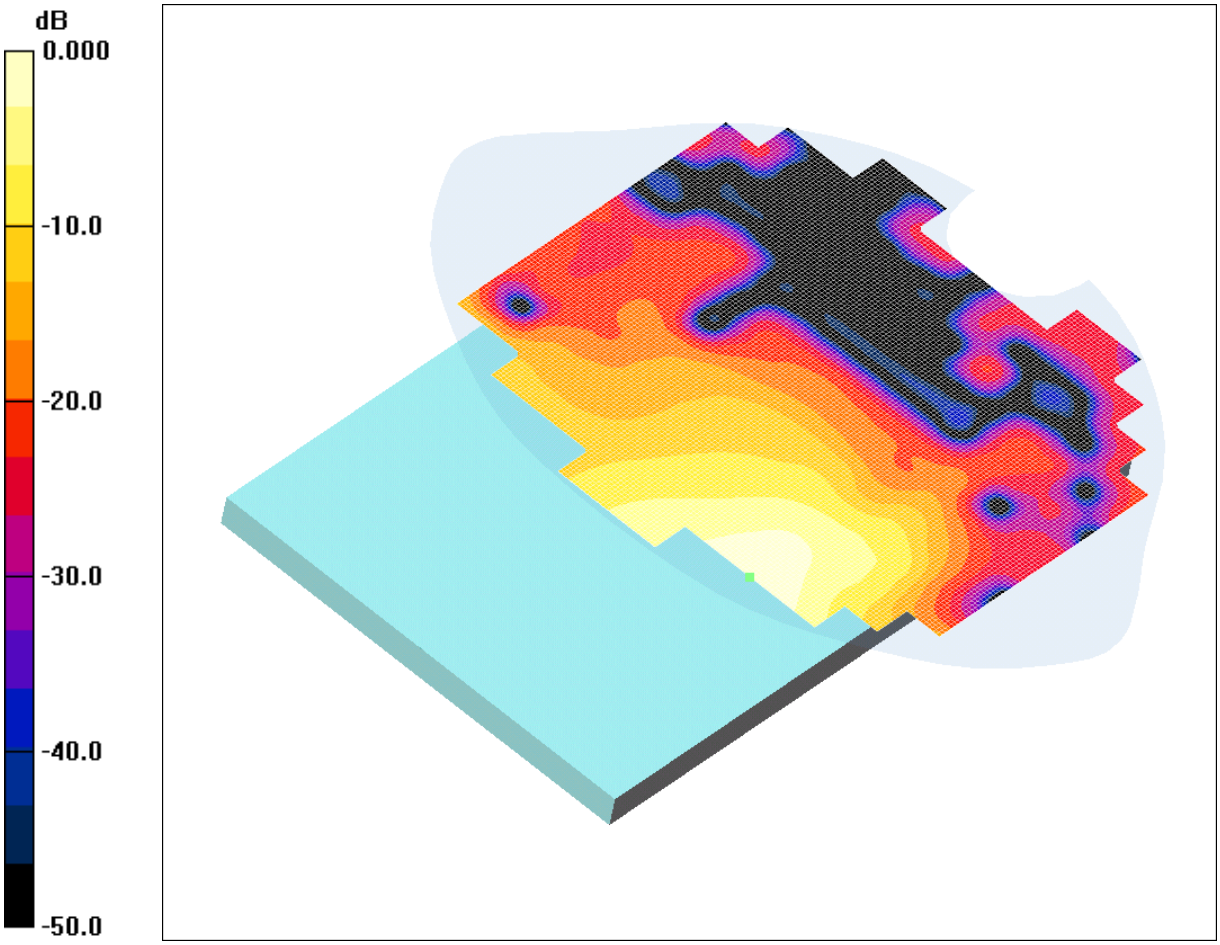


0 dB = 14.2mW/g

Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: 2450 MHz MSL Medium parameters used: f = 2450 MHz; σ = 2.03 mho/m; ε_r = 50.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(7.15, 7.15, 7.15); Calibrated: 22/09/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

d=10mm, Pin=250mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 18.6 mW/g
d=10mm, Pin=250mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 82.4 V/m; Power Drift = 0.050 dB
Peak SAR (extrapolated) = 26.5 W/kg
SAR(1 g) = 12.7 mW/g; SAR(10 g) = 5.77 mW/g
Maximum value of SAR (measured) = 14.2 mW/g

SCN/87983JD02A/021: Base of EUT (Region 1) Antenna Retracted Facing Phantom FDD V CH4183
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369

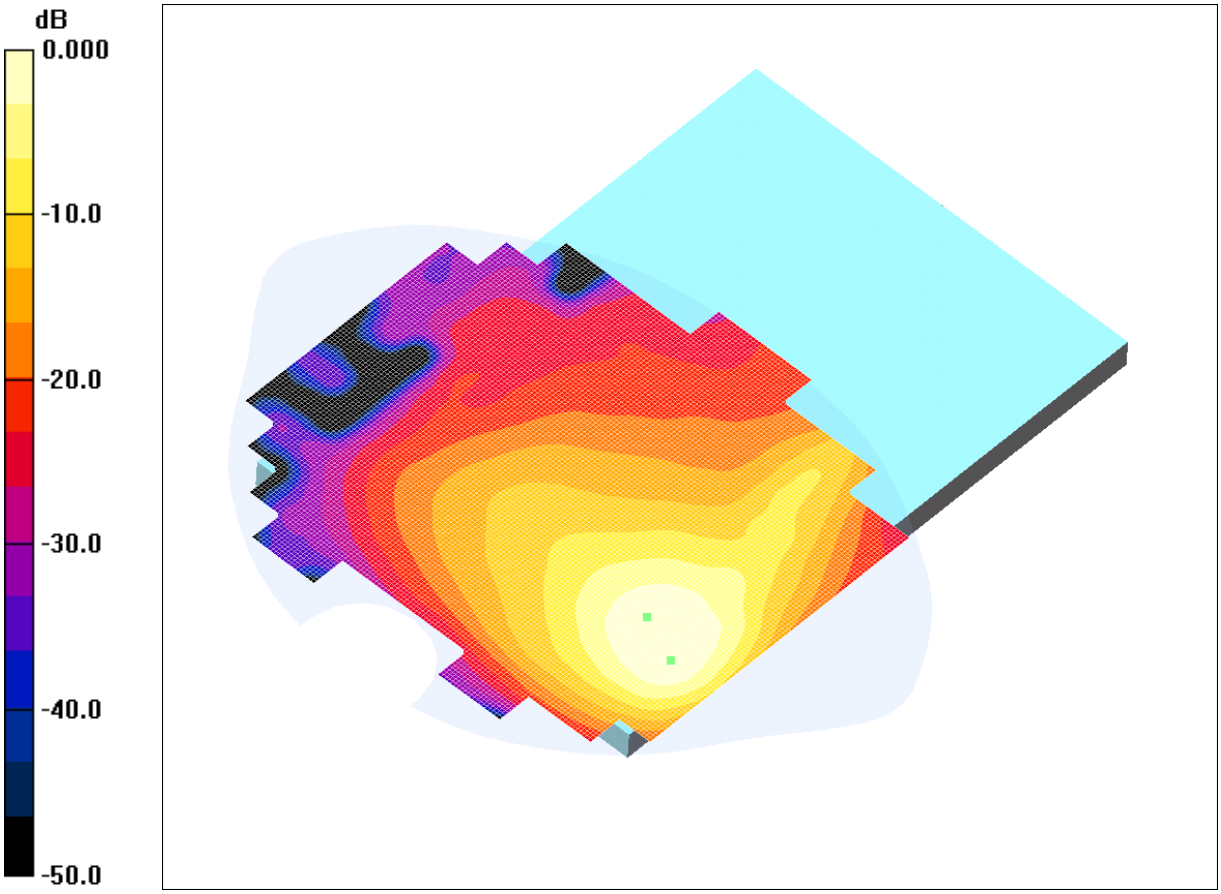


0 dB = 0.222mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium: 900 MHz MSL Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.971 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(8.92, 8.92, 8.92); Calibrated: 22/09/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

{Information Purpose Only}
Base of EUT(Region 1) Antenna Retracted Facing Phantom - Middle/Area Scan (131x141x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.222 mW/g

SCN/87983JD02A/022: Base of EUT (Region 2) Antenna Retracted Facing Phantom FDD V CH4183
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369

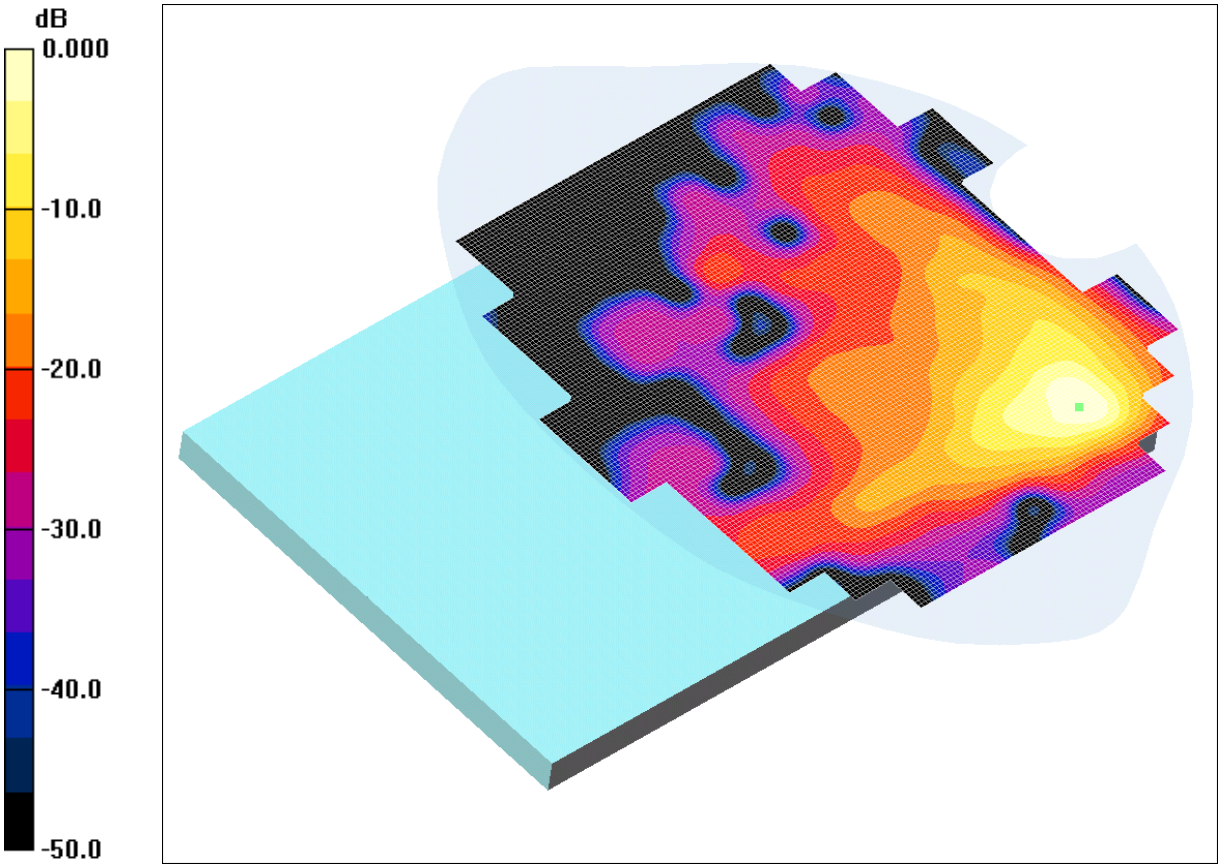


0 dB = 1.42mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium: 900 MHz MSL Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.971 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(8.92, 8.92, 8.92); Calibrated: 22/09/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Base of EUT(Region 2) Antenna Retracted Facing Phantom - Middle/Area Scan (131x141x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.42 mW/g

SCN/87983JD02A/023: Base of EUT (Region 1) Antenna Retracted Facing Phantom Wi-Fi 802.11b 1Mbps CH6
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369

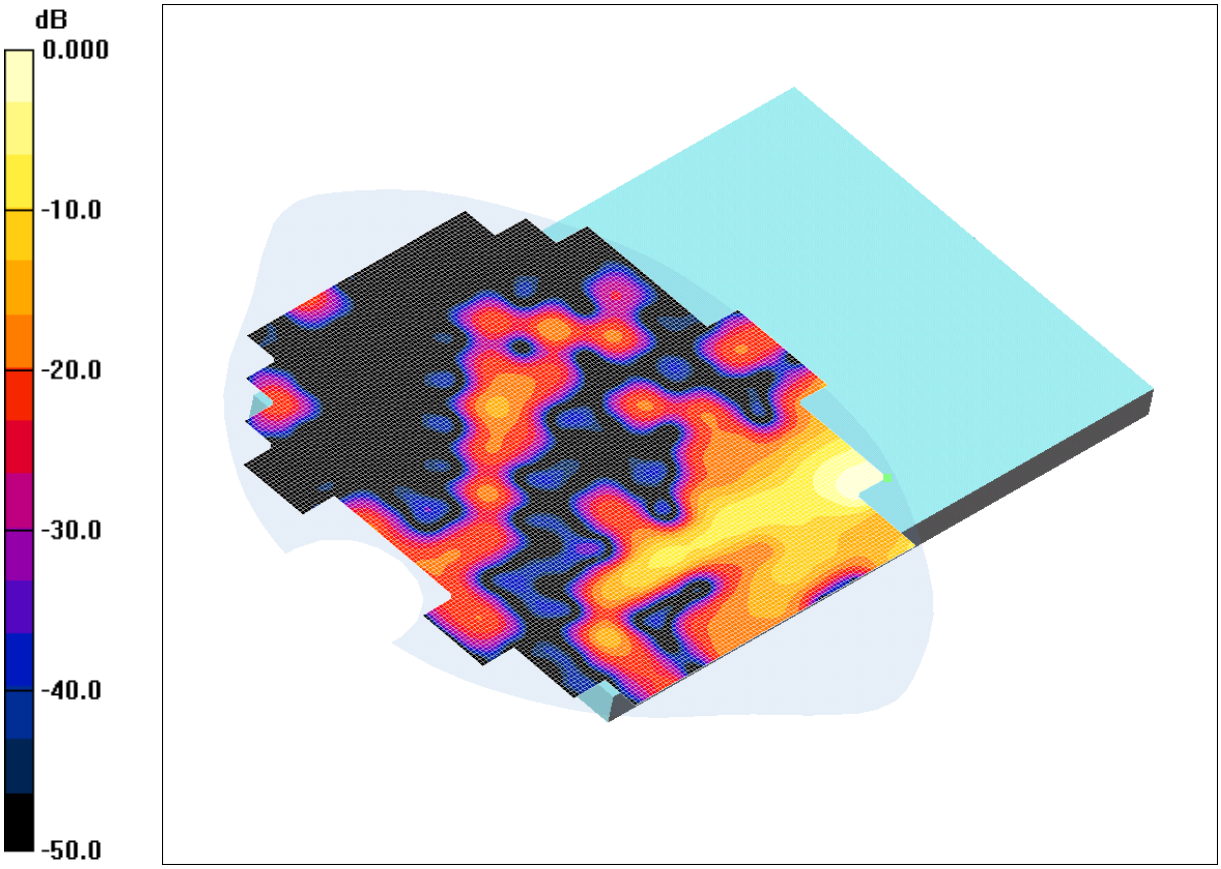


0 dB = 1.84mW/g

Communication System: WLAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: 2450 MHz MSL Medium parameters used (interpolated): f = 2437 MHz; σ = 2.01 mho/m; ε_r = 50.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(7.15, 7.15, 7.15); Calibrated: 22/09/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Base of EUT(Region 1) Antenna Retracted Facing Phantom - Middle/Area Scan (131x141x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.84 mW/g

SCN/87983JD02A/024: Base of EUT (Region 2) Antenna Retracted Facing Phantom Wi-Fi 802.11b 1Mbps CH6
Date 31/05/2012
DUT: Panasonic Mobile Comms Dev of Europe; Type: D21BR2 Tablet Sample C11 ; Serial: 359952040036369



0 dB = 0.137mW/g

Communication System: WLAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: 2450 MHz MSL Medium parameters used (interpolated): f = 2437 MHz; σ = 2.01 mho/m; ε_r = 50.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3814; ConvF(7.15, 7.15, 7.15); Calibrated: 22/09/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 26/01/2012
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Base of EUT(Region 2) Antenna Retracted Facing Phantom - Middle/Area Scan (131x141x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.137 mW/g