SAR TEST REPORT

No. 25T04Z100481-006

For

Shenzhen Tinno Mobile Technology Corp.

Weymouth

Model Name: B321MH

with

Hardware Version: V1.0

Software Version: B321MHV01.05.10

FCC ID: XD6B321MH

Issued Date: 2025-05-14

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

Test Laboratory:

CTTL, Telecommunication Technology Labs, CAICT

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REPORT HISTORY

Report Number	Revision	Issue Date	Description
25T04Z100481-006	Rev.0	2025-05-14	Initial creation of test report

TABLE OF CONTENT

1 Test Laboratory

1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under American Association for Laboratory Accreditation (A2LA) with lab code 7049.01, and is also an FCC accredited test laboratory (CN1349), and ISED accredited test laboratory (CAB identifier:CN0066). The detail accreditation scope can be found on A2LA website.

1.2. Testing Location

Location 1: CTTL(huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China 100191

1.3. Testing Environment

Normal Temperature: 18-25℃

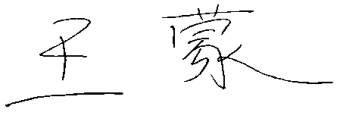
Relative Humidity: 30-70%

1.4. Project data

Testing Start Date: 2025-04-15

Testing End Date: 2025-05-13

1.5. Signature

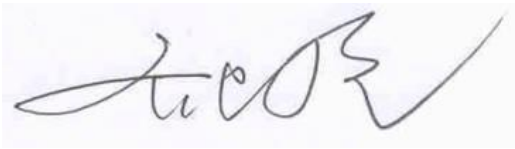


Wang Meng

(Prepared this test report)

Lin Jun

(Reviewed this test report)



Qi Dianyuan

Deputy Director of the laboratory

(Approved this test report)

2 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for Shenzhen Tinno Mobile Technology Corp. Weymouth B321MH are as follows:

Table 2.1: Highest Reported SAR (1g)

Band	Antenna	Highest Reported SAR (1g)	
		1g SAR Body	1g SAR Hotspot
LTE Band 2	ANT1	1.18	1.14
LTE Band 12	ANT1	0.77	0.61
LTE Band 25	ANT1	1.11	1.27
LTE Band 66/4	ANT1	1.06	1.06
LTE Band 71	ANT1	1.19	0.81
n25	ANT1	0.94	1.19
n41	ANT2	1.08	1.31
n41	ANT3	0.17	0.07
n41	ANT5	0.34	0.15
n41	ANT7	0.53	0.19
n66	ANT1	1.18	1.20
n71	ANT1	1.18	0.78
WLAN 2.4 GHz	ANT6	/	0.68
WLAN 5 GHz	ANT6	/	1.27

Note1: The device have similar frequency in some LTE bands ： LTE Band 66/4 since the supported frequency spans for the smaller LTE bands are completely cover by the larger LTE bands and the channel bandwidth and other operating parameters for the smaller band be fully supported by the larger band, therefore, only larger LTE bands were required to be tested for SAR.

The SAR values found for the Weymouth are below the maximum recommended levels of 1.6 W/kg as averaged over any 1g tissue according to the ANSI C95.1-1992.

For body operation, this device has been tested and meets FCC RF exposure guidelines when used with any accessory that contains no metal and which provides a minimum separation distance of 5 mm between this device and the body of the user. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power output.

The measurement together with the test system set-up is described in annex C of this test report. A detailed description of the equipment under test can be found in chapter 4 of this test report. The highest reported SAR value is obtained at the case of **(Table 2.1),** and the values are**:**

Body: 1.19 W/kg(1g)

Hotspot: 1.31 W/kg(1g)

Table 2.2: Simultaneous Transmission-Body

	Position	Main antenna	WiFi	Sum
Highest SAR value for Body	Right 10mm	0.78 (n71)	0.71 (WiFi5G)	**1.49**

Note1: the test positions of above tables are for the worse case that have been evaluated.

According to the above tables, the highest sum of reported SAR values is **1.49 W/kg (1g)**. The detail for simultaneous transmission consideration is described in chapter 13.

Conclusion:

According to the above tables, the sum of reported SAR values is<1.6W/kg for 1g SAR. So the simultaneous transmission SAR with volume scans is not required.

3 Client Information

3.1 Applicant Information

Company Name:	Shenzhen Tinno Mobile Technology Corp.
Address/Post:	27-001, South Side of Tianlong Mobile Headquarters Building, Tongfa South Road, Xili Community, Xili Street, Nanshan District, Shen zhen ,PRC
Contact Person:	xiaoping.li
Contact Email:	xiaoping.li@tinno.com
Telephone:	0755-86095550
Fax	0755-86095551

3.2 Manufacturer Information

Company Name:	Shenzhen Tinno Mobile Technology Corp.
Address/Post:	27-001, South Side of Tianlong Mobile Headquarters Building, Tongfa South Road, Xili Community, Xili Street, Nanshan District, Shen zhen ,PRC
Contact Person:	xiaoping.li
Contact Email:	xiaoping.li@tinno.com
Telephone:	0755-86095550
Fax	0755-86095551

4 Equipment Under Test (EUT) and Ancillary Equipment (AE)

4.1 About EUT

Description:	Weymouth
Model name:	B321MH
Tested Band:	LTE Band 2/4/12/25/66/71 5G NR n25/41/66/71 WLAN 2.4GHz, WLAN 5GHz
Tx Frequency:	1850 – 1910 MHz (LTE Band 2)
	1710 – 1755 MHz (LTE Band 4)
	699 – 716 MHz (LTE Band 12)
	1850 – 1915 MHz (LTE Band 25)
	1710 – 1780 MHz (LTE Band 66)
	663 – 698 MHz (LTE Band 71)
	1850 – 1915 MHz (n25)
	2496 – 2690 MHz (n41)
	1710 – 1780 MHz (n66)
	663 – 698 MHz (n71)
	2412 – 2462 MHz (WLAN 2.4GHz)
	5180 – 5240 MHz (WLAN 5GHz UNII-1)
	5745 – 5825 MHz (WLAN 5GHz UNII-3)
Test device production information:	Production unit
Device type:	Portable device
Antenna type:	Integrated antenna

4.2 Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version
EUT1	864214070007119	V1.0	B321MHV01.05.10
EUT2	864214070006996	V1.0	B321MHV01.05.10
EUT3	864214070006863	V1.0	B321MHV01.05.10
EUT4	864214070007077	V1.0	B321MHV01.05.10
EUT5	864214070005527	V1.0	B321MHV01.05.10
EUT6	864214070005659	V1.0	B321MHV01.05.10

*EUT ID: is used to identify the test sample in the lab internally.

Note: It is performed to test SAR with the EUT1~4 and conducted power with the EUT5~6.

4.3 Internal Identification of AE used during the test

AE ID*	Description	Model	SN	Manufacturer
AE1	Battery	TNO496386AG- N1	TLP250312U572A012817	Guangdong Fenghua New Energy Co.,Ltd.
AE2	Battery	TNO496386AG- N1	TLP250312U572A012956	Guangdong Fenghua New Energy Co.,Ltd.
AE3	Battery	TNO496386AG- N1	TLP250312U572A013050	Guangdong Fenghua New Energy Co.,Ltd.

*AE ID: is used to identify the test sample in the lab internally.

5 TEST METHODOLOGY

5.1 Applicable Limit Regulations

ANSI C95.1–1992:IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

It specifies the maximum exposure limit of **1.6 W/kg** as averaged over any 1 gram of tissue for portable devices being used within 20 cm of the user in the uncontrolled environment.

It specifies the maximum exposure limit of **4.0** W/kg as averaged over any 10 gram of tissue for portable devices being used within 20 cm of the user in the uncontrolled environment.

5.2 Applicable Measurement Standards

IEEE Std 1528–2013: Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques.

5.3 KDB and Workshop Procedures

KDB447498 D01: General RF Exposure Guidance v06: Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.

KDB447498 D02 SAR Procedures for Dongle Xmtr v02r01: SAR Measurement Procedures for USB Dongle Transmitters

KDB941225 D05 SAR for LTE Devices v02r05: SAR Evaluation Considerations for LTE Devices

KDB941225 D06 Hotspot Mode SAR v02r01: SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities

KDB248227 D01 802.11 Wi-Fi SAR v02r02: SAR GUIDANCE FOR IEEE 802.11 (Wi-Fi) TRANSMITTERS

KDB 616217 D04 SAR for laptop and tablets v01r02: SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers

KDB865664 D01 SAR measurement 100 MHz to 6 GHz v01r04: SAR Measurement Requirements for 100 MHz to 6 GHz.

KDB865664 D02 RF Exposure Reporting v01r02: RF Exposure Compliance Reporting and Documentation Considerations

6 Specific Absorption Rate (SAR)

6.1 Introduction

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

6.2 SAR Definition

The SAR definition is 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) . The equation description is as below:

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

SAR is expressed in units of Watts per kilogram (W/kg)
SAR measurement can be either related to the temperature elevation in tissue by

$$SAR = c\left(\frac{\delta T}{\delta t}\right)$$

Where: C is the specific head capacity, δT is the temperature rise and δt is the exposure duration, or related to the electrical field in the tissue by

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

Where: σ is the conductivity of the tissue, ρ is the mass density of tissue and E is the RMS electrical field strength.

However for evaluating SAR of low power transmitter, electrical field measurement is typically applied.

7 Tissue Simulating Liquids

7.1 Targets for tissue simulating liquid

Table 7.1: Targets for tissue simulating liquid(frequency <3GHz)

Frequency(MHz)	Liquid Type	Conductivity(σ)	±10% Range	Permittivity(ε)	± 10% Range
750	Head	0.89	0.80～0.98	41.94	37.75～46.13
900	Head	0.97	0.87～1.07	41.5	37.35～45.65
1800	Head	1.40	1.26～1.54	40.0	36～44
1900	Head	1.40	1.26～1.54	40.0	36～44
2000	Head	1.40	1.26～1.54	40.0	36～44
2300	Head	1.67	1.50～1.84	39.47	37.5～41.4
2450	Head	1.80	1.62～1.98	39.2	35.28～43.12
2600	Head	1.96	1.76～2.16	39.01	35.11～42.91

Table 7.2: Targets for tissue simulating liquid(frequency >3GHz)

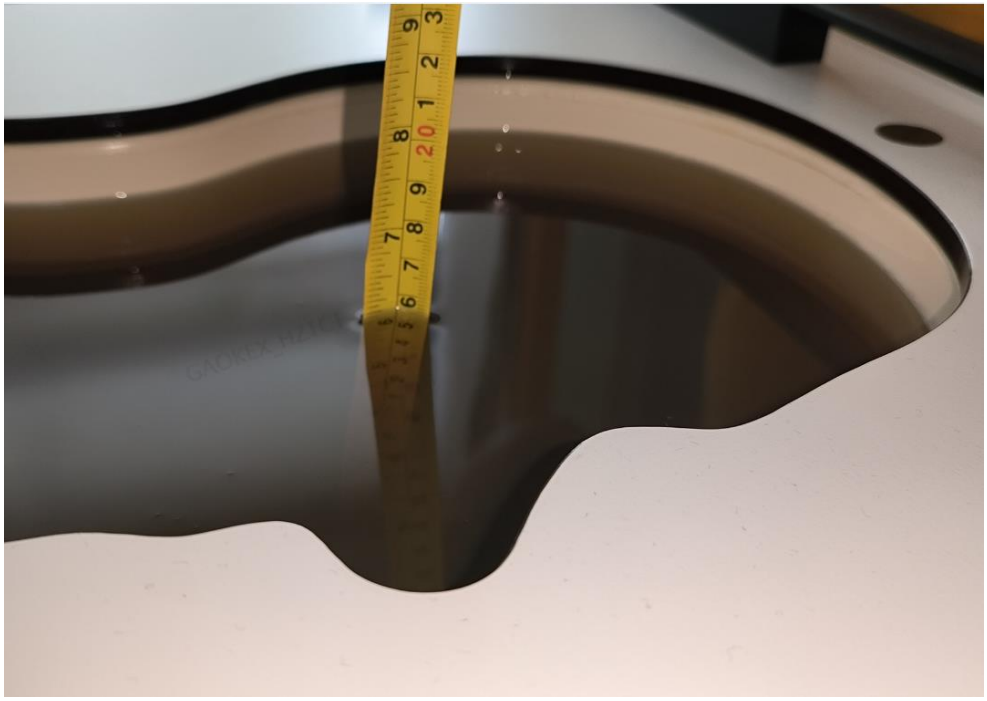
Frequency(MHz)	Liquid Type	Conductivity(σ)	± 5% Range	Permittivity(ε)	± 5% Range
3300	Head	2.71	2.57～2.85	38.2	36.29～40.11
3500	Head	2.91	2.76～3.06	37.93	36.03～39.83
3700	Head	3.22	3.06~3.38	37.6	35.72~39.48
3900	Head	3.32	3.15~3.49	37.5	35.63~39.38
4200	Head	3.63	3.45~3.81	37.1	35.25~38.96
5250	Head	4.71	4.47～4.95	35.93	34.13～37.73
5600	Head	5.07	4.82～5.32	35.53	33.8～37.3
5750	Head	5.22	4.96～5.48	35.36	33.59～37.13

7.2 Dielectric Performance

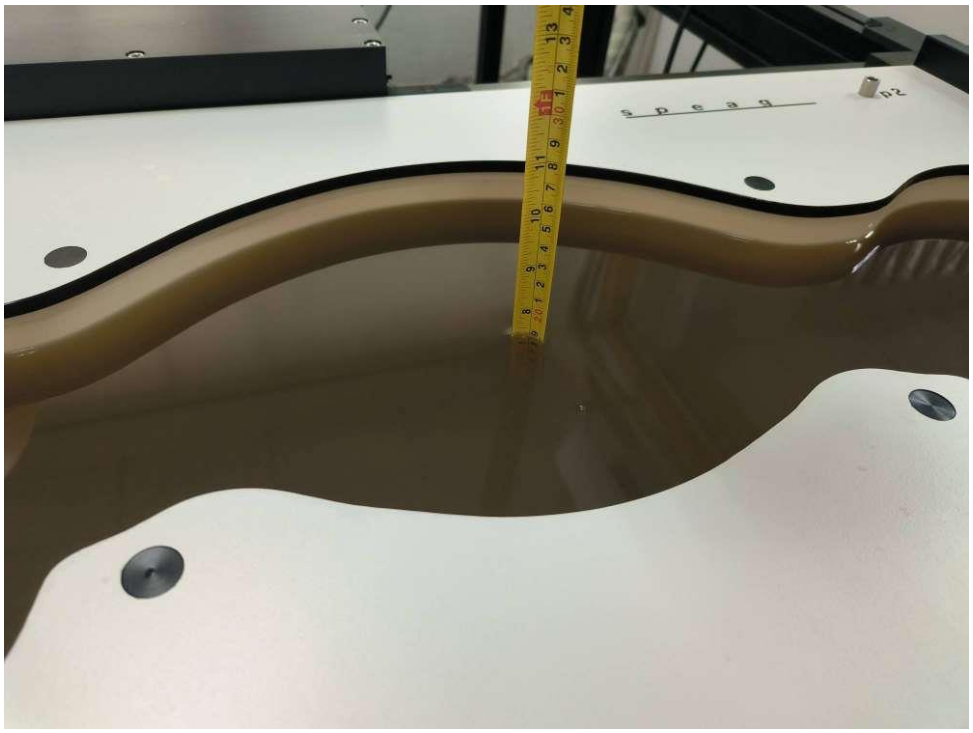
Table 7.3: Dielectric Performance of Tissue Simulating Liquid

Measurement Date (yyyy-mm-dd)	Type	Frequency	Permittivity ε	Drift (%)	Conductivity σ (S/m)	Drift (%)
2025-04-18	Head	750 MHz	41.766	-0.32	0.888	-0.22
2025-04-17	Head	1750 MHz	38.633	-3.66	1.316	-3.94
2025-04-15	Head	1900 MHz	38.540	-3.65	1.404	0.29
2025-04-17	Head	1900 MHz	38.489	-3.78	1.403	0.21
2025-04-29	Head	1900 MHz	39.017	-2.46	1.411	0.79
2025-05-13	Head	1900 MHz	39.156	-2.11	1.425	1.79
2025-04-21	Head	2450 MHz	38.005	-3.05	1.845	2.50
2025-04-21	Head	2600 MHz	37.783	-3.12	1.961	0.05
2025-05-13	Head	2600 MHz	39.773	1.98	1.956	-0.20
2025-04-16	Head	5200 MHz	35.706	-0.82	4.714	1.16
2025-04-16	Head	5800 MHz	34.540	-2.15	5.418	2.81

Note: The liquid temperature is 22.0℃



Picture 1 Liquid depth in the Head Phantom

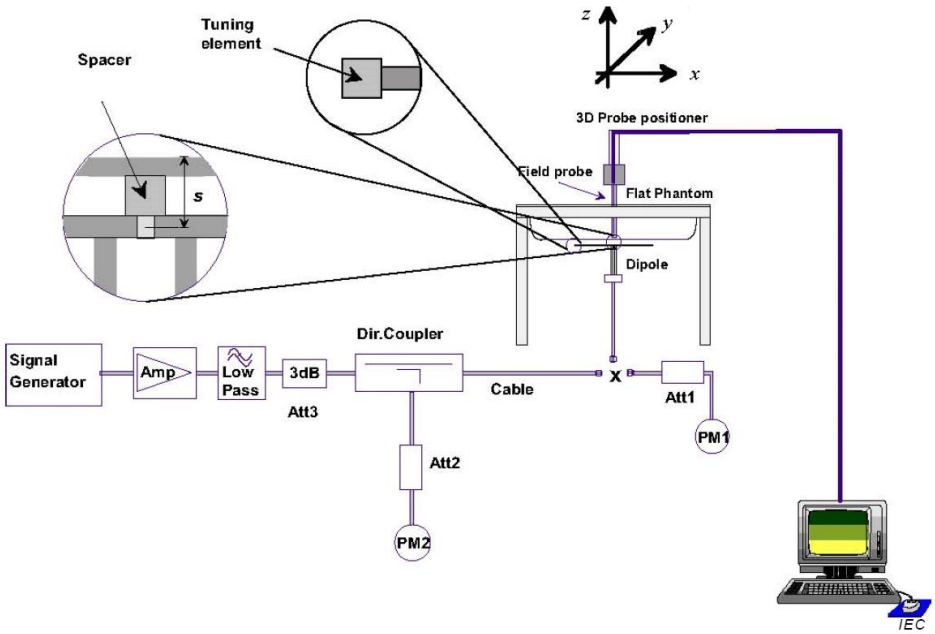


Picture 2 Liquid depth in the Flat Phantom

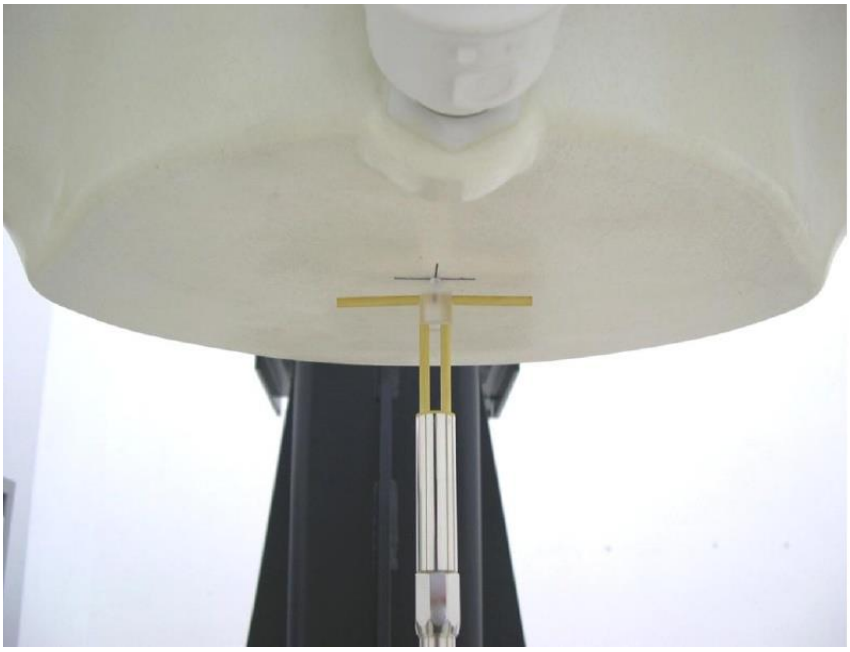
8 System verification

8.1 System Setup

In the simplified setup for system evaluation, the DUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave that comes from a signal generator. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The equipment setup is shown below:



Picture 3 System Setup for System Evaluation



Picture 4 Photo of Dipole Setup

8.2 System Verification

SAR system verification is required to confirm measurement accuracy, according to the tissue dielectric media, probe calibration points and other system operating parameters required for measuring the SAR of a test device. The system verification must be performed for each frequency band and within the valid range of each probe calibration point required for testing the device.

Table 8.1: System Verification of Head

Measurement Date (yyyy-mm-dd)	Frequency	Target value (W/kg)		Measured value(W/kg)		Deviation	
		10 g Average	1 g Average	10 g Average	1 g Average	10 g Average	1 g Average
2025-04-18	750 MHz	5.53	8.52	5.56	8.60	0.54%	0.94%
2025-04-17	1750 MHz	19.80	37.20	19.76	37.28	-0.20%	0.22%
2025-04-15	1900 MHz	20.60	39.10	20.80	40.40	0.97%	3.32%
2025-04-17	1900 MHz	20.60	39.10	20.88	40.40	1.36%	3.32%
2025-04-29	1900 MHz	20.60	39.10	20.68	40.00	0.39%	2.30%
2025-05-13	1900 MHz	20.60	39.10	20.76	40.00	0.78%	2.30%
2025-04-21	2450 MHz	24.50	52.20	25.04	54.00	2.20%	3.45%
2025-04-21	2600 MHz	24.80	54.90	25.40	56.40	2.42%	2.73%
2025-05-13	2600 MHz	24.80	54.90	25.48	56.40	2.74%	2.73%
2025-04-16	5200 MHz	21.80	76.50	22.60	78.50	3.67%	2.61%
2025-04-16	5800 MHz	22.20	78.70	22.60	79.40	1.80%	0.89%

9 Measurement Procedures

9.1 Tests to be performed

In order to determine the highest value of the peak spatial-average SAR of a handset, all device positions, configurations and operational modes shall be tested for each frequency band according to steps 1 to 3 below. A flowchart of the test process is shown in picture 5.

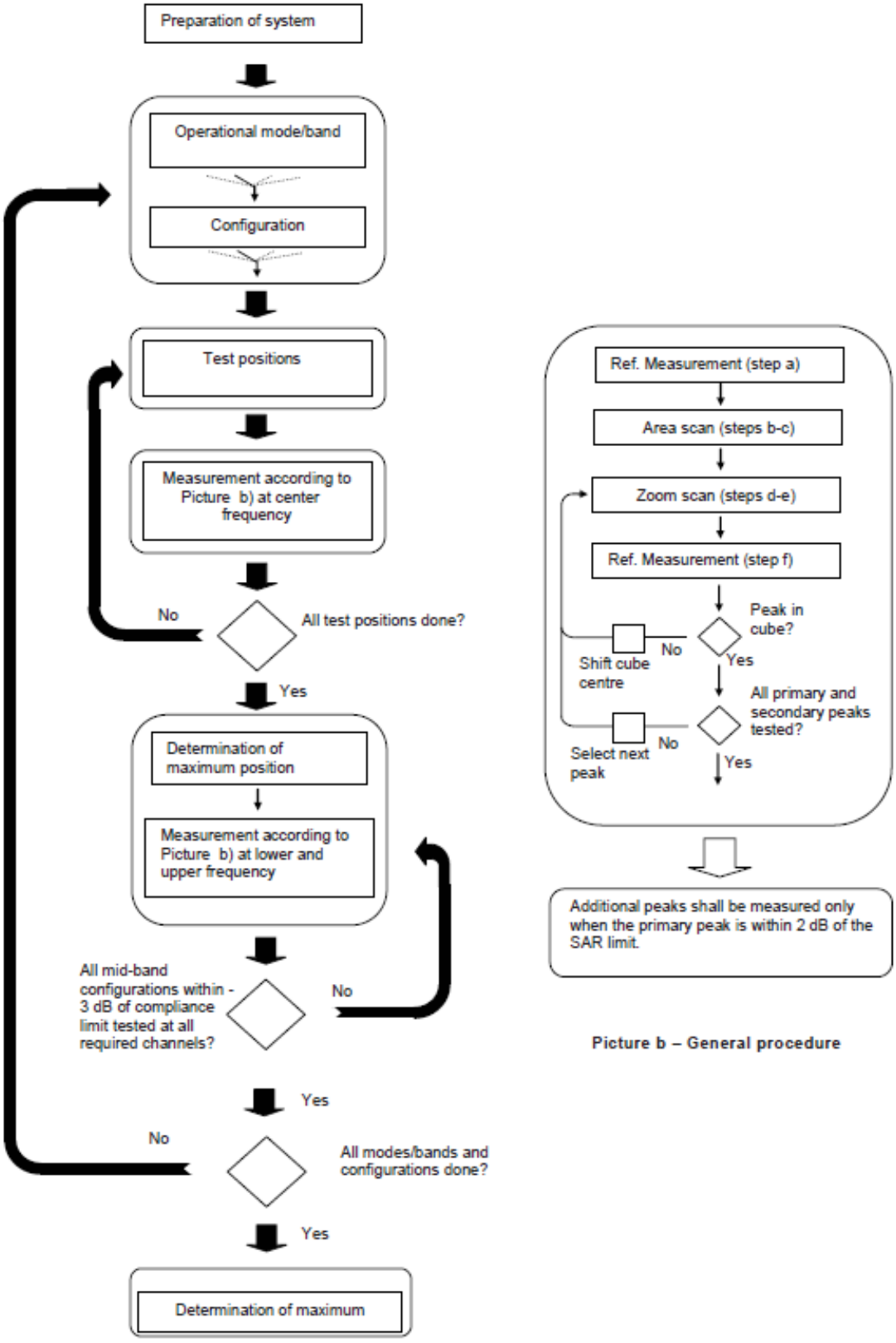
Step 1: The tests described in 9.2 shall be performed at the channel that is closest to the centre of the transmit frequency band (f_c) for:

a) all device positions (cheek and tilt, for both left and right sides of the SAM phantom, as described in annex D),
b) all configurations for each device position in a), e.g., antenna extended and retracted, and
c) all operational modes, e.g., analogue and digital, for each device position in a) and configuration in b) in each frequency band.

If more than three frequencies need to be tested according to 11.1 (i.e., $N_c > 3$), then all frequencies, configurations and modes shall be tested for all of the above test conditions.

Step 2: For the condition providing highest peak spatial-average SAR determined in Step 1,perform all tests described in 10.2 at all other test frequencies, i.e., lowest and highest frequencies. In addition, for all other conditions (device position, configuration and operational mode) where the peak spatial-average SAR value determined in Step 1 is within3 dB of the applicable SAR limit, it is recommended that all other test frequencies shall be tested as well.

Step 3: Examine all data to determine the highest value of the peak spatial-average SAR found in Steps 1 to 2.



Picture a – Tests to be performed

Picture b – General procedure

Picture 5 Block diagram of the tests to be performed

9.2 General Measurement Procedure

The area and zoom scan resolutions specified in the table below must be applied to the SAR measurements and fully documented in SAR reports to qualify for TCB approval. Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Both the probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1-g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std 1528-2003. The results should be documented as part of the system validation records and may be requested to support test results when all the measurement parameters in the following table are not satisfied.

<table>
<tr><td colspan="3"></td><td>≤ 3 GHz</td><td>> 3 GHz</td></tr>
<tr><td colspan="3">Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface</td><td>5 ± 1 mm</td><td>½·δ·ln(2) ± 0.5 mm</td></tr>
<tr><td colspan="3">Maximum probe angle from probe axis to phantom surface normal at the measurement location</td><td>30° ± 1°</td><td>20° ± 1°</td></tr>
<tr><td colspan="3" rowspan="2">Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}</td><td>≤ 2 GHz: ≤ 15 mm
2 – 3 GHz: ≤ 12 mm</td><td>3 – 4 GHz: ≤ 12 mm
4 – 6 GHz: ≤ 10 mm</td></tr>
<tr><td colspan="2">When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.</td></tr>
<tr><td colspan="3">Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}</td><td>≤ 2 GHz: ≤ 8 mm
2 – 3 GHz: ≤ 5 mm*</td><td>3 – 4 GHz: ≤ 5 mm*
4 – 6 GHz: ≤ 4 mm*</td></tr>
<tr><td rowspan="3">Maximum zoom scan spatial resolution, normal to phantom surface</td><td colspan="2">uniform grid: $\Delta z_{Zoom}(n)$</td><td>≤ 5 mm</td><td>3 – 4 GHz: ≤ 4 mm
4 – 5 GHz: ≤ 3 mm
5 – 6 GHz: ≤ 2 mm</td></tr>
<tr><td rowspan="2">graded grid</td><td>$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface</td><td>≤ 4 mm</td><td>3 – 4 GHz: ≤ 3 mm
4 – 5 GHz: ≤ 2.5 mm
5 – 6 GHz: ≤ 2 mm</td></tr>
<tr><td>$\Delta z_{Zoom}(n>1)$: between subsequent points</td><td colspan="2">≤ 1.5·$\Delta z_{Zoom}(n-1)$</td></tr>
<tr><td>Minimum zoom scan volume</td><td colspan="2">x, y, z</td><td>≥ 30 mm</td><td>3 – 4 GHz: ≥ 28 mm
4 – 5 GHz: ≥ 25 mm
5 – 6 GHz: ≥ 22 mm</td></tr>
<tr><td colspan="5">Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.
* When zoom scan is required and the <u>reported</u> SAR from the area scan based 1-g SAR estimation procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.</td></tr>
</table>

9.3 WCDMA Measurement Procedures for SAR

The following procedures are applicable to WCDMA handsets operating under 3GPP Release99, Release 5 and Release 6. The default test configuration is to measure SAR with an established radio link between the DUT and a communication test set using a 12.2kbps RMC (reference measurement channel) configured in Test Loop Mode 1. SAR is selectively confirmed for other physical channel configurations (DPCCH & $DPDCH_n$), HSDPA and HSPA (HSUPA/HSDPA) modes according to output power, exposure conditions and device operating capabilities. Both uplink and downlink should be configured with the same RMC or AMR, when required. SAR for Release 5 HSDPA and Release 6 HSPA are measured using the applicable FRC (fixed reference channel) and E-DCH reference channel configurations. Maximum output power is verified according to applicable versions of 3GPP TS 34.121 and SAR must be measured according to these maximum output conditions. When Maximum Power Reduction (MPR) is not implemented according to Cubic Metric (CM) requirements for Release 6 HSPA, the following procedures do not apply.

For Release 5 HSDPA Data Devices:

Sub-test	β_c	β_d	β_d （SF）	β_c/β_d	β_{hs}	CM/dB
1	2/15	15/15	64	2/15	4/15	0.0
2	12/15	15/15	64	12/15	24/25	1.0
3	15/15	8/15	64	15/8	30/15	1.5
4	15/15	4/15	64	15/4	30/15	1.5

For Release 6 HSPA Data Devices

Sub-test	β_c	β_d	β_d （SF）	β_c / β_d	β_{hs}	β_{ec}	β_{ed}	β_{ed} （SF）	β_{ed} （codes）	CM (dB)	MPR (dB)	AG Index	E-TFCI
1	11/15	15/15	64	11/15	22/15	209/225	1039/225	4	1	1.5	1.5	20	75
2	6/15	15/15	64	6/15	12/15	12/15	12/15	4	1	1.5	1.5	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed1}:47/15 β_{ed2}:47/15	4	2	1.5	1.5	15	92
4	2/15	15/15	64	2/15	4/15	4/15	56/75	4	1	1.5	1.5	17	71
5	15/15	15/15	64	15/15	24/15	30/15	134/15	4	1	1.5	1.5	21	81

Rel.8 DC-HSDPA (Cat 24)

SAR test exclusion for Rel.8 DC-HSDPA must satisfy the SAR test exclusion requirements of Rel.5 HSDPA. SAR test exclusion for DC-HSDPA devices is determined by power measurements according to the H-Set 12, Fixed Reference Channel (FRC) configuration in Table C.8.1.12 of 3GPP TS 34.121-1. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to qualify for SAR test exclusion.

9.4 SAR Measurement for LTE

SAR tests for LTE are performed with a base station simulator, Rohde & Rchwarz CMW500. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. All powers were measured with the CMW 500.

It is performed for conducted power and SAR based on the KDB941225 D05.

SAR is evaluated separately according to the following procedures for the different test positions in each exposure condition – head, body, body-worn accessories and other use conditions. The procedures in the following subsections are applied separately to test each LTE frequency band.

1) QPSK with 1 RB allocation

   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 among RB offsets at the upper edge, middle and lower edge of each required test channel. 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. When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.

2) QPSK with 50% RB allocation

   The procedures required for 1 RB allocation in 1) are applied to measure the SAR for QPSK with 50% RB allocation.

3) QPSK with 100% RB allocation

   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 1) and 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.

TDD test:

TDD testing is performed using guidance from FCC KDB 941225 D05 and the SAR test guidance provided in April 2013 TCB works hop notes. TDD is tested at the highest duty factor using UL-DL configuration 0 with special subframe configuration 6 and applying the FDD LTE procedures in KDB 941225 D05. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211.

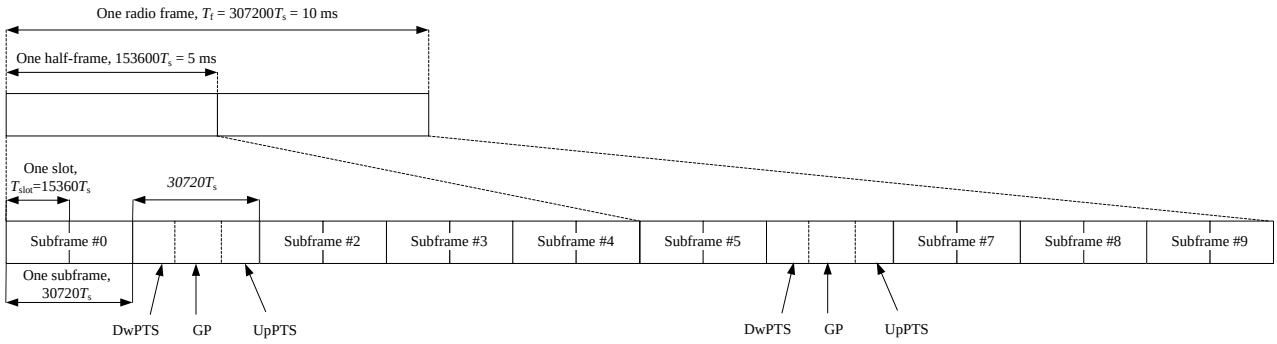


Figure 6: Frame structure type 2 (for 5 ms switch-point periodicity)

Table 9.1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592\cdot T_s$	$2192\cdot T_s$	$2560\cdot T_s$	$7680\cdot T_s$	$2192\cdot T_s$	$2560\cdot T_s$
1	$19760\cdot T_s$			$20480\cdot T_s$		
2	$21952\cdot T_s$			$23040\cdot T_s$		
3	$24144\cdot T_s$			$25600\cdot T_s$		
4	$26336\cdot T_s$			$7680\cdot T_s$	$4384\cdot T_s$	$5120\cdot T_s$
5	$6592\cdot T_s$	$4384\cdot T_s$	$5120\cdot T_s$	$20480\cdot T_s$		
6	$19760\cdot T_s$			$23040\cdot T_s$		
7	$21952\cdot T_s$			$12800\cdot T_s$		
8	$24144\cdot T_s$			-	-	-
9	$13168\cdot T_s$			-	-	-

Table 9.2: Uplink-downlink configurations

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number									
		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U	U	D	S	U	U	D

Duty factor is calculated by:

Duty factor = uplink frame*6+UpPTS*2/one frame length

= (30720.T_s * 6+5120. T_s*2)/307200.T_s

= 0.633

9.5 Bluetooth & Wi-Fi Measurement Procedures for SAR

Normal network operating configurations are not suitable for measuring the SAR of 802.11 transmitters in general. Unpredictable fluctuations in network traffic and antenna diversity conditions can introduce undesirable variations in SAR results. The SAR for these devices should be measured using chipset based test mode software to ensure that the results are consistent and reliable.
Chipset based test mode software is hardware dependent and generally varies among manufacturers. The device operating parameters established in a test mode for SAR measurements must be identical to those programmed in production units, including output power levels, amplifier gain settings and other RF performance tuning parameters. The test frequencies should correspond to actual channel frequencies defined for domestic use. SAR for devices with switched diversity should be measured with only one antenna transmitting at a time during each SAR measurement, according to a fixed modulation and data rate. The same data pattern should be used for all measurements.

9.6 NR Measurement Procedures for SAR

Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission.

9.7 Power Drift

To control the output power stability during the SAR test, DASY5 system calculates the power drift by measuring the E-field at the same location at the beginning and at the end of the measurement for each test position. These drift values can be found in section14 labeled as: (Power Drift [dB]). This ensures that the power drift during one measurement is within 5%.

10 Conducted Output Power

The device uses proximity sensor to reduce the maximum output power of main transmitting antenna in selected wireless mode and operating configurations to ensure SAR compliance. The procedures in KDB 616217 are applied to determine proximity sensor triggering distances, and sensor coverage for normal and tilt positions.

The following tables summarize the key power reduction information of main transmitting antenna triggered by specific use conditions.

Band	ANT	Mode	Full power Maximum Tune up(dBm)	Sensor on Maximum Tune up(dBm)	Sensor on Power Reduction(dB)	Hotspot on Maximum Tune up(dBm)	Hotspot on Power Reduction(dB)
LTE Band 2	ANT1	QPSK	24.5	18.5	6.0	22.0	2.5
LTE Band 4	ANT1	QPSK	24.5	20.0	4.5	22.5	2.0
LTE Band 12	ANT1	QPSK	23.0	N/A	N/A	23.0	N/A
LTE Band 25	ANT1	QPSK	23.0	18.5	4.5	22.0	1.0
LTE Band 66	ANT1	QPSK	24.5	20.0	4.5	22.5	2.0
LTE Band 71	ANT1	QPSK	25.0	N/A	N/A	25.0	N/A
NR n25	ANT1	DFT-s-OFDM QPSK	23.0	18.0	5.0	22.5	0.5
NR n41	ANT2	DFT-s-OFDM QPSK	27.0	20.0	7.0	24.0	3.0
NR n41	ANT3	DFT-s-OFDM QPSK	26.5	N/A	N/A	26.5	N/A
NR n41	ANT5	DFT-s-OFDM QPSK	27.0	N/A	N/A	27.0	N/A
NR n41	ANT7	DFT-s-OFDM QPSK	26.0	N/A	N/A	26.0	N/A
NR n66	ANT1	DFT-s-OFDM QPSK	24.5	19.5	5.0	22.0	2.5
NR n71	ANT1	DFT-s-OFDM QPSK	25.0	N/A	N/A	25.0	N/A
Wi-Fi 2.4G	ANT6	802.11b	20.7	N/A	N/A	20.7	N/A
Wi-Fi 5G UNII-1	ANT6	802.11a	19.5	N/A	N/A	19.5	N/A
Wi-Fi 5G UNII-3	ANT6	802.11a	18.0	N/A	N/A	18.0	N/A

10.1 LTE Measurement result

Table 10.1: The maximum output power (Tune-up Limit)

Band	ANT	Mode	Full power/Sensor off Maximum Tune up(dBm)	Sensor on Maximum Tune up(dBm)	Sensor on Power Reduction(dB)	Hotspot on Maximum Tune up(dBm)	Hotspot on Power Reduction(dB)
LTE Band 2	ANT1	QPSK	24.5	18.5	6.0	22.0	2.5
LTE Band 4	ANT1	QPSK	24.5	20.0	4.5	22.5	2.0
LTE Band 12	ANT1	QPSK	23.0	N/A	N/A	23.0	N/A
LTE Band 25	ANT1	QPSK	23.0	18.5	4.5	22.0	1.0
LTE Band 66	ANT1	QPSK	24.5	20.0	4.5	22.5	2.0
LTE Band 71	ANT1	QPSK	25.0	N/A	N/A	25.0	N/A

Table 10.2: Maximum Power Reduction (MPR) for LTE

Modulation	1.4 MHz	MPR	3 MHz	MPR	5 MHz	MPR	10 MHz	MPR	15 MHz	MPR	20 MHz	MPR
QPSK	≤5	0	≤4	0	≤8	0	≤12	0	≤16	0	≤18	0
QPSK	>5	1	>4	1	>8	1	>12	1	>16	1	>18	1
16 QAM	≤5	1	≤4	1	≤8	1	≤12	1	≤16	1	≤18	1
16 QAM	>5	2	>4	2	>8	2	>12	2	>16	2	>18	2
64 QAM	≤5	2	≤4	2	≤8	2	≤12	2	≤16	2	≤18	2
64 QAM	>5	3	>4	3	>8	3	>12	3	>16	3	>18	3
256 QAM	≤5	5	≤4	5	≤8	5	≤12	5	≤16	5	≤18	5
256 QAM	>5	5	>4	5	>8	5	>12	5	>16	5	>18	5

LTE Band 2(ANT1)

Full Power/Sensor off						
LTE B2			**Maximum Output Power (dBm)**			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				18607/1850.7	18900/1880	19193/1909.3
QPSK	1	Low	24.50	23.25	23.41	23.31
		Middle		23.33	23.37	23.19
		High		23.14	23.25	23.11
	50%	Low	24.50	23.17	23.28	23.17
		Middle		23.27	23.21	23.14
		High		23.07	23.21	23.01
	100%	/	23.50	22.27	22.40	22.16
16QAM	1	Low	23.50	22.34	22.51	22.37
		Middle		22.36	22.43	22.34
		High		22.33	22.51	22.27
	50%	Low	23.50	22.16	21.94	21.95
		Middle		22.11	21.93	21.96
		High		22.11	21.90	22.00
	100%	/	22.50	21.10	20.98	21.01
64QAM	1	Low	22.50	21.03	21.03	20.99
		Middle		20.98	21.03	20.92
		High		21.01	20.91	21.00
	50%	Low	22.50	20.87	20.76	20.68
		Middle		20.86	20.76	20.79
		High		20.68	20.78	20.66
	100%	/	21.50	20.06	19.98	20.04
256QAM	1	Low	21.50	19.94	20.01	19.94
		Middle		19.93	19.98	19.91
		High		20.02	20.05	19.93
	50%	Low	21.50	19.99	19.83	19.74

		Middle		20.07	19.99	19.91
		High		19.96	19.95	19.97
	100%	/	19.50	18.03	17.95	17.86
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				18615/1851.5	18900/1880	19185/1908.5
QPSK	1	Low	24.50	23.27	23.34	23.21
		Middle		23.29	23.35	23.24
		High		23.16	23.20	23.13
	50%	Low	23.50	22.28	22.45	22.24
		Middle		22.38	22.40	22.36
		High		22.30	22.21	22.21
	100%	/	23.50	22.33	22.23	22.20
16QAM	1	Low	23.50	22.51	22.53	22.39
		Middle		22.50	22.43	22.35
		High		22.38	22.41	22.29
	50%	Low	22.50	21.36	21.12	21.16
		Middle		21.24	21.31	21.15
		High		21.27	21.27	21.16
	100%	/	22.50	21.21	21.29	21.16
64QAM	1	Low	22.50	21.11	21.15	21.07
		Middle		21.17	21.12	21.03
		High		21.19	21.16	21.09
	50%	Low	21.50	20.12	20.01	19.88
		Middle		20.15	20.05	20.04
		High		19.99	20.00	19.88
	100%	/	21.50	19.92	20.03	19.94
256QAM	1	Low	19.50	18.18	18.10	18.17
		Middle		18.12	18.11	18.12
		High		18.17	18.14	18.05
	50%	Low	19.50	18.03	18.05	17.89
		Middle		17.91	17.98	17.82
		High		18.22	17.89	18.02
	100%	/	19.50	18.04	17.83	17.85
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				18625/1852.5	18900/1880	19175/1907.5
QPSK	1	Low	24.50	23.17	23.31	23.29
		Middle		23.34	23.35	23.23
		High		23.27	23.25	23.03
	50%	Low	23.50	22.35	22.40	22.30
		Middle		22.44	22.37	22.29

		High		22.20	22.23	22.22
	100%	/	23.50	22.27	22.24	22.12
16QAM	1	Low	23.50	22.34	22.43	22.32
		Middle		22.36	22.39	22.38
		High		22.31	22.43	22.33
	50%	Low	22.50	21.28	21.27	21.19
		Middle		21.21	21.20	21.14
		High		21.24	21.32	21.17
	100%	/	22.50	21.29	21.25	21.13
64QAM	1	Low	22.50	21.13	21.15	20.87
		Middle		21.14	21.11	21.00
		High		21.20	21.14	21.05
	50%	Low	21.50	20.10	19.92	19.89
		Middle		20.12	19.95	20.00
		High		19.96	19.90	19.84
	100%	/	21.50	19.90	19.91	19.89
256QAM	1	Low	19.50	18.08	18.07	18.25
		Middle		18.17	18.16	18.11
		High		18.28	18.19	17.95
	50%	Low	19.50	18.10	18.00	17.95
		Middle		17.97	17.95	17.75
		High		18.12	17.91	18.03
	100%	/	19.50	18.03	17.84	17.77
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				18650/1855	18900/1880	19150/1905
QPSK	1	Low	24.50	23.28	23.35	23.22
		Middle		23.38	23.37	23.23
		High		23.17	23.21	23.08
	50%	Low	23.50	22.28	22.27	22.20
		Middle		22.47	22.19	22.25
		High		22.18	22.19	22.27
	100%	/	23.50	22.31	22.40	22.08
16QAM	1	Low	23.50	22.32	22.40	22.40
		Middle		22.45	22.25	22.35
		High		22.28	22.46	22.30
	50%	Low	22.50	21.37	21.29	21.15
		Middle		21.26	21.16	21.06
		High		21.32	21.09	21.08
	100%	/	22.50	21.17	21.12	21.04
64QAM	1	Low	22.50	21.15	21.14	21.06
		Middle		21.17	21.11	21.03

		High		21.19	21.16	21.08
	50%	Low	21.50	20.13	20.02	19.94
		Middle		20.14	20.04	20.08
		High		19.99	20.00	19.93
	100%	/	21.50	19.93	20.01	19.98
256QAM	1	Low	19.50	18.19	18.11	18.18
		Middle		18.21	18.13	18.11
		High		18.18	18.15	18.00
	50%	Low	19.50	18.03	17.87	17.85
		Middle		18.00	17.77	17.71
		High		18.10	17.87	18.08
	100%	/	19.50	18.07	18.00	17.73
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				18675/1857.5	18900/1880	19125/1902.5
QPSK	1	Low	24.50	23.25	23.39	23.24
		Middle		23.32	23.38	23.26
		High		23.20	23.31	23.11
	50%	Low	23.50	22.30	22.33	22.23
		Middle		22.44	22.37	22.29
		High		22.21	22.22	22.23
	100%	/	23.50	22.34	22.24	22.08
16QAM	1	Low	23.50	22.46	22.50	22.56
		Middle		22.48	22.38	22.40
		High		22.40	22.51	22.32
	50%	Low	22.50	21.39	21.13	21.19
		Middle		21.29	21.29	21.16
		High		21.30	21.23	21.19
	100%	/	22.50	21.24	21.25	21.14
64QAM	1	Low	22.50	21.10	21.12	21.09
		Middle		21.13	21.13	21.06
		High		21.20	21.15	21.14
	50%	Low	21.50	20.12	20.06	19.95
		Middle		20.12	20.01	20.07
		High		19.98	19.91	19.77
	100%	/	21.50	19.72	19.73	19.75
256QAM	1	Low	19.50	18.11	18.10	18.15
		Middle		18.10	18.09	18.09
		High		18.16	18.15	17.98
	50%	Low	19.50	18.05	17.88	17.88
		Middle		17.97	17.95	17.75
		High		18.13	17.90	18.04

	100%	/	19.50	18.05	17.84	17.73
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				18700/1860	18900/1880	19100/1900
QPSK	1	Low	24.50	23.32	23.43	23.27
		Middle		23.41	23.42	23.28
		High		23.22	23.32	23.17
	50%	Low	23.50	22.33	22.41	22.27
		Middle		22.42	22.38	22.32
		High		22.24	22.32	22.19
	100%	/	23.50	22.31	22.36	22.17
16QAM	1	Low	23.50	22.49	22.51	22.47
		Middle		22.44	22.45	22.41
		High		22.38	22.53	22.35
	50%	Low	22.50	21.36	21.22	21.21
		Middle		21.22	21.23	21.18
		High		21.27	21.18	21.20
	100%	/	22.50	21.22	21.21	21.16
64QAM	1	Low	22.50	21.08	21.08	21.04
		Middle		21.11	21.06	21.02
		High		21.14	21.09	21.08
	50%	Low	21.50	20.07	19.96	19.88
		Middle		20.08	19.97	20.01
		High		19.94	19.91	19.86
	100%	/	21.50	19.88	19.92	19.91
256QAM	1	Low	19.50	18.23	18.19	18.23
		Middle		18.24	18.18	18.16
		High		18.23	18.21	18.09
	50%	Low	19.50	18.08	17.96	17.92
		Middle		17.95	17.91	17.78
		High		18.16	17.95	18.00
	100%	/	19.50	18.02	17.91	17.82

Sensor on						
LTE B2			**Maximum Output Power (dBm)**			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				18607/1850.7	18900/1880	19193/1909.3
QPSK	1	Low	18.50	17.39	17.55	17.42
		Middle		17.33	17.46	17.38
		High		17.36	17.30	17.28
	50%	Low	18.50	17.22	17.28	17.29

		Middle		17.19	17.11	17.20
		High		17.19	17.12	17.16
	100%	/	17.50	16.28	16.33	16.40
16QAM	1	Low	17.50	16.30	16.41	16.32
		Middle		16.32	16.45	16.44
		High		16.25	16.37	16.31
	50%	Low	17.50	16.04	16.12	16.11
		Middle		16.20	16.02	15.97
		High		16.12	16.19	16.14
	100%	/	16.50	15.24	15.26	15.38
64QAM	1	Low	16.50	15.37	15.48	15.42
		Middle		15.46	15.58	15.36
		High		15.56	15.48	15.51
	50%	Low	16.50	15.15	15.22	15.17
		Middle		15.19	15.17	14.97
		High		15.22	15.28	15.00
	100%	/	15.50	14.44	14.39	14.17
256QAM	1	Low	15.50	14.23	14.33	14.29
		Middle		14.29	14.32	14.15
		High		14.36	14.39	14.11
	50%	Low	15.50	14.48	14.43	14.35
		Middle		14.26	14.29	14.36
		High		14.35	14.31	14.21
	100%	/	13.50	12.39	12.40	12.41
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				18615/1851.5	18900/1880	19185/1908.5
QPSK	1	Low	18.50	17.41	17.43	17.32
		Middle		17.29	17.35	17.43
		High		17.33	17.21	17.30
	50%	Low	17.50	16.28	16.41	16.36
		Middle		16.25	16.35	16.37
		High		16.37	16.17	16.31
	100%	/	17.50	16.20	16.21	16.39
16QAM	1	Low	17.50	16.42	16.43	16.29
		Middle		16.41	16.45	16.40
		High		16.35	16.36	16.28
	50%	Low	16.50	15.19	15.29	15.17
		Middle		15.37	15.34	15.06
		High		15.32	15.41	15.20
	100%	/	16.50	15.39	15.42	15.39
64QAM	1	Low	16.50	15.49	15.50	15.36

		Middle		15.55	15.57	15.33
		High		15.64	15.63	15.46
	50%	Low	15.50	14.30	14.37	14.32
		Middle		14.38	14.36	14.17
		High		14.38	14.40	14.17
	100%	/	15.50	14.51	14.51	14.30
256QAM	1	Low	13.50	12.40	12.32	12.38
		Middle		12.40	12.38	12.46
		High		12.44	12.40	12.50
	50%	Low	13.50	12.25	12.32	12.26
		Middle		12.14	12.24	12.25
		High		12.38	12.21	12.35
	100%	/	13.50	12.19	12.26	12.43
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				18625/1852.5	18900/1880	19175/1907.5
QPSK	1	Low	18.50	17.31	17.45	17.40
		Middle		17.34	17.49	17.42
		High		17.44	17.35	17.20
	50%	Low	17.50	16.35	16.45	16.42
		Middle		16.31	16.41	16.30
		High		16.27	16.19	16.32
	100%	/	17.50	16.28	16.22	16.31
16QAM	1	Low	17.50	16.39	16.33	16.22
		Middle		16.32	16.41	16.43
		High		16.28	16.29	16.32
	50%	Low	16.50	15.11	15.30	15.20
		Middle		15.25	15.14	15.05
		High		15.20	15.37	15.21
	100%	/	16.50	15.38	15.29	15.40
64QAM	1	Low	16.50	15.37	15.50	15.25
		Middle		15.43	15.56	15.30
		High		15.65	15.61	15.42
	50%	Low	15.50	14.28	14.33	14.33
		Middle		14.35	14.31	14.13
		High		14.35	14.35	14.13
	100%	/	15.50	14.49	14.47	14.25
256QAM	1	Low	13.50	12.30	12.34	12.46
		Middle		12.45	12.43	12.45
		High		12.55	12.45	12.40
	50%	Low	13.50	12.32	12.27	12.32
		Middle		12.20	12.21	12.18

		High		12.28	12.23	12.36
	100%	/	13.50	12.18	12.27	12.35
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				18650/1855	18900/1880	19150/1905
QPSK	1	Low	18.50	17.39	17.48	17.35
		Middle		17.32	17.47	17.45
		High		17.37	17.36	17.28
	50%	Low	17.50	16.30	16.33	16.35
		Middle		16.31	16.41	16.30
		High		16.28	16.27	16.33
	100%	/	17.50	16.30	16.31	16.27
16QAM	1	Low	17.50	16.46	16.49	16.46
		Middle		16.48	16.49	16.50
		High		16.32	16.37	16.27
	50%	Low	16.50	15.17	15.21	15.16
		Middle		15.28	15.23	15.03
		High		15.21	15.28	15.19
	100%	/	16.50	15.28	15.29	15.37
64QAM	1	Low	16.50	15.43	15.47	15.42
		Middle		15.51	15.58	15.40
		High		15.65	15.62	15.55
	50%	Low	15.50	14.30	14.42	14.43
		Middle		14.35	14.32	14.24
		High		14.42	14.36	14.15
	100%	/	15.50	14.36	14.29	14.20
256QAM	1	Low	13.50	12.41	12.33	12.39
		Middle		12.49	12.40	12.45
		High		12.45	12.32	12.36
	50%	Low	13.50	12.25	12.05	12.13
		Middle		12.23	11.94	12.05
		High		12.26	12.10	12.32
	100%	/	13.50	12.22	12.43	12.31
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				18675/1857.5	18900/1880	19125/1902.5
QPSK	1	Low	18.50	17.42	17.44	17.33
		Middle		17.38	17.46	17.42
		High		17.34	17.31	17.25
	50%	Low	17.50	16.28	16.32	16.32
		Middle		16.34	16.23	16.26
		High		16.25	16.15	16.28

	100%	/	17.50	16.32	16.38	16.18
16QAM	1	Low	17.50	16.37	16.30	16.21
		Middle		16.50	16.27	16.31
		High		16.34	16.27	16.20
	50%	Low	16.50	15.29	15.32	15.07
		Middle		15.39	15.10	14.93
		High		15.32	15.14	15.08
	100%	/	16.50	15.30	15.16	15.27
64QAM	1	Low	16.50	15.48	15.49	15.44
		Middle		15.55	15.56	15.42
		High		15.64	15.63	15.54
	50%	Low	15.50	14.31	14.38	14.42
		Middle		14.37	14.26	14.25
		High		14.38	14.31	14.26
	100%	/	15.50	14.52	14.43	14.38
256QAM	1	Low	13.50	12.38	12.28	12.41
		Middle		12.43	12.32	12.48
		High		12.48	12.37	12.48
	50%	Low	13.50	12.27	12.15	12.25
		Middle		12.20	12.21	12.18
		High		12.29	12.22	12.37
	100%	/	13.50	12.20	12.27	12.31
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				18700/1860	18900/1880	19100/1900
QPSK	1	Low	18.50	17.46	**17.52**	17.38
		Middle		17.41	17.51	17.47
		High		17.39	17.37	17.34
	50%	Low	17.50	16.33	**16.41**	16.39
		Middle		16.29	16.37	16.33
		High		16.31	16.32	16.29
	100%	/	17.50	16.27	**16.38**	16.36
16QAM	1	Low	17.50	16.41	16.45	16.37
		Middle		16.44	16.51	16.46
		High		16.39	16.43	16.34
	50%	Low	16.50	15.23	15.34	15.22
		Middle		15.30	15.26	15.09
		High		15.27	15.32	15.24
	100%	/	16.50	15.35	15.34	15.43
64QAM	1	Low	16.50	15.41	15.43	15.37
		Middle		15.49	15.51	15.36
		High		15.59	15.56	15.49

	50%	Low	15.50	14.25	14.32	14.36
		Middle		14.31	14.28	14.18
		High		14.33	14.31	14.19
	100%	/	15.50	14.47	14.43	14.31
256QAM	1	Low	13.50	12.45	12.41	12.44
		Middle		12.52	12.45	12.50
		High		12.50	12.47	12.54
	50%	Low	13.50	12.30	12.23	12.29
		Middle		12.18	12.17	12.21
		High		12.32	12.27	12.33
	100%	/	13.50	12.17	12.34	12.40

Hotspot on						
LTE B2			**Maximum Output Power (dBm)**			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				18607/1850.7	18900/1880	19193/1909.3
QPSK	1	Low	22.00	20.97	21.11	21.10
		Middle		20.94	21.02	20.94
		High		20.88	20.86	20.84
	50%	Low	22.00	20.77	20.91	20.87
		Middle		20.69	20.76	20.69
		High		20.71	20.78	20.72
	100%	/	21.00	19.80	19.98	19.96
16QAM	1	Low	21.00	19.94	20.06	19.88
		Middle		19.96	20.10	20.00
		High		19.82	19.95	19.79
	50%	Low	21.00	19.64	19.77	19.66
		Middle		19.81	19.67	19.52
		High		19.73	19.75	19.66
	100%	/	20.00	18.77	18.82	18.94
64QAM	1	Low	20.00	19.04	19.00	18.98
		Middle		18.82	18.94	18.76
		High		18.92	18.84	18.91
	50%	Low	20.00	18.74	18.74	18.85
		Middle		18.86	18.77	18.69
		High		18.83	18.82	18.66
	100%	/	19.00	17.98	17.89	17.75
256QAM	1	Low	19.00	17.82	17.90	17.95
		Middle		17.93	17.88	17.81
		High		18.01	17.89	17.62
	50%	Low	19.00	17.87	17.75	17.65

		Middle		17.85	17.90	17.93
		High		17.99	17.91	17.78
	100%	/	17.00	15.70	15.66	15.67
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				18615/1851.5	18900/1880	19185/1908.5
QPSK	1	Low	22.00	20.97	21.04	21.03
		Middle		20.93	21.03	21.01
		High		20.93	20.92	20.84
	50%	Low	21.00	19.89	19.92	19.93
		Middle		19.85	19.93	19.79
		High		19.80	19.80	19.89
	100%	/	21.00	19.82	19.83	19.83
16QAM	1	Low	21.00	20.01	20.01	20.02
		Middle		20.03	20.05	20.06
		High		19.89	19.95	19.84
	50%	Low	20.00	18.81	18.86	18.80
		Middle		18.89	18.88	18.67
		High		18.82	18.93	18.80
	100%	/	20.00	18.81	18.94	18.98
64QAM	1	Low	20.00	19.01	19.03	18.94
		Middle		18.87	18.98	18.76
		High		19.01	19.02	18.91
	50%	Low	19.00	17.89	17.98	17.98
		Middle		18.02	17.92	17.83
		High		18.03	17.90	17.68
	100%	/	19.00	17.90	17.79	17.73
256QAM	1	Low	17.00	15.90	15.78	15.87
		Middle		15.86	15.84	15.92
		High		15.85	15.78	15.92
	50%	Low	17.00	15.72	15.81	15.76
		Middle		15.63	15.74	15.74
		High		15.82	15.69	15.82
	100%	/	17.00	15.73	15.60	15.79
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				18625/1852.5	18900/1880	19175/1907.5
QPSK	1	Low	22.00	20.99	20.99	21.00
		Middle		20.90	21.00	20.99
		High		20.89	20.86	20.86
	50%	Low	21.00	19.87	20.13	19.94
		Middle		19.79	20.00	19.86

		High		19.93	19.83	19.87
	100%	/	21.00	19.85	19.86	19.95
16QAM	1	Low	21.00	20.10	20.04	19.85
		Middle		20.09	20.06	19.96
		High		19.96	19.81	19.76
	50%	Low	20.00	18.83	18.81	18.72
		Middle		18.89	18.86	18.61
		High		18.84	18.93	18.72
	100%	/	20.00	18.83	18.94	19.04
64QAM	1	Low	20.00	19.07	19.02	19.01
		Middle		18.91	18.93	18.82
		High		19.00	19.03	18.95
	50%	Low	19.00	17.89	17.93	18.00
		Middle		18.05	18.00	17.89
		High		17.99	17.98	17.83
	100%	/	19.00	18.05	18.05	17.88
256QAM	1	Low	17.00	15.80	15.84	15.91
		Middle		15.91	15.93	15.87
		High		15.92	15.87	15.78
	50%	Low	17.00	15.75	15.76	15.78
		Middle		15.65	15.71	15.63
		High		15.68	15.71	15.79
	100%	/	17.00	15.68	15.61	15.67
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				18650/1855	18900/1880	19150/1905
QPSK	1	Low	22.00	20.89	21.01	21.08
		Middle		20.95	21.05	20.98
		High		21.00	20.91	20.76
	50%	Low	21.00	19.94	20.08	20.00
		Middle		19.85	19.97	19.79
		High		19.83	19.85	19.88
	100%	/	21.00	19.84	19.87	19.87
16QAM	1	Low	21.00	19.98	19.98	19.78
		Middle		20.00	20.06	19.99
		High		19.89	19.87	19.80
	50%	Low	20.00	18.71	18.95	18.75
		Middle		18.82	18.79	18.60
		High		18.77	19.02	18.73
	100%	/	20.00	18.87	18.94	18.96
64QAM	1	Low	20.00	19.00	19.06	18.81
		Middle		18.84	18.96	18.79

		High		19.01	19.01	18.91
	50%	Low	19.00	17.87	17.89	18.01
		Middle		18.02	17.95	17.85
		High		17.96	17.93	17.79
	100%	/	19.00	18.03	18.01	17.87
256QAM	1	Low	17.00	15.91	15.83	15.88
		Middle		15.95	15.90	15.91
		High		15.86	15.83	15.87
	50%	Low	17.00	15.72	15.63	15.72
		Middle		15.72	15.53	15.63
		High		15.70	15.67	15.88
	100%	/	17.00	15.76	15.77	15.67
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				18675/1857.5	18900/1880	19125/1902.5
QPSK	1	Low	22.00	21.00	21.00	21.01
		Middle		20.99	21.02	20.98
		High		20.90	20.87	20.81
	50%	Low	21.00	19.87	19.95	19.90
		Middle		19.88	19.79	19.75
		High		19.81	19.81	19.93
	100%	/	21.00	19.88	20.03	19.83
16QAM	1	Low	21.00	19.96	19.95	19.86
		Middle		20.09	19.92	19.96
		High		19.86	19.85	19.77
	50%	Low	20.00	18.84	18.97	18.71
		Middle		18.91	18.75	18.57
		High		18.84	18.79	18.69
	100%	/	20.00	18.74	18.81	18.92
64QAM	1	Low	20.00	19.06	19.05	19.00
		Middle		18.91	18.96	18.82
		High		19.00	19.03	18.94
	50%	Low	19.00	17.90	17.94	18.01
		Middle		18.04	17.99	17.88
		High		17.99	17.98	17.83
	100%	/	19.00	18.06	18.06	17.91
256QAM	1	Low	17.00	15.88	15.87	15.90
		Middle		15.89	15.91	15.94
		High		15.89	15.88	15.90
	50%	Low	17.00	15.74	15.64	15.75
		Middle		15.69	15.71	15.67
		High		15.73	15.70	15.84

	100%	/	17.00	15.74	15.61	15.67
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				18700/1860	18900/1880	19100/1900
QPSK	1	Low	22.00	21.04	21.08	21.06
		Middle		21.02	21.07	21.03
		High		20.95	20.93	20.90
	50%	Low	21.00	19.92	20.04	19.97
		Middle		19.83	19.93	19.82
		High		19.87	19.89	19.85
	100%	/	21.00	19.83	19.94	19.92
16QAM	1	Low	21.00	19.97	20.01	19.93
		Middle		20.03	20.07	20.02
		High		19.91	19.92	19.82
	50%	Low	20.00	18.78	18.90	18.77
		Middle		18.82	18.82	18.64
		High		18.79	18.88	18.76
	100%	/	20.00	18.79	18.90	18.99
64QAM	1	Low	20.00	18.99	18.99	18.93
		Middle		18.85	18.91	18.76
		High		18.95	18.96	18.89
	50%	Low	19.00	17.84	17.88	17.95
		Middle		17.98	17.92	17.81
		High		17.94	17.89	17.76
	100%	/	19.00	18.01	17.97	17.84
256QAM	1	Low	17.00	15.95	15.91	15.93
		Middle		15.98	15.95	15.96
		High		15.91	15.89	15.96
	50%	Low	17.00	15.77	15.72	15.79
		Middle		15.67	15.67	15.70
		High		15.76	15.75	15.80
	100%	/	17.00	15.71	15.68	15.76

LTE Band 4(ANT1)

Full Power/Sensor off						
LTE B4			Maximum Output Power (dBm)			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				19957/1710.7	20175/1732.5	20393/1754.3
QPSK	1	Low	24.50	23.32	23.34	23.47
		Middle		23.24	23.38	23.27

		High		23.26	23.39	23.35
	50%	Low	24.50	23.17	23.25	23.24
		Middle		23.29	23.14	23.19
		High		23.22	23.21	23.20
	100%	/	23.50	22.31	22.38	22.29
16QAM	1	Low	23.50	22.35	22.60	22.35
		Middle		22.37	22.59	22.38
		High		22.34	22.61	22.34
	50%	Low	23.50	22.13	22.29	22.25
		Middle		22.28	22.22	22.15
		High		22.31	22.22	22.14
	100%	/	22.50	21.28	21.21	21.18
64QAM	1	Low	22.50	20.84	20.99	20.90
		Middle		20.82	20.99	20.84
		High		21.03	20.89	20.93
	50%	Low	22.50	20.89	20.83	20.77
		Middle		20.84	20.79	20.75
		High		20.82	20.94	20.68
	100%	/	21.50	19.88	19.89	19.98
256QAM	1	Low	21.50	19.97	19.89	19.94
		Middle		19.94	19.89	19.93
		High		19.96	20.00	19.79
	50%	Low	21.50	19.92	19.93	20.07
		Middle		20.00	19.90	19.92
		High		20.00	19.93	19.90
	100%	/	19.50	18.33	18.12	18.15
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				19965/1711.5	20175/1732.5	20385/1753.5
QPSK	1	Low	24.50	23.34	23.38	23.37
		Middle		23.20	23.36	23.32
		High		23.23	23.39	23.37
	50%	Low	23.50	22.23	22.52	22.36
		Middle		22.30	22.38	22.36
		High		22.35	22.26	22.35
	100%	/	23.50	22.32	22.26	22.28
16QAM	1	Low	23.50	22.47	22.62	22.32
		Middle		22.51	22.59	22.34
		High		22.49	22.51	22.31
	50%	Low	22.50	21.33	21.37	21.31
		Middle		21.41	21.45	21.29
		High		21.42	21.44	21.25

	100%	/	22.50	21.34	21.37	21.33
64QAM	1	Low	22.50	20.87	21.01	20.98
		Middle		20.91	20.93	20.90
		High		21.11	20.99	20.97
	50%	Low	21.50	20.04	19.93	19.92
		Middle		20.03	19.93	19.90
		High		19.98	20.01	19.80
	100%	/	21.50	19.95	20.01	20.06
256QAM	1	Low	19.50	18.03	17.97	17.95
		Middle		18.02	18.06	18.15
		High		18.05	18.02	18.04
	50%	Low	19.50	18.10	18.23	18.21
		Middle		18.11	18.18	18.28
		High		18.21	18.07	18.20
	100%	/	19.50	18.25	18.03	18.09
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				19975/1712.5	20175/1732.5	20375/1752.5
QPSK	1	Low	24.50	23.24	23.40	23.45
		Middle		23.25	23.41	23.31
		High		23.34	23.44	23.27
	50%	Low	23.50	22.30	22.47	22.42
		Middle		22.41	22.35	22.29
		High		22.30	22.28	22.36
	100%	/	23.50	22.36	22.27	22.20
16QAM	1	Low	23.50	22.40	22.52	22.25
		Middle		22.42	22.50	22.32
		High		22.42	22.53	22.35
	50%	Low	22.50	21.25	21.47	21.34
		Middle		21.38	21.34	21.28
		High		21.39	21.49	21.26
	100%	/	22.50	21.42	21.33	21.25
64QAM	1	Low	22.50	20.84	21.01	20.78
		Middle		20.88	20.97	20.92
		High		21.12	21.02	20.98
	50%	Low	21.50	20.02	19.94	19.98
		Middle		20.00	19.93	19.91
		High		19.95	20.01	19.81
	100%	/	21.50	19.93	20.02	20.06
256QAM	1	Low	19.50	17.93	18.04	18.08
		Middle		18.07	18.06	18.09
		High		18.16	18.02	17.89

	50%	Low	19.50	18.17	18.13	18.22
		Middle		18.17	18.10	18.16
		High		18.11	18.09	18.21
	100%	/	19.50	18.24	18.04	18.01
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				20000/1715	20175/1732.5	20350/1750
QPSK	1	Low	24.50	23.35	23.39	23.38
		Middle		23.29	23.38	23.31
		High		23.24	23.40	23.32
	50%	Low	23.50	22.23	22.34	22.32
		Middle		22.44	22.22	22.30
		High		22.28	22.29	22.46
	100%	/	23.50	22.40	22.48	22.21
16QAM	1	Low	23.50	22.38	22.54	22.38
		Middle		22.51	22.41	22.34
		High		22.39	22.46	22.27
	50%	Low	22.50	21.34	21.44	21.25
		Middle		21.43	21.25	21.20
		High		21.42	21.21	21.17
	100%	/	22.50	21.25	21.15	21.16
64QAM	1	Low	22.50	20.86	21.00	20.97
		Middle		20.91	20.97	20.95
		High		21.11	21.04	21.01
	50%	Low	21.50	20.05	19.99	19.98
		Middle		20.02	19.97	19.94
		High		19.98	20.06	19.85
	100%	/	21.50	19.96	20.07	20.10
256QAM	1	Low	19.50	18.04	18.03	18.01
		Middle		18.11	18.08	18.14
		High		18.06	18.03	17.99
	50%	Low	19.50	18.10	18.05	18.17
		Middle		18.20	17.97	18.17
		High		18.09	18.05	18.26
	100%	/	19.50	18.28	18.20	17.97
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				20025/1717.5	20175/1732.5	20325/1747.5
QPSK	1	Low	24.50	23.32	23.43	23.40
		Middle		23.23	23.39	23.34
		High		23.27	23.45	23.35
	50%	Low	23.50	22.25	22.35	22.35

		Middle		22.41	22.40	22.34
		High		22.31	22.32	22.42
	100%	/	23.50	22.38	22.32	22.21
16QAM	1	Low	23.50	22.42	22.59	22.54
		Middle		22.44	22.49	22.44
		High		22.41	22.56	22.39
	50%	Low	22.50	21.26	21.33	21.39
		Middle		21.36	21.38	21.35
		High		21.35	21.35	21.33
	100%	/	22.50	21.32	21.33	21.31
64QAM	1	Low	22.50	20.81	20.98	20.95
		Middle		20.87	20.99	20.93
		High		21.12	21.03	21.02
	50%	Low	21.50	20.04	20.03	19.99
		Middle		20.00	19.94	19.93
		High		20.02	20.02	19.74
	100%	/	21.50	19.80	19.84	19.92
256QAM	1	Low	19.50	18.01	18.07	18.03
		Middle		18.05	18.09	18.17
		High		18.09	18.08	18.02
	50%	Low	19.50	18.12	18.06	18.20
		Middle		18.17	18.15	18.21
		High		18.12	18.08	18.22
	100%	/	19.50	18.26	18.04	17.97
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				20050/1720	20175/1732.5	20300/1745
QPSK	1	Low	24.50	23.39	**23.47**	23.43
		Middle		23.32	23.43	23.36
		High		23.29	23.46	23.41
	50%	Low	23.50	22.28	**22.43**	22.39
		Middle		22.39	22.36	22.37
		High		22.34	22.37	22.38
	100%	/	23.50	22.35	**22.39**	22.30
16QAM	1	Low	23.50	22.57	22.60	22.45
		Middle		22.45	22.56	22.40
		High		22.44	22.58	22.37
	50%	Low	22.50	21.28	21.42	21.36
		Middle		21.34	21.37	21.32
		High		21.37	21.35	21.29
	100%	/	22.50	21.30	21.29	21.28
64QAM	1	Low	22.50	20.79	20.94	20.90

		Middle		20.85	20.92	20.89
		High		21.06	20.97	20.96
	50%	Low	21.50	19.99	19.93	19.92
		Middle		19.96	19.90	19.87
		High		19.93	19.97	19.78
	100%	/	21.50	19.91	19.98	20.03
256QAM	1	Low	19.50	18.08	18.11	18.06
		Middle		18.14	18.13	18.19
		High		18.11	18.09	18.08
	50%	Low	19.50	18.15	18.14	18.24
		Middle		18.15	18.11	18.24
		High		18.15	18.13	18.18
	100%	/	19.50	18.23	18.11	18.06

Sensor on						
LTE B4			**Maximum Output Power (dBm)**			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				19957/1710.7	20175/1732.5	20393/1754.3
QPSK	1	Low	20.00	18.72	18.83	18.91
		Middle		18.83	18.83	18.75
		High		18.69	18.78	18.67
	50%	Low	20.00	18.68	18.65	18.74
		Middle		18.77	18.62	18.65
		High		18.69	18.70	18.65
	100%	/	19.00	17.81	17.80	17.83
16QAM	1	Low	19.00	17.64	17.84	17.65
		Middle		17.66	17.74	17.66
		High		17.60	17.73	17.57
	50%	Low	19.00	17.53	17.62	17.55
		Middle		17.75	17.55	17.44
		High		17.63	17.59	17.54
	100%	/	18.00	16.72	16.67	16.75
64QAM	1	Low	18.00	16.80	16.70	16.60
		Middle		16.69	16.79	16.60
		High		16.78	16.68	16.69
	50%	Low	18.00	16.40	16.38	16.45
		Middle		16.59	16.48	16.40
		High		16.65	16.68	16.52
	100%	/	17.00	15.64	15.63	15.49
256QAM	1	Low	17.00	15.58	15.41	15.52
		Middle		15.50	15.54	15.52

		High		15.68	15.63	15.52
	50%	Low	17.00	15.59	15.68	15.41
		Middle		15.41	15.37	15.44
		High		15.56	15.53	15.43
	100%	/	15.00	13.44	13.51	13.57
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				19965/1711.5	20175/1732.5	20385/1753.5
QPSK	1	Low	20.00	18.74	18.71	18.87
		Middle		18.79	18.81	18.86
		High		18.66	18.78	18.75
	50%	Low	19.00	17.68	17.81	17.81
		Middle		17.83	17.86	17.82
		High		17.87	17.75	17.80
	100%	/	19.00	17.82	17.68	17.82
16QAM	1	Low	19.00	17.76	17.86	17.62
		Middle		17.75	17.74	17.62
		High		17.70	17.63	17.54
	50%	Low	18.00	16.68	16.70	16.61
		Middle		16.83	16.84	16.59
		High		16.74	16.87	16.66
	100%	/	18.00	16.78	16.89	16.91
64QAM	1	Low	18.00	16.83	16.78	16.69
		Middle		16.78	16.78	16.66
		High		16.86	16.83	16.73
	50%	Low	17.00	15.55	15.53	15.60
		Middle		15.78	15.67	15.60
		High		15.81	15.74	15.63
	100%	/	17.00	15.71	15.69	15.56
256QAM	1	Low	15.00	13.84	13.80	13.85
		Middle		13.83	13.85	13.89
		High		13.84	13.81	13.87
	50%	Low	15.00	13.52	13.60	13.50
		Middle		13.64	13.75	13.75
		High		13.65	13.52	13.65
	100%	/	15.00	13.59	13.53	13.69
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				19975/1712.5	20175/1732.5	20375/1752.5
QPSK	1	Low	20.00	18.70	18.79	18.95
		Middle		18.90	18.86	18.79
		High		18.83	18.83	18.59

	50%	Low	19.00	17.81	17.76	17.81
		Middle		17.83	17.77	17.69
		High		17.71	17.71	17.75
	100%	/	19.00	17.75	17.63	17.68
16QAM	1	Low	19.00	17.58	17.70	17.49
		Middle		17.60	17.64	17.59
		High		17.57	17.59	17.52
	50%	Low	18.00	16.60	16.74	16.58
		Middle		16.80	16.73	16.58
		High		16.71	16.92	16.67
	100%	/	18.00	16.86	16.85	16.83
64QAM	1	Low	18.00	16.80	16.78	16.49
		Middle		16.75	16.83	16.69
		High		16.87	16.87	16.75
	50%	Low	17.00	15.53	15.55	15.67
		Middle		15.75	15.68	15.62
		High		15.78	15.75	15.65
	100%	/	17.00	15.69	15.65	15.51
256QAM	1	Low	15.00	13.74	13.76	13.87
		Middle		13.88	13.84	13.82
		High		13.95	13.80	13.71
	50%	Low	15.00	13.59	13.49	13.50
		Middle		13.70	13.72	13.68
		High		13.55	13.54	13.66
	100%	/	15.00	13.58	13.54	13.61

Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				20000/1715	20175/1732.5	20350/1750
QPSK	1	Low	20.00	18.81	18.72	18.82
		Middle		18.94	18.83	18.79
		High		18.73	18.79	18.64
	50%	Low	19.00	17.74	17.63	17.71
		Middle		17.92	17.59	17.65
		High		17.75	17.67	17.80
	100%	/	19.00	17.85	17.85	17.70
16QAM	1	Low	19.00	17.62	17.73	17.63
		Middle		17.75	17.56	17.62
		High		17.60	17.63	17.55
	50%	Low	18.00	16.69	16.82	16.60
		Middle		16.85	16.69	16.55
		High		16.74	16.69	16.63
	100%	/	18.00	16.69	16.72	16.79

64QAM	1	Low	18.00	16.82	16.77	16.68
		Middle		16.78	16.83	16.72
		High		16.86	16.89	16.78
	50%	Low	17.00	15.56	15.54	15.61
		Middle		15.77	15.66	15.59
		High		15.81	15.74	15.63
	100%	/	17.00	15.72	15.70	15.55
256QAM	1	Low	15.00	13.85	13.75	13.80
		Middle		13.92	13.87	13.88
		High		13.85	13.82	13.82
	50%	Low	15.00	13.52	13.42	13.46
		Middle		13.73	13.54	13.64
		High		13.53	13.50	13.71
	100%	/	15.00	13.62	13.70	13.57
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				20025/1717.5	20175/1732.5	20325/1747.5
QPSK	1	Low	20.00	18.78	18.76	18.84
		Middle		18.88	18.84	18.82
		High		18.76	18.84	18.67
	50%	Low	19.00	17.76	17.64	17.74
		Middle		17.89	17.77	17.69
		High		17.78	17.70	17.76
	100%	/	19.00	17.83	17.69	17.70
16QAM	1	Low	19.00	17.65	17.77	17.79
		Middle		17.67	17.63	17.72
		High		17.61	17.67	17.62
	50%	Low	18.00	16.60	16.65	16.69
		Middle		16.77	16.76	16.65
		High		16.66	16.77	16.74
	100%	/	18.00	16.76	16.85	16.89
64QAM	1	Low	18.00	16.77	16.75	16.66
		Middle		16.74	16.85	16.70
		High		16.87	16.88	16.79
	50%	Low	17.00	15.55	15.64	15.68
		Middle		15.75	15.69	15.64
		High		15.85	15.76	15.58
	100%	/	17.00	15.56	15.47	15.37
256QAM	1	Low	15.00	13.82	13.79	13.82
		Middle		13.86	13.82	13.85
		High		13.88	13.81	13.79
	50%	Low	15.00	13.54	13.43	13.49

		Middle		13.70	13.72	13.68
		High		13.56	13.53	13.67
	100%	/	15.00	13.60	13.54	13.57
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				20050/1720	20175/1732.5	20300/1745
QPSK	1	Low	20.00	18.85	18.86	18.93
		Middle		18.97	18.94	18.90
		High		18.78	18.91	18.79
	50%	Low	19.00	17.79	17.78	17.84
		Middle		17.87	17.79	17.78
		High		17.81	17.81	17.78
	100%	/	19.00	17.80	17.76	17.79
16QAM	1	Low	19.00	17.77	17.79	17.70
		Middle		17.69	17.71	17.68
		High		17.65	17.70	17.60
	50%	Low	18.00	16.63	16.75	16.66
		Middle		16.76	16.76	16.62
		High		16.69	16.78	16.70
	100%	/	18.00	16.74	16.81	16.86
64QAM	1	Low	18.00	16.75	16.71	16.61
		Middle		16.72	16.78	16.66
		High		16.81	16.82	16.73
	50%	Low	17.00	15.50	15.54	15.61
		Middle		15.71	15.65	15.58
		High		15.76	15.71	15.62
	100%	/	17.00	15.67	15.67	15.54
256QAM	1	Low	15.00	13.89	13.89	13.91
		Middle		13.95	13.92	13.93
		High		13.90	13.88	13.91
	50%	Low	15.00	13.57	13.51	13.53
		Middle		13.68	13.68	13.71
		High		13.59	13.58	13.63
	100%	/	15.00	13.57	13.61	13.66

Hotspot on						
LTE B4			**Maximum Output Power (dBm)**			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				19957/1710.7	20175/1732.5	20393/1754.3
QPSK	1	Low	22.50	21.33	21.44	21.52
		Middle		21.44	21.51	21.36

		High		21.30	21.39	21.28
	50%	Low	22.50	21.23	21.12	21.29
		Middle		21.32	21.19	21.20
		High		21.24	21.17	21.20
	100%	/	21.50	20.36	20.27	20.38
16QAM	1	Low	21.50	20.30	20.53	20.42
		Middle		20.24	20.39	20.35
		High		20.18	20.40	20.27
	50%	Low	21.50	20.09	20.17	20.23
		Middle		20.21	20.16	20.21
		High		20.14	20.20	20.19
	100%	/	20.50	19.14	19.28	19.18
64QAM	1	Low	20.50	19.22	19.31	19.33
		Middle		19.33	19.50	19.41
		High		19.32	19.24	19.19
	50%	Low	20.50	18.97	19.01	18.88
		Middle		19.15	19.10	19.09
		High		19.24	19.32	19.26
	100%	/	19.50	18.37	18.37	18.36
256QAM	1	Low	19.50	17.95	17.98	17.89
		Middle		18.06	18.10	18.15
		High		18.27	18.27	18.26
	50%	Low	19.50	18.32	18.42	18.42
		Middle		18.12	18.09	18.20
		High		18.24	18.22	18.31
	100%	/	17.50	16.45	16.47	16.51
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				19965/1711.5	20175/1732.5	20385/1753.5
QPSK	1	Low	22.50	21.35	21.32	21.42
		Middle		21.40	21.49	21.41
		High		21.27	21.39	21.30
	50%	Low	21.50	20.29	20.42	20.36
		Middle		20.38	20.51	20.37
		High		20.34	20.22	20.27
	100%	/	21.50	20.29	20.15	20.29
16QAM	1	Low	21.50	20.34	20.55	20.31
		Middle		20.33	20.39	20.23
		High		20.36	20.30	20.24
	50%	Low	20.50	19.32	19.25	19.29
		Middle		19.37	19.39	19.30
		High		19.33	19.42	19.25

	100%	/	20.50	19.28	19.44	19.28
64QAM	1	Low	20.50	19.33	19.25	19.28
		Middle		19.42	19.41	19.39
		High		19.40	19.31	19.23
	50%	Low	19.50	18.12	18.08	18.03
		Middle		18.34	18.21	18.29
		High		18.40	18.36	18.43
	100%	/	19.50	18.44	18.49	18.57
256QAM	1	Low	17.50	16.42	16.39	16.49
		Middle		16.42	16.45	16.54
		High		16.52	16.50	16.60
	50%	Low	17.50	16.26	16.30	16.20
		Middle		16.33	16.40	16.42
		High		16.43	16.31	16.43
	100%	/	17.50	16.23	16.32	16.46
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				19975/1712.5	20175/1732.5	20375/1752.5
QPSK	1	Low	22.50	21.25	21.34	21.50
		Middle		21.45	21.54	21.40
		High		21.38	21.44	21.20
	50%	Low	21.50	20.36	20.37	20.42
		Middle		20.44	20.40	20.22
		High		20.32	20.24	20.28
	100%	/	21.50	20.36	20.16	20.21
16QAM	1	Low	21.50	20.30	20.45	20.24
		Middle		20.32	20.43	20.34
		High		20.29	20.32	20.28
	50%	Low	20.50	19.24	19.35	19.32
		Middle		19.34	19.28	19.29
		High		19.30	19.47	19.26
	100%	/	20.50	19.36	19.40	19.20
64QAM	1	Low	20.50	19.30	19.33	19.16
		Middle		19.39	19.48	19.44
		High		19.41	19.37	19.27
	50%	Low	19.50	18.10	18.12	18.12
		Middle		18.23	18.16	18.25
		High		18.29	18.31	18.39
	100%	/	19.50	18.34	18.37	18.44
256QAM	1	Low	17.50	16.24	16.33	16.49
		Middle		16.39	16.42	16.45
		High		16.63	16.55	16.50

	50%	Low	17.50	16.33	16.25	16.26
		Middle		16.39	16.37	16.35
		High		16.33	16.33	16.44
	100%	/	17.50	16.22	16.33	16.38
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				20000/1715	20175/1732.5	20350/1750
QPSK	1	Low	22.50	21.36	21.33	21.43
		Middle		21.49	21.51	21.40
		High		21.20	21.32	21.17
	50%	Low	21.50	20.21	20.16	20.24
		Middle		20.39	20.22	20.18
		High		20.22	20.20	20.33
	100%	/	21.50	20.32	20.32	20.17
16QAM	1	Low	21.50	20.28	20.50	20.40
		Middle		20.41	20.29	20.31
		High		20.26	20.30	20.25
	50%	Low	20.50	19.33	19.37	19.28
		Middle		19.39	19.24	19.26
		High		19.25	19.16	19.14
	100%	/	20.50	19.11	19.19	19.08
64QAM	1	Low	20.50	19.24	19.24	19.27
		Middle		19.34	19.40	19.39
		High		19.40	19.39	19.30
	50%	Low	19.50	18.13	18.17	18.12
		Middle		18.33	18.28	18.36
		High		18.40	18.44	18.51
	100%	/	19.50	18.45	18.50	18.56
256QAM	1	Low	17.50	16.43	16.40	16.50
		Middle		16.51	16.47	16.53
		High		16.53	16.51	16.55
	50%	Low	17.50	16.26	16.12	16.16
		Middle		16.42	16.19	16.31
		High		16.31	16.29	16.49
	100%	/	17.50	16.26	16.49	16.34
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				20025/1717.5	20175/1732.5	20325/1747.5
QPSK	1	Low	22.50	21.33	21.37	21.45
		Middle		21.43	21.44	21.35
		High		21.31	21.37	21.20
	50%	Low	21.50	20.31	20.17	20.27

		Middle		20.44	20.40	20.22
		High		20.33	20.31	20.37
	100%	/	21.50	20.30	20.16	20.17
16QAM	1	Low	21.50	20.29	20.52	20.48
		Middle		20.31	20.34	20.33
		High		20.33	20.40	20.32
	50%	Low	20.50	19.30	19.26	19.37
		Middle		19.37	19.37	19.36
		High		19.31	19.38	19.33
	100%	/	20.50	19.26	19.40	19.26
64QAM	1	Low	20.50	19.27	19.30	19.33
		Middle		19.38	19.50	19.45
		High		19.41	19.30	19.23
	50%	Low	19.50	18.12	18.13	18.05
		Middle		18.31	18.17	18.27
		High		18.44	18.32	18.32
	100%	/	19.50	18.29	18.19	18.30
256QAM	1	Low	17.50	16.40	16.44	16.52
		Middle		16.45	16.48	16.56
		High		16.56	16.56	16.58
	50%	Low	17.50	16.28	16.13	16.19
		Middle		16.39	16.37	16.35
		High		16.34	16.32	16.45
	100%	/	17.50	16.24	16.33	16.34
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				20050/1720	20175/1732.5	20300/1745
QPSK	1	Low	22.50	21.40	21.41	21.48
		Middle		21.52	**21.56**	21.45
		High		21.33	21.46	21.34
	50%	Low	21.50	20.34	20.33	20.39
		Middle		20.42	**20.44**	20.33
		High		20.36	20.36	20.33
	100%	/	21.50	**20.35**	20.31	20.34
16QAM	1	Low	21.50	20.52	20.56	20.47
		Middle		20.35	20.44	20.37
		High		20.31	20.37	20.30
	50%	Low	20.50	19.27	19.30	19.34
		Middle		19.30	19.31	19.33
		High		19.28	19.33	19.29
	100%	/	20.50	19.24	19.36	19.23
64QAM	1	Low	20.50	19.25	19.26	19.28

		Middle		19.36	19.43	19.41
		High		19.35	19.32	19.25
	50%	Low	19.50	18.07	18.11	18.06
		Middle		18.27	18.21	18.29
		High		18.35	18.35	18.44
	100%	/	19.50	18.40	18.41	18.49
256QAM	1	Low	17.50	16.47	16.48	16.55
		Middle		16.54	16.52	16.58
		High		16.58	16.57	16.64
	50%	Low	17.50	16.31	16.21	16.23
		Middle		16.37	16.33	16.38
		High		16.37	16.37	16.41
	100%	/	17.50	16.21	16.40	16.43

LTE Band 12(ANT1)

Full Power/Hotspot on						
LTE B12			**Maximum Output Power (dBm)**			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				23017/699.7	23095/707.5	23173/715.3
QPSK	1	Low	23.00	21.76	21.86	21.64
		Middle		21.73	21.72	21.66
		High		21.70	21.61	21.59
	50%	Low	23.00	21.53	21.64	21.67
		Middle		21.56	21.49	21.59
		High		21.58	21.53	21.56
	100%	/	22.00	20.70	20.77	20.82
16QAM	1	Low	22.00	20.82	21.01	20.96
		Middle		20.91	20.89	20.91
		High		20.86	20.90	20.94
	50%	Low	22.00	20.65	20.53	20.60
		Middle		20.65	20.52	20.49
		High		20.74	20.60	20.58
	100%	/	21.00	19.73	19.64	19.65
64QAM	1	Low	21.00	19.95	19.80	19.62
		Middle		19.85	19.79	19.69
		High		19.74	19.63	19.75
	50%	Low	21.00	19.55	19.67	19.66
		Middle		19.57	19.70	19.59
		High		19.72	19.77	19.84
	100%	/	20.00	18.57	18.70	18.57

256QAM	1	Low	20.00	18.56	18.60	18.72
		Middle		18.54	18.69	18.69
		High		18.72	18.67	18.81
	50%	Low	20.00	18.45	18.61	18.79
		Middle		18.50	18.72	18.69
		High		18.82	18.71	18.76
	100%	/	18.00	17.11	17.23	17.18
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				23025/700.5	23095/707.5	23165/714.5
QPSK	1	Low	23.00	21.76	21.82	21.57
		Middle		21.65	21.73	21.66
		High		21.71	21.67	21.52
	50%	Low	22.00	20.61	20.69	20.66
		Middle		20.68	20.70	20.62
		High		20.67	20.59	20.66
	100%	/	22.00	20.79	20.73	20.69
16QAM	1	Low	22.00	20.96	21.00	21.10
		Middle		20.98	20.84	20.97
		High		20.93	20.90	20.99
	50%	Low	21.00	19.78	19.62	19.81
		Middle		19.73	19.73	19.71
		High		19.83	19.78	19.79
	100%	/	21.00	19.77	19.76	19.80
64QAM	1	Low	21.00	19.92	19.79	19.69
		Middle		19.90	19.79	19.80
		High		19.83	19.77	19.86
	50%	Low	20.00	18.70	18.87	18.90
		Middle		18.73	18.85	18.84
		High		18.92	18.85	18.90
	100%	/	20.00	18.49	18.60	18.51
256QAM	1	Low	18.00	17.14	17.22	17.31
		Middle		17.24	17.13	17.17
		High		17.27	17.16	17.15
	50%	Low	18.00	16.78	16.65	16.70
		Middle		16.84	16.64	16.74
		High		16.77	16.74	16.97
	100%	/	18.00	16.86	16.92	16.77
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				23035/701.5	23095/707.5	23155/713.5
QPSK	1	Low	23.00	21.79	21.78	21.55

		Middle		21.78	21.79	21.70
		High		21.75	21.69	21.56
	50%	Low	22.00	20.66	20.75	20.70
		Middle		20.71	20.52	20.65
		High		20.64	20.56	20.77
	100%	/	22.00	20.74	20.82	20.69
16QAM	1	Low	22.00	20.80	20.83	20.94
		Middle		20.93	20.64	20.87
		High		20.86	20.80	20.92
	50%	Low	21.00	19.81	19.73	19.72
		Middle		19.75	19.60	19.61
		High		19.85	19.64	19.68
	100%	/	21.00	19.70	19.63	19.70
64QAM	1	Low	21.00	19.97	19.81	19.71
		Middle		19.94	19.77	19.82
		High		19.82	19.71	19.78
	50%	Low	20.00	18.71	18.76	18.82
		Middle		18.75	18.81	18.78
		High		18.88	18.82	18.94
	100%	/	20.00	18.65	18.83	18.69
256QAM	1	Low	18.00	17.11	17.26	17.33
		Middle		17.18	17.21	17.27
		High		17.30	17.28	17.25
	50%	Low	18.00	16.80	16.73	16.80
		Middle		16.81	16.82	16.78
		High		16.80	16.77	16.93
	100%	/	18.00	16.84	16.76	16.77
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				23060/704	23095/707.5	23130/711
QPSK	1	Low	23.00	21.83	**21.86**	21.60
		Middle		21.81	21.84	21.75
		High		21.80	21.75	21.65
	50%	Low	22.00	20.71	**20.84**	20.77
		Middle		20.73	20.73	20.72
		High		20.77	20.71	20.69
	100%	/	22.00	20.76	**20.80**	20.78
16QAM	1	Low	22.00	20.75	20.96	21.01
		Middle		20.94	20.86	20.93
		High		20.91	20.87	20.97
	50%	Low	21.00	19.75	19.66	19.78
		Middle		19.66	19.67	19.68

		High		19.80	19.73	19.75
	100%	/	21.00	19.75	19.72	19.77
64QAM	1	Low	21.00	19.90	19.75	19.64
		Middle		19.88	19.72	19.76
		High		19.77	19.71	19.80
	50%	Low	20.00	18.65	18.77	18.83
		Middle		18.69	18.81	18.78
		High		18.83	18.80	18.94
	100%	/	20.00	18.60	18.74	18.62
256QAM	1	Low	18.00	17.18	17.30	17.36
		Middle		17.27	17.25	17.29
		High		17.32	17.29	17.31
	50%	Low	18.00	16.83	16.81	16.84
		Middle		16.79	16.78	16.81
		High		16.83	16.82	16.89
	100%	/	18.00	16.81	16.83	16.86

LTE Band 25(ANT1)

Full Power/Sensor off						
LTE B25			**Maximum Output Power (dBm)**			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				26047/1850.7	26365/1882,5	26683/1914.3
QPSK	1	Low	23.00	21.72	21.85	21.78
		Middle		21.62	21.65	21.58
		High		21.62	21.71	21.66
	50%	Low	23.00	21.74	21.73	21.69
		Middle		21.66	21.62	21.62
		High		21.69	21.71	21.60
	100%	/	22.00	20.77	20.85	20.80
16QAM	1	Low	22.00	20.89	20.99	20.73
		Middle		20.91	20.97	20.61
		High		20.85	20.79	20.65
	50%	Low	22.00	20.73	20.52	20.53
		Middle		20.79	20.49	20.63
		High		20.67	20.48	20.60
	100%	/	21.00	19.77	19.54	19.61
64QAM	1	Low	21.00	19.68	19.68	19.62
		Middle		19.67	19.84	19.69
		High		19.72	19.65	19.68
	50%	Low	21.00	19.54	19.53	19.46

		Middle		19.56	19.49	19.51
		High		19.47	19.54	19.45
	100%	/	20.00	18.59	18.51	18.55
256QAM	1	Low	20.00	18.53	18.51	18.48
		Middle		18.56	18.51	18.56
		High		18.51	18.50	18.40
	50%	Low	20.00	18.42	18.52	18.55
		Middle		18.52	18.54	18.56
		High		18.61	18.54	18.35
	100%	/	18.00	16.51	16.56	16.47
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				26055/1851.5	26365/1882,5	26675/1913.5
QPSK	1	Low	23.00	21.81	21.73	21.68
		Middle		21.65	21.63	21.63
		High		21.66	21.71	21.68
	50%	Low	22.00	20.80	20.88	20.69
		Middle		20.72	20.79	20.72
		High		20.87	20.69	20.68
	100%	/	22.00	20.78	20.73	20.79
16QAM	1	Low	22.00	21.01	21.01	20.70
		Middle		21.00	21.04	20.64
		High		20.95	20.76	20.69
	50%	Low	21.00	19.88	19.67	19.66
		Middle		19.87	19.79	19.79
		High		19.78	19.77	19.73
	100%	/	21.00	19.83	19.77	19.78
64QAM	1	Low	21.00	19.71	19.77	19.72
		Middle		19.76	19.83	19.75
		High		19.80	19.80	19.72
	50%	Low	20.00	18.69	18.68	18.61
		Middle		18.75	18.68	18.71
		High		18.63	18.66	18.62
	100%	/	20.00	18.66	18.63	18.68
256QAM	1	Low	18.00	16.81	16.74	16.67
		Middle		16.72	16.77	16.69
		High		16.72	16.67	16.61
	50%	Low	18.00	16.48	16.63	16.47
		Middle		16.60	16.68	16.64
		High		16.58	16.47	16.50
	100%	/	18.00	16.51	16.43	16.45
Modulation	RB	RB Offset	Tune up	5MHz		

				Channel/Frequency(MHz)		
				26065/1852.5	26365/1882.5	26665/1912.5
QPSK	1	Low	23.00	21.71	21.82	21.83
		Middle		21.70	21.75	21.69
		High		21.77	21.76	21.58
	50%	Low	22.00	20.87	20.83	20.75
		Middle		20.78	20.76	20.65
		High		20.77	20.71	20.69
	100%	/	22.00	20.77	20.67	20.64
16QAM	1	Low	22.00	20.89	20.84	20.56
		Middle		20.91	21.00	20.67
		High		20.88	20.78	20.73
	50%	Low	21.00	19.80	19.77	19.69
		Middle		19.84	19.68	19.78
		High		19.75	19.82	19.74
	100%	/	21.00	19.91	19.73	19.70
64QAM	1	Low	21.00	19.68	19.77	19.52
		Middle		19.73	19.82	19.72
		High		19.81	19.78	19.68
	50%	Low	20.00	18.67	18.64	18.62
		Middle		18.72	18.63	18.67
		High		18.60	18.61	18.58
	100%	/	20.00	18.64	18.59	18.63
256QAM	1	Low	18.00	16.71	16.76	16.75
		Middle		16.77	16.82	16.68
		High		16.83	16.72	16.51
	50%	Low	18.00	16.55	16.58	16.53
		Middle		16.66	16.65	16.57
		High		16.48	16.49	16.51
	100%	/	18.00	16.50	16.44	16.37
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				26090/1855	26365/1882.5	26640/1910
QPSK	1	Low	23.00	21.82	21.81	21.76
		Middle		21.74	21.72	21.69
		High		21.67	21.79	21.70
	50%	Low	22.00	20.80	20.77	20.72
		Middle		20.81	20.58	20.61
		High		20.75	20.67	20.74
	100%	/	22.00	20.81	20.83	20.60
16QAM	1	Low	22.00	20.87	20.81	20.64
		Middle		21.00	20.79	20.57

		High		20.85	20.69	20.63
	50%	Low	21.00	19.89	19.79	19.65
		Middle		19.89	19.64	19.75
		High		19.78	19.59	19.70
	100%	/	21.00	19.74	19.60	19.66
64QAM	1	Low	21.00	19.70	19.76	19.71
		Middle		19.76	19.75	19.68
		High		19.80	19.73	19.64
	50%	Low	20.00	18.70	18.62	18.55
		Middle		18.74	18.60	18.63
		High		18.63	18.59	18.55
	100%	/	20.00	18.67	18.64	18.67
256QAM	1	Low	18.00	16.82	16.75	16.68
		Middle		16.81	16.79	16.68
		High		16.73	16.68	16.56
	50%	Low	18.00	16.48	16.45	16.43
		Middle		16.69	16.47	16.53
		High		16.46	16.45	16.56
	100%	/	18.00	16.54	16.60	16.33
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				26115/1857.5	26365/1882.5	26615/1907.5
QPSK	1	Low	23.00	21.79	21.90	21.78
		Middle		21.68	21.73	21.72
		High		21.70	21.77	21.66
	50%	Low	22.00	20.82	20.71	20.68
		Middle		20.78	20.76	20.65
		High		20.78	20.77	20.77
	100%	/	22.00	20.79	20.74	20.67
16QAM	1	Low	22.00	20.96	20.98	20.87
		Middle		20.98	20.99	20.74
		High		20.92	20.86	20.77
	50%	Low	21.00	19.86	19.68	19.74
		Middle		19.87	19.77	19.85
		High		19.76	19.66	19.74
	100%	/	21.00	19.81	19.66	19.69
64QAM	1	Low	21.00	19.65	19.67	19.62
		Middle		19.72	19.84	19.73
		High		19.81	19.79	19.72
	50%	Low	20.00	18.69	18.73	18.63
		Middle		18.72	18.64	18.69
		High		18.67	18.62	18.51

	100%	/	20.00	18.51	18.41	18.49
256QAM	1	Low	18.00	16.79	16.79	16.70
		Middle		16.75	16.80	16.71
		High		16.76	16.73	16.59
	50%	Low	18.00	16.50	16.46	16.46
		Middle		16.66	16.65	16.57
		High		16.49	16.48	16.52
	100%	/	18.00	16.52	16.44	16.33
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				26140/1860	26365/1882.5	26590/1905
QPSK	1	Low	23.00	21.86	**21.89**	21.81
		Middle		21.77	21.77	21.74
		High		21.72	21.85	21.79
	50%	Low	22.00	20.85	**20.86**	20.79
		Middle		20.76	20.79	20.75
		High		20.81	20.82	20.73
	100%	/	22.00	20.76	**20.81**	20.76
16QAM	1	Low	22.00	20.97	20.94	20.78
		Middle		20.94	21.01	20.70
		High		20.90	20.83	20.75
	50%	Low	21.00	19.83	19.72	19.71
		Middle		19.80	19.71	19.82
		High		19.73	19.68	19.77
	100%	/	21.00	19.79	19.69	19.73
64QAM	1	Low	21.00	19.63	19.70	19.64
		Middle		19.70	19.77	19.69
		High		19.75	19.73	19.66
	50%	Low	20.00	18.64	18.63	18.56
		Middle		18.68	18.60	18.63
		High		18.58	18.57	18.55
	100%	/	20.00	18.62	18.55	18.60
256QAM	1	Low	18.00	16.86	16.83	16.73
		Middle		16.84	16.84	16.73
		High		16.78	16.74	16.65
	50%	Low	18.00	16.53	16.54	16.50
		Middle		16.64	16.61	16.60
		High		16.52	16.53	16.48
	100%	/	18.00	16.49	16.51	16.42

Sensor on	
LTE B25	**Maximum Output Power (dBm)**

Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				26047/1850.7	26365/1882,5	26683/1914.3
QPSK	1	Low	18.50	17.39	17.52	17.51
		Middle		17.32	17.42	17.30
		High		17.30	17.32	17.27
	50%	Low	18.50	17.29	17.30	17.27
		Middle		17.20	17.26	17.21
		High		17.04	17.28	17.23
	100%	/	17.50	16.20	16.43	16.42
16QAM	1	Low	17.50	16.36	16.46	16.28
		Middle		16.38	16.46	16.36
		High		16.32	16.42	16.30
	50%	Low	17.50	16.33	16.26	16.19
		Middle		16.41	16.26	16.12
		High		16.30	16.30	16.22
	100%	/	16.50	15.28	15.32	15.41
64QAM	1	Low	16.50	15.41	15.47	15.38
		Middle		15.43	15.54	15.29
		High		15.35	15.35	15.35
	50%	Low	16.50	15.15	15.10	15.14
		Middle		15.16	15.20	15.12
		High		15.31	15.25	15.09
	100%	/	15.50	14.28	14.23	14.10
256QAM	1	Low	15.50	14.14	14.08	14.16
		Middle		14.16	14.22	14.17
		High		14.35	14.21	14.04
	50%	Low	15.50	14.06	14.05	14.21
		Middle		14.18	14.24	14.14
		High		14.42	14.20	13.96
	100%	/	13.50	12.10	12.13	12.16
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				26055/1851.5	26365/1882,5	26675/1913.5
QPSK	1	Low	18.50	17.46	17.40	17.41
		Middle		17.33	17.40	17.35
		High		17.32	17.32	17.29
	50%	Low	17.50	16.40	16.52	16.34
		Middle		16.26	16.50	16.38
		High		16.22	16.33	16.38
	100%	/	17.50	16.21	16.31	16.41
16QAM	1	Low	17.50	16.48	16.48	16.25

		Middle		16.47	16.46	16.32
		High		16.42	16.32	16.27
	50%	Low	16.50	15.48	15.34	15.25
		Middle		15.49	15.49	15.21
		High		15.41	15.52	15.28
	100%	/	16.50	15.34	15.48	15.51
64QAM	1	Low	16.50	15.44	15.49	15.41
		Middle		15.52	15.53	15.35
		High		15.43	15.50	15.39
	50%	Low	15.50	14.30	14.25	14.29
		Middle		14.35	14.39	14.32
		High		14.47	14.37	14.26
	100%	/	15.50	14.35	14.35	14.23
256QAM	1	Low	13.50	12.26	12.18	12.24
		Middle		12.21	12.24	12.29
		High		12.32	12.29	12.36
	50%	Low	13.50	11.95	12.11	12.02
		Middle		12.06	12.17	12.18
		High		12.15	12.02	12.16
	100%	/	13.50	12.15	12.04	12.21
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				26065/1852.5	26365/1882.5	26665/1912.5
QPSK	1	Low	18.50	17.36	17.42	17.49
		Middle		17.38	17.45	17.34
		High		17.43	17.37	17.19
	50%	Low	17.50	16.47	16.47	16.40
		Middle		16.32	16.47	16.31
		High		16.12	16.35	16.39
	100%	/	17.50	16.20	16.32	16.33
16QAM	1	Low	17.50	16.36	16.38	16.18
		Middle		16.38	16.42	16.35
		High		16.35	16.34	16.31
	50%	Low	16.50	15.40	15.44	15.28
		Middle		15.46	15.38	15.20
		High		15.38	15.57	15.29
	100%	/	16.50	15.42	15.44	15.43
64QAM	1	Low	16.50	15.41	15.49	15.21
		Middle		15.49	15.52	15.32
		High		15.44	15.48	15.35
	50%	Low	15.50	14.28	14.21	14.30
		Middle		14.32	14.34	14.28

		High		14.44	14.27	14.17
	100%	/	15.50	14.33	14.26	14.13
256QAM	1	Low	13.50	12.16	12.15	12.27
		Middle		12.26	12.29	12.28
		High		12.43	12.34	12.26
	50%	Low	13.50	12.02	12.06	12.08
		Middle		12.12	12.14	12.11
		High		12.05	12.04	12.17
	100%	/	13.50	12.14	12.05	12.13
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				26090/1855	26365/1882.5	26640/1910
QPSK	1	Low	18.50	17.47	17.46	17.47
		Middle		17.42	17.47	17.39
		High		17.33	17.38	17.29
	50%	Low	17.50	16.40	16.39	16.35
		Middle		16.35	16.29	16.27
		High		16.05	16.26	16.44
	100%	/	17.50	16.19	16.43	16.29
16QAM	1	Low	17.50	16.29	16.30	16.26
		Middle		16.42	16.23	16.32
		High		16.27	16.27	16.28
	50%	Low	16.50	15.44	15.41	15.24
		Middle		15.46	15.29	15.17
		High		15.41	15.34	15.25
	100%	/	16.50	15.25	15.31	15.39
64QAM	1	Low	16.50	15.43	15.48	15.40
		Middle		15.52	15.52	15.35
		High		15.43	15.50	15.38
	50%	Low	15.50	14.31	14.26	14.30
		Middle		14.34	14.38	14.31
		High		14.47	14.37	14.26
	100%	/	15.50	14.36	14.36	14.22
256QAM	1	Low	13.50	12.27	12.14	12.20
		Middle		12.30	12.21	12.23
		High		12.33	12.25	12.26
	50%	Low	13.50	11.95	11.88	11.93
		Middle		12.15	11.96	12.07
		High		12.03	12.00	12.22
	100%	/	13.50	12.18	12.21	12.09
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		

				26115/1857.5	26365/1882.5	26615/1907.5
QPSK	1	Low	18.50	17.44	17.50	17.49
		Middle		17.36	17.43	17.37
		High		17.36	17.38	17.27
	50%	Low	17.50	16.42	16.35	16.33
		Middle		16.32	16.42	16.26
		High		16.13	16.34	16.40
	100%	/	17.50	16.22	16.32	16.29
16QAM	1	Low	17.50	16.43	16.45	16.42
		Middle		16.45	16.41	16.42
		High		16.39	16.42	16.35
	50%	Low	16.50	15.46	15.35	15.33
		Middle		15.49	15.47	15.27
		High		15.39	15.48	15.36
	100%	/	16.50	15.32	15.44	15.49
64QAM	1	Low	16.50	15.38	15.46	15.38
		Middle		15.43	15.49	15.33
		High		15.39	15.44	15.39
	50%	Low	15.50	14.25	14.25	14.31
		Middle		14.32	14.35	14.30
		High		14.51	14.33	14.15
	100%	/	15.50	14.20	14.13	14.04
256QAM	1	Low	13.50	12.24	12.23	12.27
		Middle		12.24	12.27	12.31
		High		12.36	12.35	12.34
	50%	Low	13.50	11.97	11.94	12.01
		Middle		12.12	12.14	12.11
		High		12.06	12.03	12.18
	100%	/	13.50	12.16	12.05	12.09
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				26140/1860	26365/1882.5	26590/1905
QPSK	1	Low	18.50	17.51	**17.56**	17.52
		Middle		17.45	17.52	17.44
		High		17.38	17.44	17.38
	50%	Low	17.50	16.48	**16.55**	16.50
		Middle		16.30	16.43	16.34
		High		16.16	16.39	16.36
	100%	/	17.50	16.19	**16.45**	16.38
16QAM	1	Low	17.50	16.34	16.41	16.33
		Middle		16.41	16.43	16.38
		High		16.37	16.39	16.33

	50%	Low	16.50	15.43	15.39	15.30
		Middle		15.42	15.41	15.24
		High		15.36	15.43	15.32
	100%	/	16.50	15.30	15.40	15.46
64QAM	1	Low	16.50	15.36	15.42	15.33
		Middle		15.46	15.47	15.29
		High		15.38	15.43	15.33
	50%	Low	15.50	14.25	14.20	14.24
		Middle		14.28	14.31	14.24
		High		14.42	14.28	14.19
	100%	/	15.50	14.31	14.27	14.15
256QAM	1	Low	13.50	12.31	12.27	12.30
		Middle		12.33	12.31	12.33
		High		12.38	12.36	12.40
	50%	Low	13.50	12.00	12.02	12.05
		Middle		12.10	12.10	12.14
		High		12.09	12.08	12.14
	100%	/	13.50	12.13	12.12	12.18

Hotspot on						
LTE B25			**Maximum Output Power (dBm)**			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				26047/1850.7	26365/1882,5	26683/1914.3
QPSK	1	Low	22.00	21.07	21.18	21.16
		Middle		21.01	21.07	20.99
		High		21.01	20.92	20.98
	50%	Low	22.00	20.96	20.94	20.99
		Middle		20.91	20.86	20.80
		High		20.68	20.89	20.83
	100%	/	21.00	19.84	20.07	20.06
16QAM	1	Low	21.00	19.93	20.10	19.85
		Middle		19.95	20.10	20.00
		High		19.98	20.11	20.10
	50%	Low	21.00	19.87	19.90	19.94
		Middle		20.03	19.90	19.92
		High		19.95	19.94	19.90
	100%	/	20.00	19.02	18.96	18.97
64QAM	1	Low	20.00	19.14	19.04	19.07
		Middle		19.08	19.13	19.04
		High		19.03	18.92	19.04
	50%	Low	20.00	18.76	18.69	18.70

		Middle		18.87	18.77	18.84
		High		18.81	18.82	18.81
	100%	/	19.00	17.90	17.86	17.98
256QAM	1	Low	19.00	17.75	17.67	17.72
		Middle		17.87	17.83	17.89
		High		17.85	17.82	17.76
	50%	Low	19.00	17.85	17.77	17.92
		Middle		17.67	17.68	17.77
		High		17.89	17.85	17.86
	100%	/	17.00	15.58	15.64	15.56
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				26055/1851.5	26365/1882,5	26675/1913.5
QPSK	1	Low	22.00	20.99	21.12	21.14
		Middle		21.02	21.14	21.03
		High		21.09	21.01	20.90
	50%	Low	21.00	20.05	20.11	20.08
		Middle		19.99	20.07	19.86
		High		19.72	19.96	19.95
	100%	/	21.00	19.80	19.92	19.93
16QAM	1	Low	21.00	19.89	19.98	19.71
		Middle		19.95	20.06	19.99
		High		20.01	20.03	20.11
	50%	Low	20.00	18.94	19.08	19.03
		Middle		19.08	19.02	19.00
		High		19.03	19.21	18.97
	100%	/	20.00	19.16	19.08	18.99
64QAM	1	Low	20.00	19.14	19.10	18.90
		Middle		19.14	19.11	19.03
		High		19.12	19.05	19.00
	50%	Low	19.00	17.89	17.80	17.82
		Middle		18.03	17.91	17.96
		High		17.94	17.89	17.90
	100%	/	19.00	17.95	17.98	18.06
256QAM	1	Low	17.00	15.85	15.82	15.87
		Middle		15.82	15.88	15.91
		High		15.95	15.91	15.97
	50%	Low	17.00	15.61	15.73	15.61
		Middle		15.58	15.68	15.69
		High		15.70	15.52	15.62
	100%	/	17.00	15.50	15.54	15.64
Modulation	RB	RB Offset	Tune up	5MHz		

				Channel/Frequency(MHz)		
				26065/1852.5	26365/1882.5	26665/1912.5
QPSK	1	Low	22.00	21.09	21.10	21.06
		Middle		20.97	21.09	21.04
		High		20.98	20.96	21.00
	50%	Low	21.00	20.02	20.20	20.06
		Middle		19.97	20.10	19.93
		High		19.86	19.94	19.94
	100%	/	21.00	19.85	19.91	20.01
16QAM	1	Low	21.00	20.05	20.08	19.78
		Middle		20.04	20.06	19.92
		High		20.08	19.97	20.03
	50%	Low	20.00	19.02	18.98	19.00
		Middle		19.11	19.13	19.01
		High		19.06	19.16	18.96
	100%	/	20.00	19.08	19.12	19.07
64QAM	1	Low	20.00	19.17	19.10	19.10
		Middle		19.17	19.16	19.10
		High		19.11	19.11	19.08
	50%	Low	19.00	17.91	17.88	17.85
		Middle		18.02	17.96	18.00
		High		17.93	17.94	17.94
	100%	/	19.00	17.93	17.98	18.07
256QAM	1	Low	17.00	15.71	15.80	15.91
		Middle		15.83	15.89	15.86
		High		16.06	15.96	15.87
	50%	Low	17.00	15.68	15.68	15.67
		Middle		15.64	15.65	15.62
		High		15.60	15.54	15.63
	100%	/	17.00	15.49	15.55	15.56
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				26090/1855	26365/1882.5	26640/1910
QPSK	1	Low	22.00	21.07	21.15	21.09
		Middle		21.00	21.12	21.06
		High		21.02	21.02	20.98
	50%	Low	21.00	20.00	19.99	20.01
		Middle		19.99	20.07	19.86
		High		19.73	19.95	19.96
	100%	/	21.00	19.82	19.92	19.89
16QAM	1	Low	21.00	19.96	20.05	19.95
		Middle		20.02	20.05	20.06

		High		20.05	20.11	20.15
	50%	Low	20.00	19.00	18.99	19.08
		Middle		19.11	19.11	19.07
		High		19.04	19.12	19.04
	100%	/	20.00	19.06	19.08	19.05
64QAM	1	Low	20.00	19.11	19.07	19.07
		Middle		19.13	19.17	19.08
		High		19.12	19.06	19.04
	50%	Low	19.00	17.91	17.89	17.83
		Middle		18.03	17.92	17.98
		High		18.01	17.90	17.83
	100%	/	19.00	17.82	17.76	17.88
256QAM	1	Low	17.00	15.86	15.83	15.88
		Middle		15.91	15.90	15.90
		High		15.96	15.92	15.92
	50%	Low	17.00	15.61	15.55	15.57
		Middle		15.67	15.43	15.54
		High		15.58	15.46	15.64
	100%	/	17.00	15.53	15.67	15.48
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				26115/1857.5	26365/1882.5	26615/1907.5
QPSK	1	Low	22.00	21.10	21.11	21.07
		Middle		21.06	21.11	21.03
		High		20.99	20.97	20.95
	50%	Low	21.00	20.02	20.02	20.02
		Middle		20.06	19.93	19.86
		High		19.74	19.96	20.04
	100%	/	21.00	19.88	20.12	19.93
16QAM	1	Low	21.00	19.91	19.99	19.83
		Middle		20.04	19.92	19.96
		High		19.98	20.01	20.08
	50%	Low	20.00	19.03	19.06	18.95
		Middle		19.13	18.94	18.93
		High		19.06	18.94	18.89
	100%	/	20.00	18.99	18.91	18.91
64QAM	1	Low	20.00	19.16	19.09	19.09
		Middle		19.17	19.15	19.10
		High		19.11	19.11	19.07
	50%	Low	19.00	17.92	17.89	17.86
		Middle		18.01	17.95	18.03
		High		17.93	17.94	17.98

	100%	/	19.00	17.94	17.99	18.10
256QAM	1	Low	17.00	15.79	15.83	15.90
		Middle		15.81	15.87	15.93
		High		15.99	15.97	15.95
	50%	Low	17.00	15.63	15.56	15.60
		Middle		15.64	15.65	15.62
		High		15.61	15.53	15.64
	100%	/	17.00	15.51	15.55	15.52
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				26140/1860	26365/1882.5	26590/1905
QPSK	1	Low	22.00	21.14	**21.19**	21.12
		Middle		21.09	21.16	21.08
		High		21.04	21.03	21.04
	50%	Low	21.00	20.07	**20.11**	20.09
		Middle		20.01	20.07	19.93
		High		19.80	20.04	19.96
	100%	/	21.00	19.83	**20.03**	20.02
16QAM	1	Low	21.00	19.98	20.05	19.90
		Middle		19.98	20.07	20.02
		High		20.03	20.08	20.13
	50%	Low	20.00	18.97	19.03	19.05
		Middle		19.04	19.05	19.04
		High		19.01	19.07	19.00
	100%	/	20.00	19.04	19.04	19.02
64QAM	1	Low	20.00	19.09	19.03	19.02
		Middle		19.11	19.10	19.04
		High		19.06	19.04	19.02
	50%	Low	19.00	17.86	17.83	17.80
		Middle		17.99	17.92	17.96
		High		17.92	17.89	17.91
	100%	/	19.00	17.93	17.94	18.03
256QAM	1	Low	17.00	15.90	15.91	15.93
		Middle		15.94	15.95	15.95
		High		16.01	15.98	16.01
	50%	Low	17.00	15.66	15.64	15.64
		Middle		15.62	15.61	15.65
		High		15.64	15.58	15.60
	100%	/	17.00	15.48	15.62	15.61

LTE Band 66(ANT1)

Full Power/Sensor off						
LTE B66			**Maximum Output Power (dBm)**			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				131979/1710.7	132322/1745	132665/1779.3
QPSK	1	Low	24.50	23.21	23.47	23.45
		Middle		23.23	23.28	23.29
		High		23.26	23.04	23.25
	50%	Low	24.50	23.17	23.15	23.34
		Middle		23.09	23.04	23.24
		High		23.03	23.14	23.21
	100%	/	23.50	22.28	22.34	22.45
16QAM	1	Low	23.50	22.24	22.52	22.43
		Middle		22.26	22.34	22.41
		High		22.19	22.43	22.34
	50%	Low	23.50	22.09	22.22	22.28
		Middle		22.15	22.07	22.24
		High		22.21	22.10	22.27
	100%	/	22.50	21.24	21.18	21.36
64QAM	1	Low	22.50	21.13	21.11	21.08
		Middle		21.02	21.05	21.02
		High		21.03	20.88	21.02
	50%	Low	22.50	21.09	21.06	21.21
		Middle		21.13	21.10	21.11
		High		21.07	21.20	20.96
	100%	/	21.50	20.10	20.21	20.06
256QAM	1	Low	21.50	20.08	20.10	20.17
		Middle		20.13	20.12	20.10
		High		20.11	20.16	19.91
	50%	Low	21.50	20.05	20.08	20.06
		Middle		19.97	20.11	20.30
		High		20.09	20.15	20.16
	100%	/	19.50	18.12	18.23	18.25
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				131987/1711.5	132322/1745	132657/1778.5
QPSK	1	Low	24.50	23.23	23.41	23.35
		Middle		23.19	23.32	23.34
		High		23.17	23.04	23.21
	50%	Low	23.50	22.17	22.37	22.35

		Middle		22.15	22.28	22.35
		High		22.21	22.13	22.30
	100%	/	23.50	22.29	22.16	22.38
16QAM	1	Low	23.50	22.36	22.48	22.34
		Middle		22.41	22.34	22.37
		High		22.35	22.33	22.31
	50%	Low	22.50	21.30	21.30	21.34
		Middle		21.29	21.36	21.33
		High		21.32	21.38	21.33
	100%	/	22.50	21.30	21.40	21.46
64QAM	1	Low	22.50	21.16	21.19	21.11
		Middle		21.11	21.10	21.08
		High		21.11	21.09	21.06
	50%	Low	21.50	20.24	20.21	20.30
		Middle		20.32	20.23	20.25
		High		20.23	20.26	20.13
	100%	/	21.50	20.17	20.27	20.19
256QAM	1	Low	19.50	18.15	18.06	18.16
		Middle		17.99	18.05	18.14
		High		18.06	18.07	18.13
	50%	Low	19.50	18.08	18.31	18.08
		Middle		18.17	18.22	18.27
		High		18.34	18.12	18.33
	100%	/	19.50	18.27	18.04	18.24
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				131997/1712.5	132322/1745	132647/1777.5
QPSK	1	Low	24.50	23.21	23.46	23.38
		Middle		23.22	23.35	23.36
		High		23.21	23.10	23.19
	50%	Low	23.50	22.19	22.20	22.34
		Middle		22.21	22.25	22.28
		High		22.12	22.14	22.32
	100%	/	23.50	22.30	22.17	22.26
16QAM	1	Low	23.50	22.31	22.45	22.51
		Middle		22.39	22.29	22.47
		High		22.32	22.43	22.39
	50%	Low	22.50	21.28	21.31	21.42
		Middle		21.29	21.34	21.39
		High		21.30	21.34	21.41
	100%	/	22.50	21.28	21.30	21.38
64QAM	1	Low	22.50	21.10	21.10	21.02

		Middle		21.07	21.05	21.00
		High		21.12	21.02	21.00
	50%	Low	21.50	20.24	20.26	20.32
		Middle		20.29	20.25	20.29
		High		20.27	20.28	20.08
	100%	/	21.50	20.02	20.11	20.06
256QAM	1	Low	19.50	18.05	18.14	18.30
		Middle		18.04	18.16	18.19
		High		18.17	18.12	18.03
	50%	Low	19.50	18.15	18.20	18.08
		Middle		18.23	18.13	18.14
		High		18.24	18.08	18.28
	100%	/	19.50	18.26	17.99	18.10
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				132022/1715	132322/1745	132622/1775
QPSK	1	Low	24.50	23.13	23.43	23.43
		Middle		23.18	23.31	23.27
		High		23.28	23.09	23.11
	50%	Low	23.50	22.24	22.32	22.41
		Middle		22.21	22.25	22.28
		High		22.17	22.21	22.37
	100%	/	23.50	22.34	22.23	22.36
16QAM	1	Low	23.50	22.30	22.44	22.33
		Middle		22.32	22.30	22.40
		High		22.28	22.35	22.35
	50%	Low	22.50	21.22	21.40	21.37
		Middle		21.26	21.19	21.26
		High		21.29	21.37	21.28
	100%	/	22.50	21.38	21.30	21.32
64QAM	1	Low	22.50	21.13	21.13	20.85
		Middle		21.08	21.03	20.99
		High		21.12	21.01	20.96
	50%	Low	21.50	20.22	20.23	20.37
		Middle		20.29	20.24	20.27
		High		20.20	20.27	20.15
	100%	/	21.50	20.15	20.29	20.20
256QAM	1	Low	19.50	18.16	18.13	18.23
		Middle		18.08	18.07	18.13
		High		18.07	18.02	18.02
	50%	Low	19.50	18.08	18.07	17.98
		Middle		18.26	17.95	18.10

		High		18.22	18.10	18.39
	100%	/	19.50	18.30	18.21	18.12
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				132047/1717.5	132322/1745	132597/1772.5
QPSK	1	Low	24.50	23.24	23.42	23.36
		Middle		23.22	23.28	23.27
		High		23.18	23.05	23.16
	50%	Low	23.50	22.17	22.19	22.31
		Middle		22.24	22.07	22.24
		High		22.15	22.17	22.42
	100%	/	23.50	22.38	22.39	22.32
16QAM	1	Low	23.50	22.28	22.41	22.41
		Middle		22.41	22.16	22.37
		High		22.25	22.33	22.32
	50%	Low	22.50	21.31	21.42	21.33
		Middle		21.31	21.21	21.29
		High		21.32	21.20	21.30
	100%	/	22.50	21.21	21.23	21.34
64QAM	1	Low	22.50	21.15	21.18	21.10
		Middle		21.11	21.03	21.02
		High		21.11	21.03	20.99
	50%	Low	21.50	20.25	20.22	20.31
		Middle		20.31	20.22	20.24
		High		20.23	20.26	20.13
	100%	/	21.50	20.18	20.34	20.24
256QAM	1	Low	19.50	18.13	18.17	18.25
		Middle		18.02	18.14	18.22
		High		18.10	18.13	18.11
	50%	Low	19.50	18.10	18.14	18.07
		Middle		18.23	18.19	18.20
		High		18.25	18.13	18.35
	100%	/	19.50	18.28	18.05	18.12
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				132072/1720	132322/1745	132572/1770
QPSK	1	Low	24.50	23.28	**23.50**	23.41
		Middle		23.31	23.39	23.38
		High		23.29	23.17	23.31
	50%	Low	23.50	22.28	22.34	**22.44**
		Middle		22.25	22.27	22.37
		High		22.21	22.25	22.34

	100%	/	23.50	22.33	22.30	22.41
16QAM	1	Low	23.50	22.36	22.47	22.48
		Middle		22.35	22.31	22.43
		High		22.30	22.40	22.37
	50%	Low	22.50	21.25	21.35	21.39
		Middle		21.22	21.28	21.36
		High		21.27	21.29	21.37
	100%	/	22.50	21.26	21.32	21.41
64QAM	1	Low	22.50	21.08	21.12	21.03
		Middle		21.05	21.04	21.02
		High		21.06	21.02	21.00
	50%	Low	21.50	20.19	20.22	20.31
		Middle		20.25	20.21	20.23
		High		20.18	20.23	20.12
	100%	/	21.50	20.13	20.25	20.17
256QAM	1	Low	19.50	18.20	18.21	18.28
		Middle		18.11	18.18	18.24
		High		18.12	18.14	18.17
	50%	Low	19.50	18.13	18.22	18.11
		Middle		18.21	18.15	18.23
		High		18.28	18.18	18.31
	100%	/	19.50	18.25	18.12	18.21

Sensor on						
LTE B66			**Maximum Output Power (dBm)**			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				131979/1710.7	132322/1745	132665/1779.3
QPSK	1	Low	20.00	18.95	19.04	19.01
		Middle		18.90	18.93	18.91
		High		18.88	18.87	18.88
	50%	Low	20.00	18.79	18.80	18.79
		Middle		18.76	18.62	18.74
		High		18.75	18.64	18.68
	100%	/	19.00	17.81	17.86	17.83
16QAM	1	Low	19.00	17.78	17.84	17.76
		Middle		17.80	17.80	17.78
		High		17.80	17.80	17.71
	50%	Low	19.00	17.76	17.81	17.82
		Middle		17.83	17.76	17.72
		High		17.83	17.76	17.78
	100%	/	18.00	16.75	16.82	16.76

64QAM	1	Low	18.00	16.92	16.87	16.72
		Middle		16.75	16.81	16.75
		High		16.88	16.77	16.89
	50%	Low	18.00	16.67	16.60	16.62
		Middle		16.72	16.66	16.65
		High		16.83	16.83	16.77
	100%	/	17.00	15.88	15.84	15.80
256QAM	1	Low	17.00	15.73	15.67	15.75
		Middle		15.79	15.80	15.79
		High		15.94	15.93	15.84
	50%	Low	17.00	15.90	15.88	15.84
		Middle		15.76	15.67	15.73
		High		15.85	15.79	15.76
	100%	/	15.00	13.60	13.57	13.54
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				131987/1711.5	132322/1745	132657/1778.5
QPSK	1	Low	20.00	18.87	18.98	19.05
		Middle		18.91	19.00	18.95
		High		18.96	18.96	18.80
	50%	Low	19.00	17.92	17.97	17.88
		Middle		17.88	17.83	17.80
		High		17.83	17.71	17.80
	100%	/	19.00	17.81	17.75	17.70
16QAM	1	Low	19.00	17.78	17.76	17.62
		Middle		17.80	17.80	17.77
		High		17.83	17.72	17.72
	50%	Low	18.00	16.83	16.99	16.91
		Middle		16.88	16.88	16.80
		High		16.91	17.03	16.85
	100%	/	18.00	16.89	16.94	16.78
64QAM	1	Low	18.00	16.92	16.89	16.55
		Middle		16.81	16.83	16.78
		High		16.97	16.94	16.89
	50%	Low	17.00	15.80	15.75	15.78
		Middle		15.88	15.84	15.81
		High		15.96	15.94	15.90
	100%	/	17.00	15.93	15.96	15.88
256QAM	1	Low	15.00	13.71	13.74	13.67
		Middle		13.84	13.85	13.81
		High		13.94	13.81	13.67
	50%	Low	15.00	13.73	13.68	13.69

		Middle		13.66	13.62	13.55
		High		13.61	13.65	13.71
	100%	/	15.00	13.56	13.59	13.64
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				131997/1712.5	132322/1745	132647/1777.5
QPSK	1	Low	20.00	18.97	18.96	18.97
		Middle		18.86	18.91	18.92
		High		18.85	18.87	18.86
	50%	Low	19.00	17.85	18.02	17.82
		Middle		17.82	17.86	17.87
		High		17.93	17.73	17.83
	100%	/	19.00	17.78	17.74	17.78
16QAM	1	Low	19.00	17.86	17.86	17.69
		Middle		17.85	17.80	17.70
		High		17.86	17.66	17.64
	50%	Low	18.00	16.87	16.85	16.84
		Middle		16.91	16.99	16.81
		High		16.94	16.98	16.84
	100%	/	18.00	16.81	16.98	16.86
64QAM	1	Low	18.00	16.95	16.89	16.75
		Middle		16.84	16.84	16.81
		High		16.96	16.96	16.93
	50%	Low	17.00	15.82	15.79	15.77
		Middle		15.91	15.89	15.85
		High		15.99	15.99	15.94
	100%	/	17.00	15.95	15.96	15.89
256QAM	1	Low	15.00	13.81	13.72	13.59
		Middle		13.79	13.80	13.82
		High		13.83	13.76	13.77
	50%	Low	15.00	13.66	13.73	13.63
		Middle		13.60	13.69	13.66
		High		13.71	13.63	13.70
	100%	/	15.00	13.57	13.58	13.72
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				132022/1715	132322/1745	132622/1775
QPSK	1	Low	20.00	18.98	18.97	18.98
		Middle		18.95	18.97	18.95
		High		18.86	18.88	18.81
	50%	Low	19.00	17.85	17.84	17.78
		Middle		17.91	17.65	17.76

		High		17.81	17.67	17.85
	100%	/	19.00	17.85	17.91	17.66
16QAM	1	Low	19.00	17.76	17.77	17.74
		Middle		17.89	17.66	17.74
		High		17.80	17.70	17.69
	50%	Low	18.00	16.92	17.01	16.87
		Middle		16.89	16.80	16.73
		High		16.90	16.76	16.77
	100%	/	18.00	16.68	16.77	16.70
64QAM	1	Low	18.00	16.90	16.84	16.70
		Middle		16.84	16.83	16.81
		High		16.96	16.96	16.92
	50%	Low	17.00	15.83	15.80	15.78
		Middle		15.90	15.88	15.84
		High		15.99	15.99	15.94
	100%	/	17.00	15.96	16.01	15.92
256QAM	1	Low	15.00	13.79	13.81	13.66
		Middle		13.82	13.87	13.88
		High		13.87	13.82	13.75
	50%	Low	15.00	13.68	13.56	13.62
		Middle		13.66	13.62	13.55
		High		13.62	13.60	13.68
	100%	/	15.00	13.58	13.59	13.60
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				132047/1717.5	132322/1745	132597/1772.5
QPSK	1	Low	20.00	18.95	19.01	19.00
		Middle		18.89	18.98	18.98
		High		18.85	18.93	18.84
	50%	Low	19.00	17.83	17.85	17.81
		Middle		17.84	17.83	17.80
		High		17.80	17.70	17.81
	100%	/	19.00	17.83	17.79	17.70
16QAM	1	Low	19.00	17.85	17.87	17.90
		Middle		17.87	17.79	17.84
		High		17.87	17.76	17.72
	50%	Low	18.00	16.89	16.86	16.92
		Middle		16.91	16.93	16.83
		High		16.92	16.90	16.88
	100%	/	18.00	16.79	16.90	16.80
64QAM	1	Low	18.00	16.89	16.82	16.68
		Middle		16.80	16.85	16.79

		High		16.97	16.95	16.93
	50%	Low	17.00	15.82	15.84	15.79
		Middle		15.88	15.85	15.83
		High		16.03	15.95	15.83
	100%	/	17.00	15.80	15.78	15.74
256QAM	1	Low	15.00	13.82	13.73	13.60
		Middle		13.88	13.82	13.81
		High		13.84	13.77	13.72
	50%	Low	15.00	13.66	13.55	13.59
		Middle		13.69	13.48	13.55
		High		13.59	13.61	13.76
	100%	/	15.00	13.60	13.75	13.60
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				132072/1720	132322/1745	132572/1770
QPSK	1	Low	20.00	19.02	**19.05**	19.03
		Middle		18.98	19.02	19.00
		High		18.91	18.98	18.94
	50%	Low	19.00	17.90	**17.97**	17.89
		Middle		17.86	17.83	17.87
		High		17.87	17.79	17.81
	100%	/	19.00	17.80	**17.86**	17.79
16QAM	1	Low	19.00	17.79	17.83	17.81
		Middle		17.83	17.81	17.80
		High		17.85	17.77	17.74
	50%	Low	18.00	16.86	16.94	16.93
		Middle		16.84	16.91	16.84
		High		16.89	16.89	16.88
	100%	/	18.00	16.77	16.90	16.81
64QAM	1	Low	18.00	16.87	16.82	16.67
		Middle		16.78	16.78	16.75
		High		16.91	16.89	16.87
	50%	Low	17.00	15.77	15.74	15.72
		Middle		15.84	15.81	15.77
		High		15.94	15.90	15.87
	100%	/	17.00	15.91	15.92	15.85
256QAM	1	Low	15.00	13.86	13.85	13.69
		Middle		13.91	13.91	13.90
		High		13.89	13.87	13.85
	50%	Low	15.00	13.71	13.68	13.70
		Middle		13.64	13.62	13.62
		High		13.65	13.69	13.68

	100%	/	15.00	13.55	13.66	13.69

Hotspot on						
LTE B66			**Maximum Output Power (dBm)**			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				131979/1710.7	132322/1745	132665/1779.3
QPSK	1	Low	22.50	21.58	21.65	21.67
		Middle		21.55	21.63	21.53
		High		21.54	21.57	21.54
	50%	Low	22.50	21.44	21.45	21.44
		Middle		21.41	21.40	21.39
		High		21.40	21.27	21.34
	100%	/	21.50	20.38	20.41	20.45
16QAM	1	Low	21.50	20.41	20.54	20.45
		Middle		20.43	20.51	20.45
		High		20.28	20.47	20.40
	50%	Low	21.50	20.49	20.40	20.42
		Middle		20.49	20.42	20.45
		High		20.48	20.42	20.47
	100%	/	20.50	19.49	19.48	19.54
64QAM	1	Low	20.50	19.38	19.53	19.45
		Middle		19.45	19.58	19.45
		High		19.48	19.45	19.42
	50%	Low	20.50	19.28	19.30	19.18
		Middle		19.25	19.41	19.30
		High		19.24	19.46	19.24
	100%	/	19.50	18.41	18.54	18.47
256QAM	1	Low	19.50	18.27	18.32	18.23
		Middle		18.34	18.47	18.37
		High		18.30	18.43	18.25
	50%	Low	19.50	18.23	18.33	18.37
		Middle		18.37	18.50	18.44
		High		18.47	18.47	18.27
	100%	/	17.50	16.54	16.43	16.41
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				131987/1711.5	132322/1745	132657/1778.5
QPSK	1	Low	22.50	21.60	21.60	21.57
		Middle		21.44	21.54	21.51
		High		21.44	21.50	21.49
	50%	Low	21.50	20.43	20.60	20.44

		Middle		20.47	20.64	20.56
		High		20.58	20.39	20.49
	100%	/	21.50	20.39	20.36	20.44
16QAM	1	Low	21.50	20.53	20.63	20.42
		Middle		20.52	20.58	20.41
		High		20.38	20.44	20.37
	50%	Low	20.50	19.64	19.55	19.48
		Middle		19.57	19.65	19.54
		High		19.59	19.64	19.53
	100%	/	20.50	19.55	19.57	19.57
64QAM	1	Low	20.50	19.41	19.48	19.41
		Middle		19.54	19.50	19.44
		High		19.56	19.53	19.46
	50%	Low	19.50	18.43	18.38	18.33
		Middle		18.51	18.53	18.50
		High		18.47	18.51	18.41
	100%	/	19.50	18.55	18.66	18.67
256QAM	1	Low	17.50	16.30	16.42	16.49
		Middle		16.46	16.52	16.57
		High		16.57	16.54	16.59
	50%	Low	17.50	16.35	16.43	16.36
		Middle		16.29	16.36	16.41
		High		16.42	16.27	16.42
	100%	/	17.50	16.42	16.29	16.48
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				131997/1712.5	132322/1745	132647/1777.5
QPSK	1	Low	22.50	21.50	21.62	21.65
		Middle		21.49	21.59	21.50
		High		21.55	21.55	21.39
	50%	Low	21.50	20.50	20.55	20.50
		Middle		20.53	20.61	20.49
		High		20.48	20.41	20.50
	100%	/	21.50	20.38	20.37	20.36
16QAM	1	Low	21.50	20.41	20.53	20.35
		Middle		20.43	20.54	20.44
		High		20.31	20.39	20.34
	50%	Low	20.50	19.56	19.58	19.44
		Middle		19.54	19.47	19.46
		High		19.56	19.62	19.47
	100%	/	20.50	19.63	19.53	19.49
64QAM	1	Low	20.50	19.38	19.55	19.28

		Middle		19.51	19.56	19.48
		High		19.57	19.58	19.49
	50%	Low	19.50	18.41	18.41	18.41
		Middle		18.48	18.55	18.53
		High		18.37	18.46	18.37
	100%	/	19.50	18.46	18.55	18.55
256QAM	1	Low	17.50	16.13	16.37	16.50
		Middle		16.44	16.50	16.49
		High		16.68	16.59	16.49
	50%	Low	17.50	16.42	16.38	16.42
		Middle		16.35	16.33	16.34
		High		16.32	16.29	16.43
	100%	/	17.50	16.41	16.30	16.40
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				132022/1715	132322/1745	132622/1775
QPSK	1	Low	22.50	21.61	21.54	21.58
		Middle		21.60	21.56	21.57
		High		21.52	21.51	21.51
	50%	Low	21.50	20.50	20.42	20.47
		Middle		20.56	20.36	20.45
		High		20.46	20.30	20.55
	100%	/	21.50	20.42	20.53	20.32
16QAM	1	Low	21.50	20.39	20.50	20.43
		Middle		20.52	20.40	20.41
		High		20.28	20.44	20.38
	50%	Low	20.50	19.65	19.67	19.47
		Middle		19.59	19.50	19.50
		High		19.59	19.46	19.50
	100%	/	20.50	19.46	19.40	19.52
64QAM	1	Low	20.50	19.40	19.47	19.47
		Middle		19.54	19.49	19.51
		High		19.56	19.53	19.52
	50%	Low	19.50	18.44	18.39	18.34
		Middle		18.50	18.52	18.49
		High		18.47	18.58	18.41
	100%	/	19.50	18.56	18.67	18.59
256QAM	1	Low	17.50	16.24	16.43	16.43
		Middle		16.48	16.54	16.49
		High		16.51	16.55	16.54
	50%	Low	17.50	16.28	16.25	16.32
		Middle		16.31	16.15	16.30

		High		16.30	16.25	16.48
	100%	/	17.50	16.45	16.46	16.36
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				132047/1717.5	132322/1745	132597/1772.5
QPSK	1	Low	22.50	21.58	21.65	21.60
		Middle		21.47	21.57	21.53
		High		21.48	21.56	21.47
	50%	Low	21.50	20.45	20.43	20.43
		Middle		20.53	20.61	20.49
		High		20.49	20.40	20.51
	100%	/	21.50	20.40	20.37	20.32
16QAM	1	Low	21.50	20.48	20.60	20.59
		Middle		20.50	20.53	20.51
		High		20.35	20.47	20.38
	50%	Low	20.50	19.62	19.49	19.49
		Middle		19.57	19.56	19.53
		High		19.57	19.53	19.54
	100%	/	20.50	19.53	19.53	19.55
64QAM	1	Low	20.50	19.35	19.45	19.38
		Middle		19.50	19.58	19.49
		High		19.57	19.59	19.53
	50%	Low	19.50	18.43	18.50	18.42
		Middle		18.48	18.56	18.55
		High		18.51	18.54	18.37
	100%	/	19.50	18.40	18.44	18.48
256QAM	1	Low	17.50	16.28	16.47	16.52
		Middle		16.49	16.48	16.52
		High		16.61	16.53	16.50
	50%	Low	17.50	16.37	16.19	16.28
		Middle		16.35	16.26	16.27
		High		16.33	16.28	16.44
	100%	/	17.50	16.43	16.30	16.36
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				132072/1720	132322/1745	132572/1770
QPSK	1	Low	22.50	21.65	**21.69**	21.63
		Middle		21.63	21.68	21.62
		High		21.57	21.64	21.60
	50%	Low	21.50	20.55	**20.58**	20.54
		Middle		20.51	20.57	20.52
		High		20.52	20.45	20.47

	100%	/	21.50	20.37	20.44	20.41
16QAM	1	Low	21.50	20.58	20.56	20.50
		Middle		20.46	20.55	20.47
		High		20.33	20.51	20.43
	50%	Low	20.50	19.59	19.60	19.53
		Middle		19.50	19.57	19.57
		High		19.54	19.55	19.57
	100%	/	20.50	19.51	19.56	19.59
64QAM	1	Low	20.50	19.33	19.48	19.40
		Middle		19.48	19.51	19.45
		High		19.51	19.53	19.47
	50%	Low	19.50	18.38	18.40	18.35
		Middle		18.44	18.52	18.49
		High		18.42	18.49	18.41
	100%	/	19.50	18.51	18.58	18.59
256QAM	1	Low	17.50	16.35	16.51	16.55
		Middle		16.58	16.59	16.61
		High		16.63	16.61	16.63
	50%	Low	17.50	16.40	16.34	16.39
		Middle		16.33	16.29	16.37
		High		16.36	16.33	16.40
	100%	/	17.50	16.40	16.37	16.45

LTE Band 71(ANT1)

Full Power/Hotspot on						
LTE B71			**Maximum Output Power (dBm)**			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				133147/665.5	133297/680.5	133447/695.5
QPSK	1	Low	25.00	23.94	24.01	24.05
		Middle		24.00	24.02	23.96
		High		23.89	23.86	23.79
	50%	Low	24.00	22.99	23.03	23.04
		Middle		23.06	23.03	23.09
		High		23.01	22.97	23.14
	100%	/	24.00	23.07	23.16	22.95
16QAM	1	Low	24.00	23.14	23.04	23.23
		Middle		23.27	23.12	23.32
		High		23.21	23.15	23.22
	50%	Low	23.00	22.07	22.14	22.04
		Middle		22.09	21.94	21.99

		High		22.12	21.90	21.93
	100%	/	23.00	21.98	21.93	21.96
64QAM	1	Low	23.00	22.20	22.19	22.12
		Middle		22.17	22.16	22.12
		High		22.21	22.20	22.12
	50%	Low	22.00	21.11	21.19	21.10
		Middle		21.22	21.19	21.05
		High		21.16	21.25	21.15
	100%	/	22.00	21.08	21.19	21.26
256QAM	1	Low	20.00	19.12	19.16	19.19
		Middle		19.14	19.28	19.07
		High		19.36	19.26	19.07
	50%	Low	20.00	19.06	19.12	19.18
		Middle		19.18	19.14	19.00
		High		19.08	19.03	19.01
	100%	/	20.00	19.09	18.97	18.90
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				133172/668	133297/680.5	133422/693
QPSK	1	Low	25.00	23.83	24.12	24.10
		Middle		23.96	24.05	23.96
		High		23.99	23.90	23.74
	50%	Low	24.00	23.02	23.12	23.10
		Middle		22.99	23.17	23.09
		High		23.03	23.01	23.09
	100%	/	24.00	23.03	23.00	22.99
16QAM	1	Low	24.00	23.16	23.07	23.15
		Middle		23.18	23.26	23.35
		High		23.24	23.17	23.25
	50%	Low	23.00	21.98	22.16	22.12
		Middle		22.04	22.02	22.06
		High		22.09	22.17	22.01
	100%	/	23.00	22.15	22.10	22.04
64QAM	1	Low	23.00	22.18	22.24	21.97
		Middle		22.14	22.20	22.13
		High		22.22	22.22	22.13
	50%	Low	22.00	21.08	21.14	21.10
		Middle		21.20	21.15	21.02
		High		21.13	21.20	21.11
	100%	/	22.00	21.05	21.14	21.22
256QAM	1	Low	20.00	19.20	19.19	19.14
		Middle		19.12	19.26	19.10

		High		19.29	19.27	19.15
	50%	Low	20.00	19.01	19.00	19.11
		Middle		19.18	19.14	19.00
		High		19.09	19.02	19.02
	100%	/	20.00	19.11	18.97	18.86
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				133197/670.5	133297/680.5	133397/690.5
QPSK	1	Low	25.00	23.93	24.00	24.04
		Middle		23.95	24.13	23.97
		High		23.92	23.85	23.84
	50%	Low	24.00	22.99	23.17	23.04
		Middle		22.97	23.20	23.16
		High		23.13	22.95	23.04
	100%	/	24.00	23.04	22.99	23.07
16QAM	1	Low	24.00	23.28	23.17	23.22
		Middle		23.27	23.30	23.32
		High		23.31	23.15	23.21
	50%	Low	23.00	22.06	22.06	22.09
		Middle		22.07	22.13	22.07
		High		22.12	22.12	22.00
	100%	/	23.00	22.07	22.14	22.12
64QAM	1	Low	23.00	22.21	22.24	22.17
		Middle		22.17	22.21	22.16
		High		22.21	22.24	22.17
	50%	Low	22.00	21.10	21.18	21.09
		Middle		21.23	21.20	21.06
		High		21.16	21.25	21.15
	100%	/	22.00	21.07	21.18	21.27
256QAM	1	Low	20.00	19.23	19.15	19.12
		Middle		19.18	19.25	19.07
		High		19.26	19.22	19.12
	50%	Low	20.00	18.99	18.99	19.08
		Middle		19.21	18.96	18.96
		High		19.06	18.99	19.06
	100%	/	20.00	19.13	19.13	18.86
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				133222/673	133322/683	133372/688
QPSK	1	Low	25.00	23.98	24.09	24.10
		Middle		24.07	24.11	24.05
		High		23.98	23.96	23.92

	50%	Low	24.00	23.04	23.12	23.11
		Middle		23.01	**23.17**	23.16
		High		23.07	23.05	23.06
	100%	/	24.00	23.02	**23.07**	23.04
16QAM	1	Low	24.00	23.22	23.10	23.30
		Middle		23.21	23.27	23.38
		High		23.26	23.22	23.27
	50%	Low	23.00	22.01	22.11	22.14
		Middle		22.00	22.05	22.10
		High		22.07	22.03	22.04
	100%	/	23.00	22.03	22.06	22.07
64QAM	1	Low	23.00	22.13	22.17	22.09
		Middle		22.11	22.15	22.10
		High		22.16	22.17	22.11
	50%	Low	22.00	21.05	21.13	21.04
		Middle		21.16	21.12	20.98
		High		21.11	21.16	21.08
	100%	/	22.00	21.03	21.10	21.19
256QAM	1	Low	20.00	19.27	19.23	19.17
		Middle		19.21	19.30	19.12
		High		19.31	19.28	19.21
	50%	Low	20.00	19.04	19.08	19.15
		Middle		19.16	19.10	19.03
		High		19.12	19.07	18.98
	100%	/	20.00	19.08	19.04	18.95

10.2 NR 5G Measurement result

Table 10.3: The maximum output power (Tune-up Limit)

Band	ANT	Mode	Full power MAX.Tune up(dBm)	Sensor on MAX.Tune up(dBm)	Sensor on Power Reduction(dB)	Hotspot on MAX.Tune up(dBm)	Hotspot on Power Reduction(dB)
NR n25	ANT1	DFT-s-OFDM QPSK	23.0	18.0	5.0	22.5	0.5
NR n41	ANT2	DFT-s-OFDM QPSK	27.0	20.0	7.0	24.0	3.0
NR n41	ANT3	DFT-s-OFDM QPSK	26.5	N/A	N/A	26.5	N/A
NR n41	ANT5	DFT-s-OFDM QPSK	27.0	N/A	N/A	27.0	N/A
NR n41	ANT7	DFT-s-OFDM QPSK	26.0	N/A	N/A	26.0	N/A
NR n66	ANT1	DFT-s-OFDM QPSK	24.5	19.5	5.0	22.0	2.5
NR n71	ANT1	DFT-s-OFDM QPSK	25.0	N/A	N/A	25.0	N/A

Table 10.4: Maximum Power Reduction (MPR) for NR (power class 3)

Modulation		MPR(db)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-DFDM	Pi/2 BPSK	≤3.5	≤1.2	≤0.2
		≤0.5		0
	QPSK	≤1		0
	16 QAM	≤2		≤1
	64QAM	≤2.5		
	256QAM	≤4.5		
CP-OFDM	QPSK	≤3		≤1.5
	16 QAM	≤3		≤2
	64QAM	≤3.5		
	256QAM	≤6.5		

Table 10.5: Maximum Power Reduction (MPR) for NR (power class 2)

Modulation		MPR(db)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-DFDM	Pi/2 BPSK	≤3.5	≤0.5	0
	QPSK	≤3.5	≤1	0
	16 QAM	≤3.5	≤2	≤1
	64QAM	≤3.5	≤2.5	
	256QAM	≤4.5		
CP-OFDM	QPSK	≤3.5	≤3	≤1.5
	16 QAM	≤3.5	≤3	≤2
	64QAM	≤3.5		
	256QAM	≤6.5		

n25(ANT1)

Full Power/Sensor off						
n25			**Maximum Output Power (dBm)**			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				370500/1852.5	376500/1882.5	382500/1912.5
DFT-s-OFDM PI/2 BPSK	1	1	23.00	21.97	21.84	21.95
		13		21.95	22.01	22.01
		23		21.98	21.89	21.95
	12	0	23.00	21.48	21.56	21.56
		6		22.01	22.06	22.07
		13		21.56	21.51	21.55
	25	0	23.00	21.53	21.45	21.61
DFT-s-OFDM QPSK	1	1	23.00	22.13	22.06	21.96
		13		22.17	22.15	22.05
		23		22.18	22.07	22.15
	12	0	23.00	21.12	21.00	21.11
		6		22.17	22.19	22.10
		13		21.16	21.24	21.07
	25	0	22.00	21.12	21.19	21.21
DFT-s-OFDM 16QAM	1	1	22.00	20.89	20.82	20.91
DFT-s-OFDM 64QAM	1	1	21.00	19.50	19.53	19.54
DFT-s-OFDM 256QAM	1	1	19.00	18.04	18.14	18.07
CP-OFDM QPSK	1	1	21.50	20.63	20.60	20.64
CP-OFDM 16QAM	1	1	21.50	20.45	20.41	20.47
CP-OFDM 64QAM	1	1	20.00	18.79	18.88	18.76
CP-OFDM 256QAM	1	1	16.50	15.45	15.59	15.54
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				371000/1855	376500/1882.5	382000/1910
	1	1	23.00	21.98	21.85	21.96

DFT-s-OFDM PI/2 BPSK		26		22.04	22.03	22.00
		50		22.04	21.95	21.95
	25	0	23.00	21.53	21.43	21.57
		13		22.15	21.85	21.96
		27		21.49	21.49	21.61
	50	0	23.00	21.61	21.62	21.49
DFT-s-OFDM QPSK	1	1	23.00	22.04	21.93	21.97
		26		22.17	21.92	22.00
		50		22.08	22.07	22.16
	25	0	23.00	21.13	21.12	21.10
		13		22.19	22.04	22.06
		27		21.16	21.06	21.04
	50	0	22.00	21.03	21.02	21.09
DFT-s-OFDM 16QAM	1	1	22.00	20.88	20.81	20.90
DFT-s-OFDM 64QAM	1	1	21.00	19.50	19.52	19.54
DFT-s-OFDM 256QAM	1	1	19.00	18.04	18.14	18.06
CP-OFDM QPSK	1	1	21.50	20.64	20.61	20.65
CP-OFDM 16QAM	1	1	21.50	20.44	20.40	20.46
CP-OFDM 64QAM	1	1	20.00	18.79	18.88	18.76
CP-OFDM 256QAM	1	1	16.50	15.46	15.60	15.53
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				371500/1857.5	376500/1882.5	381500/1907.5
DFT-s-OFDM PI/2 BPSK	1	1	23.00	21.95	21.89	21.98
		39		21.93	21.99	21.98
		77		22.02	21.95	21.93
	36	0	23.00	21.50	21.39	21.55
		18		22.07	22.03	22.00
		43		21.47	21.52	21.57
	75	0	23.00	21.59	21.51	21.54
	1	1	23.00	22.13	22.08	22.18
		39		22.15	22.05	22.10

DFT-s-OFDM QPSK		77		22.15	22.12	22.18
	36	0	23.00	21.10	20.96	21.14
		18		22.17	22.17	22.16
		43		21.14	21.20	21.15
	75	0	22.00	21.10	21.15	21.19
DFT-s-OFDM 16QAM	1	1	22.00	20.83	20.79	20.88
DFT-s-OFDM 64QAM	1	1	21.00	19.46	19.54	19.52
DFT-s-OFDM 256QAM	1	1	19.00	18.05	18.13	18.07
CP-OFDM QPSK	1	1	21.50	20.63	20.65	20.66
CP-OFDM 16QAM	1	1	21.50	20.42	20.37	20.45
CP-OFDM 64QAM	1	1	20.00	18.83	18.84	18.65
CP-OFDM 256QAM	1	1	16.50	15.30	15.37	15.35
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				372000/1860	376500/1882.5	381000/1905
DFT-s-OFDM PI/2 BPSK	1	1	23.00	22.02	21.93	22.01
		53		22.07	22.08	22.05
		104		22.09	22.01	22.04
	50	0	23.00	21.58	21.52	21.64
		25		22.10	22.04	22.08
		56		21.55	21.62	21.58
	100	0	23.00	21.56	21.58	21.63
DFT-s-OFDM QPSK	1	1	23.00	22.05	22.04	22.09
		53		22.11	22.12	22.11
		104		22.13	22.14	22.21
	50	0	23.00	21.07	21.05	21.16
		25		22.10	22.11	22.13
		56		21.11	21.15	21.11
	100	0	22.00	21.08	21.11	21.16
DFT-s-OFDM 16QAM	1	1	22.00	20.81	20.75	20.83

DFT-s-OFDM 64QAM	1	1	21.00	19.44	19.47	19.48
DFT-s-OFDM 256QAM	1	1	19.00	17.99	18.07	18.01
CP-OFDM QPSK	1	1	21.50	20.58	20.55	20.59
CP-OFDM 16QAM	1	1	21.50	20.38	20.33	20.39
CP-OFDM 64QAM	1	1	20.00	18.74	18.79	18.69
CP-OFDM 256QAM	1	1	16.50	15.41	15.51	15.46
SCS 15 kHz						

Sensor on						
n25			**Maximum Output Power (dBm)**			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				370500/1852.5	376500/1882.5	382500/1912.5
DFT-s-OFDM PI/2 BPSK	1	1	18.00	17.01	16.93	16.98
		13		16.89	17.01	17.06
		23		16.91	16.90	16.96
	12	0	18.00	16.91	17.08	16.94
		6		16.94	17.05	16.99
		13		17.05	16.99	16.93
	25	0		17.04	16.96	17.02
DFT-s-OFDM QPSK	1	1	18.00	17.14	17.14	16.93
		13		17.13	17.06	16.99
		23		17.16	17.08	17.07
	12	0	18.00	17.11	17.00	17.03
		6		17.16	17.20	17.07
		13		17.13	17.19	17.01
	25	0	18.00	17.04	17.10	17.04
DFT-s-OFDM 16QAM	1	1	18.00	16.94	16.96	16.92
DFT-s-OFDM 64QAM	1	1	18.00	17.01	17.03	16.98

DFT-s-OFDM 256QAM	1	1	18.00	17.10	17.18	17.08
CP-OFDM QPSK	1	1	18.00	17.10	17.14	17.07
CP-OFDM 16QAM	1	1	18.00	17.15	17.19	17.12
CP-OFDM 64QAM	1	1	18.00	17.07	17.21	17.17
CP-OFDM 256QAM	1	1	16.50	15.46	15.59	15.50
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				371000/1855	376500/1882.5	382000/1910
DFT-s-OFDM PI/2 BPSK	1	1	18.00	16.91	16.95	17.06
		26		16.94	17.03	17.02
		50		17.02	16.95	16.86
	25	0	18.00	16.98	17.03	17.00
		13		17.00	17.02	16.92
		27		16.95	17.01	16.94
	50	0		17.03	16.97	16.94
DFT-s-OFDM QPSK	1	1	18.00	17.02	17.04	16.86
		26		17.04	16.99	16.99
		50		17.09	17.10	17.11
	25	0	18.00	17.03	17.10	17.06
		13		17.13	17.09	17.06
		27		17.10	17.24	17.02
	50	0	18.00	17.12	17.06	16.96
DFT-s-OFDM 16QAM	1	1	18.00	16.91	16.96	16.72
DFT-s-OFDM 64QAM	1	1	18.00	16.98	17.02	16.95
DFT-s-OFDM 256QAM	1	1	18.00	17.11	17.16	17.04
CP-OFDM QPSK	1	1	18.00	17.08	17.10	17.08
CP-OFDM 16QAM	1	1	18.00	17.12	17.14	17.08
CP-OFDM 64QAM	1	1	18.00	17.04	17.16	17.13

CP-OFDM 256QAM	1	1	16.50	15.44	15.55	15.45
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				371500/1857.5	376500/1882.5	381500/1907.5
DFT-s-OFDM PI/2 BPSK	1	1	18.00	17.02	16.94	16.99
		39		16.98	17.03	17.05
		77		16.92	16.94	16.94
	36	0		16.91	16.93	16.93
		18		17.03	16.87	16.91
		43		16.93	16.97	16.99
	75	0		17.07	17.13	16.90
DFT-s-OFDM QPSK	1	1	18.00	17.00	17.01	16.94
		39		17.13	16.85	16.96
		77		17.06	17.05	17.05
	36	0		17.12	17.12	17.02
		18		17.18	17.05	17.03
		43		17.13	17.01	16.98
	75	0	18.00	16.95	16.93	16.92
DFT-s-OFDM 16QAM	1	1	18.00	16.93	16.95	16.91
DFT-s-OFDM 64QAM	1	1	18.00	17.01	17.02	16.98
DFT-s-OFDM 256QAM	1	1	18.00	17.10	17.18	17.07
CP-OFDM QPSK	1	1	18.00	17.11	17.15	17.08
CP-OFDM 16QAM	1	1	18.00	17.14	17.18	17.11
CP-OFDM 64QAM	1	1	18.00	17.07	17.21	17.17
CP-OFDM 256QAM	1	1	16.50	15.47	15.60	15.49
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				372000/1860	376500/1882.5	381000/1905
DFT-s-OFDM PI/2 BPSK	1	1	18.00	17.06	17.02	17.04
		53		17.01	17.08	17.10
		104		16.97	17.00	17.03

	50	0	18.00	16.96	17.02	17.00
		25		16.98	17.01	16.98
		56		16.99	17.08	16.94
	100	0		17.02	17.07	17.02
DFT-s-OFDM QPSK	1	1	18.00	17.05	17.10	17.04
		53		17.07	17.03	17.05
		104		17.11	17.15	17.13
	50	0	18.00	17.06	17.05	17.08
		25		17.09	17.12	17.10
		56		17.08	17.10	17.05
	100	0	18.00	17.00	17.02	16.99
DFT-s-OFDM 16QAM	1	1	18.00	16.86	16.89	16.84
DFT-s-OFDM 64QAM	1	1	18.00	16.95	16.97	16.92
DFT-s-OFDM 256QAM	1	1	18.00	17.05	17.11	17.02
CP-OFDM QPSK	1	1	18.00	17.05	17.09	17.02
CP-OFDM 16QAM	1	1	18.00	17.08	17.11	17.04
CP-OFDM 64QAM	1	1	18.00	17.02	17.12	17.10
CP-OFDM 256QAM	1	1	16.50	15.42	15.51	15.42
SCS 15 kHz						

Hotspot on						
n25			**Maximum Output Power (dBm)**			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				370500/1852.5	376500/1882.5	382500/1912.5
DFT-s-OFDM PI/2 BPSK	1	1	22.50	21.39	21.33	21.42
		13		21.42	21.40	21.39
		23		21.52	21.36	21.34
	12	0	22.50	20.99	20.84	21.00
		6		21.43	21.42	21.45
		13		20.88	20.97	21.02
	25	0	22.50	21.03	20.91	20.94

DFT-s-OFDM QPSK	1	1	22.50	21.57	21.41	21.56
		13		21.59	21.46	21.55
		23		21.60	21.59	21.63
	12	0	22.50	20.54	20.45	20.63
		6		21.61	21.61	21.62
		13		20.58	20.64	20.59
	25	0	21.50	20.54	20.65	20.63
DFT-s-OFDM 16QAM	1	1	21.50	20.27	20.15	20.28
DFT-s-OFDM 64QAM	1	1	20.50	18.90	18.90	18.92
DFT-s-OFDM 256QAM	1	1	18.50	17.37	17.45	17.51
CP-OFDM QPSK	1	1	21.00	19.95	20.05	20.10
CP-OFDM 16QAM	1	1	21.00	19.82	19.77	19.81
CP-OFDM 64QAM	1	1	19.50	18.23	18.24	18.01
CP-OFDM 256QAM	1	1	16.00	14.70	14.77	14.71
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				371000/1855	376500/1882.5	382000/1910
DFT-s-OFDM PI/2 BPSK	1	1	22.50	21.31	21.30	21.47
		26		21.44	21.42	21.36
		50		21.55	21.31	21.22
	25	0	22.50	21.00	20.96	21.07
		13		21.39	21.42	21.45
		27		20.83	20.98	21.01
	50	0	22.50	20.97	20.91	20.98
DFT-s-OFDM QPSK	1	1	22.50	21.46	21.34	21.32
		26		21.48	21.47	21.48
		50		21.56	21.55	21.63
	25	0	22.50	20.48	20.54	20.58
		13		21.58	21.52	21.55
		27		20.57	20.73	20.52
	50	0	21.50	20.64	20.65	20.57

DFT-s-OFDM 16QAM	1	1	21.50	20.30	20.14	20.11
DFT-s-OFDM 64QAM	1	1	20.50	18.91	18.84	18.91
DFT-s-OFDM 256QAM	1	1	18.50	17.41	17.44	17.43
CP-OFDM QPSK	1	1	21.00	19.97	19.96	20.05
CP-OFDM 16QAM	1	1	21.00	19.86	19.76	19.75
CP-OFDM 64QAM	1	1	19.50	18.20	18.23	18.04
CP-OFDM 256QAM	1	1	16.00	14.87	14.95	14.81
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				371500/1857.5	376500/1882.5	381500/1907.5
DFT-s-OFDM PI/2 BPSK	1	1	22.50	21.42	21.29	21.40
		39		21.48	21.39	21.36
		77		21.49	21.31	21.31
	36	0	22.50	20.97	20.83	20.97
		18		21.46	21.24	21.41
		43		20.85	20.94	21.06
	75	0	22.50	21.05	21.07	20.94
DFT-s-OFDM QPSK	1	1	22.50	21.48	21.31	21.40
		39		21.61	21.33	21.45
		77		21.53	21.53	21.60
	36	0	22.50	20.57	20.56	20.54
		18		21.63	21.48	21.52
		43		20.60	20.50	20.48
	75	0	21.50	20.47	20.52	20.53
DFT-s-OFDM 16QAM	1	1	21.50	20.32	20.17	20.34
DFT-s-OFDM 64QAM	1	1	20.50	18.94	18.88	18.98
DFT-s-OFDM 256QAM	1	1	18.50	17.40	17.50	17.50

CP-OFDM QPSK	1	1	21.00	20.00	20.05	20.09
CP-OFDM 16QAM	1	1	21.00	19.88	19.84	19.82
CP-OFDM 64QAM	1	1	19.50	18.23	18.32	18.12
CP-OFDM 256QAM	1	1	16.00	14.90	15.04	14.89
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				372000/1860	376500/1882.5	381000/1905
DFT-s-OFDM PI/2 BPSK	1	1	22.50	21.46	21.37	21.45
		53		21.51	21.44	21.41
		104		21.54	21.37	21.40
	50	0	22.50	21.02	20.96	21.08
		25		21.41	21.42	21.52
		56		20.91	21.06	21.02
	100	0	22.50	21.00	21.02	21.07
DFT-s-OFDM QPSK	1	1	22.50	21.49	21.41	21.51
		53		21.55	21.52	21.55
		104		21.58	21.60	21.65
	50	0	22.50	20.51	20.49	20.60
		25		21.54	21.55	21.59
		56		20.55	20.59	20.55
	100	0	21.50	20.52	20.61	20.60
DFT-s-OFDM 16QAM	1	1	21.50	20.25	20.11	20.27
DFT-s-OFDM 64QAM	1	1	20.50	18.88	18.83	18.92
DFT-s-OFDM 256QAM	1	1	18.50	17.35	17.43	17.45
CP-OFDM QPSK	1	1	21.00	19.94	19.99	20.03
CP-OFDM 16QAM	1	1	21.00	19.82	19.77	19.75
CP-OFDM 64QAM	1	1	19.50	18.18	18.23	18.05
CP-OFDM 256QAM	1	1	16.00	14.85	14.95	14.82
SCS 15 kHz						

n41(ANT2)

Full Power/Sensor off								
n41			Maximum Output Power (dBm)					
Modulation	RB	RB Offset	Tune up	10MHz				
				Channel/Frequency(MHz)				
				500202/2501.01	508902/2544.51	518598/2592.99	528300/2641.5	537000/2685
DFT-s-OFDM PI/2 BPSK	1	1	27.00	25.81	25.97	25.75	25.90	25.93
		12		25.79	25.75	25.77	25.89	25.77
		22		25.90	25.92	25.74	25.74	25.66
	12	0	27.00	25.93	25.94	25.99	25.85	25.84
		6		26.01	26.04	25.98	26.00	25.91
		12		26.11	26.06	25.90	26.04	26.05
	24	0	27.00	26.17	26.00	26.03	25.87	25.80
DFT-s-OFDM QPSK	1	1	27.00	26.09	26.03	26.05	25.84	25.76
		12		26.22	26.16	25.82	25.73	25.73
		22		26.05	26.01	25.73	25.69	25.83
	12	0	27.00	26.12	26.08	26.09	25.75	25.81
		6		26.25	26.23	26.01	25.86	25.86
		12		26.11	26.14	26.18	25.74	25.84
	24	0	27.00	26.04	25.84	26.08	25.99	25.90
DFT-s-OFDM 16QAM	1	1	26.00	25.35	25.34	25.41	25.35	25.29
DFT-s-OFDM 64QAM	1	1	25.00	23.88	23.94	23.94	23.86	23.96
DFT-s-OFDM 256QAM	1	1	24.00	22.96	23.71	22.79	22.74	22.76
CP-OFDM QPSK	1	1	26.00	25.10	25.07	25.29	25.07	25.35
CP-OFDM 16QAM	1	1	25.50	24.81	24.75	25.04	24.90	25.04
CP-OFDM 64QAM	1	1	24.50	23.18	23.17	23.51	23.31	23.45
CP-OFDM 256QAM	1	1	21.00	20.21	20.22	20.30	20.25	20.26
Modulation	RB	RB Offset	Tune up	15MHz				
				Channel/Frequency(MHz)				
				500700/2503.5	509403/2547.015	518598/2592.99	527799/2638.995	536496/2682.48

DFT-s-OFDM PI/2 BPSK	1	1	27.00	25.78	26.01	25.79	25.95	25.95
		19		25.73	25.78	25.78	25.94	25.80
		36		25.93	25.97	25.79	25.83	25.69
	18	0	27.00	25.95	25.99	26.00	25.92	25.87
		9		25.98	25.88	26.16	26.07	25.95
		20		26.05	26.12	25.84	25.96	25.92
	36	0	27.00	26.06	25.95	25.78	25.96	25.71
DFT-s-OFDM QPSK	1	1	27.00	26.09	26.11	26.15	25.91	25.92
		19		26.11	26.10	25.95	25.79	25.83
		36		26.12	26.06	25.92	25.74	25.99
	18	0	27.00	26.09	26.02	26.07	25.81	25.99
		9		26.31	26.14	26.23	25.93	26.05
		20		26.09	26.09	26.41	25.81	26.04
	36	0	27.00	26.11	25.89	26.30	26.06	26.09
DFT-s-OFDM 16QAM	1	1	26.00	25.30	25.16	25.39	25.28	25.27
DFT-s-OFDM 64QAM	1	1	25.00	23.84	23.88	23.96	23.80	23.94
DFT-s-OFDM 256QAM	1	1	24.00	22.97	23.66	22.69	22.58	22.68
CP-OFDM QPSK	1	1	26.00	25.09	25.01	25.24	25.01	25.27
CP-OFDM 16QAM	1	1	25.50	24.79	24.69	24.92	24.83	24.94
CP-OFDM 64QAM	1	1	24.50	23.22	23.12	23.38	23.35	23.25
CP-OFDM 256QAM	1	1	21.00	20.05	20.17	20.07	20.18	20.08

Modulation	RB	RB Offset	Tune up	20MHz				
				Channel/Frequency(MHz)				
				501204/2506.02	509904/2549.52	518598/2592.99	527298/2636.49	535998/2679.99
DFT-s-OFDM PI/2 BPSK	1	1	27.00	25.94	25.91	25.92	26.03	26.07
		25		25.82	25.83	25.82	25.93	25.82
		49		25.95	26.08	25.80	25.73	25.75
	25	0	27.00	25.98	26.06	26.08	25.98	25.91
		12		25.96	25.94	26.12	26.00	25.98
		26		26.08	26.02	25.89	25.97	25.88
	50	0	27.00	26.03	25.94	25.85	25.88	25.80
	1	1	27.00	26.05	25.99	26.11	25.84	25.83

DFT-s-OFDM QPSK		25		26.16	26.01	26.06	25.82	25.88
		49		26.10	25.99	25.89	25.78	25.97
	25	0	27.00	26.06	25.94	26.11	25.84	25.96
		12		26.31	26.11	26.17	25.92	26.02
		26		26.06	26.06	26.36	25.82	26.00
	50	0	27.00	26.09	25.97	26.17	25.98	25.97
DFT-s-OFDM 16QAM	1	1	26.00	25.28	25.13	25.35	25.08	25.22
DFT-s-OFDM 64QAM	1	1	25.00	23.82	23.85	23.89	23.88	23.90
DFT-s-OFDM 256QAM	1	1	24.00	22.91	23.67	22.63	22.65	22.62
CP-OFDM QPSK	1	1	26.00	25.04	24.99	25.14	25.02	25.20
CP-OFDM 16QAM	1	1	25.50	24.75	24.66	24.97	24.79	24.97
CP-OFDM 64QAM	1	1	24.50	23.13	23.09	23.42	23.20	23.38
CP-OFDM 256QAM	1	1	21.00	20.16	20.15	20.21	20.13	20.19
Modulation	RB	RB Offset	Tune up	30MHz				
				Channel/Frequency(MHz)				
				502200/2511	510402/2552.01	518598/2592.99	526800/2634	534996/2674.98
DFT-s-OFDM PI/2 BPSK	1	1	27.00	26.05	26.02	25.91	25.96	26.00
		39		25.95	25.87	25.79	25.93	25.82
		76		25.94	25.98	25.76	25.78	25.80
	36	0	27.00	26.00	25.99	25.95	25.88	25.81
		18		26.08	25.97	25.94	25.96	25.94
		42		26.15	26.00	25.85	26.13	25.93
	75	0	27.00	26.16	25.98	26.01	25.84	25.76
DFT-s-OFDM QPSK	1	1	27.00	26.12	25.97	26.08	25.92	25.91
		39		26.25	26.10	25.83	25.79	25.76
		76		26.07	25.96	25.87	25.75	25.94
	36	0	27.00	26.15	26.03	26.13	25.80	25.92
		18		26.36	26.16	26.13	25.89	25.99
		42		26.09	26.09	26.13	25.78	25.96
	75	0	27.00	25.92	25.80	26.13	25.94	26.02

DFT-s-OFDM 16QAM	1	1	26.00	25.30	25.15	25.43	25.27	25.50
DFT-s-OFDM 64QAM	1	1	25.00	23.85	23.88	23.89	23.80	23.93
DFT-s-OFDM 256QAM	1	1	24.00	22.90	23.66	22.65	22.57	22.65
CP-OFDM QPSK	1	1	26.00	25.07	25.02	25.19	25.02	25.20
CP-OFDM 16QAM	1	1	25.50	24.77	24.68	24.92	24.82	24.91
CP-OFDM 64QAM	1	1	24.50	23.16	23.12	23.47	23.35	23.42
CP-OFDM 256QAM	1	1	21.00	20.19	20.18	20.26	20.17	20.23
Modulation	RB	RB Offset	Tune up	40MHz				
				Channel/Frequency(MHz)				
				503202/2516.01	510900/2554.5	518598/2592.99	526302/2631.51	534000/2670
DFT-s-OFDM PI/2 BPSK	1	1	27.00	25.93	25.99	25.86	25.98	26.02
		53		25.80	25.81	25.80	25.96	25.85
		104		25.88	26.01	25.81	25.81	25.83
	50	0	27.00	25.93	26.01	25.96	25.80	25.84
		25		26.05	26.05	26.21	25.89	25.98
		56		26.18	26.03	25.97	25.98	25.89
	100	0	27.00	26.14	25.96	25.94	25.84	25.85
DFT-s-OFDM QPSK	1	1	27.00	26.21	26.06	26.27	26.08	26.16
		53		26.23	26.08	25.96	25.89	25.86
		104		26.14	26.03	25.88	25.82	25.92
	50	0	27.00	26.12	26.00	25.93	25.89	25.92
		25		26.34	26.14	26.17	25.99	26.00
		56		26.07	26.07	26.18	25.89	25.98
	100	0	27.00	25.99	25.87	26.17	26.04	26.03
DFT-s-OFDM 16QAM	1	1	26.00	25.25	25.10	25.32	25.25	25.39
DFT-s-OFDM 64QAM	1	1	25.00	23.81	23.84	24.00	23.78	24.00
DFT-s-OFDM 256QAM	1	1	24.00	22.91	23.67	22.73	22.58	22.75

CP-OFDM QPSK	1	1	26.00	25.06	25.01	25.23	25.14	25.21
CP-OFDM 16QAM	1	1	25.50	24.75	24.66	24.89	24.92	24.90
CP-OFDM 64QAM	1	1	24.50	23.20	23.16	23.34	23.24	23.22
CP-OFDM 256QAM	1	1	21.00	20.03	20.02	20.03	19.99	20.05
Modulation	RB	RB Offset	Tune up	50MHz				
				Channel/Frequency(MHz)				
				504204/2521.02	511404/2557.02	518598/2592.99	525798/2628.99	532998/2664.99
DFT-s-OFDM PI/2 BPSK	1	1	27.00	26.09	26.06	25.99	26.01	26.05
		66		25.98	25.90	25.84	25.98	25.96
		131		25.99	26.03	25.82	25.76	25.98
	64	0	27.00	26.05	26.04	26.04	25.84	25.97
		32		26.03	25.92	26.08	25.92	26.10
		69		26.21	26.06	25.93	25.94	25.94
	128	0	27.00	26.11	25.93	25.92	25.93	25.94
DFT-s-OFDM QPSK	1	1	27.00	26.20	26.05	26.14	25.99	25.98
		66		26.19	26.04	25.98	25.85	25.82
		131		26.12	26.01	25.94	25.80	25.90
	64	0	27.00	26.09	25.97	26.06	25.86	25.89
		32		26.27	26.07	26.20	25.96	25.97
		69		26.04	26.04	26.22	25.85	25.94
	128	0	27.00	25.97	25.85	26.22	26.01	26.00
DFT-s-OFDM 16QAM	1	1	26.00	25.23	25.08	25.37	25.20	25.34
DFT-s-OFDM 64QAM	1	1	25.00	23.70	23.82	23.93	23.74	23.96
DFT-s-OFDM 256QAM	1	1	24.00	22.76	23.61	22.67	22.63	22.69
CP-OFDM QPSK	1	1	26.00	24.92	24.96	25.22	25.07	25.23
CP-OFDM 16QAM	1	1	25.50	24.62	24.62	24.94	24.86	24.93
CP-OFDM 64QAM	1	1	24.50	23.11	23.07	23.38	23.28	23.35
CP-OFDM 256QAM	1	1	21.00	20.14	20.13	20.17	20.10	20.16
Modulation	RB	RB Offset	Tune up	60MHz				

				Channel/Frequency(MHz)				
				505200/2526	511902/2559.51	518598/2592.99	525300/2626.5	531996/2659.98
DFT-s-OFDM PI/2 BPSK	1	1	27.00	25.99	25.96	26.01	26.09	26.13
		81		25.94	25.95	25.89	25.97	25.86
		160		26.01	26.14	25.87	25.77	25.79
	81	0	27.00	26.03	26.11	25.99	26.01	25.94
		40		26.00	26.09	26.05	25.85	25.94
		81		26.11	25.96	26.04	25.95	25.95
	162	0	27.00	26.10	25.92	26.02	25.85	25.86
DFT-s-OFDM QPSK	1	1	27.00	26.08	25.93	26.13	25.92	26.00
		81		26.10	25.95	26.03	25.88	25.94
		160		26.05	25.94	25.96	25.84	26.03
	81	0	27.00	26.01	25.89	26.16	25.89	26.01
		40		26.24	26.04	26.00	25.95	25.96
		81		26.01	26.01	26.18	25.86	25.95
	162	0	27.00	26.05	25.93	26.09	25.93	25.92
DFT-s-OFDM 16QAM	1	1	26.00	25.20	25.05	25.28	25.00	25.14
DFT-s-OFDM 64QAM	1	1	25.00	23.76	23.68	23.83	23.82	23.84
DFT-s-OFDM 256QAM	1	1	24.00	22.86	23.51	22.65	22.59	22.65
CP-OFDM QPSK	1	1	26.00	24.99	24.94	25.09	25.08	25.15
CP-OFDM 16QAM	1	1	25.50	24.68	24.59	24.80	24.82	24.80
CP-OFDM 64QAM	1	1	24.50	23.08	23.04	23.24	23.24	23.22
CP-OFDM 256QAM	1	1	21.00	20.12	20.11	20.13	20.05	20.11
Modulation	RB	RB Offset	Tune up	80MHz				
				Channel/Frequency(MHz)				
				507204/2536.02	512904/2564.52	518598/2592.99	524298/2621.49	529998/2649.99
DFT-s-OFDM PI/2 BPSK	1	1	27.00	26.10	26.07	26.00	26.02	26.06
		109		25.98	25.99	25.86	25.97	25.86
		215		25.91	26.04	25.83	25.82	25.84
	108	0	27.00	25.96	26.04	25.86	25.91	25.84
		54		26.03	26.01	25.87	25.81	25.90
		109		26.00	25.94	25.91	26.00	25.91

	216	0	27.00	26.05	25.96	26.09	25.81	25.73
DFT-s-OFDM QPSK	1	1	27.00	25.97	25.91	26.01	26.00	25.99
		109		26.10	26.04	25.80	25.85	25.82
		215		26.02	25.91	25.94	25.81	26.00
	108	0	27.00	26.10	25.98	26.18	25.85	25.97
		54		26.29	26.09	26.05	25.92	26.02
		109		26.04	26.04	25.95	25.82	25.91
	216	0	27.00	25.88	25.76	25.96	25.89	25.88
DFT-s-OFDM 16QAM	1	1	26.00	25.22	25.07	25.27	25.19	25.33
DFT-s-OFDM 64QAM	1	1	25.00	23.79	23.82	23.83	23.74	23.87
DFT-s-OFDM 256QAM	1	1	24.00	22.85	23.61	22.58	22.51	22.59
CP-OFDM QPSK	1	1	26.00	25.02	24.97	25.14	25.08	25.15
CP-OFDM 16QAM	1	1	25.50	24.70	24.61	24.93	24.85	24.92
CP-OFDM 64QAM	1	1	24.50	23.11	23.07	23.38	23.28	23.35
CP-OFDM 256QAM	1	1	21.00	20.15	20.14	20.18	20.09	20.15
Modulation	RB	RB Offset	Tune up	90MHz				
				Channel/Frequency(MHz)				
				508200/2541	513402/2567.01	518598/2592.99	523800/2619	528996/2644.98
DFT-s-OFDM PI/2 BPSK	1	1	27.00	26.07	26.04	26.04	26.04	26.08
		123		26.01	25.93	25.87	26.00	25.89
		243		26.03	26.07	25.88	25.85	25.87
	120	0	27.00	26.07	26.06	25.87	25.94	25.87
		60		26.09	26.09	26.05	25.85	25.94
		125		26.12	26.08	25.94	25.96	25.87
	243	0	27.00	26.12	25.94	25.93	25.81	25.73
DFT-s-OFDM QPSK	1	1	27.00	26.15	26.00	26.11	26.16	26.15
		123		26.17	26.02	26.02	25.95	26.01
		243		26.09	25.98	26.04	25.88	26.07
	120	0	27.00	26.07	25.95	26.07	25.94	26.06
		60		26.27	26.07	26.18	26.02	26.12
		125		26.02	26.02	26.09	25.93	26.02
	243	0	27.00	25.95	25.83	26.09	25.99	25.98

DFT-s-OFDM 16QAM	1	1	26.00	25.17	25.02	25.25	25.17	25.31
DFT-s-OFDM 64QAM	1	1	25.00	23.75	23.67	23.85	23.72	23.85
DFT-s-OFDM 256QAM	1	1	24.00	22.86	23.51	22.57	22.63	22.60
CP-OFDM QPSK	1	1	26.00	25.01	24.96	25.27	25.09	25.25
CP-OFDM 16QAM	1	1	25.50	24.68	24.59	24.90	24.84	24.91
CP-OFDM 64QAM	1	1	24.50	23.15	23.11	23.34	23.17	23.24
CP-OFDM 256QAM	1	1	21.00	19.99	19.98	19.95	19.91	19.97
Modulation	RB	RB Offset	Tune up	100MHz				
				Channel/Frequency(MHz)				
				509202/2546.01	513900/2569.5	518598/2592.99	523302/2616.51	528000/2640
DFT-s-OFDM PI/2 BPSK	1	1	27.00	26.14	26.11	26.08	26.07	26.11
		137		26.10	26.02	26.00	26.02	26.00
		271		26.05	26.09	25.98	25.91	26.02
	135	0	27.00	26.10	26.09	26.04	25.98	26.00
		67		26.07	26.07	26.10	25.99	26.06
		138		26.15	26.11	26.08	26.03	25.92
	270	0	27.00	26.09	26.02	26.09	26.01	25.91
DFT-s-OFDM QPSK	1	1	27.00	26.30	26.15	26.16	26.18	26.15
		137		26.13	26.09	26.04	26.02	25.97
		271		26.07	26.07	26.01	25.97	26.05
	135	0	27.00	26.04	26.03	26.11	26.02	26.03
		67		26.20	26.11	26.12	26.10	26.09
		138		25.99	26.10	26.13	26.00	26.07
	270	0	27.00	25.93	25.92	26.14	26.07	26.04
DFT-s-OFDM 16QAM	1	1	26.00	25.15	25.11	25.30	25.23	25.35
DFT-s-OFDM 64QAM	1	1	25.00	23.73	23.76	23.87	23.79	23.90
DFT-s-OFDM 256QAM	1	1	24.00	22.80	23.56	22.60	22.57	22.63

CP-OFDM QPSK	1	1	26.00	24.96	24.91	25.17	25.02	25.18
CP-OFDM 16QAM	1	1	25.50	24.64	24.55	24.86	24.78	24.85
CP-OFDM 64QAM	1	1	24.50	23.06	23.02	23.29	23.21	23.28
CP-OFDM 256QAM	1	1	21.00	20.10	20.09	20.09	20.02	20.08
SCS 30 kHz								

Sensor on								
n41			**Maximum Output Power (dBm)**					
Modulation	RB	RB Offset	Tune up	10MHz				
				Channel/Frequency(MHz)				
				500202/2501.01	508902/2544.51	518598/2592.99	528300/2641.5	537000/2685
DFT-s-OFDM PI/2 BPSK	1	1	20.00	18.65	18.49	18.65	18.60	18.82
		12		18.57	18.63	18.78	18.68	18.86
		22		18.69	18.61	18.65	18.61	18.78
	12	0	20.00	18.81	18.92	18.92	18.93	18.90
		6		18.84	19.08	19.02	18.83	18.95
		12		19.02	18.66	18.98	18.77	19.02
	24	0	20.00	18.96	18.51	18.79	18.90	18.84
DFT-s-OFDM QPSK	1	1	20.00	19.15	18.97	18.84	18.82	18.72
		12		19.17	18.81	18.75	18.67	18.61
		22		19.08	18.58	18.63	18.48	18.50
	12	0	20.00	19.09	18.71	18.86	18.87	18.73
		6		19.27	19.15	18.92	18.91	18.81
		12		19.05	19.01	18.78	18.73	18.51
	24	0	20.00	19.02	18.95	18.94	18.77	18.74
DFT-s-OFDM 16QAM	1	1	20.00	18.91	18.75	18.73	18.60	18.73
DFT-s-OFDM 64QAM	1	1	20.00	18.93	18.88	18.87	18.64	18.81
DFT-s-OFDM 256QAM	1	1	20.00	19.10	19.07	19.22	18.86	18.91
CP-OFDM QPSK	1	1	20.00	18.77	18.79	18.85	18.71	18.71
CP-OFDM 16QAM	1	1	20.00	19.01	18.94	19.16	19.06	19.02

CP-OFDM 64QAM	1	1	20.00	18.99	19.05	19.00	19.02	19.05
CP-OFDM 256QAM	1	1	20.00	18.81	18.71	18.83	18.89	18.99
Modulation	RB	RB Offset	Tune up	15MHz				
				Channel/Frequency(MHz)				
				500700/2503.5	509403/2547.015	518598/2592.99	527799/2638.995	536496/2682.48
DFT-s-OFDM PI/2 BPSK	1	1	20.00	18.72	18.53	18.68	18.64	18.84
		19		18.66	18.67	18.80	18.69	18.89
		36		18.71	18.62	18.71	18.53	18.68
	18	0	20.00	18.84	19.00	18.96	18.81	18.80
		9		18.82	19.04	19.05	18.88	18.86
		20		19.05	18.71	18.94	18.67	18.85
	36	0	20.00	18.93	18.71	19.01	18.61	18.71
DFT-s-OFDM QPSK	1	1	20.00	19.14	19.06	18.88	18.92	18.88
		19		19.13	18.96	18.84	18.80	18.71
		36		19.06	18.68	18.74	18.58	18.57
	18	0	20.00	19.06	18.88	18.96	18.89	18.95
		9		19.20	19.22	19.02	19.17	19.04
		20		19.02	18.96	18.74	19.00	18.75
	36	0	20.00	19.00	18.91	18.91	19.03	18.97
DFT-s-OFDM 16QAM	1	1	20.00	18.89	18.71	18.68	18.71	18.84
DFT-s-OFDM 64QAM	1	1	20.00	18.91	18.68	18.70	18.79	18.92
DFT-s-OFDM 256QAM	1	1	20.00	19.04	18.88	19.03	18.98	19.05
CP-OFDM QPSK	1	1	20.00	18.72	18.69	18.78	18.75	18.72
CP-OFDM 16QAM	1	1	20.00	18.97	18.90	19.10	19.03	19.01
CP-OFDM 64QAM	1	1	20.00	18.90	19.00	19.04	18.98	18.94
CP-OFDM 256QAM	1	1	20.00	18.92	18.85	18.94	18.66	18.81
Modulation	RB	RB Offset	Tune up	20MHz				
				Channel/Frequency(MHz)				
				501204/2506.02	509904/2549.52	518598/2592.99	527298/2636.49	535998/2679.99
	1	1	20.00	18.49	18.42	18.76	18.68	18.87

DFT-s-OFDM PI/2 BPSK		25		18.58	18.59	18.79	18.73	18.91
		49		18.69	18.54	18.61	18.67	18.87
	25	0	20.00	18.78	18.82	19.02	19.02	18.97
		12		18.75	18.88	18.98	18.97	19.02
		26		18.82	18.60	18.95	18.85	18.94
	50	0	20.00	18.79	18.59	18.80	18.68	18.93
DFT-s-OFDM QPSK	1	1	20.00	18.89	18.83	18.68	18.88	18.92
		25		18.91	18.79	18.74	18.82	18.80
		49		18.99	18.70	18.65	18.55	18.68
	25	0	20.00	18.98	18.98	18.86	18.80	18.92
		12		19.17	19.11	18.88	18.98	19.01
		26		18.99	19.14	18.75	18.82	18.71
	50	0	20.00	19.08	19.00	18.96	18.99	18.94
DFT-s-OFDM 16QAM	1	1	20.00	18.86	18.84	18.61	18.67	18.79
DFT-s-OFDM 64QAM	1	1	20.00	18.88	18.80	18.80	18.72	18.88
DFT-s-OFDM 256QAM	1	1	20.00	19.05	18.99	19.12	18.92	18.86
CP-OFDM QPSK	1	1	20.00	18.70	18.65	18.79	18.65	18.52
CP-OFDM 16QAM	1	1	20.00	18.94	18.85	19.06	18.99	18.82
CP-OFDM 64QAM	1	1	20.00	18.87	18.95	19.00	18.93	18.98
CP-OFDM 256QAM	1	1	20.00	18.90	18.81	18.89	18.80	18.92
Modulation	RB	RB Offset	Tune up	30MHz				
				Channel/Frequency(MHz)				
				502200/2511	510402/2552.01	518598/2592.99	526800/2634	534996/2674.98
DFT-s-OFDM PI/2 BPSK	1	1	20.00	18.73	18.54	18.69	18.70	18.95
		39		18.75	18.69	18.79	18.78	18.90
		76		18.72	18.63	18.66	18.72	18.77
	36	0	20.00	18.84	18.82	18.92	18.97	19.03
		18		18.91	18.83	18.81	18.81	18.95
		42		18.93	18.69	18.87	18.74	18.95
	75	0	20.00	18.96	18.88	18.76	18.69	18.85
	1	1	20.00	18.87	18.80	18.76	18.78	18.85
		39		19.00	18.65	18.71	18.78	18.83

DFT-s-OFDM QPSK		76		18.83	18.55	18.62	18.57	18.72
	36	0	20.00	18.94	18.87	18.95	19.03	18.95
		18		19.09	18.94	18.98	19.00	19.00
		42		18.89	18.78	18.84	19.00	18.72
	75	0	20.00	18.78	18.74	18.92	18.95	18.86
DFT-s-OFDM 16QAM	1	1	20.00	18.88	18.83	18.67	18.54	18.46
DFT-s-OFDM 64QAM	1	1	20.00	18.91	18.80	18.70	18.58	18.72
DFT-s-OFDM 256QAM	1	1	20.00	19.04	19.01	19.02	18.77	18.82
CP-OFDM QPSK	1	1	20.00	18.73	18.70	18.66	18.48	18.53
CP-OFDM 16QAM	1	1	20.00	18.96	18.89	19.09	18.94	18.91
CP-OFDM 64QAM	1	1	20.00	18.90	19.00	19.04	18.88	18.94
CP-OFDM 256QAM	1	1	20.00	18.93	18.86	18.93	18.76	18.87
Modulation	RB	RB Offset	Tune up	40MHz				
				Channel/Frequency(MHz)				
				503202/2516.01	510900/2554.5	518598/2592.99	526302/2631.51	534000/2670
DFT-s-OFDM PI/2 BPSK	1	1	20.00	18.70	18.58	18.71	18.69	18.88
		53		18.69	18.70	18.82	18.75	18.90
		104		18.75	18.68	18.69	18.68	18.82
	50	0	20.00	18.86	18.83	18.95	18.84	18.93
		25		18.75	18.88	18.85	18.76	18.91
		56		18.83	18.59	18.83	18.83	19.00
	100	0	20.00	18.81	18.59	18.76	18.98	18.81
DFT-s-OFDM QPSK	1	1	20.00	18.96	18.90	18.92	18.88	18.93
		53		18.98	18.78	18.81	18.77	18.80
		104		19.03	18.78	18.82	18.68	18.69
	50	0	20.00	19.04	18.89	19.04	19.05	18.91
		25		19.20	19.20	19.08	18.96	18.97
		56		19.00	19.05	18.82	18.64	18.55
	100	0	20.00	18.98	19.00	18.89	18.69	18.69
DFT-s-OFDM 16QAM	1	1	20.00	18.83	18.81	18.65	18.53	18.65

DFT-s-OFDM 64QAM	1	1	20.00	18.87	18.82	18.68	18.58	18.75
DFT-s-OFDM 256QAM	1	1	20.00	19.05	19.00	19.16	18.92	18.98
CP-OFDM QPSK	1	1	20.00	18.72	18.74	18.80	18.66	18.66
CP-OFDM 16QAM	1	1	20.00	18.94	18.86	19.08	18.98	18.94
CP-OFDM 64QAM	1	1	20.00	18.94	18.96	18.93	18.93	18.98
CP-OFDM 256QAM	1	1	20.00	18.77	18.63	18.75	18.81	18.91
Modulation	RB	RB Offset	Tune up	50MHz				
				Channel/Frequency(MHz)				
				504204/2521.02	511404/2557.02	518598/2592.99	525798/2628.99	532998/2664.99
DFT-s-OFDM PI/2 BPSK	1	1	20.00	18.77	18.62	18.74	18.68	18.87
		66		18.78	18.74	18.84	18.73	18.91
		131		18.77	18.69	18.75	18.67	18.87
	64	0	20.00	18.89	18.91	18.99	19.02	18.97
		32		18.86	18.97	19.01	18.97	19.02
		69		18.99	18.77	18.79	18.72	18.81
	128	0	20.00	18.91	18.79	18.85	18.68	18.80
DFT-s-OFDM QPSK	1	1	20.00	19.08	18.99	18.83	18.88	18.79
		66		19.07	18.93	18.77	18.82	18.67
		131		19.01	18.75	18.67	18.55	18.55
	64	0	20.00	19.01	18.93	18.88	18.80	18.79
		32		19.13	19.14	18.92	18.98	18.88
		69		18.97	19.00	18.91	18.95	18.71
	128	0	20.00	18.96	18.96	18.99	18.99	18.94
DFT-s-OFDM 16QAM	1	1	20.00	18.81	18.77	18.73	18.67	18.79
DFT-s-OFDM 64QAM	1	1	20.00	18.85	18.75	18.77	18.72	18.88
DFT-s-OFDM 256QAM	1	1	20.00	18.99	18.94	19.10	18.79	18.86
CP-OFDM QPSK	1	1	20.00	18.67	18.64	18.73	18.52	18.52

CP-OFDM 16QAM	1	1	20.00	18.90	18.82	19.02	18.86	18.82
CP-OFDM 64QAM	1	1	20.00	18.85	18.91	18.97	18.80	18.85
CP-OFDM 256QAM	1	1	20.00	18.88	18.77	18.86	18.80	18.92
Modulation	RB	RB Offset	Tune up	60MHz				
				Channel/Frequency(MHz)				
				505200/2526	511902/2559.51	518598/2592.99	525300/2626.5	531996/2659.98
DFT-s-OFDM PI/2 BPSK	1	1	20.00	18.67	18.64	18.82	18.70	18.95
		81		18.83	18.79	18.83	18.78	18.90
		160		18.88	18.74	18.65	18.72	18.77
	81	0	20.00	18.96	18.86	19.05	18.97	19.03
		40		18.92	18.94	18.94	18.94	18.95
		81		18.89	18.79	18.93	18.87	18.95
	162	0	20.00	18.90	18.80	18.90	18.82	18.85
DFT-s-OFDM QPSK	1	1	20.00	18.96	18.76	18.76	18.78	18.85
		81		18.98	18.76	18.80	18.78	18.83
		160		18.94	18.64	18.71	18.57	18.72
	81	0	20.00	18.93	18.90	18.91	18.90	18.95
		40		19.10	18.90	18.91	18.87	19.00
		81		18.94	18.92	18.79	18.87	18.72
	162	0	20.00	19.04	18.79	18.78	18.82	18.86
DFT-s-OFDM 16QAM	1	1	20.00	18.78	18.64	18.40	18.54	18.59
DFT-s-OFDM 64QAM	1	1	20.00	18.82	18.74	18.74	18.71	18.85
DFT-s-OFDM 256QAM	1	1	20.00	19.00	18.92	19.06	18.77	18.82
CP-OFDM QPSK	1	1	20.00	18.65	18.60	18.74	18.48	18.53
CP-OFDM 16QAM	1	1	20.00	18.87	18.77	18.98	18.81	18.78
CP-OFDM 64QAM	1	1	20.00	18.82	18.86	18.93	18.75	18.81
CP-OFDM 256QAM	1	1	20.00	18.86	18.73	18.81	18.76	18.87
Modulation	RB	RB Offset	Tune up	80MHz				
				Channel/Frequency(MHz)				
				507204/2536.02	512904/2564.52	518598/2592.99	524298/2621.49	529998/2649.99

DFT-s-OFDM PI/2 BPSK	1	1	20.00	18.78	18.63	18.75	18.69	18.88
		109		18.87	18.76	18.83	18.75	18.90
		215		18.78	18.70	18.70	18.68	18.82
	108	0	20.00	18.89	18.73	18.95	18.84	18.93
		54		18.95	18.76	18.90	18.76	18.91
		109		18.74	18.62	18.85	18.70	18.87
	216	0	20.00	18.81	18.83	18.73	18.85	18.68
DFT-s-OFDM QPSK	1	1	20.00	18.81	18.73	18.84	18.75	18.80
		109		18.94	18.62	18.77	18.64	18.67
		215		18.78	18.62	18.68	18.55	18.56
	108	0	20.00	18.89	18.92	18.87	18.92	18.78
		54		19.02	18.86	18.88	18.83	18.84
		109		18.84	18.69	18.75	18.64	18.55
	216	0	20.00	18.87	18.79	18.87	18.82	18.82
DFT-s-OFDM 16QAM	1	1	20.00	18.80	18.76	18.72	18.66	18.78
DFT-s-OFDM 64QAM	1	1	20.00	18.85	18.74	18.77	18.71	18.88
DFT-s-OFDM 256QAM	1	1	20.00	18.99	18.94	19.09	18.92	18.98
CP-OFDM QPSK	1	1	20.00	18.68	18.65	18.74	18.66	18.66
CP-OFDM 16QAM	1	1	20.00	18.89	18.81	19.01	18.98	18.94
CP-OFDM 64QAM	1	1	20.00	18.85	18.91	18.97	18.93	18.98
CP-OFDM 256QAM	1	1	20.00	18.89	18.78	18.85	18.81	18.91
Modulation	RB	RB Offset	Tune up	90MHz				
				Channel/Frequency(MHz)				
				508200/2541	513402/2567.01	518598/2592.99	523800/2619	528996/2644.98
DFT-s-OFDM PI/2 BPSK	1	1	20.00	18.75	18.67	18.77	18.73	18.90
		123		18.81	18.77	18.86	18.76	18.93
		243		18.81	18.75	18.73	18.73	18.85
	120	0	20.00	18.91	18.74	18.98	18.85	18.96
		60		18.92	18.81	18.81	18.81	18.82
		125		18.90	18.65	18.81	18.73	18.83
	243	0	20.00	18.92	18.67	18.73	18.69	18.68
	1	1	20.00	19.03	18.83	19.00	18.85	18.96

DFT-s-OFDM QPSK		123		19.05	18.75	18.87	18.77	18.77
		243		18.98	18.72	18.75	18.65	18.63
	120	0	20.00	18.99	18.81	18.96	18.81	18.87
		60		19.13	19.12	19.11	19.09	19.07
		125		18.95	18.96	18.99	18.91	18.79
	243	0	20.00	18.94	18.92	18.84	18.82	18.79
DFT-s-OFDM 16QAM	1	1	20.00	18.75	18.74	18.57	18.51	18.63
DFT-s-OFDM 64QAM	1	1	20.00	18.81	18.76	18.75	18.73	18.86
DFT-s-OFDM 256QAM	1	1	20.00	19.00	18.93	19.10	18.91	18.99
CP-OFDM QPSK	1	1	20.00	18.67	18.69	18.75	18.70	18.67
CP-OFDM 16QAM	1	1	20.00	18.87	18.78	19.00	18.95	18.93
CP-OFDM 64QAM	1	1	20.00	18.89	18.87	18.86	18.89	18.87
CP-OFDM 256QAM	1	1	20.00	18.73	18.55	18.67	18.58	18.73
Modulation	RB	RB Offset	Tune up	100MHz				
				Channel/Frequency(MHz)				
				509202/2546.01	513900/2569.5	518598/2592.99	523302/2616.51	528000/2640
DFT-s-OFDM PI/2 BPSK	1	1	20.00	18.82	18.71	18.80	18.77	18.93
		137		18.90	18.81	18.88	18.80	18.95
		271		18.83	18.76	18.79	18.74	18.91
	135	0	20.00	18.94	18.82	19.02	18.93	19.00
		67		18.90	18.90	18.97	18.90	18.98
		138		18.93	18.83	18.90	18.91	18.92
	270	0	20.00	18.89	18.87	18.95	18.89	18.90
DFT-s-OFDM QPSK	1	1	20.00	19.03	18.92	19.04	18.94	19.00
		137		19.01	18.90	18.96	18.92	18.86
		271		18.96	18.82	18.86	18.75	18.74
	135	0	20.00	18.96	18.98	19.06	18.98	18.97
		67		19.06	19.06	19.08	19.03	19.04
		138		18.92	18.91	18.95	18.86	18.75
	270	0	20.00	18.92	18.88	18.94	18.91	18.89

DFT-s-OFDM 16QAM	1	1	20.00	18.73	18.70	18.65	18.60	18.71
DFT-s-OFDM 64QAM	1	1	20.00	18.79	18.69	18.71	18.66	18.82
DFT-s-OFDM 256QAM	1	1	20.00	18.94	18.87	19.04	18.85	18.93
CP-OFDM QPSK	1	1	20.00	18.62	18.59	18.68	18.60	18.60
CP-OFDM 16QAM	1	1	20.00	18.83	18.74	18.94	18.91	18.87
CP-OFDM 64QAM	1	1	20.00	18.80	18.82	18.90	18.84	18.91
CP-OFDM 256QAM	1	1	20.00	18.84	18.69	18.78	18.72	18.84
SCS 30 kHz								

Hotspot on								
n41			**Maximum Output Power (dBm)**					
Modulation	RB	RB Offset	Tune up	10MHz				
				Channel/Frequency(MHz)				
				500202/2501.01	508902/2544.51	518598/2592.99	528300/2641.5	537000/2685
DFT-s-OFDM PI/2 BPSK	1	1	24.00	22.69	22.72	22.71	22.71	22.80
		12		22.67	22.48	22.67	22.65	22.68
		22		22.78	22.77	22.62	22.72	22.53
	12	0	24.00	22.83	22.80	22.87	22.92	22.77
		6		22.96	22.83	22.93	22.90	22.92
		12		22.87	23.01	22.76	22.84	23.04
	24	0	24.00	22.84	22.93	22.75	22.78	22.68
DFT-s-OFDM QPSK	1	1	24.00	22.87	23.11	23.11	23.04	22.74
		12		23.00	23.13	22.79	23.06	22.67
		22		22.93	23.03	22.74	22.91	22.75
	12	0	24.00	22.96	22.96	22.97	22.97	22.86
		6		23.21	23.27	23.07	23.29	22.89
		12		23.07	23.05	23.03	23.12	22.63
	24	0	24.00	23.01	23.00	23.01	23.08	22.84
DFT-s-OFDM 16QAM	1	1	23.50	22.76	22.64	22.81	22.68	22.61

DFT-s-OFDM 64QAM	1	1	23.50	22.77	22.49	22.83	22.72	22.80
DFT-s-OFDM 256QAM	1	1	23.50	22.49	22.67	22.61	22.57	22.49
CP-OFDM QPSK	1	1	24.00	22.84	22.73	22.78	22.80	22.72
CP-OFDM 16QAM	1	1	24.00	23.05	22.85	23.02	22.91	22.99
CP-OFDM 64QAM	1	1	24.00	23.04	22.90	23.02	23.00	22.93
CP-OFDM 256QAM	1	1	21.00	19.90	19.75	19.98	19.80	19.78
Modulation	RB	RB Offset	Tune up	15MHz				
				Channel/Frequency(MHz)				
				500700/2503.5	509403/2547.015	518598/2592.99	527799/2638.995	536496/2682.48
DFT-s-OFDM PI/2 BPSK	1	1	24.00	22.66	22.79	22.75	22.78	22.82
		19		22.61	22.57	22.79	22.74	22.82
		36		22.81	22.79	22.78	22.74	22.67
	18	0	24.00	22.85	22.73	22.99	22.95	22.91
		9		22.93	22.71	23.11	22.98	22.96
		20		22.79	22.94	22.68	22.87	22.89
	36	0	24.00	22.82	22.80	22.59	22.75	22.68
DFT-s-OFDM QPSK	1	1	24.00	22.96	23.10	23.21	23.03	22.90
		19		22.98	23.09	22.92	23.02	22.77
		36		23.00	23.01	22.84	22.89	22.82
	18	0	24.00	22.93	22.93	22.86	22.94	22.95
		9		23.24	23.20	23.20	23.22	23.10
		20		23.16	23.02	23.17	23.09	22.85
	36	0	24.00	23.19	22.98	23.14	23.06	22.94
DFT-s-OFDM 16QAM	1	1	23.50	22.71	22.62	22.79	22.66	22.59
DFT-s-OFDM 64QAM	1	1	23.50	22.73	22.57	22.74	22.60	22.67
DFT-s-OFDM 256QAM	1	1	23.50	22.50	22.61	22.49	22.51	22.39
CP-OFDM QPSK	1	1	24.00	22.83	22.68	22.93	22.75	22.73

CP-OFDM 16QAM	1	1	24.00	23.03	22.81	23.10	22.87	23.09
CP-OFDM 64QAM	1	1	24.00	23.08	22.81	23.09	22.91	22.93
CP-OFDM 256QAM	1	1	21.00	19.74	19.86	19.86	19.91	19.71
Modulation	RB	RB Offset	Tune up	20MHz				
				Channel/Frequency(MHz)				
				501204/2506.02	509904/2549.52	518598/2592.99	527298/2636.49	535998/2679.99
DFT-s-OFDM PI/2 BPSK	1	1	24.00	22.73	22.69	22.79	22.68	22.85
		25		22.70	22.62	22.83	22.79	22.84
		49		22.83	22.90	22.79	22.85	22.73
	25	0	24.00	22.88	22.80	22.96	22.92	22.84
		12		22.91	22.77	22.96	22.94	22.88
		26		22.93	22.84	22.73	22.77	22.85
	50	0	24.00	22.90	22.79	22.77	22.74	22.88
DFT-s-OFDM QPSK	1	1	24.00	23.03	22.98	23.28	22.91	22.92
		25		23.05	23.00	23.05	22.93	22.84
		49		22.98	22.94	22.81	22.82	22.80
	25	0	24.00	22.90	22.85	22.90	22.86	22.92
		12		23.17	23.17	23.14	23.19	22.96
		26		23.02	22.99	23.12	23.06	22.70
	50	0	24.00	23.06	23.06	23.10	23.14	22.91
DFT-s-OFDM 16QAM	1	1	23.50	22.80	22.59	22.86	22.63	22.65
DFT-s-OFDM 64QAM	1	1	23.50	22.71	22.54	22.78	22.57	22.74
DFT-s-OFDM 256QAM	1	1	23.50	22.44	22.62	22.43	22.52	22.33
CP-OFDM QPSK	1	1	24.00	22.78	22.66	22.72	22.73	22.66
CP-OFDM 16QAM	1	1	24.00	22.99	22.78	22.95	22.84	22.92
CP-OFDM 64QAM	1	1	24.00	22.99	22.78	22.93	22.88	22.86
CP-OFDM 256QAM	1	1	21.00	19.85	19.84	20.00	19.89	19.82
Modulation	RB	RB Offset	Tune up	30MHz				
				Channel/Frequency(MHz)				
				502200/2511	510402/2552.01	518598/2592.99	526800/2634	534996/2674.98

DFT-s-OFDM PI/2 BPSK	1	1	24.00	22.84	22.80	22.78	22.79	22.78
		39		22.74	22.66	22.80	22.83	22.84
		76		22.73	22.80	22.75	22.75	22.78
	36	0	24.00	22.81	22.73	22.94	22.95	22.85
		18		22.94	22.80	22.89	22.97	22.95
		42		22.91	22.82	22.80	22.75	23.01
	75	0	24.00	22.83	22.83	22.82	22.78	22.73
DFT-s-OFDM QPSK	1	1	24.00	22.90	22.96	23.14	22.89	22.89
		39		23.03	23.09	22.80	23.02	22.70
		76		22.95	22.91	22.79	22.79	22.77
	36	0	24.00	22.99	22.94	22.92	22.95	22.88
		18		23.22	23.22	23.10	23.24	22.93
		42		23.16	23.02	23.00	23.09	22.77
	75	0	24.00	23.00	22.89	23.08	22.97	22.98
DFT-s-OFDM 16QAM	1	1	23.50	22.82	22.61	22.85	22.75	22.84
DFT-s-OFDM 64QAM	1	1	23.50	22.74	22.57	22.78	22.70	22.77
DFT-s-OFDM 256QAM	1	1	23.50	22.43	22.61	22.45	22.51	22.47
CP-OFDM QPSK	1	1	24.00	22.81	22.69	22.77	22.76	22.77
CP-OFDM 16QAM	1	1	24.00	23.01	22.80	22.99	22.86	23.06
CP-OFDM 64QAM	1	1	24.00	23.02	22.81	22.98	22.91	23.01
CP-OFDM 256QAM	1	1	21.00	19.88	19.87	20.05	19.92	19.86
Modulation	RB	RB Offset	Tune up	40MHz				
				Channel/Frequency(MHz)				
				503202/2516.01	510900/2554.5	518598/2592.99	526302/2631.51	534000/2670
DFT-s-OFDM PI/2 BPSK	1	1	24.00	22.81	22.77	22.82	22.76	22.80
		53		22.68	22.60	22.81	22.77	22.87
		104		22.76	22.83	22.80	22.78	22.81
	50	0	24.00	22.83	22.85	22.95	22.97	22.88
		25		22.91	22.87	23.07	22.94	22.99
		56		22.94	22.85	22.83	22.78	22.97
	100	0	24.00	22.92	22.81	22.77	22.76	22.84
	1	1	24.00	23.10	23.05	23.35	22.98	23.16

DFT-s-OFDM QPSK		53		23.12	23.07	23.04	23.00	22.91
		104		23.13	22.98	23.00	22.86	22.95
	50	0	24.00	22.96	22.91	22.81	22.92	22.97
		25		23.20	23.20	23.23	23.22	23.03
		56		23.03	23.00	23.03	23.07	22.77
	100	0	24.00	22.96	22.96	23.10	23.04	22.97
DFT-s-OFDM 16QAM	1	1	23.50	22.66	22.56	22.72	22.60	22.71
DFT-s-OFDM 64QAM	1	1	23.50	22.59	22.53	22.69	22.66	22.64
DFT-s-OFDM 256QAM	1	1	23.50	22.44	22.62	22.55	22.52	22.48
CP-OFDM QPSK	1	1	24.00	22.80	22.68	22.81	22.75	22.67
CP-OFDM 16QAM	1	1	24.00	22.99	22.78	22.96	22.84	22.94
CP-OFDM 64QAM	1	1	24.00	23.06	22.85	22.94	22.95	22.79
CP-OFDM 256QAM	1	1	21.00	19.72	19.71	19.71	19.76	19.57
Modulation	RB	RB Offset	Tune up	50MHz				
				Channel/Frequency(MHz)				
				504204/2521.02	511404/2557.02	518598/2592.99	525798/2628.99	532998/2664.99
DFT-s-OFDM PI/2 BPSK	1	1	24.00	22.88	22.84	22.86	22.83	22.83
		66		22.77	22.69	22.85	22.86	22.89
		131		22.78	22.85	22.81	22.80	22.87
	64	0	24.00	22.86	22.88	23.03	23.00	22.92
		32		22.89	22.75	23.03	22.92	23.02
		69		22.97	22.88	22.88	22.81	22.93
	128	0	24.00	22.89	22.78	22.84	22.73	22.93
DFT-s-OFDM QPSK	1	1	24.00	22.98	23.04	23.20	23.15	22.96
		66		22.97	23.03	22.95	22.96	22.76
		131		23.00	22.96	22.86	22.84	22.82
	64	0	24.00	22.93	22.88	22.85	22.89	22.94
		32		23.13	23.13	23.17	23.15	23.00
		69		23.00	22.97	22.98	23.04	22.73
	128	0	24.00	23.05	22.94	23.17	23.02	23.05

DFT-s-OFDM 16QAM	1	1	23.50	22.75	22.54	22.79	22.58	22.77
DFT-s-OFDM 64QAM	1	1	23.50	22.68	22.41	22.62	22.54	22.60
DFT-s-OFDM 256QAM	1	1	23.50	22.38	22.56	22.38	22.46	22.31
CP-OFDM QPSK	1	1	24.00	22.75	22.63	22.71	22.70	22.60
CP-OFDM 16QAM	1	1	24.00	22.95	22.74	22.92	22.80	22.88
CP-OFDM 64QAM	1	1	24.00	22.97	22.76	23.00	22.86	22.94
CP-OFDM 256QAM	1	1	21.00	19.83	19.82	19.96	19.87	19.79
Modulation	RB	RB Offset	Tune up	60MHz				
				Channel/Frequency(MHz)				
				505200/2526	511902/2559.51	518598/2592.99	525300/2626.5	531996/2659.98
DFT-s-OFDM PI/2 BPSK	1	1	24.00	22.78	22.74	22.88	22.85	22.91
		81		22.82	22.74	22.90	22.91	22.88
		160		22.89	22.96	22.86	22.85	22.77
	81	0	24.00	22.93	22.95	22.98	22.95	22.98
		40		22.95	22.81	23.00	22.89	22.95
		81		22.76	22.78	22.79	22.83	22.94
	162	0	24.00	22.77	22.77	22.74	22.74	22.85
DFT-s-OFDM QPSK	1	1	24.00	22.86	22.92	23.10	23.05	23.00
		81		22.99	22.94	23.02	22.92	22.90
		160		23.04	22.89	22.99	22.86	22.97
	81	0	24.00	22.85	22.80	22.95	22.99	22.97
		40		23.10	23.10	23.06	23.04	22.99
		81		22.97	22.94	23.03	23.09	22.74
	162	0	24.00	23.02	23.12	23.02	22.98	22.86
DFT-s-OFDM 16QAM	1	1	23.50	22.61	22.61	22.68	22.58	22.46
DFT-s-OFDM 64QAM	1	1	23.50	22.54	22.48	22.61	22.53	22.57
DFT-s-OFDM 256QAM	1	1	23.50	22.39	22.57	22.47	22.44	22.38

CP-OFDM QPSK	1	1	24.00	22.73	22.61	22.78	22.66	22.72
CP-OFDM 16QAM	1	1	24.00	22.92	22.71	22.98	22.75	22.95
CP-OFDM 64QAM	1	1	24.00	22.94	22.73	22.95	22.81	22.90
CP-OFDM 256QAM	1	1	21.00	19.81	19.80	19.92	19.83	19.74
Modulation	RB	RB Offset	Tune up	80MHz				
				Channel/Frequency(MHz)				
				507204/2536.02	512904/2564.52	518598/2592.99	524298/2621.49	529998/2649.99
DFT-s-OFDM PI/2 BPSK	1	1	24.00	22.89	22.85	22.87	22.84	22.84
		109		22.86	22.78	22.87	22.88	22.88
		215		22.79	22.86	22.82	22.81	22.82
	108	0	24.00	22.86	22.88	22.85	22.72	22.88
		54		22.98	22.84	22.82	22.71	22.91
		109		22.85	22.76	22.86	22.79	22.99
	216	0	24.00	22.92	22.81	23.01	22.90	22.81
DFT-s-OFDM QPSK	1	1	24.00	22.84	22.90	23.07	23.02	22.97
		109		22.97	23.03	22.77	22.78	22.76
		215		22.90	22.86	22.86	22.84	22.83
	108	0	24.00	22.94	22.89	22.97	23.01	22.93
		54		23.15	23.15	23.02	23.00	22.96
		109		23.00	22.97	22.80	22.86	22.70
	216	0	24.00	22.85	22.85	22.89	22.85	22.82
DFT-s-OFDM 16QAM	1	1	23.50	22.74	22.53	22.78	22.57	22.76
DFT-s-OFDM 64QAM	1	1	23.50	22.68	22.51	22.72	22.53	22.71
DFT-s-OFDM 256QAM	1	1	23.50	22.38	22.56	22.38	22.46	22.30
CP-OFDM QPSK	1	1	24.00	22.76	22.64	22.72	22.71	22.61
CP-OFDM 16QAM	1	1	24.00	22.94	22.73	22.91	22.79	22.87
CP-OFDM 64QAM	1	1	24.00	22.97	22.76	23.00	22.86	22.94
CP-OFDM 256QAM	1	1	21.00	19.84	19.83	19.97	19.88	19.78
Modulation	RB	RB Offset	Tune up	90MHz				

				Channel/Frequency(MHz)				
				508200/2541	513402/2567.01	518598/2592.99	523800/2619	528996/2644.98
DFT-s-OFDM PI/2 BPSK	1	1	24.00	22.86	22.82	22.91	22.88	22.86
		123		22.80	22.72	22.88	22.89	22.91
		243		22.82	22.89	22.87	22.86	22.85
	120	0	24.00	22.88	22.90	22.86	22.83	22.91
		60		22.95	22.81	23.00	22.99	22.95
		125		22.88	22.79	22.89	22.82	22.95
	243	0	24.00	22.90	22.79	22.85	22.74	22.81
DFT-s-OFDM QPSK	1	1	24.00	22.93	22.99	23.17	23.12	23.13
		123		22.95	23.01	22.90	22.91	22.86
		243		22.97	22.93	22.96	22.94	22.90
	120	0	24.00	22.91	22.86	22.86	22.90	23.02
		60		23.13	23.13	23.15	23.13	23.06
		125		22.98	22.95	22.94	23.00	22.81
	243	0	24.00	22.92	22.92	23.02	22.98	22.92
DFT-s-OFDM 16QAM	1	1	23.50	22.58	22.48	22.65	22.55	22.63
DFT-s-OFDM 64QAM	1	1	23.50	22.64	22.47	22.74	22.55	22.69
DFT-s-OFDM 256QAM	1	1	23.50	22.39	22.57	22.37	22.35	22.31
CP-OFDM QPSK	1	1	24.00	22.75	22.63	22.76	22.75	22.62
CP-OFDM 16QAM	1	1	24.00	22.92	22.71	22.88	22.76	22.86
CP-OFDM 64QAM	1	1	24.00	23.01	22.80	22.96	22.82	22.83
CP-OFDM 256QAM	1	1	21.00	19.68	19.67	19.74	19.65	19.60
Modulation	RB	RB Offset	Tune up	100MHz				
				Channel/Frequency(MHz)				
				509202/2546.01	513900/2569.5	518598/2592.99	523302/2616.51	528000/2640
DFT-s-OFDM PI/2 BPSK	1	1	24.00	22.93	22.89	22.95	22.92	22.89
		137		22.89	22.81	22.92	22.93	22.93
		271		22.84	22.91	22.88	22.87	22.91
	135	0	24.00	22.91	22.93	22.94	22.91	22.95
		67		22.93	22.89	22.96	22.95	22.98
		138		22.91	22.92	22.94	22.97	22.91

	270	0	24.00	22.87	22.86	22.92	22.91	22.90
DFT-s-OFDM QPSK	1	1	24.00	23.16	23.15	23.24	23.18	23.15
		137		23.02	23.07	23.03	23.03	22.93
		271		23.06	23.01	23.04	23.01	22.99
	135	0	24.00	22.99	22.93	23.01	23.04	23.10
		67		23.17	23.16	23.22	23.17	23.14
		138		23.06	23.02	23.00	23.05	22.88
	270	0	24.00	23.01	23.00	23.09	23.04	23.00
DFT-s-OFDM 16QAM	1	1	23.50	22.67	22.56	22.72	22.61	22.69
DFT-s-OFDM 64QAM	1	1	23.50	22.62	22.45	22.67	22.58	22.65
DFT-s-OFDM 256QAM	1	1	23.50	22.33	22.51	22.42	22.39	22.36
CP-OFDM QPSK	1	1	24.00	22.70	22.58	22.77	22.65	22.66
CP-OFDM 16QAM	1	1	24.00	22.88	22.67	22.95	22.72	22.91
CP-OFDM 64QAM	1	1	24.00	22.92	22.71	22.91	22.77	22.87
CP-OFDM 256QAM	1	1	21.00	19.79	19.78	19.88	19.79	19.71
SCS 30 kHz								

n41(ANT3)

Full Power/Hotspot on								
n41			Maximum Output Power (dBm)					
Modulation	RB	RB Offset	Tune up	10MHz				
				Channel/Frequency(MHz)				
				500202/2501.01	508902/2544.51	518598/2592.99	528300/2641.5	537000/2685
DFT-s-OFDM PI/2 BPSK	1	1	26.50	25.23	25.29	25.50	25.15	25.55
		12		25.25	25.26	25.51	25.35	25.45
		22		25.58	25.31	25.57	25.48	25.60
	12	0	26.50	24.98	25.22	25.09	25.21	25.09
		6		25.68	25.72	25.75	25.52	25.80
		12		25.36	25.05	25.31	25.31	25.39
	24	0	26.50	25.24	24.88	25.18	25.13	25.21
	1	1	26.50	25.70	25.41	25.47	25.52	25.38

DFT-s-OFDM QPSK		12		25.72	25.52	25.51	25.40	25.31
		22		25.77	25.52	25.59	25.45	25.51
	12	0	26.50	24.62	24.45	24.57	24.57	24.49
		6		25.82	25.77	25.63	25.65	25.50
		12		24.74	24.78	24.63	24.69	24.51
	24	0	26.50	24.62	24.69	24.76	24.66	24.63
DFT-s-OFDM 16QAM	1	1	25.50	24.30	24.28	24.59	24.52	24.68
DFT-s-OFDM 64QAM	1	1	24.50	22.81	22.97	23.10	22.88	23.20
DFT-s-OFDM 256QAM	1	1	23.00	21.57	21.87	21.83	21.80	21.89
CP-OFDM QPSK	1	1	25.50	24.12	24.12	24.37	24.10	24.44
CP-OFDM 16QAM	1	1	25.00	23.81	23.98	23.98	23.90	24.03
CP-OFDM 64QAM	1	1	24.00	22.26	22.40	22.19	22.34	22.47
CP-OFDM 256QAM	1	1	20.50	18.82	18.94	18.94	19.18	19.26
Modulation	RB	RB Offset	Tune up	15MHz				
				Channel/Frequency(MHz)				
				500700/2503.5	509403/2547.015	518598/2592.99	527799/2638.995	536496/2682.48
DFT-s-OFDM PI/2 BPSK	1	1	26.50	25.30	25.33	25.53	25.23	25.60
		19		25.34	25.30	25.53	25.40	25.50
		36		25.60	25.32	25.63	25.54	25.69
	18	0	26.50	25.01	25.30	25.13	25.30	25.16
		9		25.66	25.68	25.78	25.66	25.87
		20		25.39	25.10	25.27	25.39	25.31
	36	0	26.50	25.21	24.83	25.15	24.92	25.18
DFT-s-OFDM QPSK	1	1	26.50	25.81	25.37	25.38	25.58	25.45
		19		25.80	25.54	25.47	25.55	25.37
		36		25.87	25.49	25.57	25.52	25.56
	18	0	26.50	24.71	24.49	24.54	24.50	24.55
		9		25.87	25.71	25.60	25.72	25.57
		20		24.83	24.73	24.59	24.78	24.58
	36	0	26.50	24.72	24.77	24.85	24.87	24.82

DFT-s-OFDM 16QAM	1	1	25.50	24.28	24.24	24.54	24.46	24.61
DFT-s-OFDM 64QAM	1	1	24.50	22.79	22.90	22.94	22.71	23.02
DFT-s-OFDM 256QAM	1	1	23.00	21.51	21.81	21.65	21.61	21.72
CP-OFDM QPSK	1	1	25.50	24.07	24.02	24.18	23.92	24.26
CP-OFDM 16QAM	1	1	25.00	23.77	23.94	23.92	23.83	23.96
CP-OFDM 64QAM	1	1	24.00	22.17	22.35	22.23	22.25	22.40
CP-OFDM 256QAM	1	1	20.50	18.93	19.08	19.17	19.21	19.31
Modulation	RB	RB Offset	Tune up	20MHz				
				Channel/Frequency(MHz)				
				501204/2506.02	509904/2549.52	518598/2592.99	527298/2636.49	535998/2679.99
DFT-s-OFDM PI/2 BPSK	1	1	26.50	25.20	25.35	25.61	25.25	25.68
		25		25.39	25.35	25.52	25.45	25.49
		49		25.71	25.25	25.41	25.47	25.47
	25	0	26.50	25.08	25.13	25.07	25.13	25.10
		12		25.72	25.53	25.59	25.51	25.68
		26		25.29	25.00	25.16	25.29	25.20
	50	0	26.50	25.20	24.84	25.07	24.93	25.10
DFT-s-OFDM QPSK	1	1	26.50	25.69	25.27	25.31	25.48	25.38
		25		25.71	25.50	25.50	25.51	25.40
		49		25.80	25.51	25.61	25.54	25.60
	25	0	26.50	24.63	24.71	24.69	24.72	24.70
		12		25.84	25.72	25.71	25.73	25.68
		26		24.80	24.90	24.72	24.95	24.71
	50	0	26.50	24.80	24.73	24.77	24.83	24.74
DFT-s-OFDM 16QAM	1	1	25.50	24.25	24.24	24.22	24.34	24.29
DFT-s-OFDM 64QAM	1	1	24.50	22.76	22.89	22.91	22.70	22.99
DFT-s-OFDM 256QAM	1	1	23.00	21.52	21.79	21.61	21.59	21.68

CP-OFDM QPSK	1	1	25.50	24.05	23.98	24.19	23.88	24.27
CP-OFDM 16QAM	1	1	25.00	23.74	23.89	23.88	23.78	23.92
CP-OFDM 64QAM	1	1	24.00	22.14	22.30	22.19	22.20	22.36
CP-OFDM 256QAM	1	1	20.50	18.91	19.04	19.12	19.17	19.26
Modulation	RB	RB Offset	Tune up	30MHz				
				Channel/Frequency(MHz)				
				502200/2511	510402/2552.01	518598/2592.99	526800/2634	534996/2674.98
DFT-s-OFDM PI/2 BPSK	1	1	26.50	25.31	25.34	25.54	25.24	25.61
		39		25.43	25.32	25.52	25.42	25.49
		76		25.61	25.33	25.58	25.55	25.64
	36	0	26.50	25.01	25.12	25.09	25.12	25.12
		18		25.75	25.47	25.67	25.45	25.76
		42		25.27	24.96	25.21	25.25	25.25
	75	0	26.50	25.24	25.00	25.03	25.09	25.06
DFT-s-OFDM QPSK	1	1	26.50	25.67	25.24	25.39	25.45	25.46
		39		25.80	25.36	25.47	25.37	25.37
		76		25.77	25.49	25.58	25.52	25.57
	36	0	26.50	24.72	24.61	24.53	24.62	24.54
		18		25.89	25.56	25.56	25.57	25.53
		42		24.83	24.67	24.68	24.72	24.67
	75	0	26.50	24.63	24.60	24.73	24.70	24.70
DFT-s-OFDM 16QAM	1	1	25.50	24.27	24.23	24.41	24.33	24.48
DFT-s-OFDM 64QAM	1	1	24.50	22.79	22.89	22.94	22.70	23.02
DFT-s-OFDM 256QAM	1	1	23.00	21.51	21.81	21.64	21.61	21.71
CP-OFDM QPSK	1	1	25.50	24.08	24.03	24.19	23.93	24.27
CP-OFDM 16QAM	1	1	25.00	23.76	23.93	23.91	23.82	23.95
CP-OFDM 64QAM	1	1	24.00	22.17	22.35	22.35	22.37	22.52
CP-OFDM 256QAM	1	1	20.50	18.94	19.09	19.16	19.22	19.30
Modulation	RB	RB Offset	Tune up	40MHz				

				Channel/Frequency(MHz)				
				503202/2516.01	510900/2554.5	518598/2592.99	526302/2631.51	534000/2670
DFT-s-OFDM PI/2 BPSK	1	1	26.50	25.28	25.38	25.56	25.28	25.63
		53		25.37	25.33	25.55	25.43	25.52
		104		25.64	25.38	25.61	25.60	25.67
	50	0	26.50	25.03	25.13	25.12	25.13	25.15
		25		25.60	25.53	25.59	25.51	25.68
		56		25.18	24.99	25.17	25.28	25.21
	100	0	26.50	25.10	24.84	25.03	24.93	25.06
DFT-s-OFDM QPSK	1	1	26.50	25.64	25.34	25.55	25.55	25.62
		53		25.66	25.49	25.57	25.50	25.47
		104		25.72	25.59	25.65	25.62	25.64
	50	0	26.50	24.57	24.50	24.62	24.51	24.63
		25		25.75	25.69	25.66	25.70	25.63
		56		24.69	24.69	24.67	24.74	24.66
	100	0	26.50	24.58	24.61	24.71	24.71	24.68
DFT-s-OFDM 16QAM	1	1	25.50	24.10	24.09	24.39	24.31	24.46
DFT-s-OFDM 64QAM	1	1	24.50	22.63	22.79	22.92	22.72	23.00
DFT-s-OFDM 256QAM	1	1	23.00	21.40	21.68	21.65	21.60	21.72
CP-OFDM QPSK	1	1	25.50	24.07	24.07	24.32	24.09	24.40
CP-OFDM 16QAM	1	1	25.00	23.74	23.90	24.02	23.91	24.06
CP-OFDM 64QAM	1	1	24.00	22.21	22.31	22.24	22.33	22.41
CP-OFDM 256QAM	1	1	20.50	18.78	18.86	18.98	18.99	19.12
Modulation	RB	RB Offset	Tune up	50MHz				
				Channel/Frequency(MHz)				
				504204/2521.02	511404/2557.02	518598/2592.99	525798/2628.99	532998/2664.99
DFT-s-OFDM PI/2 BPSK	1	1	26.50	25.35	25.42	25.59	25.32	25.66
		66		25.46	25.37	25.57	25.47	25.54
		131		25.66	25.39	25.67	25.61	25.73
	64	0	26.50	25.06	25.21	25.16	25.21	25.19
		32		25.70	25.61	25.74	25.59	25.83
		69		25.33	25.16	25.25	25.45	25.29

	128	0	26.50	25.19	25.03	25.24	25.12	25.27
DFT-s-OFDM QPSK	1	1	26.50	25.75	25.42	25.58	25.63	25.65
		66		25.74	25.63	25.65	25.64	25.55
		131		25.70	25.56	25.63	25.59	25.62
	64	0	26.50	24.54	24.54	24.59	24.55	24.60
		32		25.68	25.63	25.63	25.64	25.60
		69		24.66	24.64	24.63	24.69	24.62
	128	0	26.50	24.56	24.57	24.68	24.67	24.65
DFT-s-OFDM 16QAM	1	1	25.50	24.08	24.05	24.34	24.27	24.41
DFT-s-OFDM 64QAM	1	1	24.50	22.73	22.84	23.00	22.77	23.08
DFT-s-OFDM 256QAM	1	1	23.00	21.46	21.74	21.71	21.66	21.78
CP-OFDM QPSK	1	1	25.50	24.02	23.97	24.13	23.87	24.33
CP-OFDM 16QAM	1	1	25.00	23.70	23.86	23.84	23.75	24.00
CP-OFDM 64QAM	1	1	24.00	22.12	22.26	22.28	22.28	22.45
CP-OFDM 256QAM	1	1	20.50	18.89	19.00	19.09	19.13	19.23
Modulation	RB	RB Offset	Tune up	60MHz				
				Channel/Frequency(MHz)				
				505200/2526	511902/2559.51	518598/2592.99	525300/2626.5	531996/2659.98
DFT-s-OFDM PI/2 BPSK	1	1	26.50	25.25	25.44	25.67	25.34	25.74
		81		25.51	25.42	25.56	25.52	25.53
		160		25.77	25.44	25.57	25.66	25.63
	81	0	26.50	25.13	25.16	25.22	25.16	25.25
		40		25.76	25.58	25.67	25.56	25.76
		81		25.23	25.18	25.26	25.47	25.30
	162	0	26.50	25.06	24.92	25.04	25.01	25.07
DFT-s-OFDM QPSK	1	1	26.50	25.51	25.20	25.39	25.41	25.46
		81		25.53	25.47	25.56	25.48	25.46
		160		25.63	25.58	25.67	25.61	25.66
	81	0	26.50	24.46	24.64	24.62	24.65	24.63
		40		25.65	25.52	25.62	25.53	25.59
		81		24.63	24.69	24.64	24.74	24.63
	162	0	26.50	24.64	24.53	24.60	24.63	24.57

DFT-s-OFDM 16QAM	1	1	25.50	24.17	24.17	24.26	24.39	24.33
DFT-s-OFDM 64QAM	1	1	24.50	22.70	22.83	22.97	22.76	23.05
DFT-s-OFDM 256QAM	1	1	23.00	21.47	21.72	21.55	21.52	21.62
CP-OFDM QPSK	1	1	25.50	24.00	23.93	24.14	23.83	24.22
CP-OFDM 16QAM	1	1	25.00	23.67	23.81	23.80	23.70	23.84
CP-OFDM 64QAM	1	1	24.00	22.09	22.21	22.24	22.23	22.41
CP-OFDM 256QAM	1	1	20.50	18.87	18.96	19.04	19.09	19.18
Modulation	RB	RB Offset	Tune up	80MHz				
				Channel/Frequency(MHz)				
				507204/2536.02	512904/2564.52	518598/2592.99	524298/2621.49	529998/2649.99
DFT-s-OFDM PI/2 BPSK	1	1	26.50	25.36	25.43	25.60	25.33	25.67
		109		25.55	25.39	25.56	25.49	25.53
		215		25.67	25.40	25.62	25.62	25.68
	108	0	26.50	25.06	25.03	25.12	25.03	25.15
		54		25.79	25.40	25.63	25.38	25.72
		109		25.09	25.02	25.19	25.31	25.23
	216	0	26.50	25.10	25.08	25.00	25.17	25.03
DFT-s-OFDM QPSK	1	1	26.50	25.49	25.17	25.47	25.38	25.54
		109		25.62	25.33	25.53	25.34	25.43
		215		25.60	25.56	25.64	25.59	25.63
	108	0	26.50	24.55	24.66	24.58	24.67	24.59
		54		25.70	25.48	25.59	25.49	25.56
		109		24.78	24.58	24.72	24.63	24.71
	216	0	26.50	24.59	24.52	24.68	24.62	24.65
DFT-s-OFDM 16QAM	1	1	25.50	24.19	24.16	24.45	24.38	24.52
DFT-s-OFDM 64QAM	1	1	24.50	22.73	22.83	23.00	22.64	22.96
DFT-s-OFDM 256QAM	1	1	23.00	21.46	21.62	21.70	21.54	21.65

CP-OFDM QPSK	1	1	25.50	24.03	23.86	24.26	23.88	24.22
CP-OFDM 16QAM	1	1	25.00	23.69	23.85	23.95	23.74	23.87
CP-OFDM 64QAM	1	1	24.00	22.12	22.26	22.28	22.28	22.45
CP-OFDM 256QAM	1	1	20.50	18.90	19.01	19.08	19.14	19.22
Modulation	RB	RB Offset	Tune up	90MHz				
				Channel/Frequency(MHz)				
				508200/2541	513402/2567.01	518598/2592.99	523800/2619	528996/2644.98
DFT-s-OFDM PI/2 BPSK	1	1	26.50	25.33	25.47	25.62	25.37	25.69
		123		25.49	25.40	25.59	25.50	25.56
		243		25.70	25.45	25.65	25.67	25.71
	120	0	26.50	25.08	25.04	25.15	25.04	25.18
		60		25.76	25.58	25.67	25.56	25.76
		125		25.24	25.17	25.27	25.46	25.31
	243	0	26.50	25.08	24.92	25.00	25.01	25.03
DFT-s-OFDM QPSK	1	1	26.50	25.58	25.27	25.63	25.48	25.70
		123		25.60	25.46	25.63	25.47	25.53
		243		25.67	25.66	25.71	25.69	25.70
	120	0	26.50	24.52	24.55	24.67	24.56	24.68
		60		25.68	25.61	25.69	25.62	25.66
		125		24.64	24.60	24.71	24.65	24.70
	243	0	26.50	24.66	24.65	24.78	24.75	24.75
DFT-s-OFDM 16QAM	1	1	25.50	24.14	24.14	24.43	24.36	24.50
DFT-s-OFDM 64QAM	1	1	24.50	22.69	22.85	22.98	22.66	22.94
DFT-s-OFDM 256QAM	1	1	23.00	21.47	21.73	21.71	21.53	21.66
CP-OFDM QPSK	1	1	25.50	24.02	24.02	24.27	23.92	24.23
CP-OFDM 16QAM	1	1	25.00	23.67	23.82	23.94	23.71	23.86
CP-OFDM 64QAM	1	1	24.00	22.16	22.22	22.17	22.24	22.34
CP-OFDM 256QAM	1	1	20.50	18.74	18.78	18.90	18.91	19.04
Modulation	RB	RB Offset	Tune up	100MHz				

				Channel/Frequency(MHz)				
				509202/2546.01	513900/2569.5	518598/2592.99	523302/2616.51	528000/2640
DFT-s-OFDM PI/2 BPSK	1	1	26.50	25.40	25.51	25.65	25.41	25.72
		137		25.58	25.44	25.61	25.54	25.58
		271		25.72	25.46	25.71	25.68	25.77
	135	0	26.50	25.11	25.12	25.19	25.12	25.22
		67		25.74	25.54	25.70	25.52	25.79
		138		25.27	25.22	25.23	25.51	25.27
	270	0	26.50	25.17	25.11	25.21	25.20	25.24
DFT-s-OFDM QPSK	1	1	26.50	25.41	25.35	25.66	25.56	25.73
		137		25.68	25.60	25.71	25.61	25.61
		271		25.77	25.75	25.81	25.78	25.80
	135	0	26.50	24.61	24.71	24.76	24.72	24.77
		67		25.73	25.67	25.78	25.68	25.75
		138		24.73	24.67	24.79	24.72	24.78
	270	0	26.50	24.64	24.61	24.75	24.71	24.72
DFT-s-OFDM 16QAM	1	1	25.50	24.12	24.10	24.38	24.32	24.45
DFT-s-OFDM 64QAM	1	1	24.50	22.67	22.78	22.94	22.71	23.02
DFT-s-OFDM 256QAM	1	1	23.00	21.41	21.67	21.65	21.59	21.72
CP-OFDM QPSK	1	1	25.50	23.97	23.92	24.20	23.94	24.28
CP-OFDM 16QAM	1	1	25.00	23.63	23.78	23.88	23.79	23.92
CP-OFDM 64QAM	1	1	24.00	22.07	22.17	22.21	22.19	22.38
CP-OFDM 256QAM	1	1	20.50	18.85	18.92	19.01	19.05	19.15
SCS 30 kHz								

n41(ANT5)

Full Power/Hotspot on								
n41			**Maximum Output Power (dBm)**					
Modulation	RB	RB Offset	Tune up	10MHz				
				Channel/Frequency(MHz)				
				500202/2501.01	508902/2544.51	518598/2592.99	528300/2641.5	537000/2685

DFT-s-OFDM PI/2 BPSK	1	1	27.00	25.50	25.39	25.53	25.37	25.83
		12		25.52	25.37	25.68	25.43	25.91
		22		25.77	25.71	25.84	25.71	25.87
	12	0	27.00	25.20	25.42	25.31	25.55	25.39
		6		25.88	25.87	25.98	26.02	26.10
		12		25.45	25.12	25.59	25.27	25.75
	24	0	27.00	25.44	25.38	25.45	25.24	25.72
DFT-s-OFDM QPSK	1	1	27.00	25.76	25.62	25.28	25.60	25.98
		12		25.89	25.65	25.41	25.62	25.95
		22		25.95	25.48	25.67	25.57	25.72
	12	0	27.00	24.92	24.61	24.58	24.64	25.08
		6		26.07	25.87	25.56	25.88	25.94
		12		24.98	24.84	24.61	24.89	25.27
	24	0	27.00	24.81	24.84	24.85	24.90	24.90
DFT-s-OFDM 16QAM	1	1	26.00	24.62	24.58	24.71	24.56	25.02
DFT-s-OFDM 64QAM	1	1	25.00	23.24	23.26	23.22	23.17	23.39
DFT-s-OFDM 256QAM	1	1	23.00	21.89	21.99	21.88	21.88	22.08
CP-OFDM QPSK	1	1	26.00	24.47	24.41	24.33	24.23	24.68
CP-OFDM 16QAM	1	1	26.00	24.22	24.33	24.15	24.16	24.38
CP-OFDM 64QAM	1	1	23.50	22.59	22.61	22.67	22.51	22.90
CP-OFDM 256QAM	1	1	21.00	19.35	19.41	19.48	19.26	19.50
Modulation	RB	RB Offset	Tune up	15MHz				
				Channel/Frequency(MHz)				
				500700/2503.5	509403/2547.015	518598/2592.99	527799/2638.995	536496/2682.48
DFT-s-OFDM PI/2 BPSK	1	1	27.00	25.54	25.47	25.58	25.44	25.87
		19		25.55	25.42	25.73	25.52	25.95
		36		25.82	25.77	25.93	25.73	25.88
	18	0	27.00	25.25	25.51	25.38	25.58	25.47
		9		25.83	26.01	26.05	26.00	26.06
		20		25.51	25.20	25.51	25.30	25.80
	36	0	27.00	25.39	25.29	25.54	25.21	25.79
	1	1	27.00	25.97	25.68	25.35	25.71	25.81

DFT-s-OFDM QPSK		19		25.96	25.80	25.47	25.58	25.84
		36		26.13	25.55	25.72	25.55	25.56
	18	0	27.00	24.99	24.54	24.64	24.61	24.99
		9		26.11	25.94	25.63	25.81	25.75
		20		25.06	24.93	24.68	24.86	25.09
	36	0	27.00	24.99	24.93	24.92	24.88	24.73
DFT-s-OFDM 16QAM	1	1	26.00	24.68	24.52	24.64	24.54	24.85
DFT-s-OFDM 64QAM	1	1	25.00	23.18	23.08	23.16	23.15	23.32
DFT-s-OFDM 256QAM	1	1	23.00	21.84	21.92	21.96	21.95	22.15
CP-OFDM QPSK	1	1	26.00	24.41	24.35	24.40	24.31	24.71
CP-OFDM 16QAM	1	1	26.00	24.16	24.26	24.08	24.12	24.34
CP-OFDM 64QAM	1	1	23.50	22.54	22.52	22.47	22.29	22.72
CP-OFDM 256QAM	1	1	21.00	19.30	19.32	19.41	19.37	19.64
Modulation	RB	RB Offset	Tune up	20MHz				
				Channel/Frequency(MHz)				
				501204/2506.02	509904/2549.52	518598/2592.99	527298/2636.49	535998/2679.99
DFT-s-OFDM PI/2 BPSK	1	1	27.00	25.44	25.49	25.66	25.46	25.95
		25		25.60	25.47	25.72	25.57	25.94
		49		25.93	25.82	25.83	25.78	25.78
	25	0	27.00	25.32	25.33	25.31	25.40	25.40
		12		25.89	25.85	25.85	25.84	25.86
		26		25.41	25.09	25.39	25.19	25.68
	50	0	27.00	25.38	25.17	25.33	25.09	25.58
DFT-s-OFDM QPSK	1	1	27.00	25.85	25.58	25.28	25.61	25.74
		25		25.87	25.76	25.50	25.54	25.87
		49		26.06	25.57	25.76	25.57	25.60
	25	0	27.00	24.91	24.77	24.80	24.84	25.15
		12		25.95	25.83	25.62	25.70	25.74
		26		24.90	24.98	24.69	24.91	25.10
	50	0	27.00	24.94	24.89	24.84	24.84	24.65

DFT-s-OFDM 16QAM	1	1	26.00	24.52	24.52	24.44	24.54	24.65
DFT-s-OFDM 64QAM	1	1	25.00	23.02	23.07	23.13	23.14	23.29
DFT-s-OFDM 256QAM	1	1	23.00	21.85	21.90	21.92	21.93	22.11
CP-OFDM QPSK	1	1	26.00	24.39	24.31	24.41	24.27	24.72
CP-OFDM 16QAM	1	1	26.00	24.13	24.21	24.17	24.20	24.43
CP-OFDM 64QAM	1	1	23.50	22.51	22.47	22.56	22.37	22.81
CP-OFDM 256QAM	1	1	21.00	19.28	19.28	19.36	19.33	19.59
Modulation	RB	RB Offset	Tune up	30MHz				
				Channel/Frequency(MHz)				
				502200/2511	510402/2552.01	518598/2592.99	526800/2634	534996/2674.98
DFT-s-OFDM PI/2 BPSK	1	1	27.00	25.55	25.48	25.59	25.45	25.88
		39		25.64	25.44	25.72	25.54	25.94
		76		25.83	25.78	25.88	25.74	25.83
	36	0	27.00	25.25	25.33	25.34	25.40	25.43
		18		25.92	25.80	25.94	25.79	25.95
		42		25.39	25.05	25.44	25.15	25.73
	75	0	27.00	25.42	25.33	25.29	25.25	25.54
DFT-s-OFDM QPSK	1	1	27.00	25.83	25.55	25.36	25.58	25.82
		39		25.96	25.62	25.47	25.40	25.84
		76		26.03	25.55	25.73	25.55	25.57
	36	0	27.00	25.00	24.66	24.63	24.73	24.98
		18		26.13	25.79	25.59	25.66	25.71
		42		25.06	24.75	24.65	24.68	25.06
	75	0	27.00	24.90	24.89	24.93	24.84	24.74
DFT-s-OFDM 16QAM	1	1	26.00	24.67	24.64	24.76	24.66	24.97
DFT-s-OFDM 64QAM	1	1	25.00	23.18	23.20	23.16	23.14	23.32
DFT-s-OFDM 256QAM	1	1	23.00	21.84	21.92	21.82	21.82	22.01

CP-OFDM QPSK	1	1	26.00	24.42	24.36	24.28	24.19	24.59
CP-OFDM 16QAM	1	1	26.00	24.15	24.25	24.07	24.11	24.33
CP-OFDM 64QAM	1	1	23.50	22.54	22.52	22.60	22.42	22.85
CP-OFDM 256QAM	1	1	21.00	19.31	19.33	19.40	19.38	19.63
Modulation	RB	RB Offset	Tune up	40MHz				
				Channel/Frequency(MHz)				
				503202/2516.01	510900/2554.5	518598/2592.99	526302/2631.51	534000/2670
DFT-s-OFDM PI/2 BPSK	1	1	27.00	25.52	25.52	25.61	25.49	25.90
		53		25.58	25.45	25.75	25.55	25.97
		104		25.86	25.83	25.91	25.79	25.86
	50	0	27.00	25.27	25.34	25.37	25.41	25.46
		25		25.89	25.98	25.98	25.97	25.99
		56		25.42	25.21	25.53	25.31	25.82
	100	0	27.00	25.40	25.17	25.29	25.09	25.54
DFT-s-OFDM QPSK	1	1	27.00	25.92	25.65	25.52	25.68	25.98
		53		25.94	25.75	25.57	25.53	25.94
		104		26.10	25.65	25.80	25.65	25.64
	50	0	27.00	24.97	24.55	24.72	24.62	25.07
		25		26.11	25.92	25.69	25.79	25.81
		56		25.04	24.89	24.76	24.82	25.17
	100	0	27.00	24.97	24.89	24.90	24.84	24.71
DFT-s-OFDM 16QAM	1	1	26.00	24.62	24.62	24.74	24.64	24.95
DFT-s-OFDM 64QAM	1	1	25.00	23.14	23.22	23.27	23.29	23.43
DFT-s-OFDM 256QAM	1	1	23.00	21.85	21.91	21.83	21.81	22.02
CP-OFDM QPSK	1	1	26.00	24.41	24.40	24.29	24.23	24.60
CP-OFDM 16QAM	1	1	26.00	24.13	24.22	24.06	24.08	24.32
CP-OFDM 64QAM	1	1	23.50	22.58	22.48	22.36	22.25	22.61
CP-OFDM 256QAM	1	1	21.00	19.15	19.10	19.22	19.15	19.45
Modulation	RB	RB Offset	Tune up	50MHz				

				Channel/Frequency(MHz)				
				504204/2521.02	511404/2557.02	518598/2592.99	525798/2628.99	532998/2664.99
DFT-s-OFDM PI/2 BPSK	1	1	27.00	25.59	25.56	25.64	25.53	25.93
		66		25.67	25.49	25.77	25.59	25.99
		131		25.88	25.84	25.97	25.80	25.92
	64	0	27.00	25.30	25.42	25.41	25.49	25.50
		32		25.74	25.81	25.88	25.80	25.89
		69		25.32	25.13	25.36	25.23	25.65
	128	0	27.00	25.24	25.24	25.38	25.16	25.63
DFT-s-OFDM QPSK	1	1	27.00	25.78	25.61	25.43	25.64	25.89
		66		25.77	25.77	25.53	25.55	25.90
		131		25.95	25.62	25.78	25.62	25.62
	64	0	27.00	24.81	24.59	24.69	24.66	25.04
		32		26.04	25.99	25.79	25.86	25.91
		69		25.01	24.97	24.85	24.90	25.26
	128	0	27.00	24.95	24.98	25.00	24.93	24.81
DFT-s-OFDM 16QAM	1	1	26.00	24.60	24.58	24.56	24.47	24.77
DFT-s-OFDM 64QAM	1	1	25.00	23.12	23.15	23.10	23.09	23.26
DFT-s-OFDM 256QAM	1	1	23.00	21.79	21.85	21.77	21.75	21.96
CP-OFDM QPSK	1	1	26.00	24.36	24.30	24.22	24.13	24.53
CP-OFDM 16QAM	1	1	26.00	24.09	24.18	24.13	24.17	24.39
CP-OFDM 64QAM	1	1	23.50	22.49	22.43	22.53	22.33	22.78
CP-OFDM 256QAM	1	1	21.00	19.26	19.24	19.33	19.29	19.56
Modulation	RB	RB Offset	Tune up	60MHz				
				Channel/Frequency(MHz)				
				505200/2526	511902/2559.51	518598/2592.99	525300/2626.5	531996/2659.98
DFT-s-OFDM PI/2 BPSK	1	1	27.00	25.49	25.58	25.72	25.55	26.01
		81		25.72	25.54	25.76	25.64	25.98
		160		25.99	25.89	25.87	25.85	25.82
	81	0	27.00	25.37	25.37	25.47	25.44	25.56
		40		25.80	25.78	25.81	25.77	25.82
		81		25.22	25.15	25.37	25.25	25.66

	162	0	27.00	25.23	25.25	25.30	25.17	25.55
DFT-s-OFDM QPSK	1	1	27.00	25.66	25.51	25.36	25.54	25.82
		81		25.68	25.73	25.56	25.51	25.93
		160		25.88	25.64	25.82	25.64	25.66
	81	0	27.00	24.86	24.82	24.85	24.89	25.20
		40		26.01	25.88	25.78	25.75	25.90
		81		24.98	25.02	24.86	24.95	25.27
	162	0	27.00	25.03	24.94	24.92	24.89	24.73
DFT-s-OFDM 16QAM	1	1	26.00	24.57	24.58	24.36	24.47	24.57
DFT-s-OFDM 64QAM	1	1	25.00	23.09	23.14	23.07	23.08	23.23
DFT-s-OFDM 256QAM	1	1	23.00	21.80	21.83	21.73	21.73	21.92
CP-OFDM QPSK	1	1	26.00	24.34	24.26	24.23	24.09	24.54
CP-OFDM 16QAM	1	1	26.00	24.06	24.13	23.96	23.99	24.22
CP-OFDM 64QAM	1	1	23.50	22.46	22.38	22.49	22.28	22.74
CP-OFDM 256QAM	1	1	21.00	19.24	19.20	19.28	19.25	19.51
Modulation	RB	RB Offset	Tune up	80MHz				
				Channel/Frequency(MHz)				
				507204/2536.02	512904/2564.52	518598/2592.99	524298/2621.49	529998/2649.99
DFT-s-OFDM PI/2 BPSK	1	1	27.00	25.60	25.57	25.65	25.54	25.94
		109		25.76	25.51	25.76	25.61	25.98
		215		25.89	25.85	25.92	25.81	25.87
	108	0	27.00	25.30	25.24	25.37	25.31	25.46
		54		25.96	25.73	25.90	25.72	25.91
		109		25.33	25.24	25.55	25.34	25.84
	216	0	27.00	25.27	25.41	25.26	25.33	25.51
DFT-s-OFDM QPSK	1	1	27.00	25.64	25.48	25.44	25.51	25.90
		109		25.77	25.59	25.53	25.37	25.90
		215		25.85	25.62	25.79	25.62	25.63
	108	0	27.00	24.82	24.71	24.68	24.78	25.03
		54		25.93	25.71	25.62	25.58	25.74
		109		24.88	24.66	24.69	24.59	25.10
	216	0	27.00	24.86	24.81	24.88	24.76	24.69

DFT-s-OFDM 16QAM	1	1	26.00	24.59	24.57	24.68	24.59	24.89
DFT-s-OFDM 64QAM	1	1	25.00	23.12	23.14	23.23	23.08	23.26
DFT-s-OFDM 256QAM	1	1	23.00	21.79	21.85	21.89	21.75	21.95
CP-OFDM QPSK	1	1	26.00	24.37	24.31	24.36	24.14	24.54
CP-OFDM 16QAM	1	1	26.00	24.08	24.17	24.12	24.03	24.25
CP-OFDM 64QAM	1	1	23.50	22.49	22.43	22.53	22.33	22.78
CP-OFDM 256QAM	1	1	21.00	19.27	19.25	19.32	19.30	19.55
Modulation	RB	RB Offset	Tune up	90MHz				
				Channel/Frequency(MHz)				
				508200/2541	513402/2567.01	518598/2592.99	523800/2619	528996/2644.98
DFT-s-OFDM PI/2 BPSK	1	1	27.00	25.57	25.61	25.67	25.58	25.96
		123		25.70	25.52	25.79	25.62	26.01
		243		25.92	25.90	25.95	25.86	25.90
	120	0	27.00	25.32	25.25	25.40	25.32	25.49
		60		25.93	25.91	25.94	25.90	25.95
		125		25.23	25.14	25.38	25.24	25.67
	243	0	27.00	25.25	25.25	25.26	25.17	25.51
DFT-s-OFDM QPSK	1	1	27.00	25.73	25.58	25.60	25.61	26.06
		123		25.75	25.72	25.63	25.50	26.00
		243		25.92	25.72	25.86	25.72	25.70
	120	0	27.00	24.79	24.60	24.77	24.67	25.12
		60		26.04	25.97	25.85	25.84	25.97
		125		24.99	24.93	24.93	24.86	25.34
	243	0	27.00	24.93	24.94	24.98	24.89	24.79
DFT-s-OFDM 16QAM	1	1	26.00	24.54	24.55	24.53	24.44	24.74
DFT-s-OFDM 64QAM	1	1	25.00	23.08	23.16	23.08	23.10	23.24
DFT-s-OFDM 256QAM	1	1	23.00	21.80	21.84	21.77	21.74	21.96

CP-OFDM QPSK	1	1	26.00	24.36	24.35	24.24	24.18	24.55
CP-OFDM 16QAM	1	1	26.00	24.06	24.14	24.11	24.13	24.37
CP-OFDM 64QAM	1	1	23.50	22.53	22.39	22.42	22.29	22.67
CP-OFDM 256QAM	1	1	21.00	19.11	19.02	19.14	19.07	19.37
Modulation	RB	RB Offset	Tune up	100MHz				
				Channel/Frequency(MHz)				
				509202/2546.01	513900/2569.5	518598/2592.99	523302/2616.51	528000/2640
DFT-s-OFDM PI/2 BPSK	1	1	27.00	25.64	25.65	25.70	25.62	25.99
		137		25.79	25.56	25.81	25.66	26.03
		271		25.94	25.91	26.01	25.87	25.96
	135	0	27.00	25.35	25.33	25.44	25.40	25.53
		67		25.91	25.87	25.97	25.86	25.98
		138		25.39	25.32	25.47	25.42	25.76
	270	0	27.00	25.35	25.45	25.48	25.37	25.73
DFT-s-OFDM QPSK	1	1	27.00	25.71	25.67	25.64	25.70	26.10
		137		25.84	25.87	25.72	25.65	26.09
		271		26.03	25.82	25.97	25.82	25.81
	135	0	27.00	24.89	24.77	24.87	24.84	25.22
		67		25.97	25.91	25.82	25.78	25.94
		138		24.96	24.88	24.89	24.81	25.30
	270	0	27.00	24.91	24.90	24.95	24.85	24.76
DFT-s-OFDM 16QAM	1	1	26.00	24.52	24.51	24.61	24.53	24.82
DFT-s-OFDM 64QAM	1	1	25.00	23.06	23.09	23.17	23.16	23.33
DFT-s-OFDM 256QAM	1	1	23.00	21.74	21.78	21.84	21.81	22.03
CP-OFDM QPSK	1	1	26.00	24.31	24.25	24.30	24.21	24.61
CP-OFDM 16QAM	1	1	26.00	24.02	24.10	24.05	24.09	24.31
CP-OFDM 64QAM	1	1	23.50	22.44	22.34	22.46	22.24	22.71
CP-OFDM 256QAM	1	1	21.00	19.22	19.16	19.25	19.21	19.48
SCS 30 kHz								

n41(ANT7)

Full Power/Hotspot on								
n41			Maximum Output Power (dBm)					
Modulation	RB	RB Offset	Tune up	10MHz				
				Channel/Frequency(MHz)				
				500202/2501.01	508902/2544.51	518598/2592.99	528300/2641.5	537000/2685
DFT-s-OFDM PI/2 BPSK	1	1	26.00	24.49	24.63	24.77	24.74	24.73
		12		24.65	24.73	24.83	24.57	24.64
		22		24.85	24.71	24.80	24.75	24.76
	12	0	26.00	24.30	24.60	24.43	24.32	24.75
		6		24.91	24.80	24.97	24.78	25.10
		12		25.01	24.66	25.11	25.00	24.85
	24	0	26.00	24.92	24.85	24.98	25.01	24.71
DFT-s-OFDM QPSK	1	1	26.00	24.92	24.89	24.56	24.89	25.06
		12		25.05	24.66	24.62	24.91	24.78
		22		25.04	24.53	24.61	24.86	24.64
	12	0	26.00	24.57	24.33	24.22	24.48	24.22
		6		25.13	24.82	24.64	24.94	25.00
		12		24.66	24.44	24.19	24.49	24.59
	24	0	26.00	24.48	24.39	24.40	24.37	24.58
DFT-s-OFDM 16QAM	1	1	25.00	23.63	23.54	23.73	23.58	23.84
DFT-s-OFDM 64QAM	1	1	24.00	22.12	22.30	22.40	22.28	22.52
DFT-s-OFDM 256QAM	1	1	22.50	20.79	21.03	21.11	20.91	21.04
CP-OFDM QPSK	1	1	25.00	23.40	23.52	23.66	23.44	23.57
CP-OFDM 16QAM	1	1	24.50	23.12	23.41	23.40	23.13	23.28
CP-OFDM 64QAM	1	1	23.00	21.44	21.78	21.79	21.50	21.70
CP-OFDM 256QAM	1	1	20.00	18.27	18.46	18.62	18.21	18.51
Modulation	RB	RB Offset	Tune up	15MHz				
				Channel/Frequency(MHz)				
				500700/2503.5	509403/2547.015	518598/2592.99	527799/2638.995	536496/2682.48
	1	1	26.00	24.53	24.71	24.82	24.81	24.77

DFT-s-OFDM PI/2 BPSK		19		24.68	24.78	24.88	24.66	24.68
		36		24.90	24.77	24.89	24.77	24.77
	18	0	26.00	24.35	24.69	24.50	24.35	24.83
		9		24.86	24.78	24.88	24.60	24.90
		20		25.07	24.58	24.87	24.87	24.74
	36	0	26.00	24.87	24.60	24.91	24.82	24.62
DFT-s-OFDM QPSK	1	1	26.00	25.00	24.95	24.63	24.88	25.02
		19		24.99	24.81	24.68	24.87	24.80
		36		25.09	24.60	24.66	24.84	24.61
	18	0	26.00	24.51	24.26	24.28	24.45	24.26
		9		25.04	24.89	24.71	24.87	24.94
		20		24.61	24.69	24.42	24.62	24.70
	36	0	26.00	24.53	24.64	24.63	24.51	24.70
DFT-s-OFDM 16QAM	1	1	25.00	23.56	23.64	23.82	23.56	23.80
DFT-s-OFDM 64QAM	1	1	24.00	22.06	22.25	22.34	22.10	22.29
DFT-s-OFDM 256QAM	1	1	22.50	20.74	20.96	21.06	20.85	20.98
CP-OFDM QPSK	1	1	25.00	23.34	23.46	23.60	23.39	23.47
CP-OFDM 16QAM	1	1	24.50	23.06	23.34	23.33	23.09	23.24
CP-OFDM 64QAM	1	1	23.00	21.39	21.69	21.72	21.57	21.81
CP-OFDM 256QAM	1	1	20.00	18.22	18.37	18.55	18.32	18.65
Modulation	RB	RB Offset	Tune up	20MHz				
				Channel/Frequency(MHz)				
				501204/2506.02	509904/2549.52	518598/2592.99	527298/2636.49	535998/2679.99
DFT-s-OFDM PI/2 BPSK	1	1	26.00	24.43	24.73	24.90	24.71	24.79
		25		24.73	24.83	24.87	24.71	24.73
		49		25.01	24.82	24.79	24.88	24.82
	25	0	26.00	24.42	24.64	24.56	24.42	24.78
		12		24.92	24.91	24.97	24.82	25.03
		26		24.97	24.76	25.04	24.93	24.92
	50	0	26.00	24.86	24.77	24.99	24.97	24.79
	1	1	26.00	24.88	25.01	24.72	24.92	25.08
		25		24.90	24.77	24.71	24.78	24.76

DFT-s-OFDM QPSK		49		25.02	24.62	24.70	24.77	24.63
	25	0	26.00	24.43	24.36	24.31	24.37	24.36
		12		25.01	24.78	24.70	24.84	24.83
		26		24.58	24.58	24.27	24.43	24.59
	50	0	26.00	24.61	24.60	24.55	24.59	24.66
DFT-s-OFDM 16QAM	1	1	25.00	23.53	23.64	23.62	23.69	23.96
DFT-s-OFDM 64QAM	1	1	24.00	22.03	22.24	22.31	22.23	22.44
DFT-s-OFDM 256QAM	1	1	22.50	20.75	20.94	21.02	20.86	20.96
CP-OFDM QPSK	1	1	25.00	23.32	23.42	23.61	23.37	23.43
CP-OFDM 16QAM	1	1	24.50	23.03	23.29	23.29	23.06	23.19
CP-OFDM 64QAM	1	1	23.00	21.36	21.64	21.68	21.54	21.76
CP-OFDM 256QAM	1	1	20.00	18.20	18.33	18.50	18.30	18.61
Modulation	RB	RB Offset	Tune up	30MHz				
				Channel/Frequency(MHz)				
				502200/2511	510402/2552.01	518598/2592.99	526800/2634	534996/2674.98
DFT-s-OFDM PI/2 BPSK	1	1	26.00	24.54	24.72	24.83	24.82	24.78
		39		24.77	24.80	24.87	24.75	24.70
		76		24.91	24.78	24.84	24.78	24.78
	36	0	26.00	24.35	24.35	24.30	24.19	24.49
		18		24.95	24.57	24.77	24.69	24.69
		42		24.95	24.56	24.93	24.75	24.72
	75	0	26.00	24.90	24.77	24.79	24.85	24.79
DFT-s-OFDM QPSK	1	1	26.00	24.86	24.82	24.64	24.74	24.89
		39		24.99	24.63	24.68	24.87	24.62
		76		24.99	24.60	24.67	24.74	24.61
	36	0	26.00	24.52	24.54	24.43	24.62	24.54
		18		25.06	24.90	24.83	25.05	24.95
		42		24.61	24.51	24.39	24.62	24.52
	75	0	26.00	24.44	24.47	24.51	24.26	24.37
DFT-s-OFDM 16QAM	1	1	25.00	23.55	23.63	23.81	23.55	23.79

DFT-s-OFDM 64QAM	1	1	24.00	22.06	22.24	22.34	22.10	22.28
DFT-s-OFDM 256QAM	1	1	22.50	20.74	20.96	21.05	20.85	20.98
CP-OFDM QPSK	1	1	25.00	23.35	23.47	23.61	23.56	23.64
CP-OFDM 16QAM	1	1	24.50	23.05	23.33	23.32	23.24	23.39
CP-OFDM 64QAM	1	1	23.00	21.39	21.69	21.72	21.57	21.81
CP-OFDM 256QAM	1	1	20.00	18.23	18.38	18.54	18.33	18.66
Modulation	RB	RB Offset	Tune up	40MHz				
				Channel/Frequency(MHz)				
				503202/2516.01	510900/2554.5	518598/2592.99	526302/2631.51	534000/2670
DFT-s-OFDM PI/2 BPSK	1	1	26.00	24.51	24.76	24.85	24.79	24.82
		53		24.71	24.81	24.90	24.69	24.71
		104		24.94	24.83	24.87	24.81	24.83
	50	0	26.00	24.37	24.52	24.49	24.37	24.66
		25		24.76	24.75	24.81	24.66	24.87
		56		24.82	24.59	24.89	24.78	24.75
	100	0	26.00	24.72	24.61	24.79	24.83	24.63
DFT-s-OFDM QPSK	1	1	26.00	24.79	24.92	24.80	24.83	24.99
		53		24.81	24.76	24.78	24.85	24.75
		104		24.90	24.70	24.74	24.81	24.71
	50	0	26.00	24.33	24.27	24.36	24.43	24.27
		25		24.88	24.87	24.77	24.87	24.92
		56		24.59	24.65	24.50	24.60	24.66
	100	0	26.00	24.51	24.60	24.61	24.49	24.66
DFT-s-OFDM 16QAM	1	1	25.00	23.50	23.61	23.63	23.50	23.93
DFT-s-OFDM 64QAM	1	1	24.00	22.02	22.26	22.16	22.06	22.46
DFT-s-OFDM 256QAM	1	1	22.50	20.75	20.95	20.90	20.86	21.13
CP-OFDM QPSK	1	1	25.00	23.34	23.51	23.46	23.39	23.68

CP-OFDM 16QAM	1	1	24.50	23.03	23.30	23.31	23.22	23.36
CP-OFDM 64QAM	1	1	23.00	21.43	21.65	21.61	21.61	21.77
CP-OFDM 256QAM	1	1	20.00	18.07	18.15	18.36	18.17	18.43
Modulation	RB	RB Offset	Tune up	50MHz				
				Channel/Frequency(MHz)				
				504204/2521.02	511404/2557.02	518598/2592.99	525798/2628.99	532998/2664.99
DFT-s-OFDM PI/2 BPSK	1	1	26.00	24.58	24.80	24.88	24.86	24.86
		66		24.80	24.85	24.92	24.78	24.75
		131		24.96	24.84	24.93	24.83	24.84
	64	0	26.00	24.40	24.60	24.53	24.40	24.74
		32		24.90	24.87	25.00	24.80	24.99
		69		25.01	24.80	25.01	24.97	24.96
	128	0	26.00	24.69	24.68	24.88	24.80	24.70
DFT-s-OFDM QPSK	1	1	26.00	24.78	24.88	24.71	24.82	24.95
		66		24.77	24.78	24.74	24.81	24.77
		131		24.88	24.67	24.72	24.79	24.68
	64	0	26.00	24.30	24.31	24.33	24.40	24.31
		32		24.81	24.81	24.74	24.80	24.86
		69		24.56	24.60	24.46	24.57	24.61
	128	0	26.00	24.49	24.56	24.58	24.47	24.62
DFT-s-OFDM 16QAM	1	1	25.00	23.48	23.57	23.74	23.48	23.73
DFT-s-OFDM 64QAM	1	1	24.00	22.00	22.19	22.28	22.04	22.23
DFT-s-OFDM 256QAM	1	1	22.50	20.69	20.89	21.00	20.80	20.91
CP-OFDM QPSK	1	1	25.00	23.29	23.41	23.55	23.34	23.42
CP-OFDM 16QAM	1	1	24.50	22.99	23.26	23.25	23.18	23.32
CP-OFDM 64QAM	1	1	23.00	21.34	21.60	21.65	21.52	21.72
CP-OFDM 256QAM	1	1	20.00	18.18	18.29	18.47	18.28	18.57
Modulation	RB	RB Offset	Tune up	60MHz				
				Channel/Frequency(MHz)				
				505200/2526	511902/2559.51	518598/2592.99	525300/2626.5	531996/2659.98

DFT-s-OFDM PI/2 BPSK	1	1	26.00	24.48	24.82	24.96	24.76	24.88
		81		24.85	24.90	24.91	24.83	24.80
		160		25.07	24.89	24.83	24.94	24.89
	81	0	26.00	24.47	24.55	24.59	24.47	24.69
		40		24.96	24.84	24.93	24.86	24.96
		81		24.91	24.82	25.02	24.87	24.98
	162	0	26.00	24.84	24.85	24.96	24.95	24.87
DFT-s-OFDM QPSK	1	1	26.00	24.66	24.78	24.64	24.70	24.85
		81		24.68	24.74	24.77	24.72	24.73
		160		24.81	24.69	24.76	24.72	24.70
	81	0	26.00	24.22	24.41	24.36	24.32	24.41
		40		24.78	24.70	24.73	24.77	24.75
		81		24.37	24.49	24.31	24.38	24.50
	162	0	26.00	24.41	24.36	24.34	24.39	24.42
DFT-s-OFDM 16QAM	1	1	25.00	23.45	23.57	23.54	23.61	23.89
DFT-s-OFDM 64QAM	1	1	24.00	21.97	22.18	22.25	22.17	22.38
DFT-s-OFDM 256QAM	1	1	22.50	20.70	20.87	20.96	20.97	20.89
CP-OFDM QPSK	1	1	25.00	23.27	23.37	23.56	23.48	23.38
CP-OFDM 16QAM	1	1	24.50	22.96	23.21	23.21	23.15	23.27
CP-OFDM 64QAM	1	1	23.00	21.31	21.55	21.61	21.49	21.67
CP-OFDM 256QAM	1	1	20.00	18.16	18.25	18.42	18.26	18.53
Modulation	RB	RB Offset	Tune up	80MHz				
				Channel/Frequency(MHz)				
				507204/2536.02	512904/2564.52	518598/2592.99	524298/2621.49	529998/2649.99
DFT-s-OFDM PI/2 BPSK	1	1	26.00	24.59	24.81	24.89	24.87	24.87
		109		24.89	24.87	24.91	24.87	24.77
		215		24.97	24.85	24.88	24.84	24.85
	108	0	26.00	24.40	24.42	24.49	24.40	24.56
		54		24.83	24.50	24.73	24.73	24.62
		109		24.73	24.62	24.91	24.69	24.78
	216	0	26.00	24.72	24.85	24.76	24.83	24.87
	1	1	26.00	24.64	24.75	24.72	24.68	24.82

DFT-s-OFDM QPSK		109		24.77	24.60	24.74	24.81	24.59
		215		24.78	24.67	24.73	24.69	24.68
	108	0	26.00	24.31	24.43	24.32	24.41	24.43
		54		24.83	24.66	24.70	24.82	24.71
		109		24.40	24.26	24.27	24.41	24.27
	216	0	26.00	24.40	24.39	24.46	24.38	24.45
DFT-s-OFDM 16QAM	1	1	25.00	23.47	23.56	23.73	23.63	23.88
DFT-s-OFDM 64QAM	1	1	24.00	22.00	22.18	22.28	22.04	22.22
DFT-s-OFDM 256QAM	1	1	22.50	20.69	20.89	20.99	20.80	20.91
CP-OFDM QPSK	1	1	25.00	23.30	23.42	23.56	23.35	23.43
CP-OFDM 16QAM	1	1	24.50	22.98	23.25	23.24	23.17	23.31
CP-OFDM 64QAM	1	1	23.00	21.34	21.60	21.65	21.52	21.72
CP-OFDM 256QAM	1	1	20.00	18.19	18.30	18.46	18.29	18.58
Modulation	RB	RB Offset	Tune up	90MHz				
				Channel/Frequency(MHz)				
				508200/2541	513402/2567.01	518598/2592.99	523800/2619	528996/2644.98
DFT-s-OFDM PI/2 BPSK	1	1	26.00	24.56	24.85	24.91	24.84	24.91
		123		24.83	24.88	24.94	24.81	24.78
		243		25.00	24.90	24.91	24.87	24.90
	120	0	26.00	24.26	24.27	24.36	24.26	24.41
		60		24.80	24.68	24.77	24.70	24.80
		125		24.76	24.65	24.87	24.72	24.81
	243	0	26.00	24.70	24.69	24.76	24.81	24.71
DFT-s-OFDM QPSK	1	1	26.00	24.73	24.85	24.88	24.77	24.92
		123		24.75	24.73	24.84	24.79	24.72
		243		24.85	24.77	24.80	24.76	24.78
	120	0	26.00	24.28	24.32	24.41	24.38	24.32
		60		24.81	24.79	24.80	24.80	24.84
		125		24.38	24.40	24.38	24.39	24.41
	243	0	26.00	24.31	24.36	24.40	24.29	24.42

DFT-s-OFDM 16QAM	1	1	25.00	23.42	23.54	23.71	23.58	23.86
DFT-s-OFDM 64QAM	1	1	24.00	21.96	22.20	22.26	22.00	22.24
DFT-s-OFDM 256QAM	1	1	22.50	20.70	20.88	21.00	20.81	20.90
CP-OFDM QPSK	1	1	25.00	23.29	23.46	23.57	23.34	23.47
CP-OFDM 16QAM	1	1	24.50	22.96	23.22	23.23	22.99	23.12
CP-OFDM 64QAM	1	1	23.00	21.38	21.56	21.54	21.56	21.68
CP-OFDM 256QAM	1	1	20.00	18.03	18.07	18.28	18.13	18.35
Modulation	RB	RB Offset	Tune up	100MHz				
				Channel/Frequency(MHz)				
				509202/2546.01	513900/2569.5	518598/2592.99	523302/2616.51	528000/2640
DFT-s-OFDM PI/2 BPSK	1	1	26.00	24.63	24.89	24.94	24.91	24.95
		137		24.92	24.92	24.96	24.90	24.82
		271		25.02	24.91	24.97	24.89	24.91
	135	0	26.00	24.45	24.51	24.56	24.45	24.65
		67		24.94	24.80	24.96	24.84	24.92
		138		24.95	24.86	24.99	24.91	25.02
	270	0	26.00	24.83	24.92	25.01	24.94	24.94
DFT-s-OFDM QPSK	1	1	26.00	25.01	24.97	24.95	24.98	25.04
		137		24.87	24.91	24.96	24.91	24.90
		271		24.99	24.90	24.94	24.90	24.91
	135	0	26.00	24.41	24.52	24.54	24.51	24.52
		67		24.90	24.89	24.93	24.89	24.94
		138		24.51	24.51	24.50	24.52	24.52
	270	0	26.00	24.45	24.48	24.53	24.43	24.54
DFT-s-OFDM 16QAM	1	1	25.00	23.40	23.50	23.66	23.56	23.82
DFT-s-OFDM 64QAM	1	1	24.00	21.94	22.13	22.22	22.14	22.33
DFT-s-OFDM 256QAM	1	1	22.50	20.64	20.82	20.94	20.91	21.00

CP-OFDM QPSK	1	1	25.00	23.24	23.36	23.50	23.45	23.53
CP-OFDM 16QAM	1	1	24.50	22.92	23.18	23.17	23.11	23.24
CP-OFDM 64QAM	1	1	23.00	21.29	21.51	21.58	21.47	21.63
CP-OFDM 256QAM	1	1	20.00	18.14	18.21	18.39	18.24	18.49
SCS 30 kHz								

n66(ANT1)

Full Power/Sensor off						
n66			Maximum Output Power (dBm)			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				342500/1712.5	349000/1745	355500/1777.5
DFT-s-OFDM PI/2 BPSK	1	1	24.50	23.38	23.45	23.52
		13		23.38	23.47	23.57
		23		23.45	23.55	23.55
	12	0	24.50	22.99	23.03	23.15
		6		23.57	23.63	23.60
		13		23.05	22.99	23.19
	25	0	24.50	23.10	22.93	23.04
DFT-s-OFDM QPSK	1	1	24.50	23.59	23.55	23.61
		13		23.61	23.55	23.58
		23		23.67	23.63	23.64
	12	0	24.50	22.59	22.57	22.71
		6		23.62	23.65	23.65
		13		22.63	22.69	22.75
	25	0	23.50	22.61	22.61	22.72
DFT-s-OFDM 16QAM	1	1	23.50	22.19	22.26	22.32
DFT-s-OFDM 64QAM	1	1	22.00	20.77	20.87	20.90
DFT-s-OFDM 256QAM	1	1	20.50	19.48	19.48	19.49
CP-OFDM QPSK	1	1	23.00	21.96	22.12	22.09

CP-OFDM 16QAM	1	1	23.00	21.83	21.94	21.93
CP-OFDM 64QAM	1	1	21.00	20.21	20.24	20.13
CP-OFDM 256QAM	1	1	18.00	16.77	16.78	16.79
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				343000/1715	349000/1745	355000/1775
DFT-s-OFDM PI/2 BPSK	1	1	24.50	23.30	23.42	23.57
		26		23.40	23.49	23.54
		50		23.52	23.54	23.47
	25	0	24.50	23.04	23.15	23.22
		13		23.57	23.63	23.60
		27		23.04	23.00	23.18
	50	0	24.50	23.08	22.93	23.08
DFT-s-OFDM QPSK	1	1	24.50	23.52	23.48	23.37
		26		23.54	23.56	23.51
		50		23.63	23.55	23.60
	25	0	24.50	22.53	22.59	22.59
		13		23.59	23.56	23.58
		27		22.62	22.78	22.68
	50	0	23.50	22.71	22.61	22.66
DFT-s-OFDM 16QAM	1	1	23.50	22.29	22.36	22.22
DFT-s-OFDM 64QAM	1	1	22.00	20.85	20.92	20.96
DFT-s-OFDM 256QAM	1	1	20.50	19.55	19.54	19.52
CP-OFDM QPSK	1	1	23.00	22.01	22.10	22.15
CP-OFDM 16QAM	1	1	23.00	21.83	21.93	21.91
CP-OFDM 64QAM	1	1	21.00	20.14	20.23	20.20
CP-OFDM 256QAM	1	1	18.00	16.90	16.96	16.93
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				343500/1717.5	349000/1745	354500/1772.5

DFT-s-OFDM PI/2 BPSK	1	1	24.50	23.41	23.41	23.50
		39		23.44	23.46	23.54
		77		23.42	23.50	23.52
	36	0	24.50	22.97	23.02	23.12
		18		23.60	23.45	23.56
		43		23.02	23.03	23.30
	75	0	24.50	23.12	23.16	23.11
DFT-s-OFDM QPSK	1	1	24.50	23.50	23.45	23.45
		39		23.63	23.42	23.48
		77		23.60	23.53	23.57
	36	0	24.50	22.62	22.61	22.55
		18		23.64	23.45	23.48
		43		22.65	22.48	22.57
	75	0	23.50	22.54	22.41	22.55
DFT-s-OFDM 16QAM	1	1	23.50	22.31	22.28	22.34
DFT-s-OFDM 64QAM	1	1	22.00	20.88	20.92	20.99
DFT-s-OFDM 256QAM	1	1	20.50	19.54	19.56	19.55
CP-OFDM QPSK	1	1	23.00	22.04	22.15	22.15
CP-OFDM 16QAM	1	1	23.00	21.85	21.97	21.94
CP-OFDM 64QAM	1	1	21.00	20.17	20.28	20.24
CP-OFDM 256QAM	1	1	18.00	16.93	17.01	16.97
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				344000/1720	349000/1745	354000/1770
DFT-s-OFDM PI/2 BPSK	1	1	24.50	23.45	23.49	23.55
		53		23.47	23.51	23.59
		104		23.47	23.56	23.61
	50	0	24.50	23.02	23.11	23.19
		25		23.55	23.59	23.63
		56		23.08	23.11	23.22
	100	0	24.50	23.07	23.07	23.20
	1	1	24.50	23.56	23.58	23.59

DFT-s-OFDM QPSK		53		23.57	23.64	23.61
		104		23.65	23.67	23.69
	50	0	24.50	22.56	22.61	22.68
		25		23.55	23.59	23.62
		56		22.60	22.64	22.71
	100	0	23.50	22.59	22.57	22.69
DFT-s-OFDM 16QAM	1	1	23.50	22.24	22.29	22.34
DFT-s-OFDM 64QAM	1	1	22.00	20.82	20.87	20.93
DFT-s-OFDM 256QAM	1	1	20.50	19.49	19.49	19.50
CP-OFDM QPSK	1	1	23.00	21.98	22.09	22.09
CP-OFDM 16QAM	1	1	23.00	21.79	21.90	21.87
CP-OFDM 64QAM	1	1	21.00	20.12	20.19	20.17
CP-OFDM 256QAM	1	1	18.00	16.88	16.92	16.90
SCS 15 kHz						

Sensor on						
n66			**Maximum Output Power (dBm)**			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				342500/1712.5	349000/1745	355500/1777.5
DFT-s-OFDM PI/2 BPSK	1	1	19.50	18.79	18.91	19.04
		13		18.84	18.97	18.89
		23		18.93	18.94	18.75
	12	0	19.50	19.05	19.09	19.05
		6		19.03	19.10	18.97
		13		18.95	19.00	19.01
	25	0	19.50	19.03	18.99	18.98
DFT-s-OFDM QPSK	1	1	19.50	18.81	18.91	18.76
		13		18.83	18.86	18.86
		23		19.00	19.00	18.94
	12	0	19.50	18.96	19.01	18.92
		6		19.05	19.01	18.91

		13		19.02	19.07	18.92
	25	0	19.50	19.13	19.00	18.90
DFT-s-OFDM 16QAM	1	1	19.50	18.66	18.72	18.38
DFT-s-OFDM 64QAM	1	1	19.50	18.81	18.86	18.77
DFT-s-OFDM 256QAM	1	1	19.50	18.95	18.99	19.01
CP-OFDM QPSK	1	1	19.50	18.95	18.98	18.98
CP-OFDM 16QAM	1	1	19.50	19.11	19.05	19.08
CP-OFDM 64QAM	1	1	19.50	19.03	19.11	19.06
CP-OFDM 256QAM	1	1	18.00	16.93	16.90	16.90
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				343000/1715	349000/1745	355000/1775
DFT-s-OFDM PI/2 BPSK	1	1	19.50	18.90	18.90	18.97
		26		18.88	18.94	18.89
		50		18.83	18.90	18.80
	25	0	19.50	18.92	18.90	18.89
		13		19.00	18.86	18.87
		27		18.87	18.90	19.00
	50	0	19.50	19.01	19.09	18.88
DFT-s-OFDM QPSK	1	1	19.50	18.79	18.88	18.84
		26		18.92	18.72	18.83
		50		18.97	18.98	18.91
	25	0	19.50	19.05	19.03	18.88
		13		19.10	18.97	18.88
		27		19.05	18.84	18.88
	50	0	19.50	18.96	18.87	18.86
DFT-s-OFDM 16QAM	1	1	19.50	18.74	18.77	18.63
DFT-s-OFDM 64QAM	1	1	19.50	18.84	18.86	18.80

DFT-s-OFDM 256QAM	1	1	19.50	18.94	19.01	19.04
CP-OFDM QPSK	1	1	19.50	18.98	19.03	18.98
CP-OFDM 16QAM	1	1	19.50	19.13	19.09	19.11
CP-OFDM 64QAM	1	1	19.50	19.06	19.16	19.10
CP-OFDM 256QAM	1	1	18.00	16.96	16.95	16.94
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				343500/1717.5	349000/1745	354500/1772.5
DFT-s-OFDM PI/2 BPSK	1	1	19.50	18.87	18.94	18.99
		39		18.82	18.95	18.92
		77		18.86	18.95	18.83
	36	0	19.50	19.00	18.97	18.98
		18		19.03	19.10	18.97
		43		18.96	18.99	19.02
	75	0	19.50	19.05	18.99	18.94
DFT-s-OFDM QPSK	1	1	19.50	18.94	19.04	19.06
		39		18.96	18.91	18.99
		77		19.04	19.08	18.98
	36	0	19.50	19.02	18.92	18.97
		18		19.08	19.10	18.98
		43		19.03	18.98	18.99
	75	0	19.50	19.03	19.00	18.96
DFT-s-OFDM 16QAM	1	1	19.50	18.63	18.69	18.55
DFT-s-OFDM 64QAM	1	1	19.50	18.80	18.88	18.78
DFT-s-OFDM 256QAM	1	1	19.50	18.95	19.00	19.05
CP-OFDM QPSK	1	1	19.50	18.97	19.07	18.99
CP-OFDM 16QAM	1	1	19.50	19.11	19.06	19.10
CP-OFDM 64QAM	1	1	19.50	19.10	19.12	18.99

CP-OFDM 256QAM	1	1	18.00	16.80	16.72	16.76
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				344000/1720	349000/1745	354000/1770
DFT-s-OFDM PI/2 BPSK	1	1	19.50	18.94	18.98	19.02
		53		18.91	18.99	18.94
		104		18.88	18.96	18.89
	50	0	19.50	19.03	19.05	19.02
		25		19.01	19.06	19.00
		56		18.99	19.04	18.98
	100	0	19.50	19.02	19.06	19.03
DFT-s-OFDM QPSK	1	1	19.50	19.11	19.05	19.01
		53		18.97	18.98	19.00
		104		19.13	19.15	19.07
	50	0	19.50	19.05	19.02	19.00
		25		19.11	19.14	19.06
		56		19.06	18.99	19.01
	100	0	19.50	19.08	19.02	18.99
DFT-s-OFDM 16QAM	1	1	19.50	18.67	18.71	18.56
DFT-s-OFDM 64QAM	1	1	19.50	18.78	18.81	18.74
DFT-s-OFDM 256QAM	1	1	19.50	18.89	18.94	18.99
CP-OFDM QPSK	1	1	19.50	18.92	18.97	18.92
CP-OFDM 16QAM	1	1	19.50	19.07	19.02	19.04
CP-OFDM 64QAM	1	1	19.50	19.01	19.07	19.03
CP-OFDM 256QAM	1	1	18.00	16.91	16.86	16.87
SCS 15 kHz						

Hotspot on				
n66			**Maximum Output Power (dBm)**	
Modulation	RB	RB Offset	Tune up	5MHz
				Channel/Frequency(MHz)

				342500/1712.5	349000/1745	355500/1777.5
DFT-s-OFDM PI/2 BPSK	1	1	22.00	21.35	21.41	21.52
		13		21.42	21.51	21.38
		23		21.52	21.50	21.35
	12	0	22.00	21.53	21.59	21.54
		6		21.52	21.51	21.49
		13		21.45	21.45	21.50
	25	0	22.00	21.53	21.41	21.36
DFT-s-OFDM QPSK	1	1	22.00	21.42	21.42	21.32
		13		21.41	21.44	21.38
		23		21.44	21.47	21.46
	12	0	22.00	21.38	21.50	21.41
		6		21.53	21.47	21.40
		13		21.50	21.60	21.35
	25	0	22.00	21.58	21.52	21.39
DFT-s-OFDM 16QAM	1	1	22.00	21.12	21.21	20.96
DFT-s-OFDM 64QAM	1	1	22.00	20.81	20.90	20.83
DFT-s-OFDM 256QAM	1	1	20.50	19.45	19.48	19.39
CP-OFDM QPSK	1	1	22.00	21.55	21.43	21.45
CP-OFDM 16QAM	1	1	22.00	21.51	21.48	21.36
CP-OFDM 64QAM	1	1	21.00	20.11	20.09	20.00
CP-OFDM 256QAM	1	1	18.00	16.85	16.95	16.89
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				343000/1715	349000/1745	355000/1775
DFT-s-OFDM PI/2 BPSK	1	1	22.00	21.46	21.40	21.45
		26		21.46	21.48	21.38
		50		21.42	21.46	21.40
	25	0	22.00	21.46	21.46	21.44
		13		21.55	21.40	21.45
		27		21.40	21.45	21.59
	50	0	22.00	21.47	21.54	21.29

DFT-s-OFDM QPSK	1	1	22.00	21.37	21.36	21.37
		26		21.50	21.30	21.35
		50		21.41	21.45	21.43
	25	0	22.00	21.47	21.52	21.37
		13		21.58	21.43	21.37
		27		21.53	21.37	21.31
	50	0	22.00	21.54	21.51	21.45
DFT-s-OFDM 16QAM	1	1	22.00	21.24	21.32	21.25
DFT-s-OFDM 64QAM	1	1	22.00	20.84	20.83	20.79
DFT-s-OFDM 256QAM	1	1	20.50	19.44	19.46	19.38
CP-OFDM QPSK	1	1	22.00	21.51	21.51	21.48
CP-OFDM 16QAM	1	1	22.00	21.47	21.61	21.49
CP-OFDM 64QAM	1	1	21.00	20.14	20.24	20.14
CP-OFDM 256QAM	1	1	18.00	16.88	17.00	16.93

Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				343500/1717.5	349000/1745	354500/1772.5
DFT-s-OFDM PI/2 BPSK	1	1	22.00	21.43	21.44	21.47
		39		21.40	21.49	21.41
		77		21.45	21.51	21.43
	36	0	22.00	21.48	21.47	21.47
		18		21.45	21.51	21.42
		43		21.36	21.41	21.48
	75	0	22.00	21.45	21.38	21.29
DFT-s-OFDM QPSK	1	1	22.00	21.46	21.46	21.53
		39		21.48	21.43	21.45
		77		21.48	21.55	21.50
	36	0	22.00	21.51	21.48	21.53
		18		21.56	21.56	21.47
		43		21.51	21.51	21.42
	75	0	22.00	21.58	21.54	21.45

DFT-s-OFDM 16QAM	1	1	22.00	21.16	21.20	21.13
DFT-s-OFDM 64QAM	1	1	22.00	20.80	20.85	20.77
DFT-s-OFDM 256QAM	1	1	20.50	19.45	19.45	19.39
CP-OFDM QPSK	1	1	22.00	21.55	21.51	21.56
CP-OFDM 16QAM	1	1	22.00	21.46	21.50	21.48
CP-OFDM 64QAM	1	1	21.00	20.18	20.20	20.03
CP-OFDM 256QAM	1	1	18.00	16.72	16.77	16.75
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				344000/1720	349000/1745	354000/1770
DFT-s-OFDM PI/2 BPSK	1	1	22.00	21.50	21.48	21.50
		53		21.49	21.53	21.43
		104		21.47	21.52	21.49
	50	0	22.00	21.51	21.55	21.51
		25		21.50	21.54	21.52
		56		21.49	21.56	21.54
	100	0	22.00	21.52	21.55	21.48
DFT-s-OFDM QPSK	1	1	22.00	21.54	21.52	21.54
		53		21.54	21.55	21.51
		104		21.56	21.62	21.58
	50	0	22.00	21.51	21.55	21.53
		25		21.59	21.60	21.54
		56		21.58	21.56	21.48
	100	0	22.00	21.59	21.60	21.52
DFT-s-OFDM 16QAM	1	1	22.00	21.17	21.26	21.18
DFT-s-OFDM 64QAM	1	1	22.00	20.78	20.85	20.80
DFT-s-OFDM 256QAM	1	1	20.50	19.39	19.46	19.40

CP-OFDM QPSK	1	1	22.00	21.61	21.52	21.49
CP-OFDM 16QAM	1	1	22.00	21.59	21.55	21.42
CP-OFDM 64QAM	1	1	21.00	20.09	20.15	20.07
CP-OFDM 256QAM	1	1	18.00	16.83	16.91	16.86
SCS 15 kHz						

n71(ANT1)

Full Power/Hotspot on						
n71			Maximum Output Power (dBm)			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				133100/665.5	136100/680.5	139100/695.5
DFT-s-OFDM PI/2 BPSK	1	1	25.00	24.04	23.97	23.99
		13		23.91	23.93	24.00
		23		24.06	23.89	24.02
	12	0	25.00	23.47	23.62	23.64
		6		23.98	24.10	24.16
		13		23.57	23.41	23.56
	25	0	25.00	23.48	23.50	23.62
DFT-s-OFDM QPSK	1	1	25.00	24.04	24.18	23.91
		13		24.03	24.07	23.95
		23		24.08	23.96	23.98
	12	0	25.00	23.07	22.98	22.95
		6		24.14	24.20	23.99
		13		23.21	23.20	22.99
	25	0	24.00	23.16	23.21	23.12
DFT-s-OFDM 16QAM	1	1	23.50	22.88	22.93	22.96
DFT-s-OFDM 64QAM	1	1	22.50	21.44	21.42	21.51
DFT-s-OFDM 256QAM	1	1	21.00	20.04	20.07	20.09
CP-OFDM QPSK	1	1	23.50	22.66	22.52	22.67
CP-OFDM 16QAM	1	1	23.50	22.49	22.52	22.57

CP-OFDM 64QAM	1	1	21.50	20.73	20.86	20.81
CP-OFDM 256QAM	1	1	18.50	17.52	17.57	17.53
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				133600/668	136100/680.5	138600/693
DFT-s-OFDM PI/2 BPSK	1	1	25.00	24.02	24.02	24.02
		26		23.94	23.96	24.02
		50		24.10	23.95	24.00
	25	0	25.00	23.42	23.38	23.56
		13		23.97	24.00	24.02
		27		23.48	23.42	23.58
	50	0	25.00	23.49	23.51	23.50
DFT-s-OFDM QPSK	1	1	25.00	23.99	24.15	24.08
		26		24.01	24.02	24.05
		50		24.05	24.06	24.06
	25	0	25.00	23.05	22.99	23.03
		13		24.07	24.11	23.98
		27		23.12	23.09	23.00
	50	0	24.00	23.14	23.17	23.10
DFT-s-OFDM 16QAM	1	1	23.50	22.82	22.90	22.93
DFT-s-OFDM 64QAM	1	1	22.50	21.40	21.50	21.56
DFT-s-OFDM 256QAM	1	1	21.00	20.05	20.13	20.16
CP-OFDM QPSK	1	1	23.50	22.66	22.57	22.76
CP-OFDM 16QAM	1	1	23.50	22.46	22.41	22.55
CP-OFDM 64QAM	1	1	21.50	20.77	20.82	20.70
CP-OFDM 256QAM	1	1	18.50	17.37	17.35	17.34
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				134100/670.5	136100/680.5	138100/690.5
DFT-s-OFDM PI/2 BPSK	1	1	25.00	24.05	23.98	24.00
		39		24.00	23.95	23.99
		77		24.07	23.90	23.97
	36	0	25.00	23.47	23.44	23.60

		18		24.00	23.82	23.98
		43		23.45	23.39	23.62
	75	0	25.00	23.51	23.67	23.50
DFT-s-OFDM QPSK	1	1	25.00	23.90	24.05	23.92
		39		24.03	23.89	23.95
		77		23.98	23.96	23.99
	36	0	25.00	23.08	23.10	22.94
		18		24.09	23.98	23.88
		43		23.21	23.02	22.96
	75	0	24.00	23.07	23.04	23.00
DFT-s-OFDM 16QAM	1	1	23.50	22.87	22.92	22.95
DFT-s-OFDM 64QAM	1	1	22.50	21.44	21.48	21.58
DFT-s-OFDM 256QAM	1	1	21.00	20.04	20.14	20.15
CP-OFDM QPSK	1	1	23.50	22.67	22.53	22.68
CP-OFDM 16QAM	1	1	23.50	22.48	22.44	22.49
CP-OFDM 64QAM	1	1	21.50	20.73	20.86	20.81
CP-OFDM 256QAM	1	1	18.50	17.53	17.58	17.52
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				134600/673	136100/680.5	137600/688
DFT-s-OFDM PI/2 BPSK	1	1	25.00	24.09	24.06	24.05
		53		24.03	24.00	24.04
		104		24.12	23.96	24.06
	50	0	25.00	23.52	23.53	23.67
		25		24.02	24.03	24.12
		56		23.58	23.54	23.61
	100	0	25.00	23.53	23.65	23.66
DFT-s-OFDM QPSK	1	1	25.00	24.24	24.26	24.15
		53		24.12	24.19	24.16
		104		24.18	24.18	24.19
	50	0	25.00	23.17	23.18	23.15
		25		24.15	24.20	24.10
		56		23.21	23.11	23.12
	100	0	24.00	23.12	23.14	23.07

DFT-s-OFDM 16QAM	1	1	23.50	22.80	22.86	22.88
DFT-s-OFDM 64QAM	1	1	22.50	21.38	21.43	21.52
DFT-s-OFDM 256QAM	1	1	21.00	19.99	20.07	20.10
CP-OFDM QPSK	1	1	23.50	22.61	22.54	22.69
CP-OFDM 16QAM	1	1	23.50	22.42	22.44	22.49
CP-OFDM 64QAM	1	1	21.50	20.68	20.77	20.74
CP-OFDM 256QAM	1	1	18.50	17.48	17.49	17.45
SCS 15 kHz						

10.3 Wi-Fi Measurement result

Wi-Fi 2.4G Tune up

Mode	BW	Channel/Frequency(MHz)	Tune up(dBm)
802.11b	20M	1/2412	20.70
		6/2437	20.70
		11/2462	20.70
802.11g	20M	1/2412	16.50
		6/2437	19.00
		11/2462	15.00
802.11n	20M	1/2412	15.50
		6/2437	19.00
		11/2462	14.50

Wi-Fi 5G Tune up

	Mode	BW	Channel/Frequency(MHz)	Tune up
U-NII-1	802.11a	20M	36/5180	18.50
			40/5200	19.50
			48/5240	19.50
	802.11n	20M	36/5180	17.00
			40/5200	19.50
			48/5240	19.50
		40M	38/5190	16.00
			46/5230	19.50
	802.11ac	20M	36/5180	18.00
			40/5200	19.50
			48/5240	19.50
		40M	38/5190	16.00
			46/5230	19.50
		80M	42/5210	15.00
U-NII-3	802.11a	20M	149/5745	18.00
			157/5785	18.00

			165/5825	18.00
	802.11n	20M	149/5745	17.50
			157/5785	17.50
			165/5825	17.50
		40M	151/5755	17.50
			159/5795	17.50
	802.11ac	20M	149/5745	17.50
			157/5785	17.50
			165/5825	17.50
		40M	151/5755	17.50
			159/5795	17.50
		80M	155/5775	16.00

The maximum output power for Wi-Fi 2.4G ANT6

Full Power/Hotspot on				
Wi-Fi 2.4G			**Maximum Output Power (dBm)**	
Mode	BW	Channel/Frequency(MHz)	Tune up(dBm)	Output Power(dBm)
802.11b	20M	1/2412	20.70	19.42
		6/2437	20.70	19.67
		11/2462	20.70	19.66
802.11g	20M	1/2412	16.50	15.36
		6/2437	19.00	18.05
		11/2462	15.00	14.12
802.11n	20M	1/2412	15.50	14.04
		6/2437	19.00	17.72
		11/2462	14.50	13.22

The maximum output power for Wi-Fi 5G ANT6

Full Power/Hotspot on					
Wi-Fi 5G				**Maximum Output Power (dBm)**	
	Mode	BW	Channel/Frequency(MHz)	Tune up	Output Power
U-NII-1	802.11a	20M	36/5180	18.50	17.43

			40/5200	19.50	18.44
			48/5240	19.50	18.51
	802.11n	20M	36/5180	17.00	15.51
			40/5200	19.50	18.45
			48/5240	19.50	18.48
		40M	38/5190	16.00	14.64
			46/5230	19.50	18.04
	802.11ac	20M	36/5180	18.00	16.50
			40/5200	19.50	18.49
			48/5240	19.50	18.50
		40M	38/5190	16.00	14.62
			46/5230	19.50	18.08
		80M	42/5210	15.00	13.56
U-NII-3	802.11a	20M	149/5745	18.00	17.23
			157/5785	18.00	17.18
			165/5825	18.00	17.12
	802.11n	20M	149/5745	17.50	16.73
			157/5785	17.50	16.71
			165/5825	17.50	16.66
		40M	151/5755	17.50	16.71
			159/5795	17.50	16.66
	802.11ac	20M	149/5745	17.50	16.72
			157/5785	17.50	16.76
			165/5825	17.50	16.68
		40M	151/5755	17.50	16.73
			159/5795	17.50	16.71
		80M	155/5775	16.00	14.76

11 SAR Test Result

Note:

KDB 447498 D01 General RF Exposure Guidance:

For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor

For BT/WLAN: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor

Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:

≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz

≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz

≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

KDB 648474 D04 Handset SAR:

With headset attached, when the reported SAR for body-worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

KDB 941225 D01 SAR test for 3G devices:

When the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ 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.

KDB 941225 D05 SAR for LTE Devices:

SAR test reduction is applied using the following criteria:

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB, and 50% RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel.

When the reported SAR is > 0.8 W/kg, testing for other Channels is performed at the highest output power level for 1RB, and 50% RB configuration for that channel.

Testing for 100% RB configuration is performed at the highest output power level for 100% RB configuration across the Low,Mid and High Channel when the highest reported SAR for 1 RB and 50% RB are > 0.8 W/kg. Testing for the remaining required channels is not needed because the reported SAR for 100% RB Allocation < 1.45 W/kg.

Testing for 16-QAM modulation is not required because the reported SAR for QPSK is < 1.45 W/Kg and its output power is not more than 0.5 dB higher than that of QPSK.

Testing for the other channel bandwidths is not required because the reported SAR for the highest channel bandwidth is <1.45 W/Kg and its output power is not more than 0.5 dB higher than that of the highest channel bandwidth.

For LTE bands that do not support at least three non-overlapping channels in certain channel bandwidths, test the available non-overlapping channels instead. When a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the

group of overlapping channels should be selected for testing; therefore, the requirement for H, M and L channels may not fully apply.

KDB 248227 D01 SAR meas for 802.11:

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.

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.

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:

$\leqslant$ 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 $\leqslant$ 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 $\leqslant$ 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 $\leqslant$ 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.

Table 15.1: Duty Cycle

Mode	Duty Cycle
LTE FDD	1:1
TDD PC3	1:1.58
TDD PC2	1:2.31

11.1 SAR results for LTE

LTE Band 2 ANT1

Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (5mm)														
Front Side	Sensor on	QPSK	20	1	low	18900	1880	17.52	18.50	0.17	0.387	1.25	0.485	/
Back Side	Sensor on	QPSK	20	1	low	18900	1880	17.52	18.50	0.19	0.849	1.25	1.064	/
Left Side	Sensor on	QPSK	20	1	low	18900	1880	17.52	18.50	-0.13	0.589	1.25	0.738	/
Right Side	Sensor off	QPSK	20	1	low	18900	1880	23.43	24.50	-0.05	0.059	1.28	0.075	/
Top Side	Sensor off	QPSK	20	1	low	18900	1880	23.43	24.50	0.01	0.164	1.28	0.210	/
Bottom Side	Sensor on	QPSK	20	1	low	18900	1880	17.52	18.50	0.00	0.262	1.25	0.328	/
Front Side	Sensor on	QPSK	20	50%	low	18900	1880	16.41	17.50	0.18	0.298	1.29	0.383	/
Back Side	Sensor on	QPSK	20	50%	low	18900	1880	16.41	17.50	0.04	0.695	1.29	0.893	/
Left Side	Sensor on	QPSK	20	50%	low	18900	1880	16.41	17.50	-0.01	0.482	1.29	0.620	/
Right Side	Sensor off	QPSK	20	50%	mid	18700	1860	22.42	23.50	-0.03	0.041	1.28	0.052	/
Top Side	Sensor off	QPSK	20	50%	mid	18700	1860	22.42	23.50	-0.01	0.084	1.28	0.108	/
Bottom Side	Sensor on	QPSK	20	50%	low	18900	1880	16.41	17.50	-0.15	0.212	1.29	0.272	/
Back Side	Sensor on	QPSK	20	1	low	18700	1860	17.46	18.50	0.15	0.724	1.27	0.920	/
Back Side	Sensor on	QPSK	20	1	mid	19100	1900	17.47	18.50	0.15	0.933	1.27	1.183	FIG A.1
Back Side	Sensor on	QPSK	20	50%	low	18700	1860	16.33	17.50	0.07	0.535	1.31	0.700	/
Back Side	Sensor on	QPSK	20	50%	low	19100	1900	16.39	17.50	-0.02	0.734	1.29	0.948	/
Back Side	Sensor on	QPSK	20	100%	low	18900	1880	16.38	17.50	0.04	0.694	1.29	0.898	/
Repeat														
Back Side	Sensor on	QPSK	20	1	low	18900	1880	17.52	18.50	0.10	0.847	1.25	1.061	/
Back Side	Sensor on	QPSK	20	1	mid	19100	1900	17.47	18.50	0.03	0.932	1.27	1.181	/
Hotspot SAR (10mm)														
Front Side	Hotstop on	QPSK	20	1	low	18900	1880	21.08	22.00	-0.13	0.514	1.24	0.635	/
Back Side	Hotstop on	QPSK	20	1	low	18900	1880	21.08	22.00	0.17	0.798	1.24	0.986	/
Left Side	Hotstop on	QPSK	20	1	low	18900	1880	21.08	22.00	0.16	0.786	1.24	0.971	/
Right Side	Hotstop on	QPSK	20	1	low	18900	1880	21.08	22.00	0.12	0.026	1.24	0.032	/
Top Side	Hotstop on	QPSK	20	1	low	18900	1880	21.08	22.00	0.19	0.027	1.24	0.033	/
Bottom Side	Hotstop on	QPSK	20	1	low	18900	1880	21.08	22.00	0.15	0.272	1.24	0.336	/
Front Side	Hotstop on	QPSK	20	50%	low	18900	1880	20.04	21.00	0.17	0.413	1.25	0.515	/
Back Side	Hotstop on	QPSK	20	50%	low	18900	1880	20.04	21.00	0.13	0.655	1.25	0.817	/
Left Side	Hotstop on	QPSK	20	50%	low	18900	1880	20.04	21.00	0.13	0.645	1.25	0.805	/
Right Side	Hotstop on	QPSK	20	50%	low	18900	1880	20.04	21.00	0.18	0.033	1.25	0.041	/
Top Side	Hotstop on	QPSK	20	50%	low	18900	1880	20.04	21.00	-0.12	0.020	1.25	0.025	/
Bottom Side	Hotstop on	QPSK	20	50%	low	18900	1880	20.04	21.00	-0.13	0.191	1.25	0.238	/
Back Side	Hotstop on	QPSK	20	1	low	18700	1860	21.04	22.00	0.19	0.688	1.25	0.858	/
Back Side	Hotstop on	QPSK	20	1	low	19100	1900	21.06	22.00	0.15	0.895	1.24	1.111	/
Left Side	Hotstop on	QPSK	20	1	low	18700	1860	21.04	22.00	0.19	0.665	1.25	0.830	/
Left Side	Hotstop on	QPSK	20	1	low	19100	1900	21.06	22.00	0.14	0.915	1.24	1.136	FIG A.2
Back Side	Hotstop on	QPSK	20	50%	low	18700	1860	19.92	21.00	-0.10	0.578	1.28	0.741	/
Back Side	Hotstop on	QPSK	20	50%	low	19100	1900	19.97	21.00	-0.04	0.801	1.27	1.015	/
Left Side	Hotstop on	QPSK	20	50%	low	18700	1860	19.92	21.00	0.00	0.510	1.28	0.654	/
Left Side	Hotstop on	QPSK	20	50%	low	19100	1900	19.97	21.00	-0.04	0.785	1.27	0.995	/
Back Side	Hotstop on	QPSK	20	100%	low	18900	1880	19.94	21.00	0.03	0.654	1.28	0.835	/
Left Side	Hotstop on	QPSK	20	100%	low	18900	1880	19.94	21.00	0.02	0.636	1.28	0.812	/
Repeat														
Back Side	Hotstop on	QPSK	20	1	low	19100	1900	21.06	22.00	0.03	0.894	1.24	1.110	/
Left Side	Hotstop on	QPSK	20	1	low	19100	1900	21.06	22.00	0.03	0.906	1.24	1.125	/
Back Side	Hotstop on	QPSK	20	50%	low	19100	1900	19.97	21.00	0.03	0.798	1.27	1.012	/
Body SAR (Front 29mm,Back 31mm, Left 49mm, Bottom 49mm)														
Front Side	Sensor off	QPSK	20	1	low	18900	1880	23.43	24.50	-0.09	0.169	1.28	0.216	/
Back Side	Sensor off	QPSK	20	1	low	18900	1880	23.43	24.50	0.05	0.250	1.28	0.320	/
Left Side	Sensor off	QPSK	20	1	low	18900	1880	23.43	24.50	0.07	0.146	1.28	0.187	/
Bottom Side	Sensor off	QPSK	20	1	low	18900	1880	23.43	24.50	-0.03	0.063	1.28	0.080	/
Front Side	Sensor off	QPSK	20	50%	mid	18700	1860	22.42	23.50	-0.17	0.133	1.28	0.171	/
Back Side	Sensor off	QPSK	20	50%	mid	18700	1860	22.42	23.50	-0.04	0.202	1.28	0.259	/
Left Side	Sensor off	QPSK	20	50%	mid	18700	1860	22.42	23.50	-0.05	0.116	1.28	0.149	/
Bottom Side	Sensor off	QPSK	20	50%	mid	18700	1860	22.42	23.50	-0.04	0.050	1.28	0.064	/

LTE Band 12 ANT1

Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (5mm)														
Front Side	Full power	QPSK	10	1	low	23095	707.5	21.86	23.00	0.02	0.582	1.30	0.757	/
Back Side	Full power	QPSK	10	1	low	23095	707.5	21.86	23.00	0.09	0.434	1.30	0.564	/
Left Side	Full power	QPSK	10	1	low	23095	707.5	21.86	23.00	0.11	0.311	1.30	0.404	/
Right Side	Full power	QPSK	10	1	low	23095	707.5	21.86	23.00	0.11	0.054	1.30	0.070	/
Top Side	Full power	QPSK	10	1	low	23095	707.5	21.86	23.00	-0.12	0.334	1.30	0.434	/
Bottom Side	Full power	QPSK	10	1	low	23095	707.5	21.86	23.00	0.05	0.592	1.30	0.770	FIG A.3
Front Side	Full power	QPSK	10	50%	low	23095	707.5	20.84	22.00	0.02	0.472	1.31	0.617	/
Back Side	Full power	QPSK	10	50%	low	23095	707.5	20.84	22.00	-0.13	0.354	1.31	0.462	/
Left Side	Full power	QPSK	10	50%	low	23095	707.5	20.84	22.00	0.17	0.243	1.31	0.317	/
Right Side	Full power	QPSK	10	50%	low	23095	707.5	20.84	22.00	0.17	0.044	1.31	0.058	/
Top Side	Full power	QPSK	10	50%	low	23095	707.5	20.84	22.00	0.01	0.287	1.31	0.375	/
Bottom Side	Full power	QPSK	10	50%	low	23095	707.5	20.84	22.00	0.06	0.486	1.31	0.635	/
Hotspot SAR (10mm)														
Front Side	Hotstop on	QPSK	10	1	low	23095	707.5	21.86	23.00	0.03	0.465	1.30	0.605	FIG A.4
Back Side	Hotstop on	QPSK	10	1	low	23095	707.5	21.86	23.00	0.01	0.391	1.30	0.508	/
Left Side	Hotstop on	QPSK	10	1	low	23095	707.5	21.86	23.00	0.19	0.158	1.30	0.205	/
Right Side	Hotstop on	QPSK	10	1	low	23095	707.5	21.86	23.00	0.11	0.026	1.30	0.034	/
Top Side	Hotstop on	QPSK	10	1	low	23095	707.5	21.86	23.00	-0.01	0.214	1.30	0.278	/
Bottom Side	Hotstop on	QPSK	10	1	low	23095	707.5	21.86	23.00	0.06	0.377	1.30	0.490	/
Front Side	Hotstop on	QPSK	10	50%	low	23095	707.5	20.84	22.00	0.02	0.374	1.31	0.489	/
Back Side	Hotstop on	QPSK	10	50%	low	23095	707.5	20.84	22.00	0.04	0.305	1.31	0.398	/
Left Side	Hotstop on	QPSK	10	50%	low	23095	707.5	20.84	22.00	0.13	0.113	1.31	0.148	/
Right Side	Hotstop on	QPSK	10	50%	low	23095	707.5	20.84	22.00	0.17	0.021	1.31	0.027	/
Top Side	Hotstop on	QPSK	10	50%	low	23095	707.5	20.84	22.00	0.02	0.182	1.31	0.238	/
Bottom Side	Hotstop on	QPSK	10	50%	low	23095	707.5	20.84	22.00	0.05	0.299	1.31	0.391	/

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Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (5mm)														
Front Side	Sensor on	QPSK	20	1	low	26365	1882.5	17.56	18.50	0.13	0.433	1.24	0.538	/
Back Side	Sensor on	QPSK	20	1	low	26365	1882.5	17.56	18.50	-0.05	0.879	1.24	1.091	/
Left Side	Sensor on	QPSK	20	1	low	26365	1882.5	17.56	18.50	0.18	0.728	1.24	0.904	/
Right Side	Sensor off	QPSK	20	1	low	26365	1882.5	21.89	23.00	0.05	0.032	1.29	0.041	/
Top Side	Sensor off	QPSK	20	1	low	26365	1882.5	21.89	23.00	-0.02	0.070	1.29	0.091	/
Bottom Side	Sensor on	QPSK	20	1	low	26365	1882.5	17.56	18.50	0.12	0.279	1.24	0.346	/
Front Side	Sensor on	QPSK	20	50%	low	26365	1882.5	16.55	17.50	0.16	0.291	1.24	0.362	/
Back Side	Sensor on	QPSK	20	50%	low	26365	1882.5	16.55	17.50	0.15	0.735	1.24	0.915	/
Left Side	Sensor on	QPSK	20	50%	low	26365	1882.5	16.55	17.50	0.19	0.597	1.24	0.743	/
Right Side	Sensor off	QPSK	20	50%	low	26365	1882.5	20.86	22.00	0.05	0.026	1.30	0.034	/
Top Side	Sensor off	QPSK	20	50%	low	26365	1882.5	20.86	22.00	0.05	0.024	1.30	0.031	/
Bottom Side	Sensor on	QPSK	20	50%	low	26365	1882.5	16.55	17.50	-0.15	0.225	1.24	0.280	/
Back Side	Sensor on	QPSK	20	1	low	26140	1860	17.51	18.50	0.11	0.768	1.26	0.965	/
Back Side	Sensor on	QPSK	20	1	low	26590	1905	17.52	18.50	-0.03	0.886	1.25	1.110	FIG A.5
Left Side	Sensor on	QPSK	20	1	low	26140	1860	17.51	18.50	0.18	0.550	1.26	0.691	/
Left Side	Sensor on	QPSK	20	1	low	26590	1905	17.52	18.50	0.13	0.865	1.25	1.084	/
Back Side	Sensor on	QPSK	20	50%	low	26140	1860	16.48	17.50	0.11	0.628	1.26	0.794	/
Back Side	Sensor on	QPSK	20	50%	low	26590	1905	16.50	17.50	0.13	0.838	1.26	1.055	/
Back Side	Sensor on	QPSK	20	100%	low	26365	1882.5	16.45	17.50	0.03	0.640	1.27	0.815	/
Left Side	Sensor on	QPSK	20	100%	low	26365	1882.5	16.45	17.50	0.06	0.722	1.27	0.919	/
Repeat														
Back Side	Sensor on	QPSK	20	1	low	26365	1882.5	17.56	18.50	-0.01	0.873	1.24	1.084	/
Back Side	Sensor on	QPSK	20	1	low	26590	1905	17.52	18.50	-0.01	0.886	1.25	1.110	/
Left Side	Sensor on	QPSK	20	1	low	26590	1905	17.52	18.50	0.02	0.862	1.25	1.080	/
Back Side	Sensor on	QPSK	20	50%	low	26590	1905	16.50	17.50	0.02	0.832	1.26	1.047	/
Hotspot SAR (10mm)														
Front Side	Hotstop on	QPSK	20	1	low	26365	1882.5	21.19	22.00	0.13	0.586	1.21	0.706	/
Back Side	Hotstop on	QPSK	20	1	low	26365	1882.5	21.19	22.00	0.13	0.894	1.21	1.077	/
Left Side	Hotstop on	QPSK	20	1	low	26365	1882.5	21.19	22.00	0.15	0.879	1.21	1.059	/
Right Side	Hotstop on	QPSK	20	1	low	26365	1882.5	21.19	22.00	0.16	0.032	1.21	0.038	/
Top Side	Hotstop on	QPSK	20	1	low	26365	1882.5	21.19	22.00	-0.05	0.028	1.21	0.033	/
Bottom Side	Hotstop on	QPSK	20	1	low	26365	1882.5	21.19	22.00	0.04	0.315	1.21	0.380	/
Front Side	Hotstop on	QPSK	20	50%	low	26365	1882.5	20.11	21.00	0.17	0.470	1.23	0.577	/
Back Side	Hotstop on	QPSK	20	50%	low	26365	1882.5	20.11	21.00	0.12	0.743	1.23	0.912	/
Left Side	Hotstop on	QPSK	20	50%	low	26365	1882.5	20.11	21.00	0.19	0.727	1.23	0.892	/
Right Side	Hotstop on	QPSK	20	50%	low	26365	1882.5	20.11	21.00	0.05	0.026	1.23	0.032	/
Top Side	Hotstop on	QPSK	20	50%	low	26365	1882.5	20.11	21.00	-0.04	0.022	1.23	0.027	/
Bottom Side	Hotstop on	QPSK	20	50%	low	26365	1882.5	20.11	21.00	-0.18	0.256	1.23	0.314	/
Back Side	Hotstop on	QPSK	20	1	low	26140	1860	21.14	22.00	0.12	0.751	1.22	0.915	/
Back Side	Hotstop on	QPSK	20	1	low	26590	1905	21.12	22.00	0.14	0.992	1.22	1.215	/
Left Side	Hotstop on	QPSK	20	1	low	26140	1860	21.14	22.00	-0.02	0.721	1.22	0.879	/
Left Side	Hotstop on	QPSK	20	1	low	26590	1905	21.12	22.00	-0.04	1.040	1.22	1.274	FIG A.6
Back Side	Hotstop on	QPSK	20	50%	low	26140	1860	20.07	21.00	0.14	0.614	1.24	0.761	/
Back Side	Hotstop on	QPSK	20	50%	low	26590	1905	20.09	21.00	0.12	0.804	1.23	0.991	/
Left Side	Hotstop on	QPSK	20	50%	low	26140	1860	20.07	21.00	-0.06	0.575	1.24	0.712	/
Left Side	Hotstop on	QPSK	20	50%	low	26590	1905	20.09	21.00	-0.03	0.905	1.23	1.116	/
Back Side	Hotstop on	QPSK	20	100%	low	26365	1882.5	20.03	21.00	0.03	0.735	1.25	0.919	/
Left Side	Hotstop on	QPSK	20	100%	low	26365	1882.5	20.03	21.00	0.04	0.724	1.25	0.905	/
Repeat														
Back Side	Hotstop on	QPSK	20	1	low	26365	1882.5	21.19	22.00	0.02	0.884	1.21	1.065	/
Left Side	Hotstop on	QPSK	20	1	low	26365	1882.5	21.19	22.00	0.04	0.879	1.21	1.059	/
Back Side	Hotstop on	QPSK	20	1	low	26590	1905	21.12	22.00	0.02	0.985	1.22	1.206	/
Left Side	Hotstop on	QPSK	20	1	low	26590	1905	21.12	22.00	-0.03	1.030	1.22	1.261	/
Back Side	Hotstop on	QPSK	20	50%	low	26590	1905	20.09	21.00	0.02	0.798	1.23	0.984	/
Left Side	Hotstop on	QPSK	20	50%	low	26590	1905	20.09	21.00	0.04	0.899	1.23	1.109	/
Body SAR (Front 29mm,Back 31mm, Left 49mm, Bottom 49mm)														
Front Side	Sensor off	QPSK	20	1	low	26365	1882.5	21.89	23.00	-0.17	0.168	1.29	0.217	/
Back Side	Sensor off	QPSK	20	1	low	26365	1882.5	21.89	23.00	-0.02	0.252	1.29	0.325	/
Left Side	Sensor off	QPSK	20	1	low	26365	1882.5	21.89	23.00	-0.05	0.146	1.29	0.189	/
Bottom Side	Sensor off	QPSK	20	1	low	26365	1882.5	21.89	23.00	-0.04	0.063	1.29	0.082	/
Front Side	Sensor off	QPSK	20	50%	low	26365	1882.5	20.86	22.00	-0.02	0.136	1.30	0.177	/
Back Side	Sensor off	QPSK	20	50%	low	26365	1882.5	20.86	22.00	-0.13	0.203	1.30	0.264	/
Left Side	Sensor off	QPSK	20	50%	low	26365	1882.5	20.86	22.00	-0.03	0.119	1.30	0.155	/
Bottom Side	Sensor off	QPSK	20	50%	low	26365	1882.5	20.86	22.00	-0.04	0.051	1.30	0.067	/

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Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (5mm)														
Front Side	Sensor on	QPSK	20	1	low	132322	1745	19.05	20.00	-0.15	0.361	1.24	0.449	/
Back Side	Sensor on	QPSK	20	1	low	132322	1745	19.05	20.00	0.11	0.750	1.24	0.933	/
Left Side	Sensor on	QPSK	20	1	low	132322	1745	19.05	20.00	0.13	0.617	1.24	0.768	/
Right Side	Sensor off	QPSK	20	1	low	132322	1745	23.50	24.50	0.18	0.063	1.26	0.079	/
Top Side	Sensor off	QPSK	20	1	low	132322	1745	23.50	24.50	-0.10	0.118	1.26	0.149	/
Bottom Side	Sensor on	QPSK	20	1	low	132322	1745	19.05	20.00	-0.09	0.299	1.24	0.372	/
Front Side	Sensor on	QPSK	20	50%	low	132322	1745	17.97	19.00	-0.16	0.287	1.27	0.364	/
Back Side	Sensor on	QPSK	20	50%	low	132322	1745	17.97	19.00	0.13	0.609	1.27	0.772	/
Left Side	Sensor on	QPSK	20	50%	low	132322	1745	17.97	19.00	0.17	0.504	1.27	0.639	/
Right Side	Sensor off	QPSK	20	50%	high	132572	1770	22.44	23.50	-0.01	0.042	1.28	0.054	/
Top Side	Sensor off	QPSK	20	50%	high	132572	1770	22.44	23.50	-0.06	0.048	1.28	0.061	/
Bottom Side	Sensor on	QPSK	20	50%	low	132322	1745	17.97	19.00	0.12	0.234	1.27	0.297	/
Back Side	Sensor on	QPSK	20	1	low	132072	1720	19.02	20.00	0.17	0.739	1.25	0.926	/
Back Side	Sensor on	QPSK	20	1	low	132572	1770	19.03	20.00	0.11	0.848	1.25	1.060	FIG A.7
Back Side	Sensor on	QPSK	20	100%	low	132322	1745	17.86	19.00	0.03	0.605	1.30	0.787	/
Repeat														
Back Side	Sensor on	QPSK	20	1	low	132572	1770	19.03	20.00	0.02	0.841	1.25	1.051	/
Hotspot SAR (10mm)														
Front Side	Hotstop on	QPSK	20	1	low	132322	1745	21.69	22.50	0.17	0.425	1.21	0.512	/
Back Side	Hotstop on	QPSK	20	1	low	132322	1745	21.69	22.50	0.15	0.831	1.21	1.001	/
Left Side	Hotstop on	QPSK	20	1	low	132322	1745	21.69	22.50	-0.19	0.609	1.21	0.734	/
Right Side	Hotstop on	QPSK	20	1	low	132322	1745	21.69	22.50	0.12	0.032	1.21	0.039	/
Top Side	Hotstop on	QPSK	20	1	low	132322	1745	21.69	22.50	-0.14	0.061	1.21	0.073	/
Bottom Side	Hotstop on	QPSK	20	1	low	132322	1745	21.69	22.50	0.13	0.241	1.21	0.290	/
Front Side	Hotstop on	QPSK	20	50%	low	132322	1745	20.58	21.50	-0.10	0.400	1.24	0.494	/
Back Side	Hotstop on	QPSK	20	50%	low	132322	1745	20.58	21.50	0.12	0.711	1.24	0.879	/
Left Side	Hotstop on	QPSK	20	50%	low	132322	1745	20.58	21.50	0.12	0.505	1.24	0.624	/
Right Side	Hotstop on	QPSK	20	50%	low	132322	1745	20.58	21.50	0.01	0.024	1.24	0.029	/
Top Side	Hotstop on	QPSK	20	50%	low	132322	1745	20.58	21.50	-0.07	0.047	1.24	0.057	/
Bottom Side	Hotstop on	QPSK	20	50%	low	132322	1745	20.58	21.50	0.02	0.186	1.24	0.230	/
Back Side	Hotstop on	QPSK	20	1	low	132072	1720	21.65	22.50	0.18	0.718	1.22	0.873	/
Back Side	Hotstop on	QPSK	20	1	low	132572	1770	21.63	22.50	0.17	0.869	1.22	1.062	FIG A.8
Back Side	Hotstop on	QPSK	20	50%	low	132072	1720	20.55	21.50	0.15	0.600	1.24	0.747	/
Back Side	Hotstop on	QPSK	20	50%	low	132572	1770	20.54	21.50	0.12	0.714	1.25	0.891	/
Back Side	Hotstop on	QPSK	20	100%	low	132322	1745	20.44	21.50	0.03	0.705	1.28	0.900	/
Repeat														
Back Side	Hotstop on	QPSK	20	1	low	132322	1745	21.69	22.50	0.06	0.825	1.21	0.994	/
Back Side	Hotstop on	QPSK	20	1	low	132572	1770	21.63	22.50	0.03	0.862	1.22	1.053	/
Body SAR (Front 29mm,Back 31mm, Left 49mm, Bottom 49mm)														
Front Side	Sensor off	QPSK	20	1	low	132322	1745	23.50	24.50	-0.05	0.140	1.26	0.176	/
Back Side	Sensor off	QPSK	20	1	low	132322	1745	23.50	24.50	-0.06	0.306	1.26	0.385	/
Left Side	Sensor off	QPSK	20	1	low	132322	1745	23.50	24.50	-0.09	0.105	1.26	0.132	/
Bottom Side	Sensor off	QPSK	20	1	low	132322	1745	23.50	24.50	-0.10	0.044	1.26	0.056	/
Front Side	Sensor off	QPSK	20	50%	high	132572	1770	22.44	23.50	-0.03	0.110	1.28	0.140	/
Back Side	Sensor off	QPSK	20	50%	high	132572	1770	22.44	23.50	-0.17	0.247	1.28	0.315	/
Left Side	Sensor off	QPSK	20	50%	high	132572	1770	22.44	23.50	-0.13	0.084	1.28	0.107	/
Bottom Side	Sensor off	QPSK	20	50%	high	132572	1770	22.44	23.50	-0.10	0.036	1.28	0.046	/

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Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (5mm)														
Front Side	Full power	QPSK	20	1	mid	133322	683	24.11	25.00	0.06	0.868	1.23	1.065	/
Back Side	Full power	QPSK	20	1	mid	133322	683	24.11	25.00	-0.11	0.804	1.23	0.987	/
Left Side	Full power	QPSK	20	1	mid	133322	683	24.11	25.00	0.17	0.614	1.23	0.754	/
Right Side	Full power	QPSK	20	1	mid	133322	683	24.11	25.00	0.09	0.076	1.23	0.094	/
Top Side	Full power	QPSK	20	1	mid	133322	683	24.11	25.00	0.00	0.275	1.23	0.338	/
Bottom Side	Full power	QPSK	20	1	mid	133322	683	24.11	25.00	0.07	0.849	1.23	1.042	/
Front Side	Full power	QPSK	20	50%	mid	133322	683	23.17	24.00	0.02	0.713	1.21	0.863	/
Back Side	Full power	QPSK	20	50%	mid	133322	683	23.17	24.00	-0.11	0.656	1.21	0.794	/
Left Side	Full power	QPSK	20	50%	mid	133322	683	23.17	24.00	0.05	0.507	1.21	0.614	/
Right Side	Full power	QPSK	20	50%	mid	133322	683	23.17	24.00	0.18	0.041	1.21	0.050	/
Top Side	Full power	QPSK	20	50%	mid	133322	683	23.17	24.00	0.12	0.208	1.21	0.252	/
Bottom Side	Full power	QPSK	20	50%	mid	133322	683	23.17	24.00	0.14	0.646	1.21	0.782	/
Front Side	Full power	QPSK	20	1	mid	133222	673	24.07	25.00	0.01	0.877	1.24	1.086	/
Front Side	Full power	QPSK	20	1	low	133372	688	24.10	25.00	0.00	0.789	1.23	0.971	/
Back Side	Full power	QPSK	20	1	mid	133222	673	24.07	25.00	-0.13	0.705	1.24	0.873	/
Back Side	Full power	QPSK	20	1	low	133372	688	24.10	25.00	0.04	0.727	1.23	0.894	/
Bottom Side	Full power	QPSK	20	1	mid	133222	673	24.07	25.00	-0.01	0.964	1.24	1.194	FIG A.9
Bottom Side	Full power	QPSK	20	1	low	133372	688	24.10	25.00	0.00	0.870	1.23	1.070	/
Front Side	Full power	QPSK	20	50%	high	133222	673	23.07	24.00	-0.14	0.658	1.24	0.815	/
Front Side	Full power	QPSK	20	50%	mid	133372	688	23.16	24.00	-0.04	0.660	1.21	0.801	/
Front Side	Full power	QPSK	20	100%	low	133372	688	23.07	24.00	-0.04	0.651	1.24	0.806	/
Back Side	Full power	QPSK	20	100%	low	133372	688	23.07	24.00	-0.04	0.654	1.24	0.810	/
Bottom Side	Full power	QPSK	20	100%	low	133372	688	23.07	24.00	0.14	0.639	1.24	0.792	/
Repeat														
Front Side	Full power	QPSK	20	1	mid	133322	683	24.11	25.00	0.01	0.859	1.23	1.054	/
Back Side	Full power	QPSK	20	1	mid	133322	683	24.11	25.00	-0.10	0.795	1.23	0.976	/
Bottom Side	Full power	QPSK	20	1	mid	133322	683	24.11	25.00	0.01	0.840	1.23	1.031	/
Front Side	Full power	QPSK	20	1	mid	133222	673	24.07	25.00	0.05	0.868	1.24	1.075	/
Bottom Side	Full power	QPSK	20	1	mid	133222	673	24.07	25.00	0.00	0.954	1.24	1.182	/
Bottom Side	Full power	QPSK	20	1	low	133372	688	24.10	25.00	0.10	0.861	1.23	1.059	/
Hotspot SAR (10mm)														
Front Side	Hotstop on	QPSK	20	1	mid	133322	683	24.11	25.00	0.02	0.659	1.23	0.809	FIG A.10
Back Side	Hotstop on	QPSK	20	1	mid	133322	683	24.11	25.00	-0.01	0.626	1.23	0.768	/
Left Side	Hotstop on	QPSK	20	1	mid	133322	683	24.11	25.00	0.13	0.306	1.23	0.376	/
Right Side	Hotstop on	QPSK	20	1	mid	133322	683	24.11	25.00	0.16	0.032	1.23	0.039	/
Top Side	Hotstop on	QPSK	20	1	mid	133322	683	24.11	25.00	-0.06	0.143	1.23	0.176	/
Bottom Side	Hotstop on	QPSK	20	1	mid	133322	683	24.11	25.00	-0.01	0.428	1.23	0.525	/
Front Side	Hotstop on	QPSK	20	50%	mid	133322	683	23.17	24.00	0.04	0.523	1.21	0.633	/
Back Side	Hotstop on	QPSK	20	50%	mid	133322	683	23.17	24.00	0.04	0.481	1.21	0.582	/
Left Side	Hotstop on	QPSK	20	50%	mid	133322	683	23.17	24.00	0.17	0.260	1.21	0.315	/
Right Side	Hotstop on	QPSK	20	50%	mid	133322	683	23.17	24.00	0.12	0.025	1.21	0.031	/
Top Side	Hotstop on	QPSK	20	50%	mid	133322	683	23.17	24.00	0.09	0.125	1.21	0.151	/
Bottom Side	Hotstop on	QPSK	20	50%	mid	133322	683	23.17	24.00	-0.15	0.326	1.21	0.395	/
Front Side	Hotstop on	QPSK	20	1	mid	133222	673	24.07	25.00	0.00	0.518	1.24	0.642	/
Front Side	Hotstop on	QPSK	20	1	low	133372	688	24.10	25.00	0.02	0.528	1.23	0.650	/
Front Side	Full power	QPSK	20	100%	low	133372	688	23.07	24.00	0.04	0.476	1.24	0.590	/

11.2 SAR results for NR

NR Band n25 ANT1

Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (5mm)														
Front Side	Sensor on	DFT-s-OFDM QPSK	20	1	104	376500	1882.5	17.15	18.00	0.15	0.337	1.22	0.410	/
Back Side	Sensor on	DFT-s-OFDM QPSK	20	1	104	376500	1882.5	17.15	18.00	-0.04	0.736	1.22	0.895	/
Left Side	Sensor on	DFT-s-OFDM QPSK	20	1	104	376500	1882.5	17.15	18.00	0.03	0.610	1.22	0.742	/
Right Side	Sensor off	DFT-s-OFDM QPSK	20	1	104	381000	1905	22.21	23.00	0.15	0.052	1.20	0.062	/
Top Side	Sensor off	DFT-s-OFDM QPSK	20	1	104	381000	1905	22.21	23.00	0.16	0.239	1.20	0.287	/
Bottom Side	Sensor on	DFT-s-OFDM QPSK	20	1	104	376500	1882.5	17.15	18.00	-0.07	0.258	1.22	0.314	/
Front Side	Sensor on	DFT-s-OFDM QPSK	20	50	25	376500	1882.5	17.12	18.00	0.08	0.331	1.22	0.405	/
Back Side	Sensor on	DFT-s-OFDM QPSK	20	50	25	376500	1882.5	17.12	18.00	-0.08	0.755	1.22	0.925	/
Left Side	Sensor on	DFT-s-OFDM QPSK	20	50	25	376500	1882.5	17.12	18.00	0.02	0.617	1.22	0.756	/
Right Side	Sensor off	DFT-s-OFDM QPSK	20	50	25	381000	1905	22.13	23.00	0.02	0.035	1.22	0.043	/
Top Side	Sensor off	DFT-s-OFDM QPSK	20	50	25	381000	1905	22.13	23.00	-0.04	0.137	1.22	0.167	/
Bottom Side	Sensor on	DFT-s-OFDM QPSK	20	50	25	376500	1882.5	17.12	18.00	-0.12	0.254	1.22	0.311	/
Back Side	Sensor on	DFT-s-OFDM QPSK	20	1	104	372000	1860	17.11	18.00	-0.02	0.752	1.23	0.923	/
Back Side	Sensor on	DFT-s-OFDM QPSK	20	1	104	381000	1905	17.13	18.00	-0.12	0.675	1.22	0.825	/
Back Side	Sensor on	DFT-s-OFDM QPSK	20	50	25	372000	1860	17.09	18.00	0.03	0.759	1.23	0.936	FIG A.11
Back Side	Sensor on	DFT-s-OFDM QPSK	20	50	25	381000	1905	17.10	18.00	-0.05	0.723	1.23	0.889	/
Back Side	Sensor on	DFT-s-OFDM QPSK	20	100	0	376500	1882.5	17.02	18.00	-0.02	0.663	1.25	0.831	/
Hotspot SAR (10mm)														
Front Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	381000	1905	21.65	22.50	-0.10	0.578	1.22	0.703	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	381000	1905	21.65	22.50	-0.04	0.857	1.22	1.042	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	381000	1905	21.65	22.50	-0.04	0.916	1.22	1.114	/
Right Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	381000	1905	21.65	22.50	-0.02	0.030	1.22	0.037	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	381000	1905	21.65	22.50	-0.08	0.075	1.22	0.091	/
Bottom Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	381000	1905	21.65	22.50	-0.13	0.375	1.22	0.456	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	381000	1905	21.59	22.50	0.16	0.497	1.23	0.613	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	381000	1905	21.59	22.50	-0.02	0.859	1.23	1.059	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	381000	1905	21.59	22.50	-0.04	0.954	1.23	1.176	/
Right Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	381000	1905	21.59	22.50	-0.06	0.024	1.23	0.030	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	381000	1905	21.59	22.50	0.01	0.067	1.23	0.082	/
Bottom Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	381000	1905	21.59	22.50	-0.08	0.370	1.23	0.456	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	372000	1860	21.58	22.50	0.01	0.845	1.24	1.044	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	376500	1882.5	21.60	22.50	0.18	0.926	1.23	1.139	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	372000	1860	21.58	22.50	-0.08	0.936	1.24	1.157	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	376500	1882.5	21.60	22.50	0.10	0.929	1.23	1.143	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	372000	1860	21.54	22.50	-0.02	0.835	1.25	1.042	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	376500	1882.5	21.55	22.50	0.13	0.929	1.24	1.156	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	372000	1860	21.54	22.50	0.10	0.943	1.25	1.176	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	376500	1882.5	21.55	22.50	0.02	0.958	1.24	1.192	FIG A.12
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	100	0	376500	1882.5	20.61	21.50	-0.06	0.827	1.23	1.015	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	100	0	376500	1882.5	20.61	21.50	-0.17	0.841	1.23	1.032	/
Repeat														
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	381000	1905	21.65	22.50	0.00	0.857	1.22	1.042	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	381000	1905	21.65	22.50	-0.01	0.910	1.22	1.107	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	381000	1905	21.59	22.50	-0.10	0.853	1.23	1.052	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	381000	1905	21.59	22.50	-0.02	0.947	1.23	1.168	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	372000	1860	21.58	22.50	0.00	0.839	1.24	1.037	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	376500	1882.5	21.60	22.50	0.02	0.922	1.23	1.134	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	372000	1860	21.58	22.50	-0.07	0.929	1.24	1.148	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	376500	1882.5	21.60	22.50	0.10	0.926	1.23	1.139	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	372000	1860	21.54	22.50	-0.01	0.829	1.25	1.034	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	376500	1882.5	21.55	22.50	0.01	0.925	1.24	1.151	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	372000	1860	21.54	22.50	0.01	0.936	1.25	1.168	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	376500	1882.5	21.55	22.50	0.00	0.954	1.24	1.187	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	100	0	376500	1882.5	20.61	21.50	-0.02	0.824	1.23	1.011	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	100	0	376500	1882.5	20.61	21.50	-0.07	0.838	1.23	1.029	/
Body SAR (Front 29mm,Back 31mm, Left 49mm, Bottom 49mm)														
Front Side	Sensor off	DFT-s-OFDM QPSK	20	1	104	381000	1905	22.21	23.00	-0.16	0.137	1.20	0.164	/
Back Side	Sensor off	DFT-s-OFDM QPSK	20	1	104	381000	1905	22.21	23.00	0.17	0.184	1.20	0.221	/
Left Side	Sensor off	DFT-s-OFDM QPSK	20	1	104	381000	1905	22.21	23.00	-0.05	0.146	1.20	0.175	/
Bottom Side	Sensor off	DFT-s-OFDM QPSK	20	1	104	381000	1905	22.21	23.00	-0.09	0.042	1.20	0.050	/
Front Side	Sensor off	DFT-s-OFDM QPSK	20	50	25	381000	1905	22.13	23.00	0.05	0.232	1.22	0.283	/
Back Side	Sensor off	DFT-s-OFDM QPSK	20	50	25	381000	1905	22.13	23.00	-0.01	0.190	1.22	0.232	/
Left Side	Sensor off	DFT-s-OFDM QPSK	20	50	25	381000	1905	22.13	23.00	-0.03	0.119	1.22	0.145	/
Bottom Side	Sensor off	DFT-s-OFDM QPSK	20	50	25	381000	1905	22.13	23.00	0.03	0.042	1.22	0.051	/

NR Band n41 ANT2

Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (5mm)														
Front Side	Sensor on	DFT-s-OFDM QPSK	100	1	1	518598	2592.99	19.04	20.00	0.05	0.757	1.25	0.944	/
Back Side	Sensor on	DFT-s-OFDM QPSK	100	1	1	518598	2592.99	19.04	20.00	0.04	0.787	1.25	0.982	/
Left Side	Sensor on	DFT-s-OFDM QPSK	100	1	1	518598	2592.99	19.04	20.00	0.03	0.607	1.25	0.757	/
Right Side	Sensor off	DFT-s-OFDM QPSK	100	1	1	509202	2546.01	26.30	27.00	-0.09	0.028	1.17	0.033	/
Top Side	Sensor on	DFT-s-OFDM QPSK	100	1	1	518598	2592.99	19.04	20.00	-0.06	0.560	1.25	0.699	/
Bottom Side	Sensor off	DFT-s-OFDM QPSK	100	1	1	509202	2546.01	26.30	27.00	-0.06	0.559	1.17	0.657	/
Front Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	19.08	20.00	-0.09	0.751	1.24	0.928	/
Back Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	19.08	20.00	0.06	0.739	1.24	0.913	/
Left Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	19.08	20.00	0.05	0.661	1.24	0.817	/
Right Side	Sensor off	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	26.20	27.00	0.06	0.055	1.20	0.066	/
Top Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	19.08	20.00	-0.09	0.850	1.24	1.051	/
Bottom Side	Sensor off	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	26.20	27.00	-0.11	0.530	1.20	0.637	/
Front Side	Sensor on	DFT-s-OFDM QPSK	100	1	1	509202	2546.01	19.03	20.00	0.09	0.828	1.25	1.035	/
Front Side	Sensor on	DFT-s-OFDM QPSK	100	1	1	513900	2569.5	18.92	20.00	0.00	0.679	1.28	0.871	/
Front Side	Sensor on	DFT-s-OFDM QPSK	100	1	1	523302	2616.51	18.94	20.00	0.06	0.557	1.28	0.711	/
Front Side	Sensor on	DFT-s-OFDM QPSK	100	1	1	528000	2640	19.00	20.00	0.09	0.794	1.26	1.000	/
Back Side	Sensor on	DFT-s-OFDM QPSK	100	1	1	509202	2546.01	19.03	20.00	0.03	0.795	1.25	0.994	/
Back Side	Sensor on	DFT-s-OFDM QPSK	100	1	1	513900	2569.5	18.92	20.00	-0.09	0.714	1.28	0.916	/
Back Side	Sensor on	DFT-s-OFDM QPSK	100	1	1	523302	2616.51	18.94	20.00	0.04	0.702	1.28	0.896	/
Back Side	Sensor on	DFT-s-OFDM QPSK	100	1	1	528000	2640	19.00	20.00	0.02	0.768	1.26	0.967	/
Front Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	19.06	20.00	0.18	0.787	1.24	0.977	/
Front Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	513900	2569.5	19.06	20.00	0.12	0.613	1.24	0.761	/
Front Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	523302	2616.51	19.03	20.00	-0.04	0.634	1.25	0.793	/
Front Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	528000	2640	19.04	20.00	0.16	0.720	1.25	0.898	/
Back Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	19.06	20.00	-0.03	0.765	1.24	0.950	/
Back Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	513900	2569.5	19.06	20.00	0.02	0.719	1.24	0.893	/
Back Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	523302	2616.51	19.03	20.00	0.04	0.743	1.25	0.929	/
Back Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	528000	2640	19.04	20.00	0.05	0.766	1.25	0.955	/
Left Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	19.06	20.00	0.07	0.566	1.24	0.703	/
Left Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	513900	2569.5	19.06	20.00	0.04	0.529	1.24	0.657	/
Left Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	523302	2616.51	19.03	20.00	0.17	0.545	1.25	0.681	/
Left Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	528000	2640	19.04	20.00	0.04	0.632	1.25	0.788	/
Top Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	19.06	20.00	-0.08	0.604	1.24	0.750	/
Top Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	513900	2569.5	19.06	20.00	-0.04	0.814	1.24	1.011	/
Top Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	523302	2616.51	19.03	20.00	-0.05	0.839	1.25	1.049	/
Top Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	528000	2640	19.04	20.00	-0.05	0.867	1.25	1.081	FIG A.13
Front Side	Sensor on	DFT-s-OFDM QPSK	100	270	0	518598	2592.99	18.94	20.00	0.00	0.697	1.28	0.890	/
Back Side	Sensor on	DFT-s-OFDM QPSK	100	270	0	518598	2592.99	18.94	20.00	0.01	0.793	1.28	1.012	/
Left Side	Sensor on	DFT-s-OFDM QPSK	100	270	0	518598	2592.99	18.94	20.00	0.03	0.608	1.28	0.776	/
Top Side	Sensor on	DFT-s-OFDM QPSK	100	270	0	518598	2592.99	18.94	20.00	-0.04	0.561	1.28	0.716	/
Repeat														
Top Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	19.08	20.00	-0.02	0.852	1.24	1.053	/
Front Side	Sensor on	DFT-s-OFDM QPSK	100	1	1	509202	2546.01	19.03	20.00	0.08	0.827	1.25	1.034	/
Top Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	513900	2569.5	19.06	20.00	0.03	0.806	1.24	1.001	/
Top Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	523302	2616.51	19.03	20.00	-0.05	0.832	1.25	1.040	/
Top Side	Sensor on	DFT-s-OFDM QPSK	100	135	67	528000	2640	19.04	20.00	-0.07	0.865	1.25	1.079	/
Hotspot SAR (10mm)														
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	518598	2592.99	23.24	24.00	-0.04	0.982	1.19	1.170	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	518598	2592.99	23.24	24.00	0.03	0.914	1.19	1.089	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	518598	2592.99	23.24	24.00	-0.06	0.658	1.19	0.784	/
Right Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	518598	2592.99	23.24	24.00	-0.05	0.035	1.19	0.042	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	518598	2592.99	23.24	24.00	0.03	0.614	1.19	0.731	/
Bottom Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	518598	2592.99	23.24	24.00	-0.04	0.204	1.19	0.243	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	23.22	24.00	-0.02	0.872	1.20	1.044	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	23.22	24.00	-0.04	1.080	1.20	1.292	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	23.22	24.00	0.10	0.668	1.20	0.799	/
Right Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	23.22	24.00	0.03	0.045	1.20	0.053	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	23.22	24.00	-0.03	0.759	1.20	0.908	/
Bottom Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	23.22	24.00	-0.15	0.201	1.20	0.241	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	509202	2546.01	23.16	24.00	-0.02	1.080	1.21	1.310	FIG A.14
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	513900	2569.5	23.15	24.00	-0.12	1.060	1.22	1.289	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	523302	2616.51	23.18	24.00	0.08	0.966	1.21	1.167	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	528000	2640	23.15	24.00	0.04	0.954	1.22	1.160	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	509202	2546.01	23.16	24.00	-0.05	0.863	1.21	1.047	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	513900	2569.5	23.15	24.00	0.02	0.852	1.22	1.036	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	523302	2616.51	23.18	24.00	0.08	1.040	1.21	1.256	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	528000	2640	23.15	24.00	0.05	0.946	1.22	1.151	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	23.17	24.00	-0.03	0.991	1.21	1.200	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	513900	2569.5	23.16	24.00	-0.02	0.970	1.21	1.177	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	523302	2616.51	23.17	24.00	-0.02	0.791	1.21	0.958	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	528000	2640	23.14	24.00	0.06	0.720	1.22	0.878	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	23.17	24.00	0.04	0.871	1.21	1.054	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	513900	2569.5	23.16	24.00	-0.08	0.953	1.21	1.156	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	523302	2616.51	23.17	24.00	-0.07	0.987	1.21	1.195	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	528000	2640	23.14	24.00	0.02	0.946	1.22	1.153	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	23.17	24.00	-0.08	0.622	1.21	0.753	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	513900	2569.5	23.16	24.00	-0.05	0.496	1.21	0.602	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	523302	2616.51	23.17	24.00	0.01	0.882	1.21	1.068	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	528000	2640	23.14	24.00	-0.05	0.909	1.22	1.108	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	270	0	518598	2592.99	23.09	24.00	-0.16	0.874	1.23	1.078	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	270	0	518598	2592.99	23.09	24.00	0.01	0.903	1.23	1.113	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	100	270	0	518598	2592.99	23.09	24.00	0.03	0.612	1.23	0.755	/

Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Repeat														
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	518598	2592.99	23.24	24.00	-0.03	0.977	1.19	1.164	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	518598	2592.99	23.24	24.00	0.02	0.910	1.19	1.084	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	23.22	24.00	-0.02	0.868	1.20	1.039	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	23.22	24.00	-0.03	1.080	1.20	1.292	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	509202	2546.01	23.16	24.00	-0.01	1.070	1.21	1.298	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	513900	2569.5	23.15	24.00	-0.10	1.050	1.22	1.277	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	523302	2616.51	23.18	24.00	0.00	0.964	1.21	1.164	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	528000	2640	23.15	24.00	0.01	0.945	1.22	1.149	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	509202	2546.01	23.16	24.00	-0.03	0.854	1.21	1.036	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	513900	2569.5	23.15	24.00	0.10	0.849	1.22	1.033	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	523302	2616.51	23.18	24.00	0.00	1.040	1.21	1.256	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	528000	2640	23.15	24.00	0.00	0.937	1.22	1.140	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	23.17	24.00	-0.02	0.981	1.21	1.188	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	513900	2569.5	23.16	24.00	-0.02	0.967	1.21	1.173	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	23.17	24.00	0.03	0.862	1.21	1.044	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	513900	2569.5	23.16	24.00	-0.08	0.949	1.21	1.152	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	523302	2616.51	23.17	24.00	-0.04	0.985	1.21	1.192	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	528000	2640	23.14	24.00	0.02	0.937	1.22	1.142	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	523302	2616.51	23.17	24.00	0.01	0.878	1.21	1.063	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	528000	2640	23.14	24.00	-0.03	0.900	1.22	1.097	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	270	0	518598	2592.99	23.09	24.00	-0.05	0.874	1.23	1.078	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	270	0	518598	2592.99	23.09	24.00	0.00	0.903	1.23	1.113	/
Body SAR (Front 16mm,Back 24mm, Left 9mm, Top 19mm)														
Front Side	Sensor off	DFT-s-OFDM QPSK	100	1	1	509202	2546.01	26.30	27.00	-0.07	0.957	1.17	1.124	/
Back Side	Sensor off	DFT-s-OFDM QPSK	100	1	1	509202	2546.01	26.30	27.00	0.04	0.330	1.17	0.388	/
Left Side	Sensor off	DFT-s-OFDM QPSK	100	1	1	509202	2546.01	26.30	27.00	-0.11	0.903	1.17	1.061	/
Top Side	Sensor off	DFT-s-OFDM QPSK	100	1	1	509202	2546.01	26.30	27.00	-0.03	0.160	1.17	0.188	/
Front Side	Sensor off	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	26.20	27.00	-0.06	0.934	1.20	1.123	/
Back Side	Sensor off	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	26.20	27.00	0.02	0.400	1.20	0.481	/
Left Side	Sensor off	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	26.20	27.00	-0.15	0.975	1.20	1.172	/
Top Side	Sensor off	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	26.20	27.00	-0.04	0.303	1.20	0.364	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	518598	2592.99	26.16	27.00	-0.05	0.694	1.21	0.842	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	513900	2569.5	26.15	27.00	-0.05	0.681	1.22	0.828	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	523302	2616.51	26.18	27.00	-0.01	0.693	1.21	0.837	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	528000	2640	26.15	27.00	-0.02	0.707	1.22	0.860	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	518598	2592.99	26.16	27.00	0.00	0.843	1.21	1.023	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	513900	2569.5	26.15	27.00	0.00	0.827	1.22	1.006	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	523302	2616.51	26.18	27.00	-0.04	0.873	1.21	1.054	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	528000	2640	26.15	27.00	-0.04	0.890	1.22	1.082	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	26.12	27.00	-0.03	0.867	1.22	1.062	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	513900	2569.5	26.11	27.00	-0.03	0.850	1.23	1.043	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	523302	2616.51	26.10	27.00	-0.10	0.730	1.23	0.898	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	528000	2640	26.09	27.00	-0.12	0.744	1.23	0.917	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	26.12	27.00	-0.08	0.908	1.22	1.112	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	513900	2569.5	26.11	27.00	-0.06	0.892	1.23	1.095	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	523302	2616.51	26.10	27.00	-0.01	0.753	1.23	0.926	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	528000	2640	26.09	27.00	-0.09	0.913	1.23	1.126	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	270	0	518598	2592.99	26.14	27.00	-0.03	0.738	1.22	0.900	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	270	0	518598	2592.99	26.14	27.00	-0.02	0.730	1.22	0.890	/
Repeat														
Front Side	Sensor off	DFT-s-OFDM QPSK	100	1	1	509202	2546.01	26.30	27.00	-0.04	0.950	1.17	1.116	/
Left Side	Sensor off	DFT-s-OFDM QPSK	100	1	1	509202	2546.01	26.30	27.00	-0.10	0.897	1.17	1.054	/
Front Side	Sensor off	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	26.20	27.00	-0.03	0.928	1.20	1.116	/
Left Side	Sensor off	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	26.20	27.00	-0.06	0.896	1.20	1.077	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	518598	2592.99	26.16	27.00	0.10	0.838	1.21	1.017	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	513900	2569.5	26.15	27.00	0.10	0.823	1.22	1.001	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	523302	2616.51	26.18	27.00	-0.04	0.870	1.21	1.051	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	528000	2640	26.15	27.00	-0.01	0.881	1.22	1.071	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	26.12	27.00	-0.02	0.862	1.22	1.056	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	513900	2569.5	26.11	27.00	-0.02	0.845	1.23	1.037	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	26.12	27.00	-0.01	0.903	1.22	1.106	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	513900	2569.5	26.11	27.00	0.00	0.888	1.23	1.090	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	528000	2640	26.09	27.00	-0.09	0.904	1.23	1.115	/

NR Band n41 ANT3

Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (5mm)														
Front Side	Full power	DFT-s-OFDM QPSK	100	1	271	518598	2592.99	25.81	26.50	-0.03	0.119	1.17	0.139	/
Back Side	Full power	DFT-s-OFDM QPSK	100	1	271	518598	2592.99	25.81	26.50	-0.14	0.102	1.17	0.120	/
Left Side	Full power	DFT-s-OFDM QPSK	100	1	271	518598	2592.99	25.81	26.50	0.11	0.080	1.17	0.093	/
Right Side	Full power	DFT-s-OFDM QPSK	100	1	271	518598	2592.99	25.81	26.50	0.06	0.080	1.17	0.094	/
Top Side	Full power	DFT-s-OFDM QPSK	100	1	271	518598	2592.99	25.81	26.50	-0.04	0.142	1.17	0.166	/
Bottom Side	Full power	DFT-s-OFDM QPSK	100	1	271	518598	2592.99	25.81	26.50	0.02	0.053	1.17	0.062	/
Front Side	Full power	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	25.78	26.50	0.02	0.094	1.18	0.111	/
Back Side	Full power	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	25.78	26.50	-0.02	0.076	1.18	0.090	/
Left Side	Full power	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	25.78	26.50	0.03	0.065	1.18	0.077	/
Right Side	Full power	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	25.78	26.50	-0.15	0.065	1.18	0.077	/
Top Side	Full power	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	25.78	26.50	-0.11	0.120	1.18	0.142	/
Bottom Side	Full power	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	25.78	26.50	0.09	0.039	1.18	0.047	/
Hotspot SAR (10mm)														
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	1	271	518598	2592.99	25.81	26.50	-0.02	0.052	1.17	0.061	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	1	271	518598	2592.99	25.81	26.50	-0.07	0.033	1.17	0.039	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	1	271	518598	2592.99	25.81	26.50	-0.10	0.025	1.17	0.029	/
Right Side	Hotstop on	DFT-s-OFDM QPSK	100	1	271	518598	2592.99	25.81	26.50	0.10	0.042	1.17	0.049	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	100	1	271	518598	2592.99	25.81	26.50	-0.10	0.062	1.17	0.073	/
Bottom Side	Hotstop on	DFT-s-OFDM QPSK	100	1	271	518598	2592.99	25.81	26.50	0.03	0.017	1.17	0.020	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	25.78	26.50	-0.03	0.042	1.18	0.050	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	25.78	26.50	-0.07	0.028	1.18	0.033	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	25.78	26.50	0.02	0.053	1.18	0.063	/
Right Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	25.78	26.50	-0.03	0.048	1.18	0.057	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	25.78	26.50	-0.05	0.052	1.18	0.062	/
Bottom Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	518598	2592.99	25.78	26.50	0.10	0.019	1.18	0.022	/

NR Band n41 ANT5

Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (5mm)														
Front Side	Full power	DFT-s-OFDM QPSK	100	1	1	528000	2640	26.10	27.00	0.02	0.051	1.23	0.063	/
Back Side	Full power	DFT-s-OFDM QPSK	100	1	1	528000	2640	26.10	27.00	0.04	0.128	1.23	0.157	/
Left Side	Full power	DFT-s-OFDM QPSK	100	1	1	528000	2640	26.10	27.00	-0.02	0.010	1.23	0.013	/
Right Side	Full power	DFT-s-OFDM QPSK	100	1	1	528000	2640	26.10	27.00	-0.06	0.183	1.23	0.225	/
Top Side	Full power	DFT-s-OFDM QPSK	100	1	1	528000	2640	26.10	27.00	0.02	0.046	1.23	0.056	/
Bottom Side	Full power	DFT-s-OFDM QPSK	100	1	1	528000	2640	26.10	27.00	-0.07	0.026	1.23	0.032	/
Front Side	Full power	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	25.97	27.00	0.13	0.074	1.27	0.093	/
Back Side	Full power	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	25.97	27.00	-0.03	0.186	1.27	0.236	/
Left Side	Full power	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	25.97	27.00	-0.02	0.011	1.27	0.013	/
Right Side	Full power	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	25.97	27.00	-0.02	0.265	1.27	0.336	/
Top Side	Full power	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	25.97	27.00	-0.12	0.056	1.27	0.071	/
Bottom Side	Full power	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	25.97	27.00	-0.09	0.025	1.27	0.031	/
Hotspot SAR (10mm)														
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	528000	2640	26.10	27.00	-0.10	0.021	1.23	0.025	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	528000	2640	26.10	27.00	-0.02	0.062	1.23	0.076	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	528000	2640	26.10	27.00	-0.05	0.010	1.23	0.013	/
Right Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	528000	2640	26.10	27.00	-0.10	0.069	1.23	0.085	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	528000	2640	26.10	27.00	-0.03	0.017	1.23	0.021	/
Bottom Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	528000	2640	26.10	27.00	-0.14	0.020	1.23	0.025	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	25.97	27.00	-0.09	0.037	1.27	0.046	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	25.97	27.00	-0.02	0.096	1.27	0.121	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	25.97	27.00	0.03	0.009	1.27	0.011	/
Right Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	25.97	27.00	-0.14	0.119	1.27	0.151	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	25.97	27.00	-0.15	0.025	1.27	0.032	/
Bottom Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	509202	2546.01	25.97	27.00	-0.02	0.015	1.27	0.019	/

NR Band n41 ANT7

Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (5mm)														
Front Side	Full power	DFT-s-OFDM QPSK	100	1	1	528000	2640	25.04	26.00	0.00	0.152	1.25	0.190	/
Back Side	Full power	DFT-s-OFDM QPSK	100	1	1	528000	2640	25.04	26.00	0.00	0.003	1.25	0.004	/
Left Side	Full power	DFT-s-OFDM QPSK	100	1	1	528000	2640	25.04	26.00	0.06	0.041	1.25	0.052	/
Right Side	Full power	DFT-s-OFDM QPSK	100	1	1	528000	2640	25.04	26.00	0.07	0.063	1.25	0.078	/
Top Side	Full power	DFT-s-OFDM QPSK	100	1	1	528000	2640	25.04	26.00	-0.16	0.003	1.25	0.004	/
Bottom Side	Full power	DFT-s-OFDM QPSK	100	1	1	528000	2640	25.04	26.00	0.06	0.411	1.25	0.513	/
Front Side	Full power	DFT-s-OFDM QPSK	100	135	67	528000	2640	24.94	26.00	0.00	0.115	1.28	0.147	/
Back Side	Full power	DFT-s-OFDM QPSK	100	135	67	528000	2640	24.94	26.00	-0.10	0.138	1.28	0.176	/
Left Side	Full power	DFT-s-OFDM QPSK	100	135	67	528000	2640	24.94	26.00	0.07	0.055	1.28	0.070	/
Right Side	Full power	DFT-s-OFDM QPSK	100	135	67	528000	2640	24.94	26.00	0.05	0.058	1.28	0.074	/
Top Side	Full power	DFT-s-OFDM QPSK	100	135	67	528000	2640	24.94	26.00	0.04	0.001	1.28	0.002	/
Bottom Side	Full power	DFT-s-OFDM QPSK	100	135	67	528000	2640	24.94	26.00	0.03	0.415	1.28	0.530	/
Hotspot SAR (10mm)														
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	528000	2640	25.04	26.00	0.00	0.070	1.25	0.087	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	528000	2640	25.04	26.00	0.00	0.000	1.25	0.000	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	528000	2640	25.04	26.00	0.03	0.027	1.25	0.034	/
Right Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	528000	2640	25.04	26.00	0.09	0.039	1.25	0.049	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	528000	2640	25.04	26.00	-0.10	0.004	1.25	0.005	/
Bottom Side	Hotstop on	DFT-s-OFDM QPSK	100	1	1	528000	2640	25.04	26.00	-0.13	0.149	1.25	0.186	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	528000	2640	24.94	26.00	0.00	0.051	1.28	0.065	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	528000	2640	24.94	26.00	0.02	0.061	1.28	0.078	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	528000	2640	24.94	26.00	0.18	0.037	1.28	0.047	/
Right Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	528000	2640	24.94	26.00	0.02	0.014	1.28	0.018	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	528000	2640	24.94	26.00	0.00	0.000	1.28	0.000	/
Bottom Side	Hotstop on	DFT-s-OFDM QPSK	100	135	67	528000	2640	24.94	26.00	-0.07	0.139	1.28	0.177	/

NR Band n66 ANT1

Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (5mm)														
Front Side	Sensor on	DFT-s-OFDM QPSK	20	1	104	349000	1745	19.15	19.50	0.03	0.331	1.08	0.359	/
Back Side	Sensor on	DFT-s-OFDM QPSK	20	1	104	349000	1745	19.15	19.50	0.08	1.090	1.08	1.181	/
Left Side	Sensor on	DFT-s-OFDM QPSK	20	1	104	349000	1745	19.15	19.50	0.02	0.803	1.08	0.870	/
Right Side	Sensor off	DFT-s-OFDM QPSK	20	1	104	354000	1770	23.69	24.50	-0.03	0.052	1.21	0.063	/
Top Side	Sensor off	DFT-s-OFDM QPSK	20	1	104	354000	1770	23.69	24.50	-0.05	0.106	1.21	0.128	/
Bottom Side	Sensor on	DFT-s-OFDM QPSK	20	1	104	349000	1745	19.15	19.50	0.02	0.256	1.08	0.277	/
Front Side	Sensor on	DFT-s-OFDM QPSK	20	50	25	349000	1745	19.14	19.50	-0.08	0.350	1.09	0.380	/
Back Side	Sensor on	DFT-s-OFDM QPSK	20	50	25	349000	1745	19.14	19.50	0.16	1.090	1.09	1.184	FIG A.15
Left Side	Sensor on	DFT-s-OFDM QPSK	20	50	25	349000	1745	19.14	19.50	0.06	0.768	1.09	0.834	/
Right Side	Sensor off	DFT-s-OFDM QPSK	20	50	25	354000	1770	23.62	24.50	-0.02	0.074	1.22	0.091	/
Top Side	Sensor off	DFT-s-OFDM QPSK	20	50	25	354000	1770	23.62	24.50	-0.02	0.091	1.22	0.112	/
Bottom Side	Sensor on	DFT-s-OFDM QPSK	20	50	25	349000	1745	19.14	19.50	-0.16	0.255	1.09	0.277	/
Back Side	Sensor on	DFT-s-OFDM QPSK	20	1	104	344000	1720	19.13	19.50	0.15	0.904	1.09	0.984	/
Back Side	Sensor on	DFT-s-OFDM QPSK	20	1	104	354000	1770	19.07	19.50	-0.17	1.060	1.10	1.170	/
Left Side	Sensor on	DFT-s-OFDM QPSK	20	1	104	344000	1720	19.13	19.50	-0.02	0.663	1.09	0.722	/
Left Side	Sensor on	DFT-s-OFDM QPSK	20	1	104	354000	1770	19.07	19.50	0.17	0.816	1.10	0.901	/
Back Side	Sensor on	DFT-s-OFDM QPSK	20	50	25	344000	1720	19.11	19.50	-0.02	0.844	1.09	0.923	/
Back Side	Sensor on	DFT-s-OFDM QPSK	20	50	25	354000	1770	19.06	19.50	-0.02	1.070	1.11	1.184	/
Left Side	Sensor on	DFT-s-OFDM QPSK	20	50	25	344000	1720	19.11	19.50	-0.06	0.606	1.09	0.663	/
Left Side	Sensor on	DFT-s-OFDM QPSK	20	50	25	354000	1770	19.06	19.50	0.11	0.861	1.11	0.953	/
Back Side	Sensor on	DFT-s-OFDM QPSK	20	100	0	344000	1720	19.08	19.50	-0.02	0.837	1.10	0.922	/
Left Side	Sensor on	DFT-s-OFDM QPSK	20	100	0	344000	1720	19.08	19.50	-0.10	0.658	1.10	0.725	/
Repeat														
Back Side	Sensor on	DFT-s-OFDM QPSK	20	1	104	349000	1745	19.15	19.50	0.00	1.060	1.08	1.149	/
Left Side	Sensor on	DFT-s-OFDM QPSK	20	1	104	349000	1745	19.15	19.50	0.19	0.784	1.08	0.850	/
Back Side	Sensor on	DFT-s-OFDM QPSK	20	50	25	349000	1745	19.14	19.50	0.02	1.060	1.09	1.152	/
Back Side	Sensor on	DFT-s-OFDM QPSK	20	1	104	344000	1720	19.13	19.50	0.11	0.897	1.09	0.977	/
Back Side	Sensor on	DFT-s-OFDM QPSK	20	1	104	354000	1770	19.07	19.50	-0.02	1.040	1.10	1.148	/
Left Side	Sensor on	DFT-s-OFDM QPSK	20	1	104	354000	1770	19.07	19.50	0.02	0.798	1.10	0.881	/
Back Side	Sensor on	DFT-s-OFDM QPSK	20	50	25	344000	1720	19.11	19.50	-0.02	0.837	1.09	0.916	/
Back Side	Sensor on	DFT-s-OFDM QPSK	20	50	25	354000	1770	19.06	19.50	-0.19	1.040	1.11	1.151	/
Left Side	Sensor on	DFT-s-OFDM QPSK	20	50	25	354000	1770	19.06	19.50	0.10	0.842	1.11	0.932	/
Back Side	Sensor on	DFT-s-OFDM QPSK	20	100	0	344000	1720	19.08	19.50	-0.01	0.837	1.10	0.922	/
Hotspot SAR (10mm)														
Front Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	349000	1745	21.62	22.00	0.08	0.318	1.09	0.347	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	349000	1745	21.62	22.00	0.05	1.090	1.09	1.190	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	349000	1745	21.62	22.00	0.09	0.766	1.09	0.836	/
Right Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	349000	1745	21.62	22.00	-0.08	0.023	1.09	0.025	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	349000	1745	21.62	22.00	-0.02	0.041	1.09	0.045	/
Bottom Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	349000	1745	21.62	22.00	-0.03	0.217	1.09	0.237	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	349000	1745	21.60	22.00	-0.05	0.311	1.10	0.341	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	349000	1745	21.60	22.00	0.18	1.090	1.10	1.195	FIG A.16
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	349000	1745	21.60	22.00	0.07	0.726	1.10	0.796	/
Right Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	349000	1745	21.60	22.00	-0.06	0.022	1.10	0.024	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	349000	1745	21.60	22.00	-0.03	0.040	1.10	0.044	/
Bottom Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	349000	1745	21.60	22.00	-0.08	0.224	1.10	0.246	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	344000	1720	21.56	22.00	0.08	0.964	1.11	1.067	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	354000	1770	21.58	22.00	-0.10	0.902	1.10	0.994	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	344000	1720	21.56	22.00	-0.03	0.604	1.11	0.668	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	354000	1770	21.58	22.00	0.12	0.705	1.10	0.777	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	344000	1720	21.59	22.00	-0.10	0.679	1.10	0.746	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	354000	1770	21.54	22.00	0.13	0.926	1.11	1.029	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	344000	1720	21.59	22.00	0.02	0.394	1.10	0.433	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	354000	1770	21.54	22.00	0.02	0.716	1.11	0.796	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	100	0	349000	1745	21.60	22.00	-0.01	0.866	1.10	0.950	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	100	0	349000	1745	21.60	22.00	-0.03	0.615	1.10	0.674	/
Repeat														
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	349000	1745	21.62	22.00	0.15	1.050	1.09	1.146	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	349000	1745	21.60	22.00	0.02	0.997	1.10	1.093	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	344000	1720	21.56	22.00	0.07	0.957	1.11	1.059	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	354000	1770	21.58	22.00	0.13	0.905	1.10	0.997	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	354000	1770	21.54	22.00	-0.10	0.882	1.11	0.981	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	100	0	349000	1745	21.60	22.00	0.00	0.866	1.10	0.950	/
Body SAR (Front 29mm,Back 31mm, Left 49mm, Bottom 49mm)														
Front Side	Sensor off	DFT-s-OFDM QPSK	20	1	104	354000	1770	23.69	24.50	-0.05	0.140	1.21	0.169	/
Back Side	Sensor off	DFT-s-OFDM QPSK	20	1	104	354000	1770	23.69	24.50	-0.06	0.306	1.21	0.369	/
Left Side	Sensor off	DFT-s-OFDM QPSK	20	1	104	354000	1770	23.69	24.50	-0.09	0.105	1.21	0.127	/
Bottom Side	Sensor off	DFT-s-OFDM QPSK	20	1	104	354000	1770	23.69	24.50	-0.01	0.044	1.21	0.053	/
Front Side	Sensor off	DFT-s-OFDM QPSK	20	50	25	354000	1770	23.62	24.50	-0.03	0.110	1.22	0.135	/
Back Side	Sensor off	DFT-s-OFDM QPSK	20	50	25	354000	1770	23.62	24.50	-0.17	0.247	1.22	0.302	/
Left Side	Sensor off	DFT-s-OFDM QPSK	20	50	25	354000	1770	23.62	24.50	-0.13	0.084	1.22	0.103	/
Bottom Side	Sensor off	DFT-s-OFDM QPSK	20	50	25	354000	1770	23.62	24.50	-0.14	0.036	1.22	0.044	/

NR Band n71 ANT1

Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (5mm)														
Front Side	Full power	DFT-s-OFDM QPSK	20	1	1	136100	680.5	24.26	25.00	0.04	0.825	1.19	0.978	/
Back Side	Full power	DFT-s-OFDM QPSK	20	1	1	136100	680.5	24.26	25.00	0.07	0.871	1.19	1.033	/
Left Side	Full power	DFT-s-OFDM QPSK	20	1	1	136100	680.5	24.26	25.00	-0.04	0.534	1.19	0.633	/
Right Side	Full power	DFT-s-OFDM QPSK	20	1	1	136100	680.5	24.26	25.00	0.02	0.081	1.19	0.096	/
Top Side	Full power	DFT-s-OFDM QPSK	20	1	1	136100	680.5	24.26	25.00	0.04	0.290	1.19	0.344	/
Bottom Side	Full power	DFT-s-OFDM QPSK	20	1	1	136100	680.5	24.26	25.00	0.00	0.922	1.19	1.093	/
Front Side	Full power	DFT-s-OFDM QPSK	20	50	25	136100	680.5	24.20	25.00	0.00	0.862	1.20	1.036	/
Back Side	Full power	DFT-s-OFDM QPSK	20	50	25	136100	680.5	24.20	25.00	-0.02	0.840	1.20	1.010	/
Left Side	Full power	DFT-s-OFDM QPSK	20	50	25	136100	680.5	24.20	25.00	0.02	0.565	1.20	0.679	/
Right Side	Full power	DFT-s-OFDM QPSK	20	50	25	136100	680.5	24.20	25.00	0.04	0.077	1.20	0.092	/
Top Side	Full power	DFT-s-OFDM QPSK	20	50	25	136100	680.5	24.20	25.00	0.02	0.244	1.20	0.293	/
Bottom Side	Full power	DFT-s-OFDM QPSK	20	50	25	136100	680.5	24.20	25.00	0.02	0.878	1.20	1.056	/
Front Side	Full power	DFT-s-OFDM QPSK	20	1	1	134600	673	24.24	25.00	0.02	0.785	1.19	0.935	/
Front Side	Full power	DFT-s-OFDM QPSK	20	1	104	137600	688	24.19	25.00	-0.12	0.813	1.21	0.980	/
Back Side	Full power	DFT-s-OFDM QPSK	20	1	1	134600	673	24.24	25.00	-0.04	0.908	1.19	1.082	/
Back Side	Full power	DFT-s-OFDM QPSK	20	1	104	137600	688	24.19	25.00	-0.07	0.832	1.21	1.003	/
Bottom Side	Full power	DFT-s-OFDM QPSK	20	1	1	134600	673	24.24	25.00	-0.02	0.994	1.19	1.184	FIG A.17
Bottom Side	Full power	DFT-s-OFDM QPSK	20	1	104	137600	688	24.19	25.00	0.00	0.900	1.21	1.085	/
Front Side	Full power	DFT-s-OFDM QPSK	20	50	25	134600	673	24.15	25.00	-0.16	0.845	1.22	1.028	/
Front Side	Full power	DFT-s-OFDM QPSK	20	50	25	137600	688	24.10	25.00	-0.09	0.827	1.23	1.017	/
Back Side	Full power	DFT-s-OFDM QPSK	20	50	25	134600	673	24.15	25.00	-0.03	0.891	1.22	1.084	/
Back Side	Full power	DFT-s-OFDM QPSK	20	50	25	137600	688	24.10	25.00	0.01	0.799	1.23	0.983	/
Bottom Side	Full power	DFT-s-OFDM QPSK	20	50	25	134600	673	24.15	25.00	-0.08	0.958	1.22	1.165	/
Bottom Side	Full power	DFT-s-OFDM QPSK	20	50	25	137600	688	24.10	25.00	0.03	0.805	1.23	0.990	/
Front Side	Full power	DFT-s-OFDM QPSK	20	100	0	136100	680.5	23.14	24.00	0.04	0.816	1.22	0.995	/
Back Side	Full power	DFT-s-OFDM QPSK	20	100	0	136100	680.5	23.14	24.00	0.00	0.791	1.22	0.964	/
Bottom Side	Full power	DFT-s-OFDM QPSK	20	100	0	136100	680.5	23.14	24.00	0.03	0.797	1.22	0.972	/
Repeat														
Front Side	Full power	DFT-s-OFDM QPSK	20	1	1	136100	680.5	24.26	25.00	0.10	0.816	1.19	0.968	/
Back Side	Full power	DFT-s-OFDM QPSK	20	1	1	136100	680.5	24.26	25.00	0.01	0.862	1.19	1.022	/
Bottom Side	Full power	DFT-s-OFDM QPSK	20	1	1	136100	680.5	24.26	25.00	0.03	0.912	1.19	1.081	/
Front Side	Full power	DFT-s-OFDM QPSK	20	50	25	136100	680.5	24.20	25.00	0.10	0.853	1.20	1.026	/
Back Side	Full power	DFT-s-OFDM QPSK	20	50	25	136100	680.5	24.20	25.00	0.00	0.832	1.20	1.000	/
Bottom Side	Full power	DFT-s-OFDM QPSK	20	50	25	136100	680.5	24.20	25.00	0.01	0.868	1.20	1.044	/
Front Side	Full power	DFT-s-OFDM QPSK	20	1	104	137600	688	24.19	25.00	-0.11	0.805	1.21	0.970	/
Back Side	Full power	DFT-s-OFDM QPSK	20	1	1	134600	673	24.24	25.00	-0.10	0.898	1.19	1.070	/
Back Side	Full power	DFT-s-OFDM QPSK	20	1	104	137600	688	24.19	25.00	-0.06	0.824	1.21	0.993	/
Bottom Side	Full power	DFT-s-OFDM QPSK	20	1	1	134600	673	24.24	25.00	-0.01	0.983	1.19	1.171	/
Bottom Side	Full power	DFT-s-OFDM QPSK	20	1	104	137600	688	24.19	25.00	-0.10	0.891	1.21	1.074	/
Front Side	Full power	DFT-s-OFDM QPSK	20	50	25	134600	673	24.15	25.00	-0.02	0.836	1.22	1.017	/
Front Side	Full power	DFT-s-OFDM QPSK	20	50	25	137600	688	24.10	25.00	-0.01	0.818	1.23	1.006	/
Back Side	Full power	DFT-s-OFDM QPSK	20	50	25	134600	673	24.15	25.00	-0.01	0.881	1.22	1.071	/
Bottom Side	Full power	DFT-s-OFDM QPSK	20	50	25	134600	673	24.15	25.00	-0.18	0.947	1.22	1.152	/
Bottom Side	Full power	DFT-s-OFDM QPSK	20	50	25	137600	688	24.10	25.00	0.00	0.797	1.23	0.981	/
Front Side	Full power	DFT-s-OFDM QPSK	20	100	0	136100	680.5	23.14	24.00	0.10	0.803	1.22	0.979	/
Hotspot SAR (10mm)														
Front Side	Hotstop on	DFT-s-OFDM QPSK	20	1	1	136100	680.5	24.26	25.00	0.00	0.594	1.19	0.704	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	1	1	136100	680.5	24.26	25.00	0.04	0.656	1.19	0.778	FIG A.18
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	1	1	136100	680.5	24.26	25.00	0.10	0.276	1.19	0.327	/
Right Side	Hotstop on	DFT-s-OFDM QPSK	20	1	1	136100	680.5	24.26	25.00	0.03	0.030	1.19	0.035	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	20	1	1	136100	680.5	24.26	25.00	0.01	0.318	1.19	0.377	/
Bottom Side	Hotstop on	DFT-s-OFDM QPSK	20	1	1	136100	680.5	24.26	25.00	0.07	0.481	1.19	0.570	/
Front Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	136100	680.5	24.20	25.00	0.02	0.630	1.20	0.757	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	136100	680.5	24.20	25.00	0.00	0.636	1.20	0.765	/
Left Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	136100	680.5	24.20	25.00	0.05	0.299	1.20	0.359	/
Right Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	136100	680.5	24.20	25.00	-0.12	0.044	1.20	0.053	/
Top Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	136100	680.5	24.20	25.00	0.01	0.224	1.20	0.269	/
Bottom Side	Hotstop on	DFT-s-OFDM QPSK	20	50	25	136100	680.5	24.20	25.00	0.04	0.481	1.20	0.578	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	1	1	134600	673	24.24	25.00	0.02	0.640	1.19	0.762	/
Back Side	Hotstop on	DFT-s-OFDM QPSK	20	1	104	137600	688	24.19	25.00	0.02	0.647	1.21	0.780	/

11.3 SAR results for WLAN

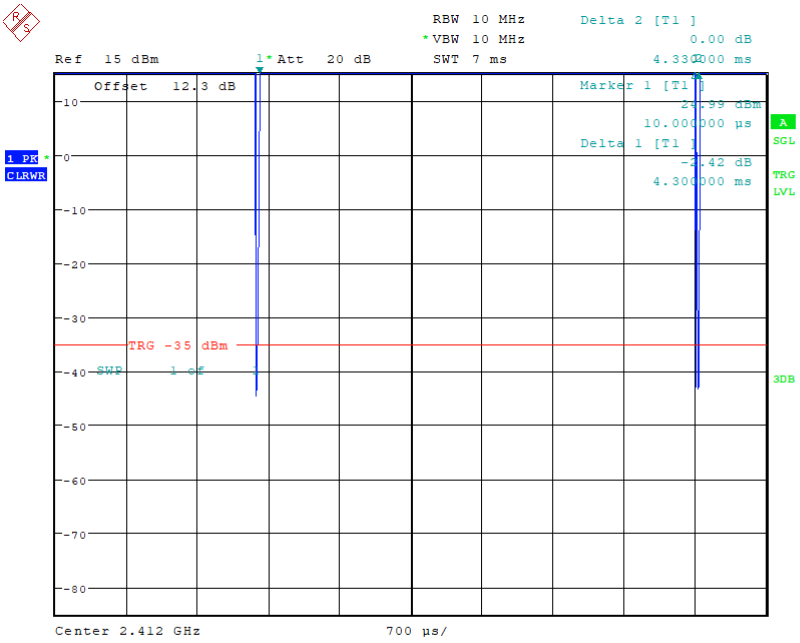
The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures.

When the same transmission mode configurations have the same maximum output power on the same channel for the 802.11 a/g/n/ac/ax modes, the channel in the lower order/sequence 802.11 mode (i.e. a, g, n ac then ax) is selected.

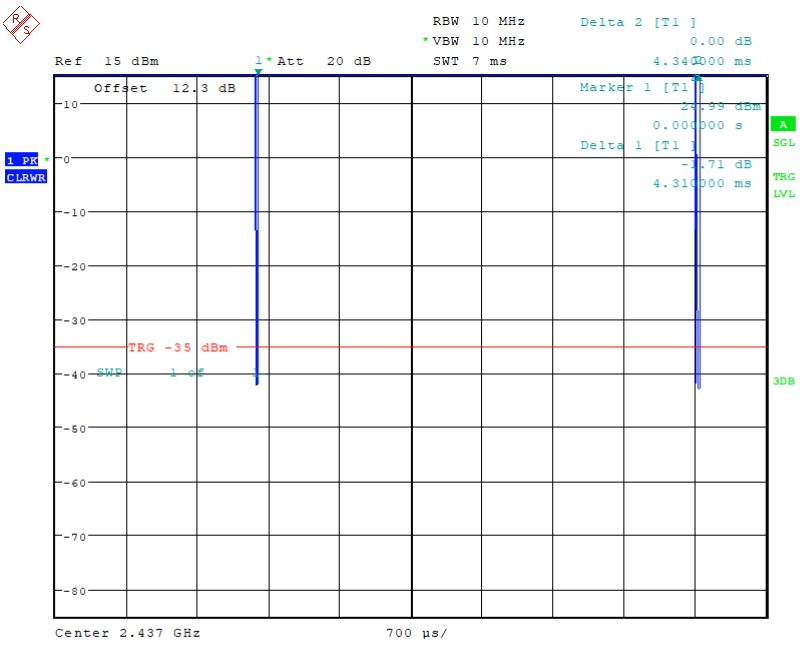
SAR Test reduction was applied from KDB 248227 guidance, when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band. Additional output power measurements were not deemed necessary.

Duty factor plot

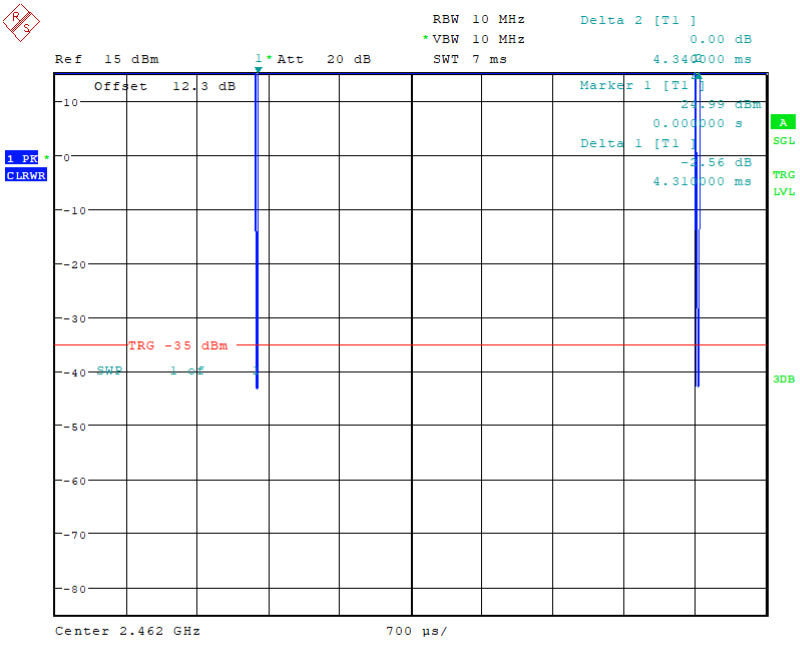
Channel 1 ANT6: Duty Cycle:99.31%; Burst:4.30ms; Period:4.33ms



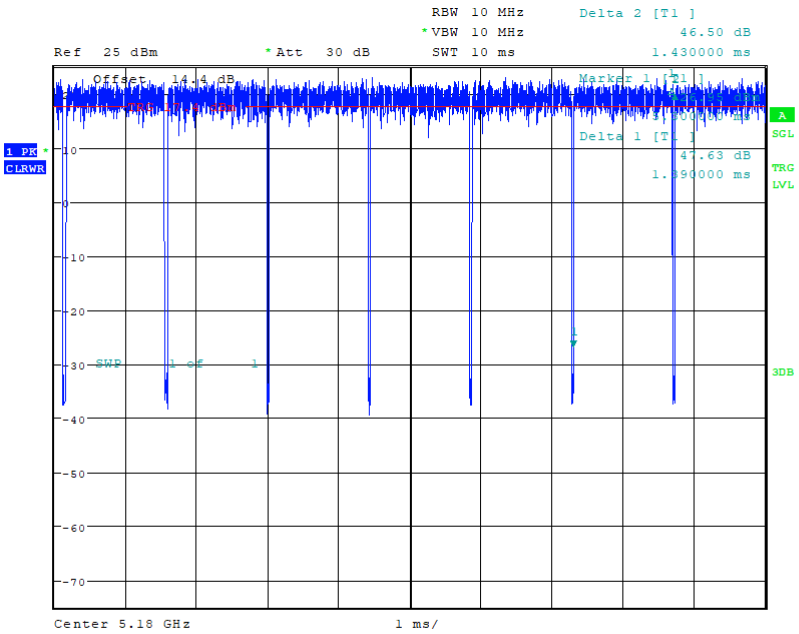
Channel 6 ANT6: Duty Cycle:99.31%; Burst:4.31ms; Period:4.34ms



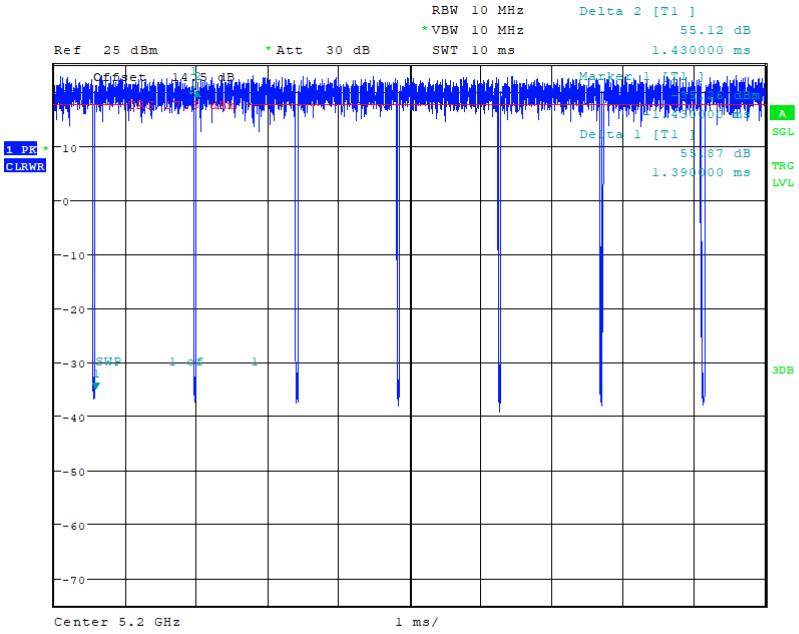
Channel 11 ANT6: Duty Cycle:99.31%; Burst:4.31ms; Period:4.34ms



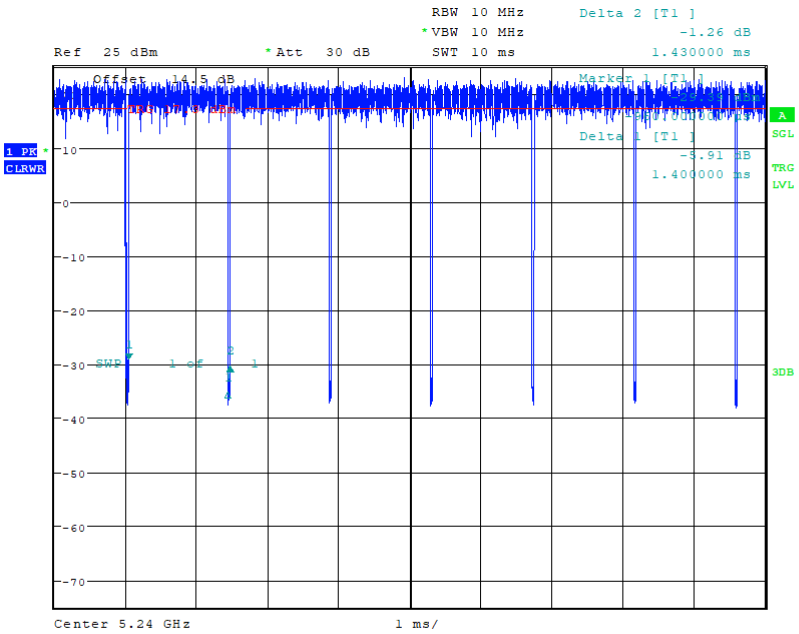
Channel 36 ANT6: Duty Cycle:97.20%; Burst:1.39ms; Period:1.43ms



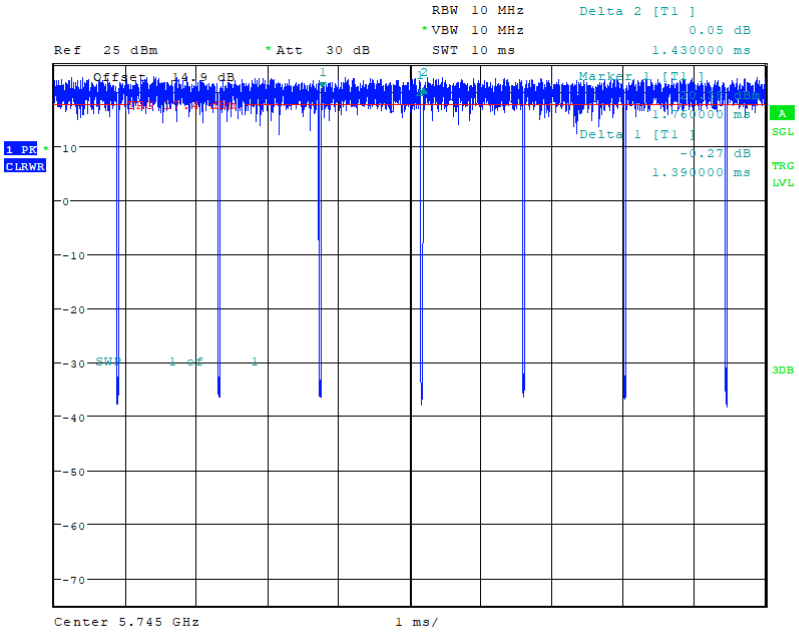
Channel 40 ANT6: Duty Cycle:97.20%; Burst:1.39ms; Period:1.43ms



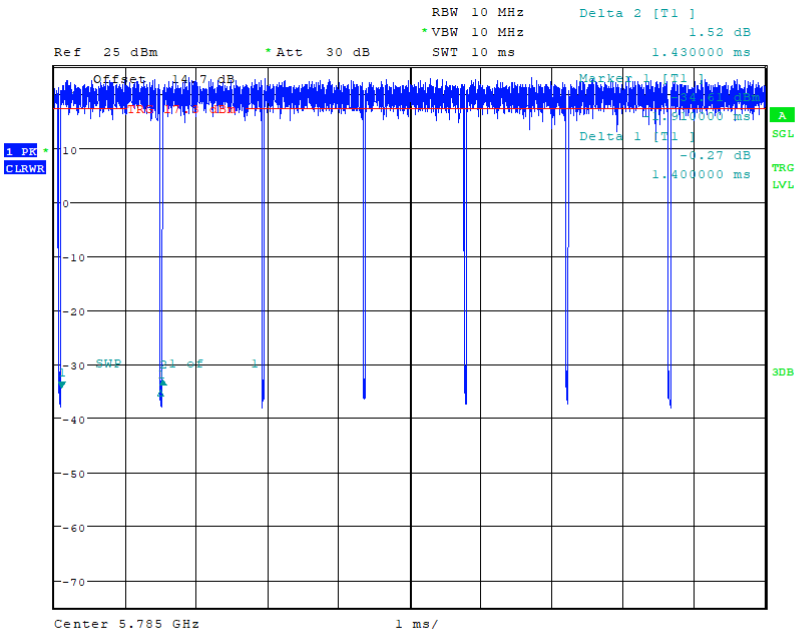
Channel 48 ANT6: Duty Cycle:97.90%; Burst:1.40ms; Period:1.43ms



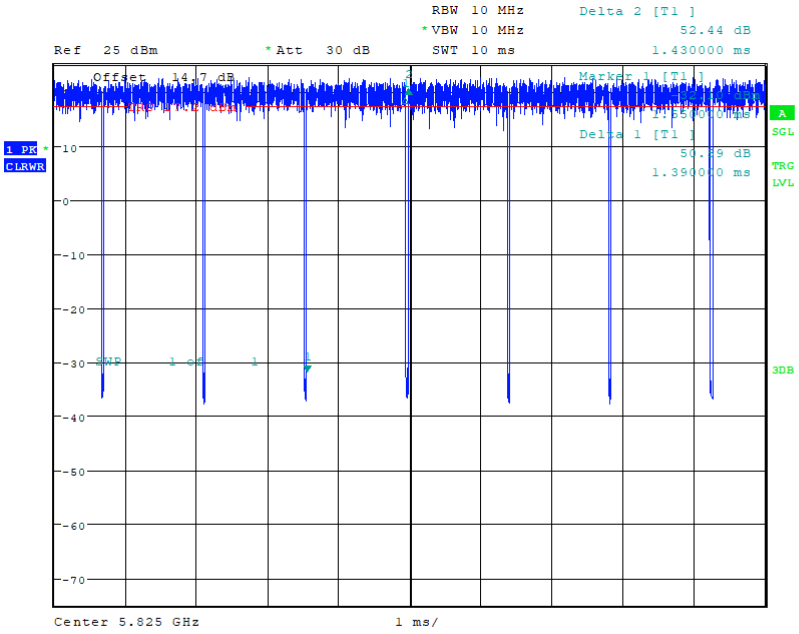
Channel 149 ANT6: Duty Cycle:97.20%; Burst:1.39ms; Period:1.43ms



Channel 157 ANT6: Duty Cycle:97.90%; Burst:1.40ms; Period:1.43ms



Channel 165 ANT6: Duty Cycle:97.20%; Burst:1.39ms; Period:1.43ms



WLAN 2.4G

Test Position	Cover Type	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)				Figure No.
										Measured SAR1g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR1g	
Hotspot SAR (10mm)														
Front Side	Hotstop on	802.11b	20	99.31%	6	2437	19.67	20.70	-0.02	0.416	1.01	1.27	0.531	/
Back Side	Hotstop on	802.11b	20	99.31%	6	2437	19.67	20.70	-0.01	0.534	1.01	1.27	0.682	FIG A.19
Left Side	Hotstop on	802.11b	20	99.31%	6	2437	19.67	20.70	-0.03	0.098	1.01	1.27	0.124	/
Right Side	Hotstop on	802.11b	20	99.31%	6	2437	19.67	20.70	-0.05	0.188	1.01	1.27	0.240	/
Top Side	Hotstop on	802.11b	20	99.31%	6	2437	19.67	20.70	-0.11	0.046	1.01	1.27	0.059	/
Bottom Side	Hotstop on	802.11b	20	99.31%	6	2437	19.67	20.70	-0.02	0.508	1.01	1.27	0.648	/
Hotspot SAR (16mm)														
Front Side	Hotstop on	802.11b	20	99.31%	6	2437	19.67	20.70	-0.04	0.265	1.01	1.27	0.338	/

WLAN 5G

Test Position	Cover Type	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)				Figure No.
										Measured SAR1g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR1g	
Hotspot SAR (10mm)														
Front Side	Hotstop on	802.11a	20	97.90%	48	5240	18.51	19.50	-0.06	0.242	1.02	1.26	0.310	/
Back Side	Hotstop on	802.11a	20	97.90%	48	5240	18.51	19.50	0.03	0.644	1.02	1.26	0.826	/
Left Side	Hotstop on	802.11a	20	97.90%	48	5240	18.51	19.50	-0.10	0.068	1.02	1.26	0.087	/
Right Side	Hotstop on	802.11a	20	97.90%	48	5240	18.51	19.50	-0.09	0.783	1.02	1.26	1.005	FIG A.20
Top Side	Hotstop on	802.11a	20	97.90%	48	5240	18.51	19.50	0.07	0.152	1.02	1.26	0.195	/
Bottom Side	Hotstop on	802.11a	20	97.90%	48	5240	18.51	19.50	0.00	0.161	1.02	1.26	0.207	/
Back Side	Hotstop on	802.11a	20	97.20%	36	5180	17.43	18.50	-0.04	0.557	1.03	1.28	0.733	/
Back Side	Hotstop on	802.11a	20	97.20%	40	5200	18.44	19.50	-0.08	0.631	1.03	1.28	0.829	/
Right Side	Hotstop on	802.11a	20	97.20%	36	5180	17.43	18.50	-0.03	0.640	1.03	1.28	0.842	/
Right Side	Hotstop on	802.11a	20	97.20%	40	5200	18.44	19.50	-0.16	0.688	1.03	1.28	0.903	/
Hotspot SAR (16mm)														
Front Side	Hotstop on	802.11a	20	97.90%	48	5240	18.51	19.50	-0.10	0.143	1.02	1.26	0.183	/

Test Position	Cover Type	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)				Figure No.
										Measured SAR1g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR1g	
Hotspot SAR (10mm)														
Front Side	Hotstop on	802.11a	20	97.20%	149	5745	17.23	18.00	-0.06	0.281	1.03	1.19	0.345	/
Back Side	Hotstop on	802.11a	20	97.20%	149	5745	17.23	18.00	-0.11	0.575	1.03	1.19	0.706	/
Left Side	Hotstop on	802.11a	20	97.20%	149	5745	17.23	18.00	-0.03	0.079	1.03	1.19	0.098	/
Right Side	Hotstop on	802.11a	20	97.20%	149	5745	17.23	18.00	-0.12	1.020	1.03	1.19	1.253	/
Top Side	Hotstop on	802.11a	20	97.20%	149	5745	17.23	18.00	0.00	0.075	1.03	1.19	0.093	/
Bottom Side	Hotstop on	802.11a	20	97.20%	149	5745	17.23	18.00	0.07	0.175	1.03	1.19	0.215	/
Right Side	Hotstop on	802.11a	20	97.90%	157	5785	17.18	18.00	0.09	1.030	1.02	1.21	1.271	FIG A.21
Right Side	Hotstop on	802.11a	20	97.90%	165	5825	17.12	18.00	-0.03	1.010	1.02	1.22	1.263	/
Repeat														
Right Side	Hotstop on	802.11a	20	97.20%	149	5745	17.23	18.00	-0.10	1.020	1.03	1.19	1.253	/
Right Side	Hotstop on	802.11a	20	97.90%	157	5785	17.18	18.00	0.10	1.010	1.02	1.21	1.246	/
Right Side	Hotstop on	802.11a	20	97.90%	165	5825	17.12	18.00	-0.02	0.997	1.02	1.22	1.247	/
Hotspot SAR (16mm)														
Front Side	Hotstop on	802.11a	20	97.20%	149	5745	17.23	18.00	-0.03	0.199	1.03	1.19	0.244	/

12 SAR Measurement Variability

SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium.

The following procedures are applied to determine if repeated measurements are required.

1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps2) through 4) do not apply.

2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.

3) 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 ≥ 1.45W/kg (~ 10% from the 1-g SAR limit).

4) 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

ANT	Frequency Band	Channel Number	Frequency(MHz)	Mode	Test setup	Distance	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated SAR (W/kg)
1	LTE Band 2	18900	1880	1RB-Low	Back Side	5	0.849	0.847	1.00	/
1	LTE Band 2	19100	1900	1RB-Middle	Back Side	5	0.933	0.932	1.00	/
1	LTE Band 2	19100	1900	1RB-Low	Back Side	10	0.895	0.894	1.00	/
1	LTE Band 2	19100	1900	1RB-Low	Left Side	10	0.915	0.906	1.01	/
1	LTE Band 2	19100	1900	50%RB-Middle	Back Side	10	0.801	0.798	1.00	/
1	LTE Band 25	26365	1882.5	1RB-Low	Back Side	5	0.879	0.873	1.01	/
1	LTE Band 25	26590	1905	1RB-Low	Back Side	5	0.886	0.886	1.00	/
1	LTE Band 25	26590	1905	1RB-Low	Left Side	5	0.865	0.862	1.00	/
1	LTE Band 25	26590	1905	50%RB-Low	Back Side	5	0.838	0.832	1.01	/
1	LTE Band 25	26365	1882.5	1RB-Low	Back Side	10	0.894	0.884	1.01	/
1	LTE Band 25	26365	1882.5	1RB-Low	Left Side	10	0.879	0.879	1.00	/
1	LTE Band 25	26590	1905	1RB-Low	Back Side	10	0.992	0.985	1.01	/
1	LTE Band 25	26590	1905	1RB-Low	Left Side	10	1.040	1.030	1.01	/
1	LTE Band 25	26590	1905	50%RB-Low	Back Side	10	0.804	0.798	1.01	/
1	LTE Band 25	26590	1905	50%RB-Low	Left Side	10	0.905	0.899	1.01	/
1	LTE Band 66	132572	1770	1RB-Low	Back Side	5	0.848	0.841	1.01	/
1	LTE Band 66	132322	1745	1RB-Low	Back Side	10	0.831	0.825	1.01	/
1	LTE Band 66	132572	1770	1RB-Low	Back Side	10	0.869	0.862	1.01	/
1	LTE Band 71	133322	683	1RB-Middle	Front Side	5	0.868	0.859	1.01	/
1	LTE Band 71	133322	683	1RB-Middle	Back Side	5	0.804	0.795	1.01	/
1	LTE Band 71	133322	683	1RB-Middle	Bottom Side	5	0.849	0.840	1.01	/
1	LTE Band 71	133222	673	1RB-Middle	Front Side	5	0.877	0.868	1.01	/
1	LTE Band 71	133222	673	1RB-Middle	Bottom Side	5	0.964	0.954	1.01	/
1	LTE Band 71	133372	688	1RB-Low	Bottom Side	5	0.870	0.861	1.01	/
1	NR Band n25	381000	1905	1RB-104	Back Side	10	0.857	0.857	1.00	/
1	NR Band n25	381000	1905	1RB-104	Left Side	10	0.916	0.910	1.01	/
1	NR Band n25	381000	1905	50RB-25	Back Side	10	0.859	0.853	1.01	/
1	NR Band n25	381000	1905	50RB-25	Left Side	10	0.954	0.947	1.01	/
1	NR Band n25	372000	1860	1RB-104	Back Side	10	0.845	0.839	1.01	/
1	NR Band n25	376500	1882.5	1RB-104	Back Side	10	0.926	0.922	1.00	/
1	NR Band n25	372000	1860	1RB-104	Left Side	10	0.936	0.929	1.01	/
1	NR Band n25	376500	1882.5	1RB-104	Left Side	10	0.929	0.926	1.00	/
1	NR Band n25	372000	1860	50RB-25	Back Side	10	0.835	0.829	1.01	/
1	NR Band n25	376500	1882.5	50RB-25	Back Side	10	0.929	0.925	1.00	/
1	NR Band n25	372000	1860	50RB-25	Left Side	10	0.943	0.936	1.01	/
1	NR Band n25	376500	1882.5	50RB-25	Left Side	10	0.958	0.954	1.00	/
1	NR Band n25	376500	1882.5	100RB-0	Back Side	10	0.827	0.824	1.00	/
1	NR Band n25	376500	1882.5	100RB-0	Left Side	10	0.841	0.838	1.00	/

ANT	Frequency Band	Channel Number	Frequency(MHz)	Mode	Test setup	Distance	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated SAR (W/kg)
2	NR Band n41	518598	2592.99	135RB-67	Top Side	5	0.850	0.852	1.00	/
2	NR Band n41	509202	2546.01	1RB-1	Front Side	5	0.828	0.827	1.00	/
2	NR Band n41	513900	2569.5	135RB-67	Top Side	5	0.814	0.806	1.01	/
2	NR Band n41	523302	2616.51	135RB-67	Top Side	5	0.839	0.832	1.01	/
2	NR Band n41	528000	2640	135RB-67	Top Side	5	0.867	0.865	1.00	/
2	NR Band n41	518598	2592.99	1RB-1	Front Side	10	0.982	0.977	1.01	/
2	NR Band n41	518598	2592.99	1RB-1	Back Side	10	0.914	0.910	1.00	/
2	NR Band n41	518598	2592.99	135RB-67	Front Side	10	0.872	0.868	1.00	/
2	NR Band n41	518598	2592.99	135RB-67	Back Side	10	1.080	1.080	1.00	/
2	NR Band n41	509202	2546.01	1RB-1	Front Side	10	1.080	1.070	1.01	/
2	NR Band n41	513900	2569.5	1RB-1	Front Side	10	1.060	1.050	1.01	/
2	NR Band n41	523302	2616.51	1RB-1	Front Side	10	0.966	0.964	1.00	/
2	NR Band n41	528000	2640	1RB-1	Front Side	10	0.954	0.945	1.01	/
2	NR Band n41	509202	2546.01	1RB-1	Back Side	10	0.863	0.854	1.01	/
2	NR Band n41	513900	2569.5	1RB-1	Back Side	10	0.852	0.849	1.00	/
2	NR Band n41	523302	2616.51	1RB-1	Back Side	10	1.040	1.040	1.00	/
2	NR Band n41	528000	2640	1RB-1	Back Side	10	0.946	0.937	1.01	/
2	NR Band n41	509202	2546.01	135RB-67	Front Side	10	0.991	0.981	1.01	/
2	NR Band n41	513900	2569.5	135RB-67	Front Side	10	0.970	0.967	1.00	/
2	NR Band n41	509202	2546.01	135RB-67	Back Side	10	0.871	0.862	1.01	/
2	NR Band n41	513900	2569.5	135RB-67	Back Side	10	0.953	0.949	1.00	/
2	NR Band n41	523302	2616.51	135RB-67	Back Side	10	0.987	0.985	1.00	/
2	NR Band n41	528000	2640	135RB-67	Back Side	10	0.946	0.937	1.01	/
2	NR Band n41	523302	2616.51	135RB-67	Top Side	10	0.882	0.878	1.00	/
2	NR Band n41	528000	2640	135RB-67	Top Side	10	0.909	0.900	1.01	/
2	NR Band n41	518598	2592.99	270RB-0	Front Side	10	0.874	0.874	1.00	/
2	NR Band n41	518598	2592.99	270RB-0	Back Side	10	0.903	0.903	1.00	/
2	NR Band n41	509202	2546.01	1RB-1	Front Side	13	0.957	0.950	1.01	/
2	NR Band n41	509202	2546.01	1RB-1	Left Side	9	0.903	0.897	1.01	/
2	NR Band n41	509202	2546.01	135RB-67	Front Side	13	0.934	0.928	1.01	/
2	NR Band n41	509202	2546.01	135RB-67	Left Side	9	0.975	0.896	1.09	/
2	NR Band n41	518598	2592.99	1RB-1	Left Side	9	0.843	0.838	1.01	/
2	NR Band n41	513900	2569.5	1RB-1	Left Side	9	0.827	0.823	1.00	/
2	NR Band n41	523302	2616.51	1RB-1	Left Side	9	0.873	0.870	1.00	/
2	NR Band n41	528000	2640	1RB-1	Left Side	9	0.890	0.881	1.01	/
2	NR Band n41	518598	2592.99	135RB-67	Front Side	13	0.867	0.862	1.01	/
2	NR Band n41	513900	2569.5	135RB-67	Front Side	13	0.850	0.845	1.01	/
2	NR Band n41	518598	2592.99	135RB-67	Left Side	9	0.908	0.903	1.01	/
2	NR Band n41	513900	2569.5	135RB-67	Left Side	9	0.892	0.888	1.00	/
2	NR Band n41	528000	2640	135RB-67	Left Side	9	0.913	0.904	1.01	/
1	NR Band n66	349000	1745	1RB-104	Back Side	5	1.090	1.060	1.03	/
1	NR Band n66	349000	1745	1RB-104	Left Side	5	0.803	0.784	1.02	/
1	NR Band n66	349000	1745	50RB-25	Back Side	5	1.090	1.060	1.03	/
1	NR Band n66	344000	1720	1RB-104	Back Side	5	0.904	0.897	1.01	/
1	NR Band n66	354000	1770	1RB-104	Back Side	5	1.060	1.040	1.02	/
1	NR Band n66	354000	1770	1RB-104	Left Side	5	0.816	0.798	1.02	/
1	NR Band n66	344000	1720	50RB-25	Back Side	5	0.844	0.837	1.01	/
1	NR Band n66	354000	1770	50RB-25	Back Side	5	1.070	1.040	1.03	/
1	NR Band n66	354000	1770	50RB-25	Left Side	5	0.861	0.842	1.02	/
1	NR Band n66	344000	1720	100RB-0	Back Side	5	0.837	0.837	1.00	/
1	NR Band n66	349000	1745	1RB-104	Back Side	10	1.090	1.050	1.04	/
1	NR Band n66	349000	1745	50RB-25	Back Side	10	1.090	0.997	1.09	/
1	NR Band n66	344000	1720	1RB-104	Back Side	10	0.964	0.957	1.01	/
1	NR Band n66	354000	1770	1RB-104	Back Side	10	0.902	0.905	1.00	/
1	NR Band n66	354000	1770	50RB-25	Back Side	10	0.926	0.882	1.05	/
1	NR Band n66	349000	1745	100RB-0	Back Side	10	0.866	0.866	1.00	/
1	NR Band n71	136100	680.5	1RB-1	Front Side	5	0.825	0.816	1.01	/
1	NR Band n71	136100	680.5	1RB-1	Back Side	5	0.871	0.862	1.01	/
1	NR Band n71	136100	680.5	1RB-1	Bottom Side	5	0.922	0.912	1.01	/
1	NR Band n71	136100	680.5	50RB-25	Front Side	5	0.862	0.853	1.01	/
1	NR Band n71	136100	680.5	50RB-25	Back Side	5	0.840	0.832	1.01	/
1	NR Band n71	136100	680.5	50RB-25	Bottom Side	5	0.878	0.868	1.01	/
1	NR Band n71	137600	688	1RB-104	Front Side	5	0.813	0.805	1.01	/
1	NR Band n71	134600	673	1RB-1	Back Side	5	0.908	0.898	1.01	/
1	NR Band n71	137600	688	1RB-104	Back Side	5	0.832	0.824	1.01	/
1	NR Band n71	134600	673	1RB-1	Bottom Side	5	0.994	0.983	1.01	/
1	NR Band n71	137600	688	1RB-104	Bottom Side	5	0.900	0.891	1.01	/
1	NR Band n71	134600	673	50RB-25	Front Side	5	0.845	0.836	1.01	/
1	NR Band n71	137600	688	50RB-25	Front Side	5	0.827	0.818	1.01	/
1	NR Band n71	134600	673	50RB-25	Back Side	5	0.891	0.881	1.01	/
1	NR Band n71	134600	673	50RB-25	Bottom Side	5	0.958	0.947	1.01	/
1	NR Band n71	137600	688	50RB-25	Bottom Side	5	0.805	0.797	1.01	/
1	NR Band n71	136100	680.5	100RB-0	Front Side	5	0.816	0.803	1.02	/
6	Wi-Fi 5G U-NII-3	149	5745	802.11a	Right Side	10	1.020	1.020	1.00	/
6	Wi-Fi 5G U-NII-3	157	5785	802.11a	Right Side	10	1.030	1.010	1.02	/
6	Wi-Fi 5G U-NII-3	165	5825	802.11a	Right Side	10	1.010	0.997	1.01	/

13 Simultaneous TX SAR Considerations

13.1 Transmit Antenna Separation Distances

The detail for transmit antenna separation distances is described in the additional document:
Appendix to test report No.25T04Z100481-006
The photos of SAR test

13.2 SAR Measurement Positions

According to the KDB941225 D06 Hot Spot SAR, the edges with less than 2.5 cm distance to the antennas need to be tested for SAR.

Antenna/Sensor-to- DUT sides separation distances						
Mode	Front	Rear	Left edge	Right edge	Top edge	Bottom edge
Ant.1	<25mm	<25mm	<25mm	>25mm	<25mm	<25mm
Ant.2	<25mm	<25mm	<25mm	>25mm	<25mm	>25mm
Ant.3	<25mm	<25mm	>25mm	>25mm	<25mm	>25mm
Ant.5	<25mm	<25mm	>25mm	<25mm	<25mm	<25mm
Ant.6	<25mm	<25mm	>25mm	<25mm	>25mm	<25mm
Ant.7	<25mm	<25mm	>25mm	<25mm	>25mm	<25mm

13.3 Simultaneous Transmission

13.3.1 Introduction

The following procedures adopted from “FCC SAR Considerations for Cell Phones with Multiple Transmitters” are applicable to handsets with built-in unlicensed transmitters such as WLAN and Bluetooth devices which may simultaneously transmit with the licensed transmitter. KDB 447498 D01 provides two procedures for determining simultaneous transmission SAR test exclusion: Sum of SAR and SAR to Peak Location Ratio (SPLSR)

13.3.2 Sum of SAR

To qualify for simultaneous transmission SAR test exclusion based upon Sum of SAR the sum of the reported standalone SARs for all simultaneously transmitting antennas shall be below the applicable standalone SAR limit. If the sum of the SARs is above the applicable limit then simultaneous transmission SAR test exclusion may still apply if the requirements of the SAR to Peak Location Ratio (SPLSR) evaluation are met.

13.3.3 SAR to Peak Location Ratio (SPLSR)

KDB 447498 D01 General RF Exposure Guidance explains how to calculate the SAR to Peak Location Ratio (SPLSR) between pairs of simultaneously transmitting antennas:

$SPLSR = (SAR1 + SAR2)^{1.5} / Ri$

Where:

SAR1 is the highest reported or estimated SAR for the first of a pair of simultaneous transmitting antennas, in a specific test operating mode and exposure condition.

SAR2 is the highest reported or estimated SAR for the second of a pair of simultaneous transmitting antennas, in the same test operating mode and exposure condition as the first .

Ri is the separation distance between the pair of simultaneous transmitting antennas. When the SAR is measured, for both antennas in the pair, it is determined by the actual x, y and z coordinates in the 1-g SAR for each SAR peak location, based on the extrapolated and interpolated result in the zoom scan measurement, using the formula of

$[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$

In order for a pair of simultaneous transmitting antennas with the sum of 1-g SAR > 1.6 W/kg to qualify for exemption from Simultaneous Transmission SAR measurements, it has to satisfy the condition of:

$(SAR1 + SAR2)^{1.5} / Ri \leqslant 0.04$

When an individual antenna transmits at on two bands simultaneously, the sum of the highest reported SAR for the frequency bands should be used to determine SAR1 or SAR2. When SPLSR is necessary, the smallest distance between the peak SAR locations for the antenna pair with respect to the peaks from each antenna should be used.

13.3.4 Simultaneous Transmission Capabilities

The simultaneous transmission possibilities for this device are listed as below:

Capable Transmit Configurations	Body	Hotspot
WWAN + Wi-Fi 2.4G	No	Yes
WWAN + Wi-Fi 5G	No	Yes

Note:

1. The reported SAR summation is calculated based on the same configuration and test position.
2. For the devices edges with antennas more than 2.5 cm from edge are not required to be evaluated for SAR, we determined the SAR of this edges were less than 0.01. For the convenience of simultaneous transmission calculation, all SAR values less than 0.01 are uniformly written as 0.00

13.3.5 Evaluation of Simultaneous

Simultaneous Transmission Table	Report SAR_{1g}(W/kg) / Test Position	ANT 1	ANT 1	ANT 1	ANT 1	ANT 1	ANT 1	ANT 2	ANT 3	ANT 5	ANT 7	ANT 1	ANT 1	Max.Report SAR_{1g} LTE/NR	ANT 6			WWAN+Wi-Fi 2.4G	WWAN+Wi-Fi 5G U-NII-1	WWAN+Wi-Fi 5G U-NII-3	MAX.ΣSAR$_{1g}$
		LTE B2	LTE B12	LTE B25	LTE B66	LTE B71	NR n25	NR n41	NR n41	NR n41	NR n41	NR n66	NR n71		Max.Report SAR_{1g} Wi-Fi 2.4G	Wi-Fi 5G U-NII-1	Wi-Fi 5G U-NII-3				
Hotspot 10mm	Front Side	0.635	0.605	0.706	0.512	0.809	0.703	1.310	0.061	0.046	0.087	0.347	0.757	1.310	0.531	0.310	0.345	1.340	1.119	1.154	1.34
	Back Side	1.111	0.508	1.215	1.062	0.768	1.156	1.292	0.039	0.121	0.078	1.195	0.780	1.292	0.682	0.829	0.706	1.462	1.337	1.486	1.49
	Left Side	1.136	0.205	1.274	0.734	0.376	1.192	0.799	0.063	0.013	0.047	0.836	0.359	1.274	0.124	0.087	0.098	1.398	1.361	1.372	1.40
	Right Side	0.041	0.034	0.038	0.039	0.039	0.037	0.053	0.057	0.151	0.049	0.025	0.053	0.151	0.240	1.005	1.271	0.391	1.156	1.422	1.42
	Top Side	0.033	0.278	0.033	0.073	0.176	0.091	1.108	0.073	0.032	0.005	0.045	0.377	1.108	0.059	0.195	0.093	1.167	1.303	1.201	1.30
	Bottom Side	0.336	0.490	0.380	0.290	0.525	0.456	0.243	0.022	0.025	0.186	0.246	0.578	0.578	0.648	0.207	0.215	1.226	0.785	0.793	1.23
Body SAR-triggering distance minus 1 mm	Front Side(29mm)	0.216	N/A	0.217	0.176	N/A	0.283	N/A	N/A	N/A	N/A	0.169	N/A	0.283	0.531	0.310	0.345	0.814	0.593	0.628	0.81
	Back Side(31mm)	0.320	N/A	0.325	0.385	N/A	0.232	N/A	N/A	N/A	N/A	0.369	N/A	0.385	0.682	0.829	0.706	1.067	1.214	1.091	1.21
	Left Side(49mm)	0.187	N/A	0.189	0.132	N/A	0.175	N/A	N/A	N/A	N/A	0.127	N/A	0.189	0.124	0.087	0.098	0.313	0.276	0.287	0.31
	Bottom Side(49mm)	0.080	N/A	0.082	0.056	N/A	0.051	N/A	N/A	N/A	N/A	0.053	N/A	0.082	0.648	0.207	0.215	0.730	0.289	0.297	0.73
Body SAR-triggering distance minus 1 mm	Front Side(16mm)	N/A	N/A	N/A	N/A	N/A	N/A	1.124	N/A	N/A	N/A	N/A	N/A	1.124	0.338	0.183	0.244	1.462	1.307	1.368	1.46
	Back Side(24mm)	N/A	N/A	N/A	N/A	N/A	N/A	0.481	N/A	N/A	N/A	N/A	N/A	0.481	0.682	0.829	0.706	1.163	1.310	1.187	1.31
	Left Side(9mm)	N/A	N/A	N/A	N/A	N/A	N/A	1.172	N/A	N/A	N/A	N/A	N/A	1.172	0.124	0.087	0.098	1.296	1.259	1.270	1.30
	Top Side(19mm)	N/A	N/A	N/A	N/A	N/A	N/A	0.364	N/A	N/A	N/A	N/A	N/A	0.364	0.059	0.195	0.093	0.423	0.559	0.457	0.56

Note: The data marked in "blue" in the table will be calculated separately for SPLSR. The calculation results are as follows.

No.	Band	Position	SAR(W/kg)	GAP(mm)	SAR peak location (mm)			Band	Position	SAR (W/kg)	GAP (mm)	SAR peak location (mm)			Summed SAR (W/kg)	3D distance (mm)	SPLSR Results	Limit	Figure No.
					X	Y	Z					X	Y	Z					
LTE/NR+Wi-Fi 2.4G	n41 ANT2	Front Side	1.310	10	-3	-40	-208	Wi-Fi 2.4G	Front Side	0.531	10	1	37	-208	1.84	77.10	0.032	≤0.04	FIG 13.3.5-1
	LTE B2	Back Side	1.111	10	-11	-58	-208	Wi-Fi 2.4G	Back Side	0.682	10	-53	39	-208	1.79	105.70	0.023	≤0.04	FIG 13.3.5-2
	LTE B25	Back Side	1.215	10	-11	-58	-208	Wi-Fi 2.4G	Back Side	0.682	10	-53	39	-208	1.90	105.70	0.025	≤0.04	FIG 13.3.5-3
	LTE B66	Back Side	1.062	10	-21	-56	-208	Wi-Fi 2.4G	Back Side	0.682	10	-53	39	-208	1.74	100.24	0.023	≤0.04	FIG 13.3.5-4
	LTE B71	Back Side	0.768	10	-27	-25	-208	Wi-Fi 2.4G	Back Side	0.682	10	-53	39	-208	1.45	69.08	N/A	1.6(W/kg)	N/A
	n25	Back Side	1.156	10	-17	-61	-208	Wi-Fi 2.4G	Back Side	0.682	10	-53	39	-208	1.84	106.28	0.023	≤0.04	FIG 13.3.5-5
	n41 ANT2	Back Side	1.292	10	15	-38	-208	Wi-Fi 2.4G	Back Side	0.682	10	-53	39	-208	1.97	102.73	0.027	≤0.04	FIG 13.3.5-6
	n66	Back Side	1.195	10	-35	-51	-208	Wi-Fi 2.4G	Back Side	0.682	10	-53	39	-208	1.88	91.78	0.028	≤0.04	FIG 13.3.5-7
	n71	Back Side	0.780	10	-27	-27	-208	Wi-Fi 2.4G	Back Side	0.682	10	-53	39	-208	1.46	70.94	N/A	1.6(W/kg)	N/A
No.	Band	Position	SAR(W/kg)	GAP(mm)	SAR peak location (mm)			Band	Position	SAR (W/kg)	GAP (mm)	SAR peak location (mm)			Summed SAR (W/kg)	3D distance (mm)	SPLSR Results	Limit	Figure No.
					X	Y	Z					X	Y	Z					
LTE/NR+Wi-Fi 5G U-NII-1	n41 ANT2	Front Side	1.310	10	-3	-40	-208	Wi-Fi 5G U-NII-1	Front Side	0.310	10	1	65	-208	1.62	105.08	0.020	≤0.04	FIG 13.3.5-8
	LTE B2	Back Side	1.111	10	-11	-58	-208	Wi-Fi 5G U-NII-1	Back Side	0.829	10	-55	63	-208	1.94	128.75	0.021	≤0.04	FIG 13.3.5-9
	LTE B25	Back Side	1.215	10	-11	-58	-208	Wi-Fi 5G U-NII-1	Back Side	0.829	10	-55	63	-208	2.04	128.75	0.023	≤0.04	FIG 13.3.5-10
	LTE B66	Back Side	1.062	10	-21	-56	-208	Wi-Fi 5G U-NII-1	Back Side	0.829	10	-55	63	-208	1.89	123.76	0.021	≤0.04	FIG 13.3.5-11
	LTE B71	Back Side	0.768	10	-27	-25	-208	Wi-Fi 5G U-NII-1	Back Side	0.829	10	-55	63	-208	1.60	92.35	0.022	≤0.04	FIG 13.3.5-12
	n25	Back Side	1.156	10	-17	-61	-208	Wi-Fi 5G U-NII-1	Back Side	0.829	10	-55	63	-208	1.99	129.69	0.022	≤0.04	FIG 13.3.5-13
	n41 ANT2	Back Side	1.292	10	15	-38	-208	Wi-Fi 5G U-NII-1	Back Side	0.829	10	-55	63	-208	2.12	122.89	0.025	≤0.04	FIG 13.3.5-14
	n66	Back Side	1.195	10	-35	-51	-208	Wi-Fi 5G U-NII-1	Back Side	0.829	10	-55	63	-208	2.02	115.74	0.025	≤0.04	FIG 13.3.5-15
	n71	Back Side	0.780	10	-27	-27	-208	Wi-Fi 5G U-NII-1	Back Side	0.829	10	-55	63	-208	1.61	94.25	0.022	≤0.04	FIG 13.3.5-16
No.	Band	Position	SAR(W/kg)	GAP(mm)	SAR peak location (mm)			Band	Position	SAR (W/kg)	GAP (mm)	SAR peak location (mm)			Summed SAR (W/kg)	3D distance (mm)	SPLSR Results	Limit	Figure No.
					X	Y	Z					X	Y	Z					
LTE/NR+Wi-Fi 5G U-NII-3	n41 ANT2	Front Side	1.310	10	-3	-40	-208	Wi-Fi 5G U-NII-3	Front Side	0.345	10	7	67	-208	1.66	107.47	0.020	≤0.04	FIG 13.3.5-17
	LTE B2	Back Side	1.111	10	-11	-58	-208	Wi-Fi 5G U-NII-3	Back Side	0.706	10	-61	57	-208	1.82	125.40	0.020	≤0.04	FIG 13.3.5-18
	LTE B25	Back Side	1.215	10	-11	-58	-208	Wi-Fi 5G U-NII-3	Back Side	0.706	10	-61	57	-208	1.92	125.40	0.021	≤0.04	FIG 13.3.5-19
	LTE B66	Back Side	1.062	10	-21	-56	-208	Wi-Fi 5G U-NII-3	Back Side	0.706	10	-61	57	-208	1.77	119.87	0.020	≤0.04	FIG 13.3.5-20
	LTE B71	Back Side	0.768	10	-27	-25	-208	Wi-Fi 5G U-NII-3	Back Side	0.706	10	-61	57	-208	1.47	88.77	N/A	1.6(W/kg)	N/A
	n25	Back Side	1.156	10	-17	-61	-208	Wi-Fi 5G U-NII-3	Back Side	0.706	10	-61	57	-208	1.86	125.94	0.020	≤0.04	FIG 13.3.5-21
	n41 ANT2	Back Side	1.292	10	15	-38	-208	Wi-Fi 5G U-NII-3	Back Side	0.706	10	-61	57	-208	2.00	121.66	0.023	≤0.04	FIG 13.3.5-22
	n66	Back Side	1.195	10	-35	-51	-208	Wi-Fi 5G U-NII-3	Back Side	0.706	10	-61	57	-208	1.90	111.09	0.024	≤0.04	FIG 13.3.5-23
	n71	Back Side	0.780	10	-27	-27	-208	Wi-Fi 5G U-NII-3	Back Side	0.706	10	-61	57	-208	1.49	90.62	N/A	1.6(W/kg)	N/A

Conclusion:

According to the above tables, the sum of reported SAR values is<1.6W/kg. So the simultaneous transmission SAR with volume scans is not required.

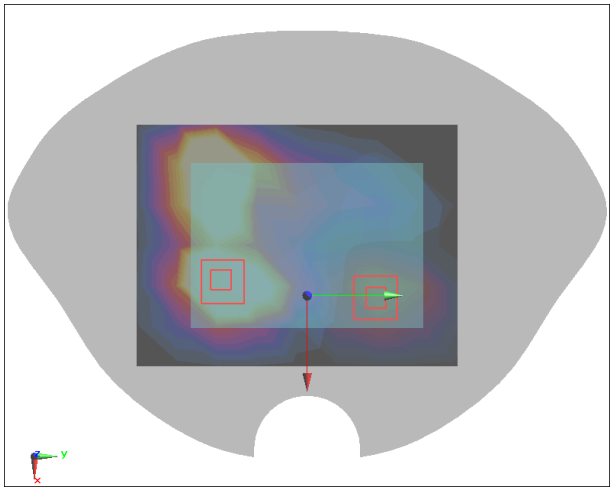


FIG 13.3.5-1

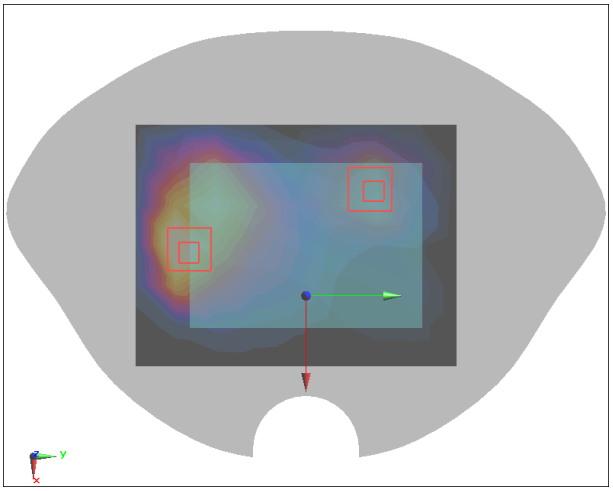


FIG 13.3.5-2

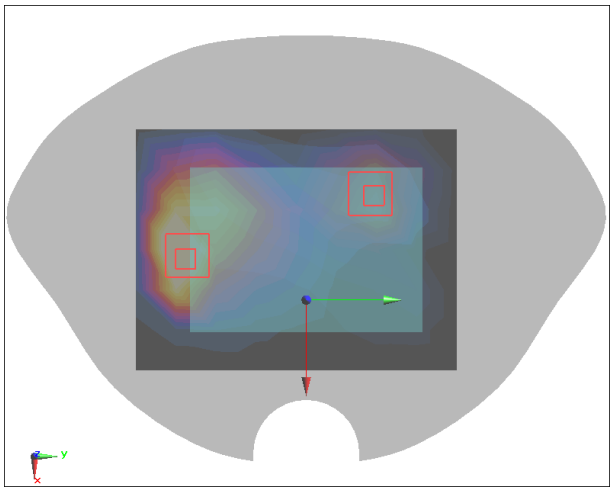


FIG 13.3.5-3

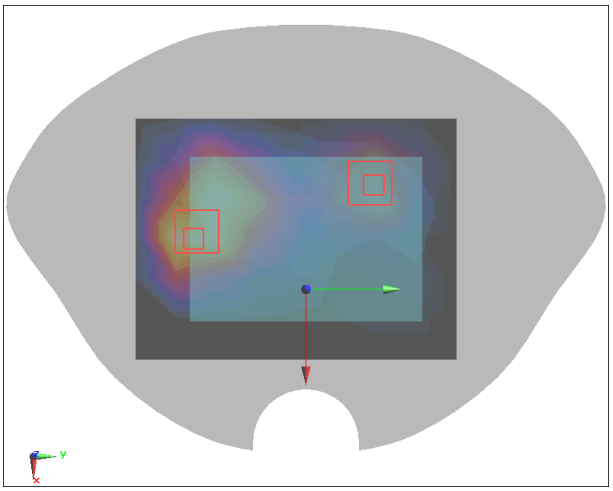


FIG 13.3.5-4

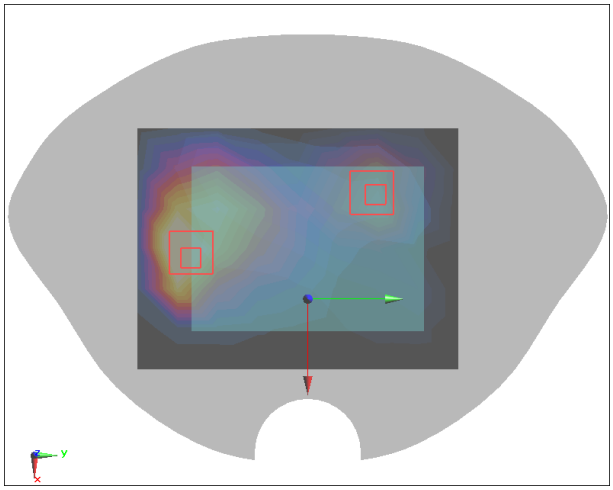


FIG 13.3.5-5

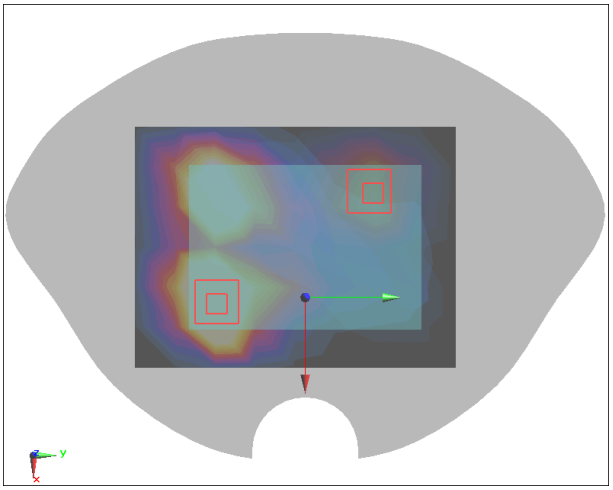


FIG 13.3.5-6

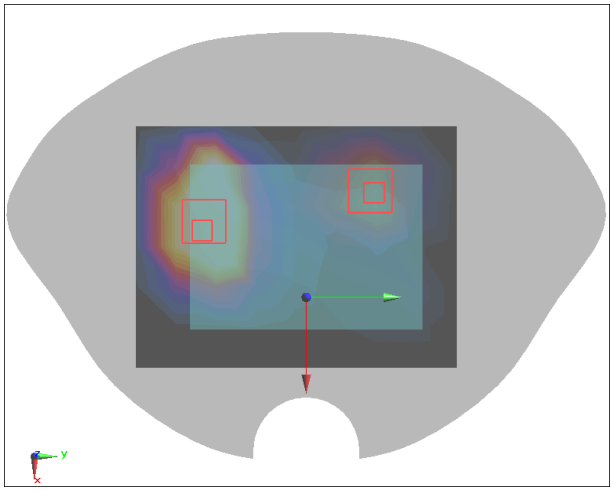


FIG 13.3.5-7

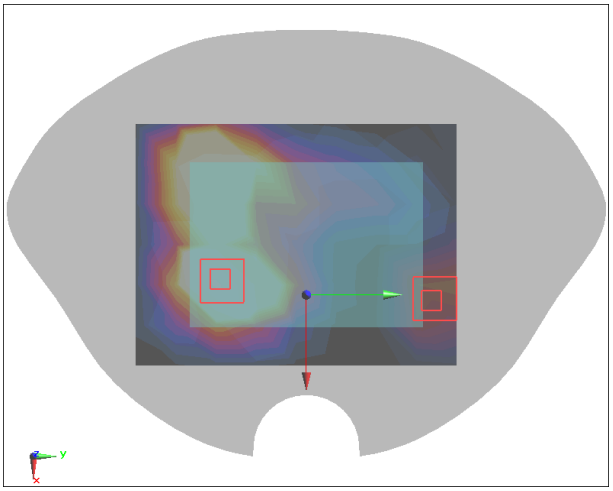


FIG 13.3.5-8

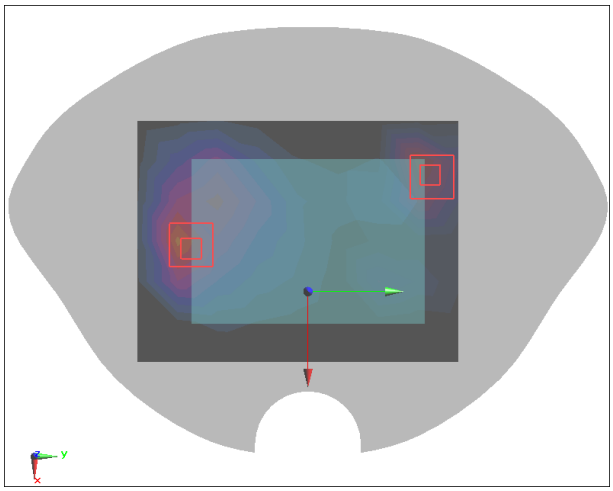


FIG 13.3.5-9

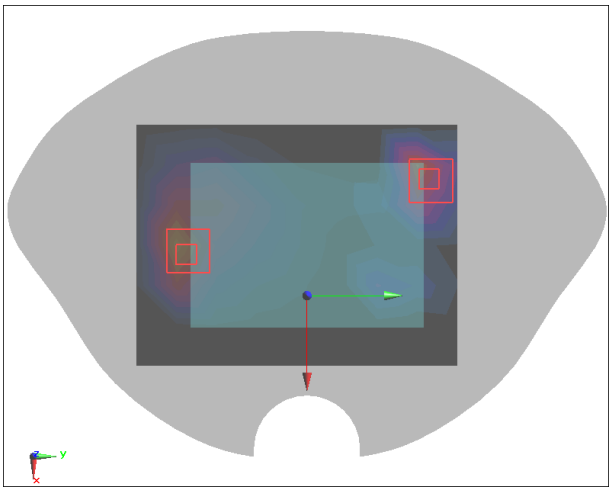


FIG 13.3.5-10

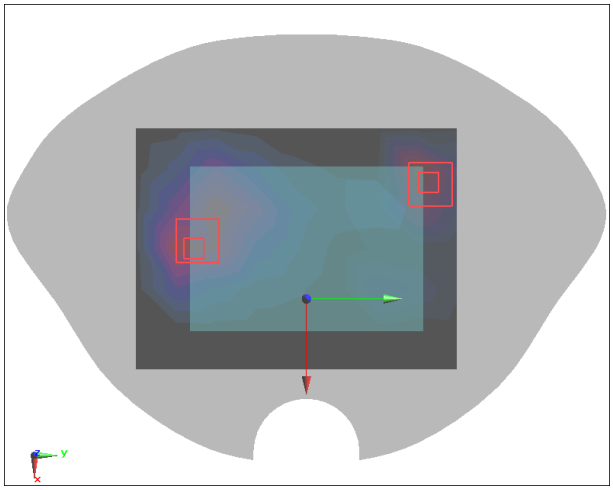


FIG 13.3.5-11

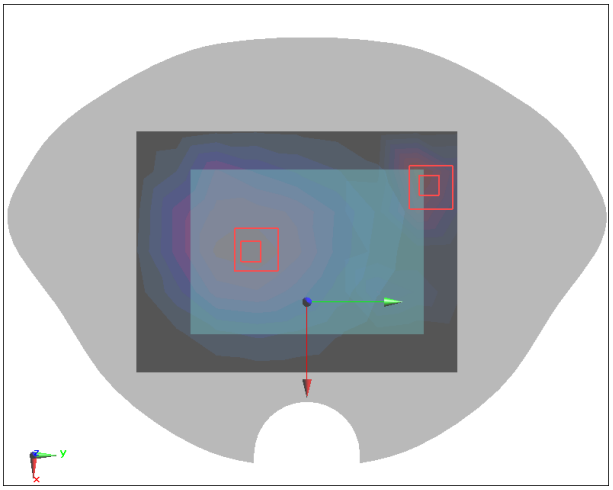


FIG 13.3.5-12

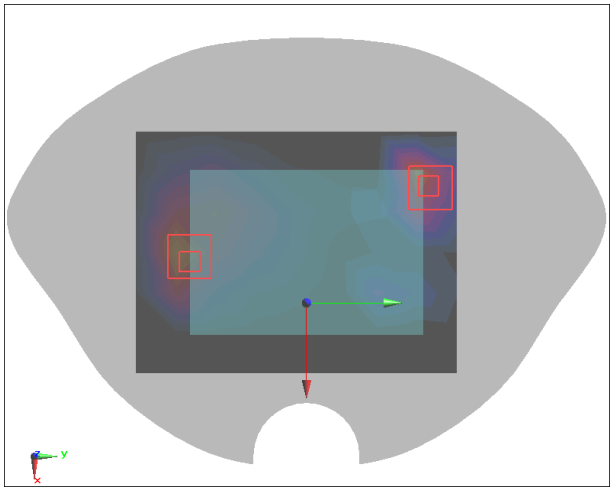


FIG 13.3.5-13

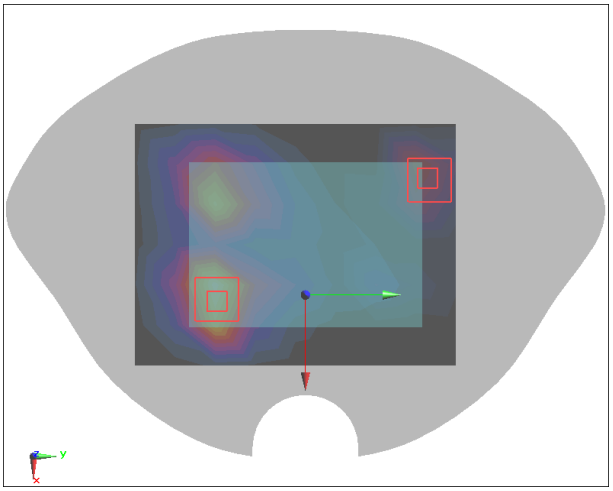


FIG 13.3.5-14

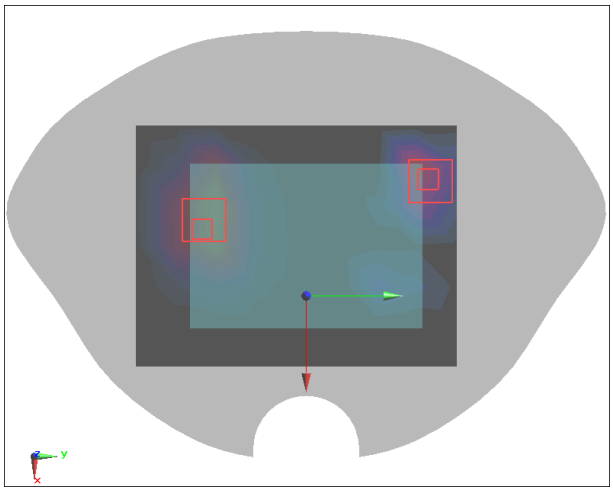


FIG 13.3.5-15

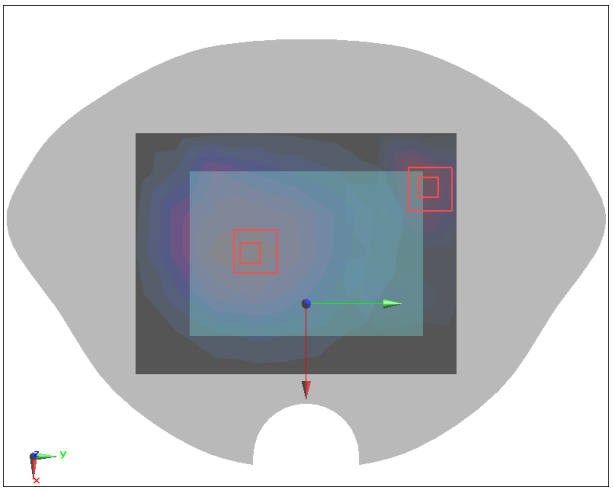


FIG 13.3.5-16

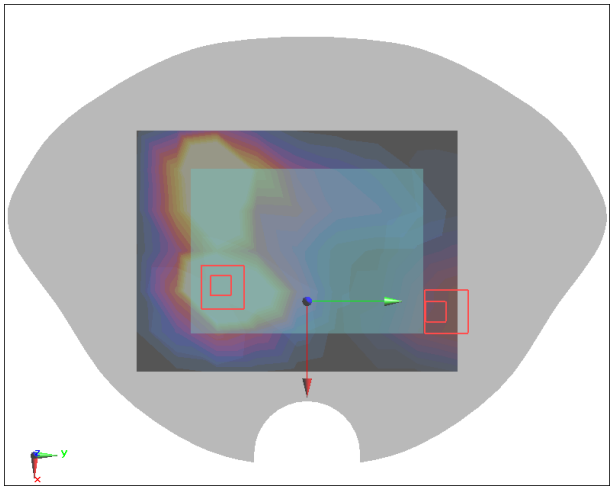


FIG 13.3.5-17

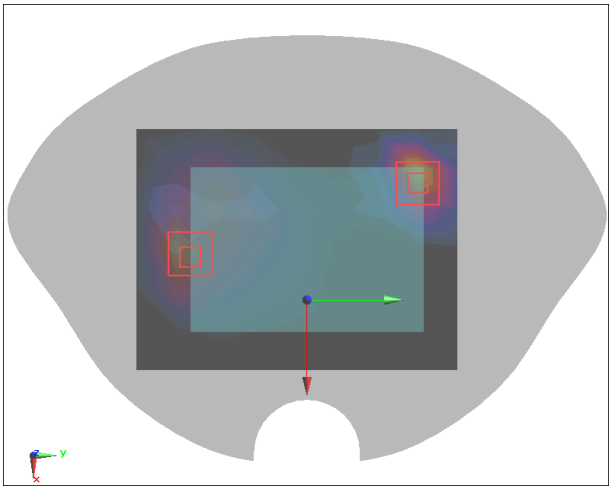


FIG 13.3.5-18

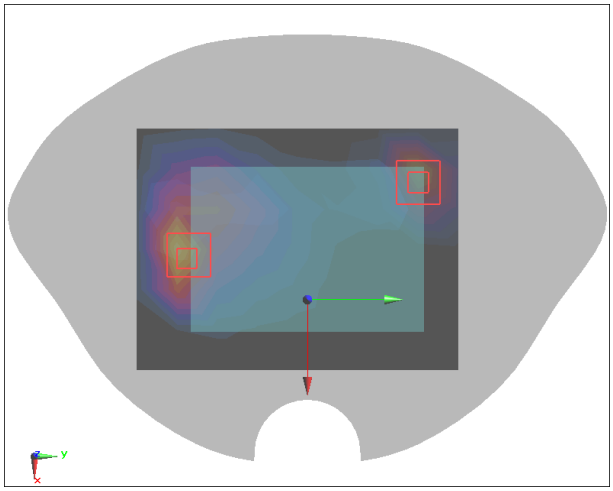


FIG 13.3.5-19

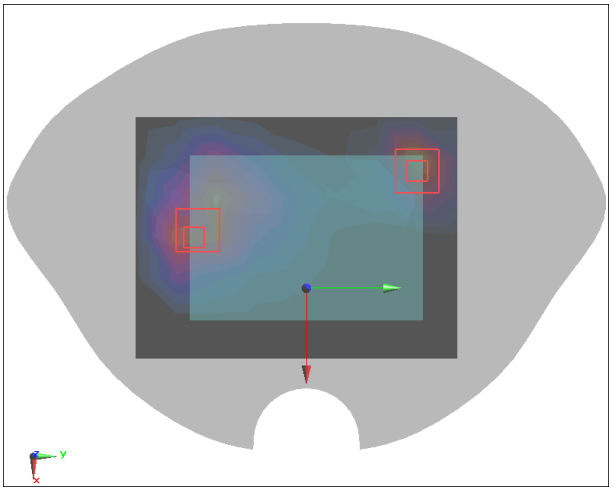


FIG 13.3.5-20

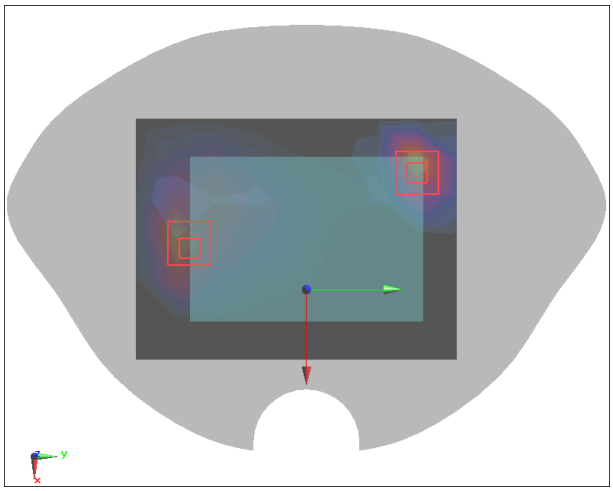


FIG 13.3.5-21

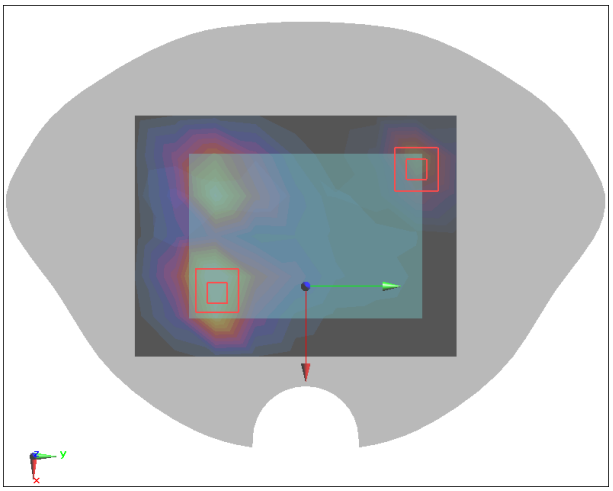


FIG 13.3.5-22

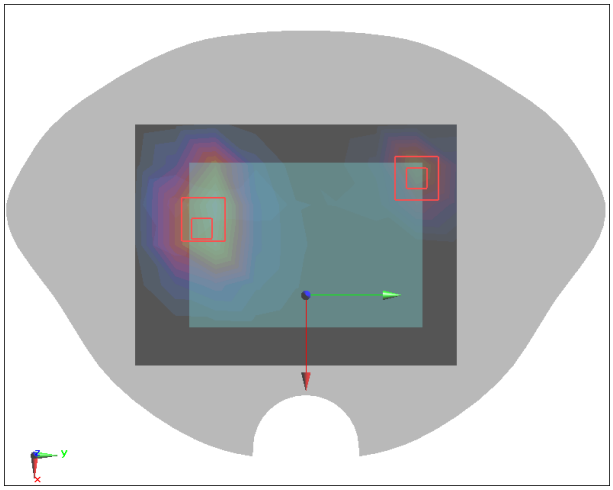


FIG 13.3.5-23

14 Measurement Uncertainty

14.1 Measurement Uncertainty for Normal SAR Tests (300MHz~3GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	6.0	N	1	1	1	6.0	6.0	∞
2	Isotropy	B	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞
3	Boundary effect	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
4	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
5	Detection limit	B	1.0	N	1	1	1	0.6	0.6	∞
6	Readout electronics	B	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞
7	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
8	Integration time	B	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	B	0	R	$\sqrt{3}$	1	1	0	0	∞
10	RFambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	∞
11	Probe positioned mech. restrictions	B	0.4	R	$\sqrt{3}$	1	1	0.2	0.2	∞
12	Probe positioning with respect to phantom shell	B	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞
13	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
Test sample related										
14	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
15	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
16	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
17	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
18	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
19	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
20	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
21	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521

Combined standard uncertainty	$u_c^{'} = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$					9.55	9.43	257
Expanded uncertainty (confidence interval of 95 %)	$u_e = 2u_c$					19.1	18.9	

14.2 Measurement Uncertainty for Normal SAR Tests (3~6GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	6.55	N	1	1	1	6.55	6.55	∞
2	Isotropy	B	4.7	R	√3	0.7	0.7	1.9	1.9	∞
3	Boundary effect	B	2.0	R	√3	1	1	1.2	1.2	∞
4	Linearity	B	4.7	R	√3	1	1	2.7	2.7	∞
5	Detection limit	B	1.0	R	√3	1	1	0.6	0.6	∞
6	Readout electronics	B	0.3	R	√3	1	1	0.3	0.3	∞
7	Response time	B	0.8	R	√3	1	1	0.5	0.5	∞
8	Integration time	B	2.6	R	√3	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	B	0	R	√3	1	1	0	0	∞
10	RFambient conditions-reflection	B	0	R	√3	1	1	0	0	∞
11	Probe positioned mech. restrictions	B	0.8	R	√3	1	1	0.5	0.5	∞
12	Probe positioning with respect to phantom shell	B	6.7	R	√3	1	1	3.9	3.9	∞
13	Post-processing	B	4.0	R	√3	1	1	2.3	2.3	∞
Test sample related										
14	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
15	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
16	Drift of output power	B	5.0	R	√3	1	1	2.9	2.9	∞
Phantom and set-up										
17	Phantom uncertainty	B	4.0	R	√3	1	1	2.3	2.3	∞
18	Liquid conductivity (target)	B	5.0	R	√3	0.64	0.43	1.8	1.2	∞
19	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
20	Liquid permittivity (target)	B	5.0	R	√3	0.6	0.49	1.7	1.4	∞

21	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521
Combined standard uncertainty		$u_c^{'} = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$						10.7	10.6	257
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$						21.4	21.1	

15 MAIN TEST INSTRUMENTS

Table 15.1: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	N5239A	MY55491241	May 21, 2024	One year
02	Power sensor	NRP50S	101488	June 5, 2024	One year
03	Power sensor	NRP50S	101489		
04	Signal Generator	MG3700A	6201052605	June 12 2024	One Year
05	Amplifier	60S1G4	0331848	No Calibration Requested	
06	BTS	CMW500	159889	January 21, 2025	One year
07	DAE	DAE4	1331	September 13,2024	One year
08	E-field Probe	EX3DV4	7673	July 29,2024	One year
09	Dipole Validation Kit	D750V3	1017	July 9,2024	One year
10	Dipole Validation Kit	D1750V2	1003	July 11,2024	One year
11	Dipole Validation Kit	D1900V2	5d101	July 8,2024	One year
12	Dipole Validation Kit	D2450V2	853	July 10,2024	One year
13	Dipole Validation Kit	D2600V2	1012	July 10,2024	One year
14	Dipole Validation Kit	D5GHzV2	1060	June 12,2024	One year

END OF REPORT BODY

Appendixes

Refer to separated files for the following appendixes

ANNEX A Graph Results

ANNEX B **System Verification Results**

ANNEX C SAR Measurement Setup

ANNEX D Position of the wireless device in relation to the phantom

ANNEX E Equivalent Media Recipes

ANNEX F System Validation

ANNEX G Probe Calibration Certificate

ANNEX H Dipole Calibration Certificate

ANNEX I Sensor Triggering Data Summary

ANNEX J Accreditation Certificate