TEST REPORT

No.I22N01644-SAR

For

IDEMIA Identity and Security France

ID Screen

Model Name: MPH-MB003A

With

Hardware Version: V01 (M32N)

Software Version: V01

FCC ID: ZBW-MPHMB003

Issued Date: 2022-10-21

Designation Number: CN1210

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 SAICT.

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
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1. Summary of Test Report

1.1. Test Items

Description:	ID Screen
Model Name:	MPH-MB003A
Applicant's Name:	IDEMIA Identity and Security France
Manufacturer's Name:	IDEMIA Identity and Security France

1.2. Test Standards

ANSI C95.1:1992, IEEE 1528:2013

1.3. Test Result

Pass. Please refer to "13. Summary of Test Results" and "ANNEX M: Spot Check Test"

1.4. Testing Location

Address: Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong, P. R. China

1.5. Project Data

Testing Start Date: 2020-06-11 Testing End Date: 2022-10-18

1.6. Signature

Li Yongfu
(Prepared this test report)

Zhang Yunzhuan
(Reviewed this test report)

Cao Junfei
(Approved this test report)

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2. Statement of Compliance

This EUT is a variant product and the report of original sample is No.I20N00956-SAR. According to "Justification Letter" provided by applicant, we quote the test results of original sample and spot check the worst case in annex M and retest WLAN 2.4GHz SAR in section 13.3.

The maximum results of Specific Absorption Rate (SAR) found during testing for IDEMIA Identity and Security France ID Screen MPH-MB003A are as follows:

Table 2.1: Highest Reported SAR for Body (1g)

Exposure Configuration	Technology Band	Highest Reported SAR 1g(W/Kg)	Equipment Class
Body	GSM850	1.08	PCE
	GSM1900	1.06	
	WCDMA Band 2	1.25	
	WCDMA Band 5	1.15	
	LTE Band 2	1.25	
	LTE Band 4	1.21	
	LTE Band 5	**1.30**	
	LTE Band 7	1.24	
	LTE Band 38	0.91	
	Bluetooth	0.03	DSS
	WLAN 2.4GHz	0.35	DTS
	WLAN 5GHz	0.70	NII

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

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 value is**: 1.30 W/kg (1g).**

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Table 2.2: The sum of reported SAR values for main antenna and WLAN 2.4GHz

/	Position	Main Antenna (W/kg)	WLAN 2.4GHz (W/kg)	Sum (W/kg)
Highest reported SAR value for Body	Rear (0mm)	1.30	0.17	1.47

Note: the test positions of above tables are for the worse case that has been evaluated.

Table 2.3: The sum of reported SAR values for main antenna and WLAN 5GHz

/	Position	Main Antenna (W/kg)	WLAN 5GHz (W/kg)	Sum (W/kg)
Highest reported SAR value for Body	Rear (0mm)	1.06	0.53	1.59

Note: the test positions of above tables are for the worse case that has been evaluated.

Table 2.4: The sum of reported SAR values for main antenna and Bluetooth

/	Position	Main Antenna (W/kg)	Bluetooth (W/kg)	Sum (W/kg)
Highest reported SAR value for Body	Rear (0mm)	1.30	0.03	1.33

Note: the test positions of above tables are for the worse case that has been evaluated.

According to the above tables, the highest sum of reported SAR values is **1.59 W/kg (1g)**.

The detail for simultaneous transmission consideration is described in chapter 12.

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3. Client Information

3.1. Applicant Information

Company Name:	IDEMIA Identity and Security France
Address:	2 place Samuel de Champlain 92400 Courbevoie France
City:	Courbevoie
Country:	France
Telephone:	+33 1 30 20 12 77

3.2. Manufacturer Information

Company Name:	IDEMIA Identity and Security France
Address:	2 place Samuel de Champlain 92400 Courbevoie France
City:	Courbevoie
Country:	France
Telephone:	+33 1 30 20 12 77

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4. Equipment under Test (EUT) and Ancillary Equipment (AE)

4.1. About EUT

Description:	ID Screen
Model Name:	MPH-MB003A
Condition of EUT as received	No obvious damage in appearance
Frequency Bands:	GSM850/1900, WCDMA Band 2/5, LTE Band 2/4/5/7/38, Bluetooth, WLAN 2.4GHz/5GHz
Tested Tx Frequency:	825 – 848.8MHz (GSM 850)
	1850.2 – 1910MHz (GSM 1900)
	1852.4 – 1907.6MHz (WCDMA Band 2)
	826.4 – 846.6MHz (WCDMA Band 5)
	1850.7 – 1909.3MHz (LTE Band 2)
	1710.7 – 1754.3MHz (LTE Band 4)
	824.7 – 848.3MHz (LTE Band 5)
	2502.5 – 2567.5MHz (LTE Band 7)
	2572.5 – 2617.5MHz (LTE Band 38)
	2402 – 2480MHz (Bluetooth)
	2412 – 2462MHz (WLAN 2.4GHz)
	5180 – 5825MHz (WLAN 5GHz)
GPRS / EGPRS Multislot Class:	12
GPRS capability Class:	B
Test device Production information:	Production unit
Device type:	Portable device
Antenna type:	Integrated antenna
Product Dimensions:	Long 239.5mm;Wide 133.0mm; Overall Diagonal 260mm

4.2. Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version	Receipt Date
UT03aa	354520110003885	V01 (M16N)	V01	2020-05-05
UT04aa	354520110005245	V01 (M16N)	V01	2020-05-05
UT15aa	354520110006722	V01 (M16N)	V01	2020-05-05
UT16aa	354520110010989	V01 (M32N)	V01	2020-05-05
UT17aa	354520110006540	V01 (M16I)	V01	2020-05-05
UT18aa	354520110011102	V01 (M32I)	V01	2020-05-05
UT02aa	354520110403341	V01 (M32N)	V01	2022-08-23
UT05aa	354520110403648	V01 (M32N)	V01	2022-08-23

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

Note: It is performed to test SAR with the UT03aa & UT04aa & UT16aa & UT17aa & UT18aa & UT02aa & UT05aa, and conducted power with the UT15aa.

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4.3. Internal Identification of AE used during the test

AE ID*	Description	Type	Manufacturer
AE1	Battery	MPH-MB003A	Zhongshan Tianmao Battery Co., Ltd.

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

4.4. Configuration List

There are four kinds of combination modes to be tested and the detail information is as follows:

MPH-MB003A		MPH-MB003B	
Config1	**Config2**	**Config3**	**Config4**
Non-IRIS SIM(16GB)	Non-IRIS SIM(32GB)	IRIS SIM(16GB)	IRIS SIM(32GB)
HW: V01 (M16N)	HW: V01 (M32N)	HW: V01 (M16I)	HW: V01 (M32I)

We'll perform the SAR measurement with Config1 and retest on highest value point with Config2, Config3 and Config4.

4.5. General Description

According to client's description, the table below shows the difference between original and variant:

/	Original	Variant
Model Differences	MPH-MB003A/ MPH-MB003B	MPH-MB003A Memory (32GB)
Audio PA	178153879	178213691
3D G-sensor	STK8321	SC7A2TR
P-sensor	3in1 STK3311-X	3in1 LTR-559ALS
DCDC	PCA9412A	ETA1132
Camera IC	GC2385	GC02M2
Memory (ROM+RAM)	EMMC32G-TA29 + 2NP-053RS WT:A	EMMC32G-TX29 + 2NP-053RS WT:B
GPS LNA	MXDLN16G	AW5005DNRZ

We'll perform Variant product for spot check test. The results of spot check are presented in annex M.

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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.

5.2. Applicable Measurement Standards

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

KDB 447498 D01 General RF Exposure Guidance v06 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies

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

KDB 941225 D01 SAR test for 3G devices v03r01 SAR Measurement Procedures for 3G Devices

KDB 941225 D05 SAR for LTE Devices v02r05 SAR Evaluation Considerations for LTE Devices

KDB 248227 D01 802.11 Wi-Fi SAR v02r02 SAR Guidance for IEEE 802.11 (Wi-Fi) Transmitters

KDB 865664 D01SAR measurement 100 MHz to 6 GHz v01r04 SAR Measurement Requirements for 100 MHz to 6 GHz

KDB 865664 D02 RF Exposure Reporting v01r02 RF Exposure Compliance Reporting and Documentation Considerations

TCB workshop April 2019; RF Exposure Procedures (Tissue Simulating Liquids)

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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:

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

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

SAR measurement can be either related to the temperature elevation in tissue by

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

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.

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7. Tissue Simulating Liquids

7.1. Targets for tissue simulating liquid

Table 7.1: Targets for tissue simulating liquid

Frequency (MHz)	Liquid Type	Conductivity (σ)	± 5% Range	Permittivity (ε)	± 5% Range
835	Head	0.90	0.86～0.95	41.5	39.4～43.6
1750	Head	1.37	1.30～1.44	40.1	38.1～42.1
1900	Head	1.40	1.33～1.47	40.0	38.0～42.0
2450	Head	1.80	1.71～1.89	39.2	37.2～41.2
2550	Head	1.91	1.81～2.01	39.1	37.1～41.0
5250	Head	4.71	4.47～4.95	35.9	34.1～37.7
5600	Head	5.07	4.82～5.32	35.5	33.8～37.3
5750	Head	5.22	4.96～5.48	35.4	33.6～37.1

7.2. Dielectric Performance

Table 7.2: Dielectric Performance of Tissue Simulating Liquid

Measurement Date (yyyy-mm-dd)	Type	Frequency	Conductivity σ (S/m)	Drift (%)	Permittivity ε	Drift (%)
2020-06-16	Head	835	0.884	-1.78	41.85	0.84
2020-06-11	Head	1750	1.386	1.17	39.56	-1.35
2020-06-18	Head	1900	1.423	1.64	39.27	-1.82
2020-06-23	Head	2450	1.835	1.94	38.48	-1.84
2022-10-18	Head	2450	1.844	2.44	38.12	-2.76
2020-06-15	Head	2550	1.942	1.68	38.03	-2.74
2020-06-20	Head	5250	4.654	-1.19	36.72	2.28
2020-06-20	Head	5600	5.123	1.05	34.84	-1.86
2020-06-20	Head	5750	5.155	-1.25	35.96	1.58
2022-09-17	Head	835	0.878	-2.44	42.26	1.83
2022-09-19	Head	1750	1.361	-0.66	40.57	1.17
2022-09-19	Head	1900	1.415	1.07	39.53	-1.18
2022-10-18	Head	2450	1.844	2.44	38.12	-2.76
2022-09-20	Head	2550	1.937	1.41	37.95	-2.94
2022-10-14	Head	5750	5.106	-2.18	36.28	2.49

Note: The liquid temperature is 22.0^{o}C.

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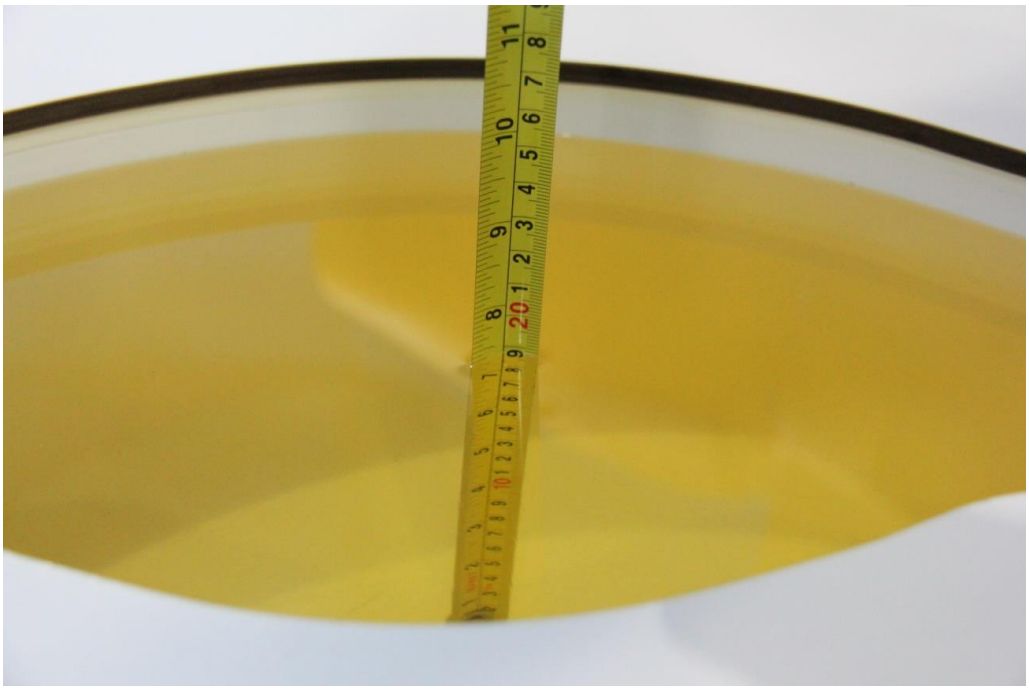
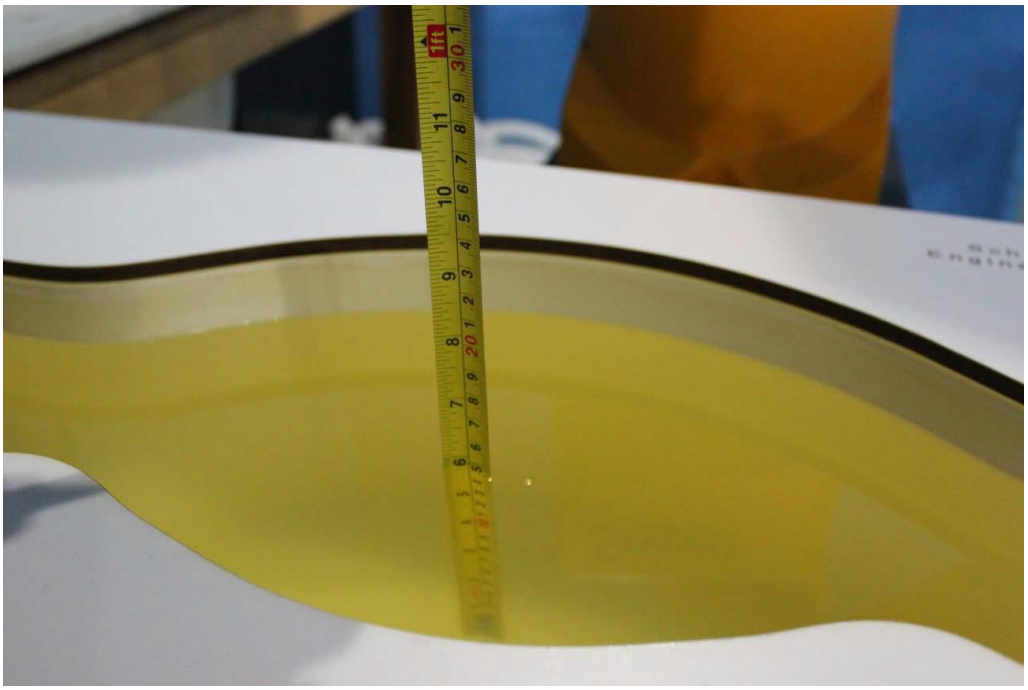


Picture 7-1: Liquid depth in the Head Phantom (835MHz)



Picture 7-2: Liquid depth in the Head Phantom (1750MHz)

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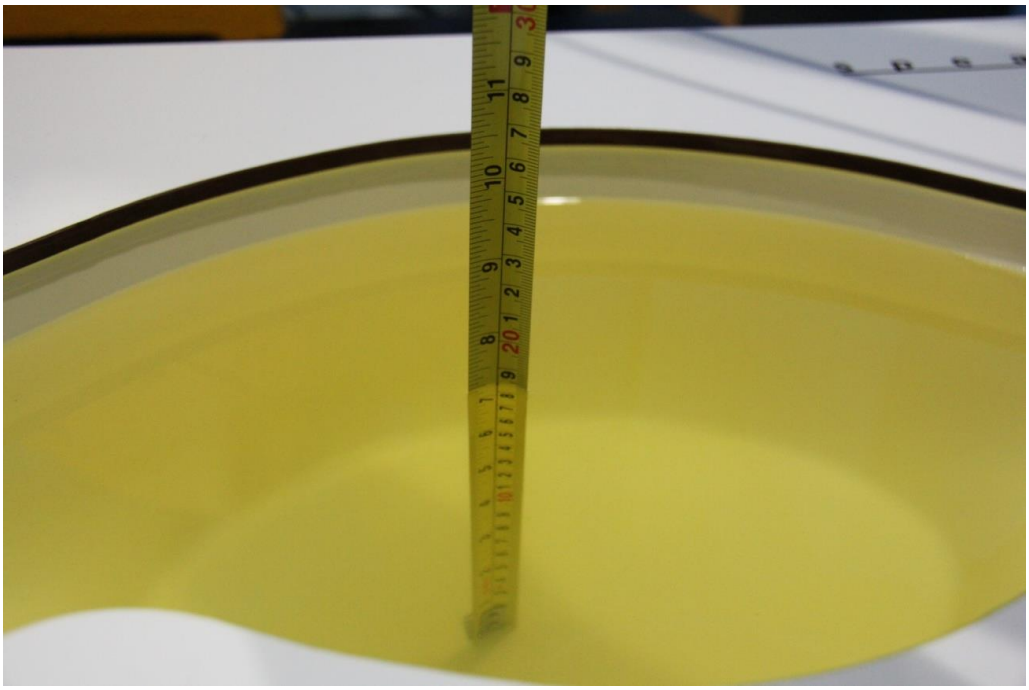
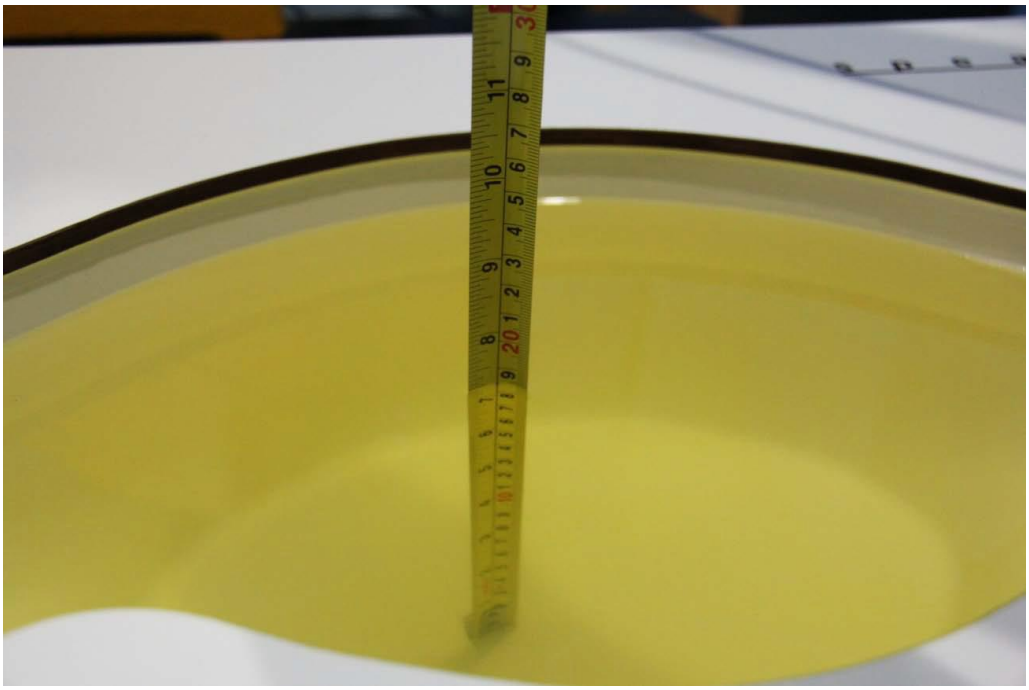


Picture 7-3: Liquid depth in the Head Phantom (1900MHz)



Picture 7-4: Liquid depth in the Head Phantom(2450MHz)

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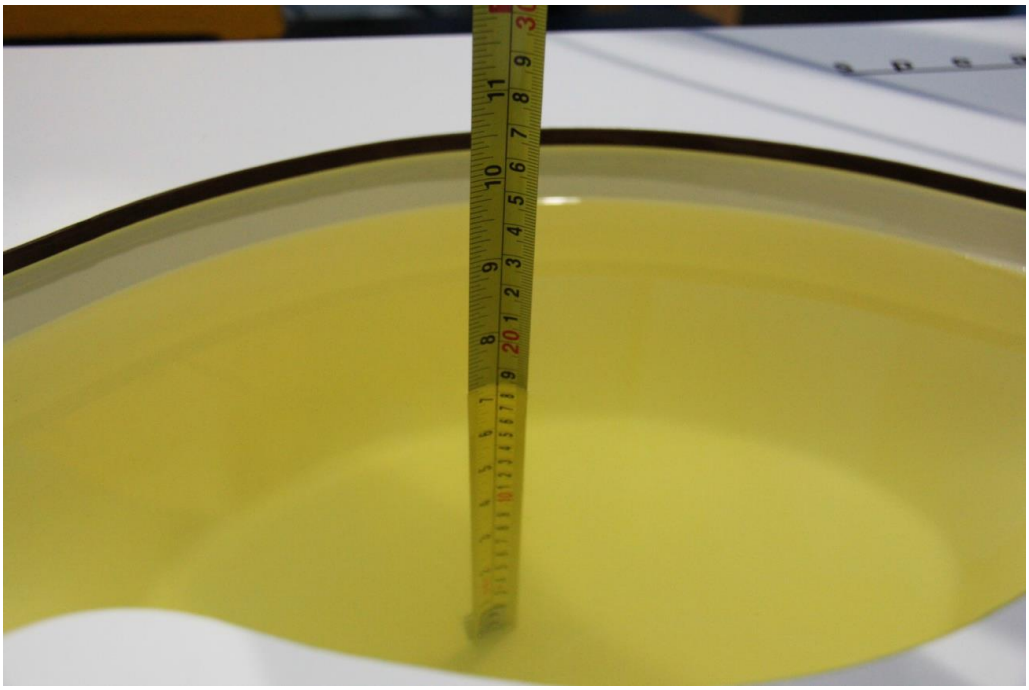
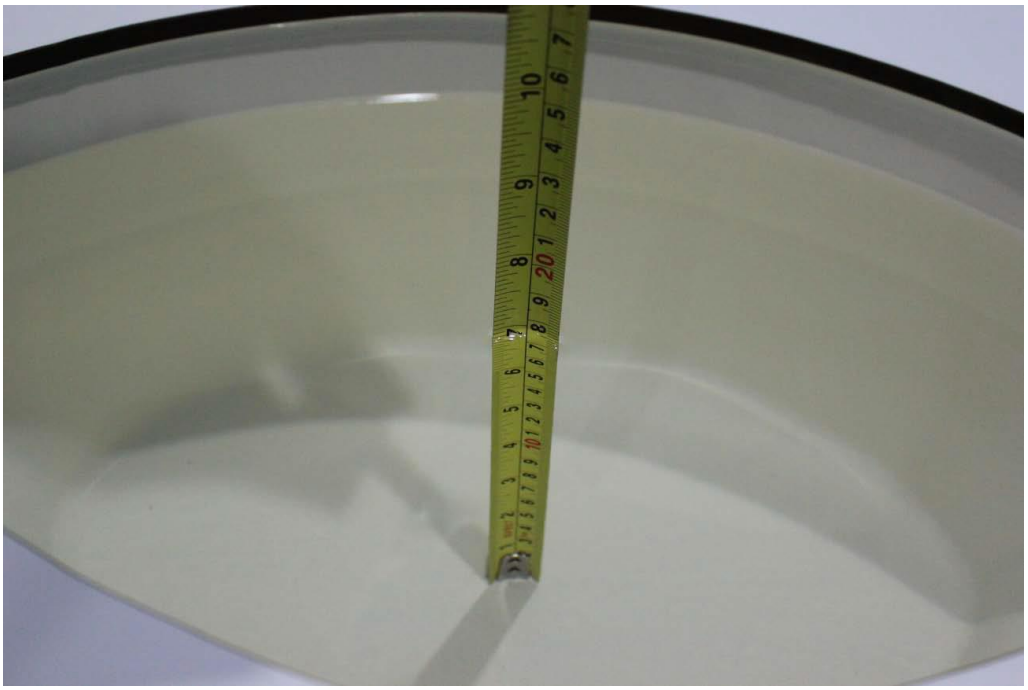


Picture 7-5: Liquid depth in the Head Phantom(2550MHz)



Picture 7-6: Liquid depth in the Head Phantom(5GHz)

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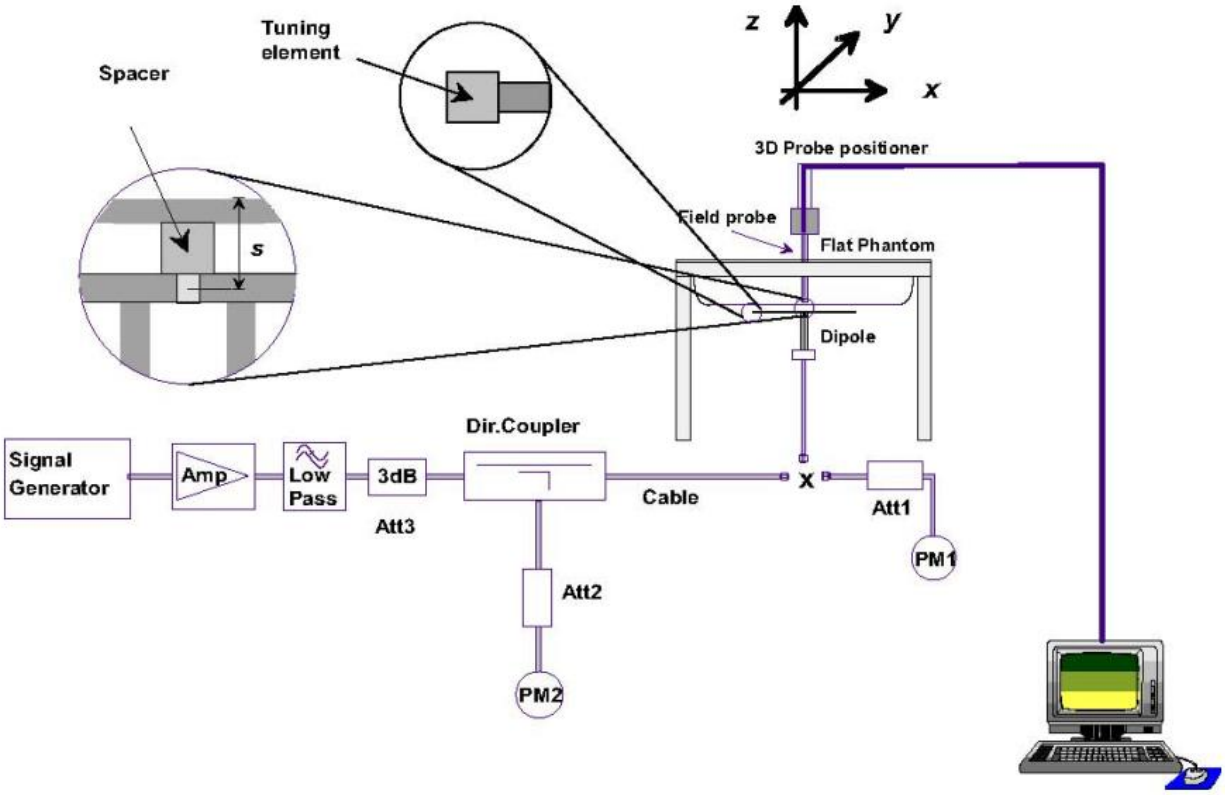
8. System verification

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 8.1 System Setup for System Evaluation

For the dipole below 3GHz, the output power on dipole port must be calibrated to 24 dBm (250mW) before dipole is connected.
For the dipole above 3GHz, the output power on dipole port must be calibrated to 20 dBm (100mW) before dipole is connected.

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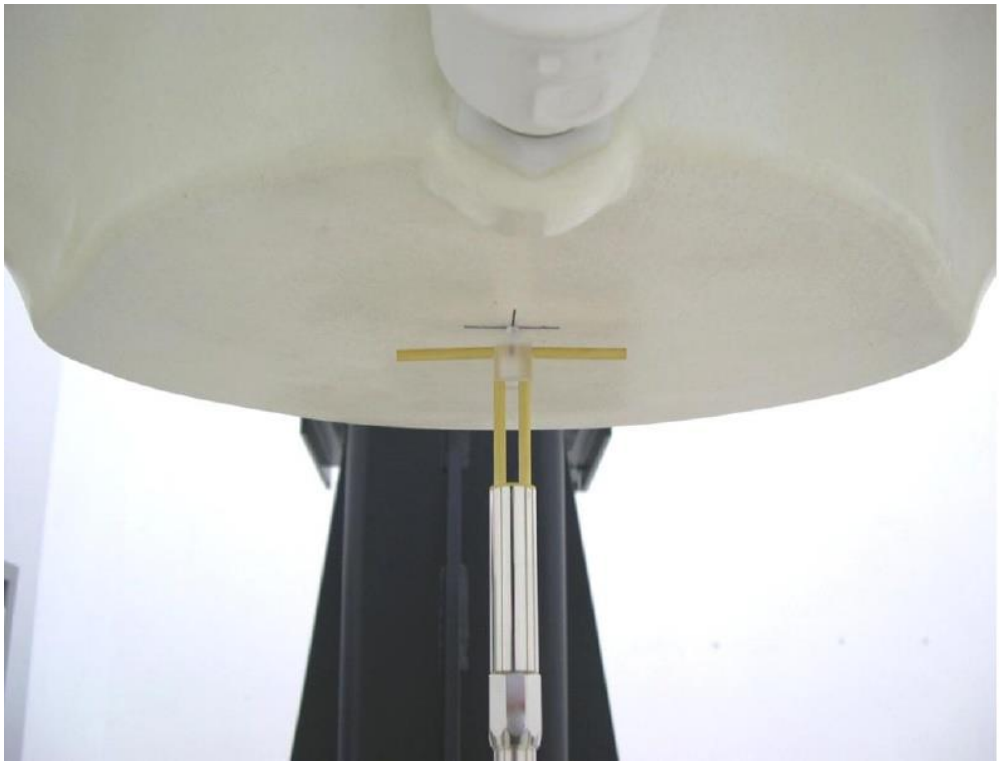

Picture 8.2 Photo of Dipole Setup

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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	Frequency (MHz)	Target value (W/kg)		Measured value (W/kg)				Deviation (%)	
				/		Normalize to 1W			
		10 g	1 g	10 g	1 g	10 g	1 g	10 g	1 g
2020-06-16	835	6.29	9.62	1.55	2.31	6.20	9.24	-1.43	-3.95
2020-06-11	1750	19.30	36.40	4.92	9.36	19.68	37.44	1.97	2.86
2020-06-18	1900	21.00	40.50	5.33	10.4	21.32	41.60	1.52	2.72
2020-06-23	2450	24.10	52.00	6.12	13.4	24.48	53.60	1.58	3.08
2022-10-18	2450	24.20	53.20	6.19	13.8	24.76	55.20	2.31	3.76
2020-06-15	2550	26.50	57.80	6.77	14.9	27.08	59.60	2.19	3.11
2020-06-20	5250	22.30	78.00	2.18	7.54	21.80	75.40	-2.24	-3.33
2020-06-20	5600	22.70	79.50	2.33	8.29	23.30	82.90	2.64	4.28
2020-06-20	5750	22.20	78.40	2.16	7.48	21.60	74.80	-2.70	-4.59
2022-09-17	835	6.29	9.64	1.55	2.34	6.20	9.36	-1.43	-2.90
2022-09-19	1750	19.60	36.30	4.81	8.75	19.24	35.00	-1.84	-3.58
2022-09-19	1900	20.50	40.20	5.20	10.4	20.80	41.60	1.46	3.48
2022-10-18	2450	24.20	53.20	6.19	13.8	24.76	55.20	2.31	3.76
2022-09-20	2550	25.20	55.90	6.38	14.3	25.52	57.20	1.27	2.33
2022-10-14	5750	22.10	78.50	2.15	7.51	21.50	75.10	-2.71	-4.33

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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 9.1.

Step 1: The tests described in 9.2 shall be performed at the channel that is closest to the center 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 9.2 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 within 3 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.

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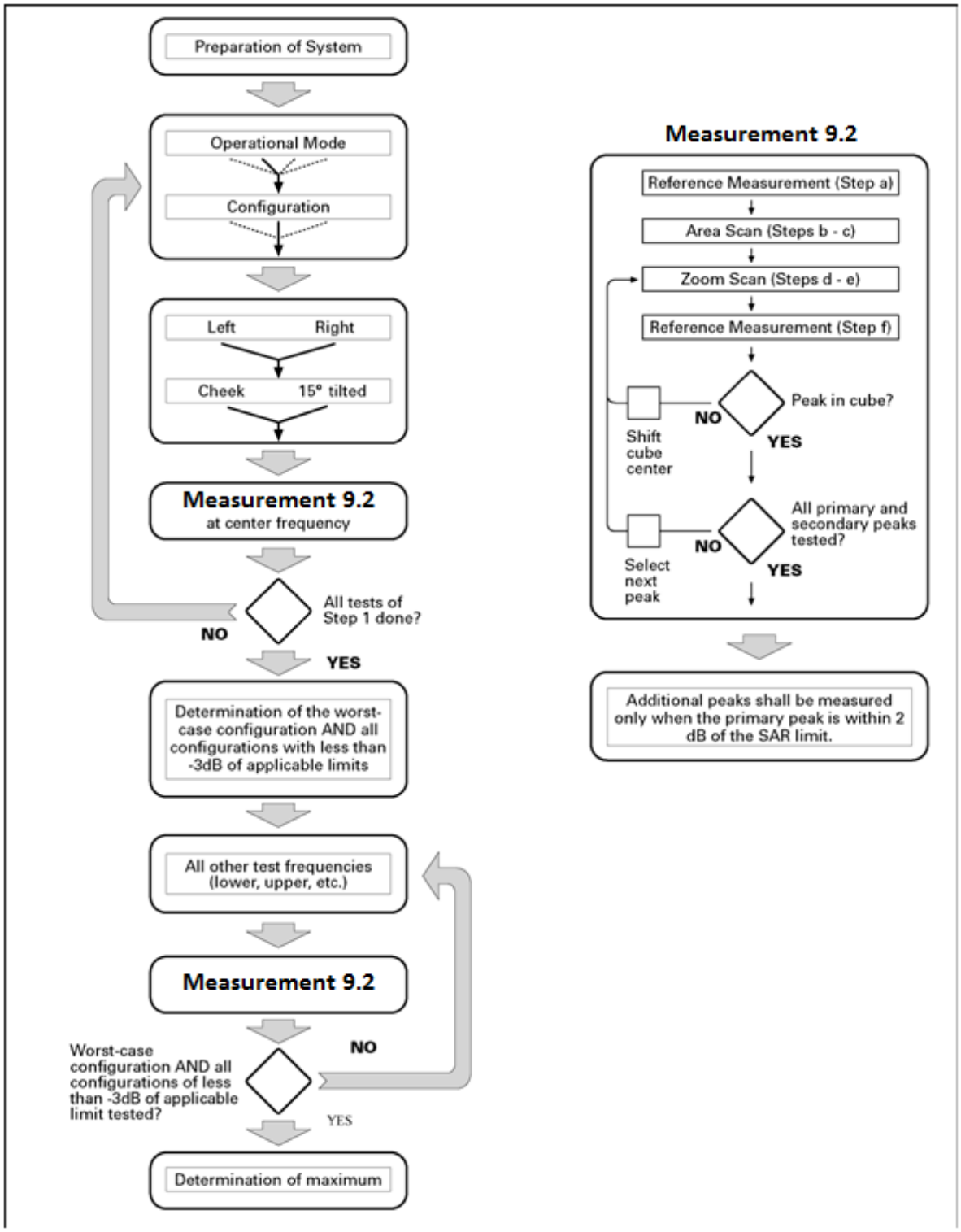

Picture 9.1 Block diagram of the tests to be performed

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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 1528-2013. 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.

			≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5 ± 1 mm	½·δ·ln(2) ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location			30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}			≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
			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.	
Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm

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 *reported* 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.

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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	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	12/15	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed1}:47/15 β_{ed2}:47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	4/15	56/75	4	1	3.0	2.0	17	71
5	15/15	15/15	64	15/15	24/15	30/15	134/15	4	1	1.0	0.0	21	81

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9.4. LTE Measurement Procedures for SAR

SAR tests for LTE are performed with a base station simulator, Anristu MT8820C. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. All powers were measured with the Anristu MT8820C.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.

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9.5. LTE (TDD) Considerations

According to KDB 941225 D05 SAR for LTE Devices, for Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.
SAR was tested with the highest transmission duty factor (63.33%) using Uplink-downlink configuration 0 and Special subframe configuration 7.
LTE TDD Band 38 support 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations and Table 4.2-1 for Special subframe configurations.

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	$13168 \cdot T_s$			-	-	-

Configuration of special subframe (lengths of DwPTS/GP/UpPTS)

Uplink-Downlink Configuration	Downlink-to-Uplink Switch-point Periodicity	Subframe Number										Calculated Duty Cycle (%)
		0	1	2	3	4	5	6	7	8	9	
0	5 ms	D	S	U	U	U	D	S	U	U	U	63.33
1	5 ms	D	S	U	U	D	D	S	U	U	D	43.33
2	5 ms	D	S	U	D	D	D	S	U	D	D	23.33
3	10 ms	D	S	U	U	U	D	D	D	D	D	31.67
4	10 ms	D	S	U	U	D	D	D	D	D	D	21.67
5	10 ms	D	S	U	D	D	D	D	D	D	D	11.67
6	5 ms	D	S	U	U	U	D	S	U	U	D	53.33

Calculated Duty Cycle

Calculated Duty Cycle = Extended cyclic prefix in uplink x (Ts) x # of S + # of U
Example for Calculated Duty Cycle for Uplink-Downlink Configuration 0:
Calculated Duty Cycle = 5120 x [1/(15000 x 2048)] x 2 + 6 ms = 63.33%
Where
Ts = 1/(15000 x 2048) seconds

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9.6. Bluetooth & WLAN 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.

9.7. 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 Section 14 labeled as: (Power Drift [dB]). This ensures that the power drift during one measurement is within 5%.

9.8. Proximity Sensor Considerations

This device uses a proximity sensor that share the same metallic electrode as the transmitting antenna to facilitate triggering in typical user interactivity with the device. Due to the operating configurations and exposure conditions required by the device, the proximity sensor is used to indicate when the tablet is held close to a user's body exposure condition. It utilizes the proximity sensor to reduce the output power in specific wireless and operating modes to ensure SAR compliance for the following scenarios: To reduce the output power of main antennas during body operating configurations. . It is also set an output power leveled to the lowest one to make sure that in any case of SAR sensor hardware failure the SAR requirements can still be satisfied.

Sensor triggering distance summary data is included in Appendix K.

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10. Conducted Output Power

10.1. GSM Measurement result

During the process of testing, the EUT was controlled via Agilent Digital Radio Communication tester (E5515C) to ensure the maximum power transmission and proper modulation. This result contains conducted output power for the EUT. In all cases, the measured peak output power should be greater and within 5% than EMI measurement.

Table 10.1: The conducted power measurement results for GPRS and EGPRS

Full Power								
GPRS850/ EGPRS850	Tune up	Measured Power (dBm)			calculation	Average Power (dBm)		
		251	190	128		251	190	128
1Tx-slot	33.5	32.71	32.63	32.71	-9.03dB	23.68	23.60	23.68
2Tx-slots	32.5	31.95	31.86	31.95	-6.02dB	25.93	25.84	25.93
3Tx-slots	31.0	30.18	30.08	30.14	-4.26dB	25.92	25.82	25.88
4Tx-slots	**30.0**	**29.07**	**28.99**	**29.01**	-3.01dB	**26.06**	**25.98**	**26.00**
EGPRS 850 (8PSK)	Tune up	Measured Power (dBm)			calculation	Measured Power (dBm)		
		251	190	128		251	190	128
1Tx-slot	28.5	27.73	28.06	28.17	-9.03dB	18.70	19.03	19.14
2Tx-slots	27.0	26.33	26.91	26.77	-6.02dB	20.31	20.89	20.75
3Tx-slots	25.0	24.06	24.53	24.46	-4.26dB	19.80	20.27	20.20
4Tx-slots	23.5	22.68	23.13	23.17	-3.01dB	19.67	20.12	20.16
Sensor on								
GPRS850/ EGPRS850	Tune up	Measured Power (dBm)			calculation	Average Power (dBm)		
		251	190	128		251	190	128
1Tx-slot	29.5	28.69	28.62	28.70	-9.03dB	19.66	19.59	19.67
2Tx-slots	28.5	27.92	27.85	27.91	-6.02dB	21.90	21.83	21.89
3Tx-slots	27.0	26.15	26.06	26.12	-4.26dB	21.89	21.80	21.86
4Tx-slots	**26.0**	**25.06**	**24.98**	**25.02**	-3.01dB	**22.05**	**21.97**	**22.01**
EGPRS 850 (8PSK)	Tune up	Measured Power (dBm)			calculation	Measured Power (dBm)		
		251	190	128		251	190	128
1Tx-slot	24.5	23.70	24.04	24.13	-9.03dB	14.67	15.01	15.10
2Tx-slots	23.0	22.31	22.88	22.75	-6.02dB	16.29	16.86	16.73
3Tx-slots	21.0	20.03	20.51	20.44	-4.26dB	15.77	16.25	16.18
4Tx-slots	19.5	18.66	19.10	19.14	-3.01dB	15.65	16.09	16.13

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Full Power								
GPRS1900/ EGPRS1900	Tune up	Measured Power (dBm)			calculation	Average Power (dBm)		
		810	661	512		810	661	512
1Tx-slot	31.0	30.34	30.32	30.32	-9.03dB	21.31	21.29	21.29
2Tx-slots	30.0	29.61	29.55	29.53	-6.02dB	23.59	23.53	23.51
3Tx-slots	28.5	27.91	27.75	27.63	-4.26dB	23.65	23.49	23.37
4Tx-slots	27.5	**26.87**	**26.67**	**26.47**	-3.01dB	**23.86**	**23.66**	**23.46**
EGPRS 1900 (8PSK)	Tune up	Measured Power (dBm)			calculation	Measured Power (dBm)		
		810	661	512		810	661	512
1Tx-slot	27.5	27.10	27.03	26.75	-9.03dB	18.07	18.00	17.72
2Tx-slots	26.5	26.08	25.66	25.63	-6.02dB	20.06	19.64	19.61
3Tx-slots	24.5	24.09	23.60	23.54	-4.26dB	19.83	19.34	19.28
4Tx-slots	23.5	22.83	22.42	22.28	-3.01dB	19.82	19.41	19.27
Sensor on								
GPRS1900/ EGPRS1900	Tune up	Measured Power (dBm)			calculation	Average Power (dBm)		
		810	661	512		810	661	512
1Tx-slot	24.0	23.28	23.30	23.29	-9.03dB	14.25	14.27	14.26
2Tx-slots	23.0	22.60	22.62	22.55	-6.02dB	16.58	16.60	16.53
3Tx-slots	21.5	20.88	20.73	20.61	-4.26dB	16.62	16.47	16.35
4Tx-slots	20.5	**19.94**	**19.73**	**19.64**	-3.01dB	**16.93**	**16.72**	**16.63**
EGPRS 1900 (8PSK)	Tune up	Measured Power (dBm)			calculation	Measured Power (dBm)		
		810	661	512		810	661	512
1Tx-slot	20.5	20.08	20.02	19.77	-9.03dB	11.05	10.99	10.74
2Tx-slots	19.5	19.05	18.63	18.61	-6.02dB	13.03	12.61	12.59
3Tx-slots	17.5	17.08	16.57	16.52	-4.26dB	12.82	12.31	12.26
4Tx-slots	16.5	15.81	15.44	15.25	-3.01dB	12.80	12.43	12.24

Notes:

1) Division Factors

To average the power, the division factor is as follows:

1TX-slot = 1 transmit time slot out of 8 time slots=> conducted power divided by (8/1) => -9.03dB

2TX-slots = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB

3TX-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB

4TX-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB

According to the conducted power as above, the body measurements are performed with 4Txslots for 850MHz and 1900MHz.

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10.2. WCDMA Measurement result

Table 10.2: The conducted power measurement results WCDMA

Full Power					
Item	band	WCDMA Band 2			
	ARFCN	Tune up	9538 (1907.6MHz)	9400 (1880MHz)	9262 (1852.4MHz)
WCDMA	\	24.0	23.58	23.60	23.55
HSUPA	1	22.0	21.20	21.20	21.10
	2	22.0	20.70	20.60	20.50
	3	22.0	21.70	21.60	21.50
	4	22.0	20.20	20.10	20.10
	5	22.0	21.40	21.50	21.50
HSDPA	1	23.0	22.70	22.70	22.50
	2	23.0	22.60	22.60	22.40
	3	23.0	22.10	22.20	22.00
	4	23.0	22.10	22.20	21.90
DC-HSDPA	1	23.0	22.70	22.60	22.50
	2	23.0	22.60	22.60	22.60
	3	23.0	22.10	22.10	22.00
	4	23.0	22.10	22.10	22.00
Sensor on					
Item	band	WCDMA Band 2			
	ARFCN	Tune up	9538 (1907.6MHz)	9400 (1880MHz)	9262 (1852.4MHz)
WCDMA	\	16.5	16.08	16.05	16.01
HSUPA	1	15.5	14.20	14.10	14.00
	2	15.5	14.60	14.50	14.50
	3	15.5	14.20	14.20	14.10
	4	16.0	15.70	15.60	15.50
	5	15.5	14.80	14.90	14.80
HSDPA	1	16.0	15.70	15.60	15.50
	2	16.0	15.70	15.50	15.50
	3	16.0	15.00	15.10	14.90
	4	16.0	15.10	15.10	14.90
DC-HSDPA	1	16.0	15.60	15.60	15.60
	2	16.0	15.70	15.60	15.50
	3	16.0	15.10	15.00	15.00
	4	16.0	15.10	15.00	14.90

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Full Power					
Item	band	WCDMA Band 5			
	ARFCN	Tune up	4233 (846.6MHz)	4182 (836.4MHz)	4132 (826.4MHz)
WCDMA	\	23.5	23.08	23.10	23.05
HSUPA	1	21.0	20.10	20.20	20.20
	2	21.0	19.50	19.80	19.70
	3	21.0	20.50	20.70	20.70
	4	21.0	19.10	19.20	19.30
	5	21.0	20.70	20.80	20.80
HSDPA	1	22.0	21.50	21.80	21.70
	2	22.0	21.50	21.70	21.70
	3	22.0	21.00	21.20	21.20
	4	22.0	21.00	21.20	21.20
DC-HSDPA	1	22.0	21.60	21.70	21.60
	2	22.0	21.50	21.60	21.70
	3	22.0	21.10	21.20	21.10
	4	22.0	21.00	21.10	21.20
Sensor on					
Item	band	WCDMA Band 5			
	ARFCN	Tune up	4233 (846.6MHz)	4182 (836.4MHz)	4132 (826.4MHz)
WCDMA	\	22.5	22.05	22.13	22.03
HSUPA	1	20.5	19.40	19.50	19.60
	2	20.5	19.00	19.20	19.20
	3	20.5	20.00	20.10	20.10
	4	20.5	18.70	18.70	18.70
	5	20.5	19.90	20.00	20.00
HSDPA	1	21.5	21.00	21.10	21.10
	2	21.5	20.90	21.00	21.10
	3	21.5	20.40	20.50	20.60
	4	21.5	20.40	20.40	20.60
DC-HSDPA	1	21.5	21.00	21.10	21.20
	2	21.5	21.00	21.10	21.10
	3	21.5	20.30	20.50	20.50
	4	21.5	20.30	20.40	20.50

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10.3. LTE Measurement result

Table 10.3: The conducted Power for LTE

Full Power								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1909.3MHz	23.60	22.74	21.79	**24.0**	**23.0**	**22.0**
		1880MHz	23.61	22.87	21.74	**24.0**	**23.0**	**22.0**
		1850.7MHz	23.54	22.73	21.68	**24.0**	**23.0**	**22.0**
	1RB_3	1909.3MHz	23.72	22.84	21.89	**24.0**	**23.0**	**22.0**
		1880MHz	23.74	23.04	21.84	**24.0**	**23.0**	**22.0**
		1850.7MHz	23.63	22.79	21.79	**24.0**	**23.0**	**22.0**
	1RB_0	1909.3MHz	23.63	22.80	21.81	**24.0**	**23.0**	**22.0**
		1880MHz	23.59	22.84	21.84	**24.0**	**23.0**	**22.0**
		1850.7MHz	23.55	22.67	21.69	**24.0**	**23.0**	**22.0**
	3RB_3	1909.3MHz	23.76	22.64	21.77	**24.0**	**23.0**	**22.0**
		1880MHz	23.72	22.72	21.80	**24.0**	**23.0**	**22.0**
		1850.7MHz	23.60	22.61	21.76	**24.0**	**23.0**	**22.0**
	3RB_1	1909.3MHz	23.82	22.72	21.78	**24.0**	**23.0**	**22.0**
		1880MHz	23.73	22.76	21.91	**24.0**	**23.0**	**22.0**
		1850.7MHz	23.72	22.66	21.81	**24.0**	**23.0**	**22.0**
	3RB_0	1909.3MHz	23.73	22.66	21.75	**24.0**	**23.0**	**22.0**
		1880MHz	23.71	22.71	21.87	**24.0**	**23.0**	**22.0**
		1850.7MHz	23.63	22.60	21.74	**24.0**	**23.0**	**22.0**
	6RB_0	1909.3MHz	22.82	21.83	20.79	**23.0**	**22.0**	**21.0**
		1880MHz	22.72	21.84	20.81	**23.0**	**22.0**	**21.0**
		1850.7MHz	22.72	21.74	20.66	**23.0**	**22.0**	**21.0**

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Full Power								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1908.5MHz	23.68	22.84	21.80	**24.0**	**23.0**	**22.0**
		1880MHz	23.62	22.89	21.86	**24.0**	**23.0**	**22.0**
		1851.5MHz	23.62	22.79	21.76	**24.0**	**23.0**	**22.0**
	1RB_7	1908.5MHz	23.86	22.99	22.01	**24.0**	**23.0**	**22.0**
		1880MHz	23.83	23.07	22.05	**24.0**	**23.0**	**22.0**
		1851.5MHz	23.80	22.91	21.90	**24.0**	**23.0**	**22.0**
	1RB_0	1908.5MHz	23.70	22.81	21.81	**24.0**	**23.0**	**22.0**
		1880MHz	23.66	22.94	21.87	**24.0**	**23.0**	**22.0**
		1851.5MHz	23.59	22.80	21.78	**24.0**	**23.0**	**22.0**
	8RB_7	1908.5MHz	22.72	21.73	20.78	**23.0**	**22.0**	**21.0**
		1880MHz	22.66	21.73	20.76	**23.0**	**22.0**	**21.0**
		1851.5MHz	22.63	21.59	20.68	**23.0**	**22.0**	**21.0**
	8RB_4	1908.5MHz	22.78	21.75	20.76	**23.0**	**22.0**	**21.0**
		1880MHz	22.74	21.76	20.78	**23.0**	**22.0**	**21.0**
		1851.5MHz	22.68	21.64	20.70	**23.0**	**22.0**	**21.0**
	8RB_0	1908.5MHz	22.75	21.77	20.77	**23.0**	**22.0**	**21.0**
		1880MHz	22.69	21.73	20.73	**23.0**	**22.0**	**21.0**
		1851.5MHz	22.63	21.62	20.72	**23.0**	**22.0**	**21.0**
	15RB_0	1908.5MHz	22.80	21.71	20.76	**23.0**	**22.0**	**21.0**
		1880MHz	22.73	21.68	20.70	**23.0**	**22.0**	**21.0**
		1851.5MHz	22.66	21.59	20.61	**23.0**	**22.0**	**21.0**

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Full Power								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1907.5MHz	23.57	22.70	21.70	**24.0**	**23.0**	**22.0**
		1880MHz	23.50	22.84	21.77	**24.0**	**23.0**	**22.0**
		1852.5MHz	23.46	22.71	21.74	**24.0**	**23.0**	**22.0**
	1RB_12	1907.5MHz	23.88	22.98	21.95	**24.0**	**23.0**	**22.0**
		1880MHz	23.90	22.98	22.02	**24.0**	**23.0**	**22.0**
		1852.5MHz	23.78	23.02	21.96	**24.0**	**23.0**	**22.0**
	1RB_0	1907.5MHz	23.51	22.71	21.69	**24.0**	**23.0**	**22.0**
		1880MHz	23.50	22.91	21.84	**24.0**	**23.0**	**22.0**
		1852.5MHz	23.46	22.69	21.70	**24.0**	**23.0**	**22.0**
	12RB_13	1907.5MHz	22.68	21.64	20.75	**23.0**	**22.0**	**21.0**
		1880MHz	22.68	21.66	20.78	**23.0**	**22.0**	**21.0**
		1852.5MHz	22.68	21.59	20.73	**23.0**	**22.0**	**21.0**
	12RB_6	1907.5MHz	22.82	21.74	20.80	**23.0**	**22.0**	**21.0**
		1880MHz	22.74	21.72	20.82	**23.0**	**22.0**	**21.0**
		1852.5MHz	22.71	21.61	20.75	**23.0**	**22.0**	**21.0**
	12RB_0	1907.5MHz	22.77	21.74	20.77	**23.0**	**22.0**	**21.0**
		1880MHz	22.72	21.71	20.78	**23.0**	**22.0**	**21.0**
		1852.5MHz	22.62	21.57	20.70	**23.0**	**22.0**	**21.0**
	25RB_0	1907.5MHz	22.76	21.76	20.74	**23.0**	**22.0**	**21.0**
		1880MHz	22.72	21.75	20.72	**23.0**	**22.0**	**21.0**
		1852.5MHz	22.67	21.66	20.66	**23.0**	**22.0**	**21.0**

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Full Power								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1905MHz	23.65	22.85	21.90	**24.0**	**23.0**	**22.0**
		1880MHz	23.61	22.96	21.93	**24.0**	**23.0**	**22.0**
		1855MHz	23.60	22.71	21.68	**24.0**	**23.0**	**22.0**
	1RB_24	1905MHz	23.75	22.91	21.98	**24.0**	**23.0**	**22.0**
		1880MHz	23.71	23.06	21.95	**24.0**	**23.0**	**22.0**
		1855MHz	23.71	22.80	21.75	**24.0**	**23.0**	**22.0**
	1RB_0	1905MHz	23.63	22.83	21.86	**24.0**	**23.0**	**22.0**
		1880MHz	23.62	22.84	21.82	**24.0**	**23.0**	**22.0**
		1855MHz	23.57	22.68	21.70	**24.0**	**23.0**	**22.0**
	25RB_25	1905MHz	22.70	21.63	20.66	**23.0**	**22.0**	**21.0**
		1880MHz	22.70	21.77	20.73	**23.0**	**22.0**	**21.0**
		1855MHz	22.73	21.71	20.73	**23.0**	**22.0**	**21.0**
	25RB_12	1905MHz	22.78	21.74	20.75	**23.0**	**22.0**	**21.0**
		1880MHz	22.73	21.76	20.74	**23.0**	**22.0**	**21.0**
		1855MHz	22.71	21.70	20.73	**23.0**	**22.0**	**21.0**
	25RB_0	1905MHz	22.87	21.79	20.78	**23.0**	**22.0**	**21.0**
		1880MHz	22.77	21.76	20.78	**23.0**	**22.0**	**21.0**
		1855MHz	22.72	21.68	20.72	**23.0**	**22.0**	**21.0**
	50RB_0	1905MHz	22.77	21.75	20.72	**23.0**	**22.0**	**21.0**
		1880MHz	22.75	21.74	20.77	**23.0**	**22.0**	**21.0**
		1855MHz	22.75	21.73	20.76	**23.0**	**22.0**	**21.0**

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Full Power								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1902.5MHz	23.57	22.73	21.73	**24.0**	**23.0**	**22.0**
		1880MHz	23.55	22.81	21.88	**24.0**	**23.0**	**22.0**
		1857.5MHz	23.49	22.74	21.75	**24.0**	**23.0**	**22.0**
	1RB_37	1902.5MHz	23.62	22.79	21.85	**24.0**	**23.0**	**22.0**
		1880MHz	23.64	22.95	21.94	**24.0**	**23.0**	**22.0**
		1857.5MHz	23.69	22.81	21.87	**24.0**	**23.0**	**22.0**
	1RB_0	1902.5MHz	23.55	22.82	21.86	**24.0**	**23.0**	**22.0**
		1880MHz	23.59	22.84	21.88	**24.0**	**23.0**	**22.0**
		1857.5MHz	23.58	22.72	21.79	**24.0**	**23.0**	**22.0**
	36RB_38	1902.5MHz	22.73	21.65	20.70	**23.0**	**22.0**	**21.0**
		1880MHz	22.74	21.67	20.76	**23.0**	**22.0**	**21.0**
		1857.5MHz	22.70	21.65	20.70	**23.0**	**22.0**	**21.0**
	36RB_19	1902.5MHz	22.79	21.71	20.75	**23.0**	**22.0**	**21.0**
		1880MHz	22.73	21.73	20.77	**23.0**	**22.0**	**21.0**
		1857.5MHz	22.71	21.69	20.71	**23.0**	**22.0**	**21.0**
	36RB_0	1902.5MHz	22.78	21.70	20.74	**23.0**	**22.0**	**21.0**
		1880MHz	22.74	21.71	20.74	**23.0**	**22.0**	**21.0**
		1857.5MHz	22.68	21.60	20.71	**23.0**	**22.0**	**21.0**
	75RB_0	1902.5MHz	22.77	21.67	20.71	**23.0**	**22.0**	**21.0**
		1880MHz	22.74	21.72	20.74	**23.0**	**22.0**	**21.0**
		1857.5MHz	22.71	21.69	20.70	**23.0**	**22.0**	**21.0**

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Full Power								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1900MHz	23.53	22.77	21.58	**24.0**	**23.0**	**22.0**
		1880MHz	23.46	22.77	21.66	**24.0**	**23.0**	**22.0**
		1860MHz	23.48	22.63	21.69	**24.0**	**23.0**	**22.0**
	1RB_50	1900MHz	23.65	22.95	21.78	**24.0**	**23.0**	**22.0**
		1880MHz	**23.76**	22.96	21.82	**24.0**	**23.0**	**22.0**
		1860MHz	23.73	22.90	21.89	**24.0**	**23.0**	**22.0**
	1RB_0	1900MHz	23.53	22.94	21.76	**24.0**	**23.0**	**22.0**
		1880MHz	23.54	22.81	21.63	**24.0**	**23.0**	**22.0**
		1860MHz	23.53	22.62	21.67	**24.0**	**23.0**	**22.0**
	50RB_50	1900MHz	22.58	21.58	20.58	**23.0**	**22.0**	**21.0**
		1880MHz	22.69	21.69	20.70	**23.0**	**22.0**	**21.0**
		1860MHz	22.72	21.64	20.65	**23.0**	**22.0**	**21.0**
	50RB_25	1900MHz	22.73	21.74	20.73	**23.0**	**22.0**	**21.0**
		1880MHz	22.73	21.72	20.72	**23.0**	**22.0**	**21.0**
		1860MHz	22.77	21.72	20.72	**23.0**	**22.0**	**21.0**
	50RB_0	1900MHz	22.75	21.69	20.69	**23.0**	**22.0**	**21.0**
		1880MHz	22.76	21.74	20.73	**23.0**	**22.0**	**21.0**
		1860MHz	**22.78**	21.68	20.70	**23.0**	**22.0**	**21.0**
	100RB_0	1900MHz	22.66	21.64	20.67	**23.0**	**22.0**	**21.0**
		1880MHz	22.71	21.68	20.66	**23.0**	**22.0**	**21.0**
		1860MHz	22.65	21.65	20.66	**23.0**	**22.0**	**21.0**

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Sensor on								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1909.3MHz	16.10	16.29	16.26	**16.5**	**16.5**	**16.5**
		1880MHz	16.06	16.25	16.32	**16.5**	**16.5**	**16.5**
		1850.7MHz	15.97	16.16	16.18	**16.5**	**16.5**	**16.5**
	1RB_3	1909.3MHz	16.23	16.41	16.40	**16.5**	**16.5**	**16.5**
		1880MHz	16.20	16.47	16.40	**16.5**	**16.5**	**16.5**
		1850.7MHz	16.14	16.22	16.25	**16.5**	**16.5**	**16.5**
	1RB_0	1909.3MHz	16.10	16.30	16.26	**16.5**	**16.5**	**16.5**
		1880MHz	16.06	16.39	16.30	**16.5**	**16.5**	**16.5**
		1850.7MHz	15.99	16.14	16.04	**16.5**	**16.5**	**16.5**
	3RB_3	1909.3MHz	16.17	16.13	16.20	**16.5**	**16.5**	**16.5**
		1880MHz	16.16	16.09	16.27	**16.5**	**16.5**	**16.5**
		1850.7MHz	16.11	15.98	16.20	**16.5**	**16.5**	**16.5**
	3RB_1	1909.3MHz	16.26	16.19	16.39	**16.5**	**16.5**	**16.5**
		1880MHz	16.21	16.14	16.35	**16.5**	**16.5**	**16.5**
		1850.7MHz	16.13	16.05	16.20	**16.5**	**16.5**	**16.5**
	3RB_0	1909.3MHz	16.22	16.07	16.32	**16.5**	**16.5**	**16.5**
		1880MHz	16.11	16.13	16.29	**16.5**	**16.5**	**16.5**
		1850.7MHz	16.10	16.04	16.19	**16.5**	**16.5**	**16.5**
	6RB_0	1909.3MHz	16.19	16.20	16.14	**16.5**	**16.5**	**16.5**
		1880MHz	16.16	16.20	16.16	**16.5**	**16.5**	**16.5**
		1850.7MHz	16.12	16.09	16.09	**16.5**	**16.5**	**16.5**

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Sensor on								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1908.5MHz	16.13	16.42	16.21	**16.5**	**16.5**	**16.5**
		1880MHz	16.10	16.37	16.26	**16.5**	**16.5**	**16.5**
		1851.5MHz	16.07	16.22	16.18	**16.5**	**16.5**	**16.5**
	1RB_7	1908.5MHz	16.35	16.57	16.31	**16.5**	**16.5**	**16.5**
		1880MHz	16.27	16.56	16.44	**16.5**	**16.5**	**16.5**
		1851.5MHz	16.13	16.36	16.43	**16.5**	**16.5**	**16.5**
	1RB_0	1908.5MHz	16.12	16.35	16.15	**16.5**	**16.5**	**16.5**
		1880MHz	16.09	16.33	16.26	**16.5**	**16.5**	**16.5**
		1851.5MHz	16.02	16.20	16.16	**16.5**	**16.5**	**16.5**
	8RB_7	1908.5MHz	16.15	16.15	16.21	**16.5**	**16.5**	**16.5**
		1880MHz	16.15	16.15	16.16	**16.5**	**16.5**	**16.5**
		1851.5MHz	16.07	16.09	16.06	**16.5**	**16.5**	**16.5**
	8RB_4	1908.5MHz	16.23	16.18	16.25	**16.5**	**16.5**	**16.5**
		1880MHz	16.12	16.18	16.25	**16.5**	**16.5**	**16.5**
		1851.5MHz	16.11	16.10	16.14	**16.5**	**16.5**	**16.5**
	8RB_0	1908.5MHz	16.20	16.16	16.24	**16.5**	**16.5**	**16.5**
		1880MHz	16.15	16.17	16.24	**16.5**	**16.5**	**16.5**
		1851.5MHz	16.03	16.11	16.05	**16.5**	**16.5**	**16.5**
	15RB_0	1908.5MHz	16.17	16.14	16.16	**16.5**	**16.5**	**16.5**
		1880MHz	16.12	16.14	16.16	**16.5**	**16.5**	**16.5**
		1851.5MHz	16.09	16.02	16.08	**16.5**	**16.5**	**16.5**

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Sensor on								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1907.5MHz	16.04	16.20	16.15	**16.5**	**16.5**	**16.5**
		1880MHz	15.99	16.27	16.16	**16.5**	**16.5**	**16.5**
		1852.5MHz	15.96	16.15	15.95	**16.5**	**16.5**	**16.5**
	1RB_12	1907.5MHz	16.28	16.49	16.46	**16.5**	**16.5**	**16.5**
		1880MHz	16.19	16.57	16.37	**16.5**	**16.5**	**16.5**
		1852.5MHz	16.19	16.38	16.33	**16.5**	**16.5**	**16.5**
	1RB_0	1907.5MHz	16.00	16.15	16.14	**16.5**	**16.5**	**16.5**
		1880MHz	15.99	16.24	16.16	**16.5**	**16.5**	**16.5**
		1852.5MHz	15.92	16.20	15.95	**16.5**	**16.5**	**16.5**
	12RB_13	1907.5MHz	16.08	16.03	16.11	**16.5**	**16.5**	**16.5**
		1880MHz	16.13	16.13	16.14	**16.5**	**16.5**	**16.5**
		1852.5MHz	16.09	16.01	16.07	**16.5**	**16.5**	**16.5**
	12RB_6	1907.5MHz	16.23	16.15	16.20	**16.5**	**16.5**	**16.5**
		1880MHz	16.23	16.16	16.17	**16.5**	**16.5**	**16.5**
		1852.5MHz	16.13	16.07	16.12	**16.5**	**16.5**	**16.5**
	12RB_0	1907.5MHz	16.19	16.10	16.17	**16.5**	**16.5**	**16.5**
		1880MHz	16.13	16.13	16.13	**16.5**	**16.5**	**16.5**
		1852.5MHz	16.08	16.00	16.00	**16.5**	**16.5**	**16.5**
	25RB_0	1907.5MHz	16.19	16.15	16.17	**16.5**	**16.5**	**16.5**
		1880MHz	16.12	16.17	16.18	**16.5**	**16.5**	**16.5**
		1852.5MHz	16.10	16.07	16.07	**16.5**	**16.5**	**16.5**

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Sensor on								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1905MHz	16.12	16.28	16.21	**16.5**	**16.5**	**16.5**
		1880MHz	16.05	16.35	16.24	**16.5**	**16.5**	**16.5**
		1855MHz	16.03	16.31	16.19	**16.5**	**16.5**	**16.5**
	1RB_24	1905MHz	16.17	16.37	16.29	**16.5**	**16.5**	**16.5**
		1880MHz	16.23	16.52	16.44	**16.5**	**16.5**	**16.5**
		1855MHz	16.13	16.46	16.29	**16.5**	**16.5**	**16.5**
	1RB_0	1905MHz	16.05	16.26	16.19	**16.5**	**16.5**	**16.5**
		1880MHz	16.07	16.33	16.26	**16.5**	**16.5**	**16.5**
		1855MHz	16.06	16.32	16.18	**16.5**	**16.5**	**16.5**
	25RB_25	1905MHz	16.15	16.09	16.14	**16.5**	**16.5**	**16.5**
		1880MHz	16.18	16.13	16.20	**16.5**	**16.5**	**16.5**
		1855MHz	16.18	16.13	16.18	**16.5**	**16.5**	**16.5**
	25RB_12	1905MHz	16.17	16.15	16.23	**16.5**	**16.5**	**16.5**
		1880MHz	16.15	16.16	16.20	**16.5**	**16.5**	**16.5**
		1855MHz	16.15	16.13	16.19	**16.5**	**16.5**	**16.5**
	25RB_0	1905MHz	16.27	16.21	16.26	**16.5**	**16.5**	**16.5**
		1880MHz	16.19	16.21	16.23	**16.5**	**16.5**	**16.5**
		1855MHz	16.15	16.13	16.14	**16.5**	**16.5**	**16.5**
	50RB_0	1905MHz	16.21	16.17	16.18	**16.5**	**16.5**	**16.5**
		1880MHz	16.17	16.12	16.20	**16.5**	**16.5**	**16.5**
		1855MHz	16.17	16.12	16.12	**16.5**	**16.5**	**16.5**

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Sensor on								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1902.5MHz	16.03	16.25	16.09	**16.5**	**16.5**	**16.5**
		1880MHz	16.04	16.29	16.17	**16.5**	**16.5**	**16.5**
		1857.5MHz	15.95	16.20	15.96	**16.5**	**16.5**	**16.5**
	1RB_37	1902.5MHz	16.08	16.30	16.28	**16.5**	**16.5**	**16.5**
		1880MHz	16.13	16.42	16.17	**16.5**	**16.5**	**16.5**
		1857.5MHz	16.10	16.28	16.10	**16.5**	**16.5**	**16.5**
	1RB_0	1902.5MHz	16.05	16.25	16.12	**16.5**	**16.5**	**16.5**
		1880MHz	16.05	16.25	16.16	**16.5**	**16.5**	**16.5**
		1857.5MHz	16.00	16.20	16.02	**16.5**	**16.5**	**16.5**
	36RB_38	1902.5MHz	16.15	16.08	16.13	**16.5**	**16.5**	**16.5**
		1880MHz	16.14	16.11	16.16	**16.5**	**16.5**	**16.5**
		1857.5MHz	16.12	16.07	16.15	**16.5**	**16.5**	**16.5**
	36RB_19	1902.5MHz	16.21	16.13	16.20	**16.5**	**16.5**	**16.5**
		1880MHz	16.14	16.10	16.17	**16.5**	**16.5**	**16.5**
		1857.5MHz	16.18	16.10	16.18	**16.5**	**16.5**	**16.5**
	36RB_0	1902.5MHz	16.18	16.12	16.17	**16.5**	**16.5**	**16.5**
		1880MHz	16.19	16.11	16.21	**16.5**	**16.5**	**16.5**
		1857.5MHz	16.15	16.05	16.12	**16.5**	**16.5**	**16.5**
	75RB_0	1902.5MHz	16.18	16.12	16.14	**16.5**	**16.5**	**16.5**
		1880MHz	16.17	16.14	16.17	**16.5**	**16.5**	**16.5**
		1857.5MHz	16.19	16.10	16.09	**16.5**	**16.5**	**16.5**

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Sensor on								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1900MHz	15.98	16.19	16.18	**16.5**	**16.5**	**16.5**
		1880MHz	15.98	16.26	16.27	**16.5**	**16.5**	**16.5**
		1860MHz	15.94	16.22	16.18	**16.5**	**16.5**	**16.5**
	1RB_50	1900MHz	16.21	16.35	16.39	**16.5**	**16.5**	**16.5**
		1880MHz	**16.22**	16.46	16.38	**16.5**	**16.5**	**16.5**
		1860MHz	16.16	16.38	16.30	**16.5**	**16.5**	**16.5**
	1RB_0	1900MHz	16.00	16.31	16.30	**16.5**	**16.5**	**16.5**
		1880MHz	15.99	16.20	16.22	**16.5**	**16.5**	**16.5**
		1860MHz	15.99	16.18	16.17	**16.5**	**16.5**	**16.5**
	50RB_50	1900MHz	16.00	16.02	16.03	**16.5**	**16.5**	**16.5**
		1880MHz	16.11	16.12	16.14	**16.5**	**16.5**	**16.5**
		1860MHz	16.07	16.08	16.09	**16.5**	**16.5**	**16.5**
	50RB_25	1900MHz	16.10	16.14	16.18	**16.5**	**16.5**	**16.5**
		1880MHz	16.16	16.13	16.18	**16.5**	**16.5**	**16.5**
		1860MHz	16.15	16.14	16.17	**16.5**	**16.5**	**16.5**
	50RB_0	1900MHz	16.13	16.11	16.13	**16.5**	**16.5**	**16.5**
		1880MHz	16.18	16.16	16.19	**16.5**	**16.5**	**16.5**
		1860MHz	**16.19**	16.09	16.11	**16.5**	**16.5**	**16.5**
	100RB_0	1900MHz	16.09	16.04	16.09	**16.5**	**16.5**	**16.5**
		1880MHz	16.08	16.07	16.14	**16.5**	**16.5**	**16.5**
		1860MHz	16.10	16.06	16.07	**16.5**	**16.5**	**16.5**

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Full Power								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1754.3MHz	23.33	22.69	21.51	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.38	22.63	21.59	**24.0**	**23.0**	**22.0**
		1710.7MHz	23.35	22.70	21.63	**24.0**	**23.0**	**22.0**
	1RB_3	1754.3MHz	23.46	22.75	21.62	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.49	22.72	21.73	**24.0**	**23.0**	**22.0**
		1710.7MHz	23.53	22.78	21.75	**24.0**	**23.0**	**22.0**
	1RB_0	1754.3MHz	23.35	22.68	21.58	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.34	22.62	21.62	**24.0**	**23.0**	**22.0**
		1710.7MHz	23.36	22.70	21.50	**24.0**	**23.0**	**22.0**
	3RB_3	1754.3MHz	23.49	22.47	21.60	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.45	22.44	21.54	**24.0**	**23.0**	**22.0**
		1710.7MHz	23.45	22.39	21.54	**24.0**	**23.0**	**22.0**
	3RB_1	1754.3MHz	23.50	22.54	21.54	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.51	22.49	21.68	**24.0**	**23.0**	**22.0**
		1710.7MHz	23.45	22.43	21.54	**24.0**	**23.0**	**22.0**
	3RB_0	1754.3MHz	23.44	22.45	21.62	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.44	22.38	21.50	**24.0**	**23.0**	**22.0**
		1710.7MHz	23.47	22.40	21.62	**24.0**	**23.0**	**22.0**
	6RB_0	1754.3MHz	22.47	21.59	20.52	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.44	21.57	20.46	**23.0**	**22.0**	**21.0**
		1710.7MHz	22.46	21.56	20.52	**23.0**	**22.0**	**21.0**

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Full Power								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1753.5MHz	23.41	22.70	21.45	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.37	22.73	21.45	**24.0**	**23.0**	**22.0**
		1711.5MHz	23.44	22.82	21.56	**24.0**	**23.0**	**22.0**
	1RB_7	1753.5MHz	23.51	22.85	21.65	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.43	22.81	21.68	**24.0**	**23.0**	**22.0**
		1711.5MHz	23.48	22.87	21.70	**24.0**	**23.0**	**22.0**
	1RB_0	1753.5MHz	23.40	22.70	21.43	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.38	22.76	21.53	**24.0**	**23.0**	**22.0**
		1711.5MHz	23.43	22.71	21.54	**24.0**	**23.0**	**22.0**
	8RB_7	1753.5MHz	22.40	21.46	20.47	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.39	21.45	20.54	**23.0**	**22.0**	**21.0**
		1711.5MHz	22.42	21.48	20.56	**23.0**	**22.0**	**21.0**
	8RB_4	1753.5MHz	22.45	21.52	20.53	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.43	21.53	20.60	**23.0**	**22.0**	**21.0**
		1711.5MHz	22.46	21.54	20.60	**23.0**	**22.0**	**21.0**
	8RB_0	1753.5MHz	22.42	21.50	20.54	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.41	21.46	20.58	**23.0**	**22.0**	**21.0**
		1711.5MHz	22.42	21.49	20.59	**23.0**	**22.0**	**21.0**
	15RB_0	1753.5MHz	22.44	21.43	20.50	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.44	21.45	20.49	**23.0**	**22.0**	**21.0**
		1711.5MHz	22.42	21.50	20.47	**23.0**	**22.0**	**21.0**

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Full Power								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1752.5MHz	23.26	22.53	21.45	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.28	22.50	21.48	**24.0**	**23.0**	**22.0**
		1712.5MHz	23.33	22.59	21.56	**24.0**	**23.0**	**22.0**
	1RB_12	1752.5MHz	23.50	22.86	21.68	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.52	22.75	21.82	**24.0**	**23.0**	**22.0**
		1712.5MHz	23.65	22.79	21.80	**24.0**	**23.0**	**22.0**
	1RB_0	1752.5MHz	23.35	22.59	21.53	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.33	22.55	21.59	**24.0**	**23.0**	**22.0**
		1712.5MHz	23.29	22.50	21.53	**24.0**	**23.0**	**22.0**
	12RB_13	1752.5MHz	22.40	21.39	20.48	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.46	21.44	20.55	**23.0**	**22.0**	**21.0**
		1712.5MHz	22.46	21.44	20.48	**23.0**	**22.0**	**21.0**
	12RB_6	1752.5MHz	22.52	21.50	20.61	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.49	21.46	20.54	**23.0**	**22.0**	**21.0**
		1712.5MHz	22.48	21.47	20.56	**23.0**	**22.0**	**21.0**
	12RB_0	1752.5MHz	22.47	21.50	20.55	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.44	21.42	20.52	**23.0**	**22.0**	**21.0**
		1712.5MHz	22.42	21.40	20.50	**23.0**	**22.0**	**21.0**
	25RB_0	1752.5MHz	22.44	21.49	20.51	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.50	21.48	20.50	**23.0**	**22.0**	**21.0**
		1712.5MHz	22.45	21.47	20.50	**23.0**	**22.0**	**21.0**

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Full Power								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1750MHz	23.33	22.67	21.48	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.34	22.62	21.57	**24.0**	**23.0**	**22.0**
		1715MHz	23.42	22.71	21.70	**24.0**	**23.0**	**22.0**
	1RB_24	1750MHz	23.51	22.87	21.72	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.48	22.80	21.71	**24.0**	**23.0**	**22.0**
		1715MHz	23.60	22.90	21.75	**24.0**	**23.0**	**22.0**
	1RB_0	1750MHz	23.45	22.76	21.72	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.50	22.81	21.69	**24.0**	**23.0**	**22.0**
		1715MHz	23.42	22.67	21.62	**24.0**	**23.0**	**22.0**
	25RB_25	1750MHz	22.45	21.45	20.49	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.50	21.53	20.55	**23.0**	**22.0**	**21.0**
		1715MHz	22.50	21.52	20.56	**23.0**	**22.0**	**21.0**
	25RB_12	1750MHz	22.51	21.51	20.53	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.51	21.54	20.58	**23.0**	**22.0**	**21.0**
		1715MHz	22.51	21.56	20.56	**23.0**	**22.0**	**21.0**
	25RB_0	1750MHz	22.60	21.60	20.62	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.48	21.51	20.53	**23.0**	**22.0**	**21.0**
		1715MHz	22.55	21.56	20.58	**23.0**	**22.0**	**21.0**
	50RB_0	1750MHz	22.55	21.50	20.55	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.53	21.51	20.53	**23.0**	**22.0**	**21.0**
		1715MHz	22.52	21.59	20.57	**23.0**	**22.0**	**21.0**

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Full Power								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1747.5MHz	23.30	22.62	21.51	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.30	22.59	21.46	**24.0**	**23.0**	**22.0**
		1717.5MHz	23.36	22.75	21.52	**24.0**	**23.0**	**22.0**
	1RB_37	1747.5MHz	23.47	22.76	21.67	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.45	22.73	21.64	**24.0**	**23.0**	**22.0**
		1717.5MHz	23.51	22.79	21.69	**24.0**	**23.0**	**22.0**
	1RB_0	1747.5MHz	23.41	22.69	21.63	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.42	22.78	21.46	**24.0**	**23.0**	**22.0**
		1717.5MHz	23.40	22.65	21.47	**24.0**	**23.0**	**22.0**
	36RB_38	1747.5MHz	22.45	21.45	20.47	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.49	21.42	20.51	**23.0**	**22.0**	**21.0**
		1717.5MHz	22.50	21.50	20.60	**23.0**	**22.0**	**21.0**
	36RB_19	1747.5MHz	22.52	21.52	20.60	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.53	21.47	20.55	**23.0**	**22.0**	**21.0**
		1717.5MHz	22.54	21.52	20.59	**23.0**	**22.0**	**21.0**
	36RB_0	1747.5MHz	22.56	21.53	20.58	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.50	21.52	20.54	**23.0**	**22.0**	**21.0**
		1717.5MHz	22.51	21.52	20.60	**23.0**	**22.0**	**21.0**
	75RB_0	1747.5MHz	22.53	21.52	20.54	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.46	21.46	20.49	**23.0**	**22.0**	**21.0**
		1717.5MHz	22.49	21.52	20.53	**23.0**	**22.0**	**21.0**

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Full Power								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1745MHz	23.24	22.56	21.40	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.20	22.58	21.32	**24.0**	**23.0**	**22.0**
		1720MHz	23.26	22.56	21.32	**24.0**	**23.0**	**22.0**
	1RB_50	1745MHz	23.51	22.81	21.57	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.50	22.86	21.65	**24.0**	**23.0**	**22.0**
		1720MHz	**23.52**	22.73	21.73	**24.0**	**23.0**	**22.0**
	1RB_0	1745MHz	23.34	22.71	21.50	**24.0**	**23.0**	**22.0**
		1732.5MHz	23.38	22.73	21.43	**24.0**	**23.0**	**22.0**
		1720MHz	23.32	22.53	21.57	**24.0**	**23.0**	**22.0**
	50RB_50	1745MHz	22.38	21.42	20.44	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.42	21.44	20.47	**23.0**	**22.0**	**21.0**
		1720MHz	22.56	21.56	20.55	**23.0**	**22.0**	**21.0**
	50RB_25	1745MHz	22.55	21.52	20.52	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.50	21.50	20.54	**23.0**	**22.0**	**21.0**
		1720MHz	22.52	21.54	20.60	**23.0**	**22.0**	**21.0**
	50RB_0	1745MHz	22.56	21.54	20.58	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.51	21.44	20.50	**23.0**	**22.0**	**21.0**
		1720MHz	**22.58**	21.59	20.62	**23.0**	**22.0**	**21.0**
	100RB_0	1745MHz	22.50	21.46	20.48	**23.0**	**22.0**	**21.0**
		1732.5MHz	22.45	21.43	20.51	**23.0**	**22.0**	**21.0**
		1720MHz	22.55	21.57	20.59	**23.0**	**22.0**	**21.0**

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Sensor on								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1754.3MHz	16.25	16.55	16.50	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.27	16.61	16.53	**17.0**	**17.0**	**17.0**
		1710.7MHz	16.29	16.65	16.56	**17.0**	**17.0**	**17.0**
	1RB_3	1754.3MHz	16.39	16.73	16.58	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.37	16.84	16.61	**17.0**	**17.0**	**17.0**
		1710.7MHz	16.46	16.72	16.68	**17.0**	**17.0**	**17.0**
	1RB_0	1754.3MHz	16.33	16.58	16.47	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.31	16.66	16.56	**17.0**	**17.0**	**17.0**
		1710.7MHz	16.28	16.63	16.55	**17.0**	**17.0**	**17.0**
	3RB_3	1754.3MHz	16.41	16.38	16.53	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.40	16.35	16.47	**17.0**	**17.0**	**17.0**
		1710.7MHz	16.41	16.40	16.58	**17.0**	**17.0**	**17.0**
	3RB_1	1754.3MHz	16.45	16.46	16.54	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.48	16.43	16.56	**17.0**	**17.0**	**17.0**
		1710.7MHz	16.48	16.46	16.61	**17.0**	**17.0**	**17.0**
	3RB_0	1754.3MHz	16.41	16.39	16.54	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.38	16.38	16.58	**17.0**	**17.0**	**17.0**
		1710.7MHz	16.41	16.41	16.56	**17.0**	**17.0**	**17.0**
	6RB_0	1754.3MHz	16.37	16.51	16.45	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.39	16.55	16.41	**17.0**	**17.0**	**17.0**
		1710.7MHz	16.40	16.49	16.45	**17.0**	**17.0**	**17.0**

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Sensor on								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1753.5MHz	16.32	16.67	16.65	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.30	16.63	16.53	**17.0**	**17.0**	**17.0**
		1711.5MHz	16.32	16.76	16.60	**17.0**	**17.0**	**17.0**
	1RB_7	1753.5MHz	16.54	16.83	16.73	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.45	16.69	16.68	**17.0**	**17.0**	**17.0**
		1711.5MHz	16.44	16.88	16.73	**17.0**	**17.0**	**17.0**
	1RB_0	1753.5MHz	16.35	16.68	16.68	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.33	16.68	16.56	**17.0**	**17.0**	**17.0**
		1711.5MHz	16.34	16.74	16.55	**17.0**	**17.0**	**17.0**
	8RB_7	1753.5MHz	16.38	16.45	16.47	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.36	16.45	16.52	**17.0**	**17.0**	**17.0**
		1711.5MHz	16.36	16.44	16.48	**17.0**	**17.0**	**17.0**
	8RB_4	1753.5MHz	16.40	16.52	16.52	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.35	16.44	16.56	**17.0**	**17.0**	**17.0**
		1711.5MHz	16.43	16.45	16.50	**17.0**	**17.0**	**17.0**
	8RB_0	1753.5MHz	16.35	16.49	16.52	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.33	16.44	16.52	**17.0**	**17.0**	**17.0**
		1711.5MHz	16.38	16.45	16.51	**17.0**	**17.0**	**17.0**
	15RB_0	1753.5MHz	16.37	16.38	16.39	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.35	16.38	16.41	**17.0**	**17.0**	**17.0**
		1711.5MHz	16.41	16.35	16.45	**17.0**	**17.0**	**17.0**

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Sensor on								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1752.5MHz	16.20	16.52	16.49	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.23	16.50	16.49	**17.0**	**17.0**	**17.0**
		1712.5MHz	16.27	16.53	16.52	**17.0**	**17.0**	**17.0**
	1RB_12	1752.5MHz	16.47	16.81	17.03	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.58	16.68	16.82	**17.0**	**17.0**	**17.0**
		1712.5MHz	16.48	16.70	16.76	**17.0**	**17.0**	**17.0**
	1RB_0	1752.5MHz	16.30	16.60	16.50	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.29	16.55	16.53	**17.0**	**17.0**	**17.0**
		1712.5MHz	16.23	16.52	16.50	**17.0**	**17.0**	**17.0**
	12RB_13	1752.5MHz	16.36	16.33	16.42	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.39	16.40	16.46	**17.0**	**17.0**	**17.0**
		1712.5MHz	16.38	16.40	16.44	**17.0**	**17.0**	**17.0**
	12RB_6	1752.5MHz	16.45	16.43	16.50	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.42	16.44	16.49	**17.0**	**17.0**	**17.0**
		1712.5MHz	16.41	16.38	16.48	**17.0**	**17.0**	**17.0**
	12RB_0	1752.5MHz	16.43	16.42	16.46	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.38	16.38	16.43	**17.0**	**17.0**	**17.0**
		1712.5MHz	16.38	16.35	16.44	**17.0**	**17.0**	**17.0**
	25RB_0	1752.5MHz	16.39	16.41	16.43	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.40	16.38	16.49	**17.0**	**17.0**	**17.0**
		1712.5MHz	16.38	16.35	16.39	**17.0**	**17.0**	**17.0**

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Sensor on								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1750MHz	16.29	16.65	16.58	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.30	16.64	16.60	**17.0**	**17.0**	**17.0**
		1715MHz	16.35	16.70	16.72	**17.0**	**17.0**	**17.0**
	1RB_24	1750MHz	16.49	16.83	16.75	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.44	16.82	16.73	**17.0**	**17.0**	**17.0**
		1715MHz	16.54	16.78	16.80	**17.0**	**17.0**	**17.0**
	1RB_0	1750MHz	16.37	16.71	16.66	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.42	16.72	16.73	**17.0**	**17.0**	**17.0**
		1715MHz	16.39	16.65	16.70	**17.0**	**17.0**	**17.0**
	25RB_25	1750MHz	16.41	16.42	16.46	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.42	16.46	16.50	**17.0**	**17.0**	**17.0**
		1715MHz	16.42	16.46	16.52	**17.0**	**17.0**	**17.0**
	25RB_12	1750MHz	16.47	16.51	16.52	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.46	16.48	16.50	**17.0**	**17.0**	**17.0**
		1715MHz	16.47	16.47	16.48	**17.0**	**17.0**	**17.0**
	25RB_0	1750MHz	16.53	16.55	16.56	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.41	16.47	16.51	**17.0**	**17.0**	**17.0**
		1715MHz	16.52	16.52	16.52	**17.0**	**17.0**	**17.0**
	50RB_0	1750MHz	16.51	16.45	16.52	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.47	16.49	16.55	**17.0**	**17.0**	**17.0**
		1715MHz	16.49	16.47	16.55	**17.0**	**17.0**	**17.0**

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Sensor on								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1747.5MHz	16.25	16.62	16.51	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.24	16.54	16.38	**17.0**	**17.0**	**17.0**
		1717.5MHz	16.24	16.64	16.45	**17.0**	**17.0**	**17.0**
	1RB_37	1747.5MHz	16.42	16.59	16.63	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.39	16.71	16.56	**17.0**	**17.0**	**17.0**
		1717.5MHz	16.44	16.70	16.59	**17.0**	**17.0**	**17.0**
	1RB_0	1747.5MHz	16.33	16.65	16.60	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.43	16.73	16.57	**17.0**	**17.0**	**17.0**
		1717.5MHz	16.33	16.55	16.47	**17.0**	**17.0**	**17.0**
	36RB_38	1747.5MHz	16.39	16.39	16.45	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.42	16.39	16.44	**17.0**	**17.0**	**17.0**
		1717.5MHz	16.45	16.43	16.52	**17.0**	**17.0**	**17.0**
	36RB_19	1747.5MHz	16.49	16.45	16.52	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.42	16.43	16.52	**17.0**	**17.0**	**17.0**
		1717.5MHz	16.45	16.49	16.53	**17.0**	**17.0**	**17.0**
	36RB_0	1747.5MHz	16.48	16.46	16.50	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.44	16.46	16.49	**17.0**	**17.0**	**17.0**
		1717.5MHz	16.45	16.44	16.48	**17.0**	**17.0**	**17.0**
	75RB_0	1747.5MHz	16.46	16.46	16.48	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.45	16.42	16.48	**17.0**	**17.0**	**17.0**
		1717.5MHz	16.43	16.45	16.55	**17.0**	**17.0**	**17.0**

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Sensor on								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1745MHz	16.18	16.54	16.52	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.18	16.48	16.49	**17.0**	**17.0**	**17.0**
		1720MHz	16.25	16.57	16.56	**17.0**	**17.0**	**17.0**
	1RB_50	1745MHz	16.48	16.75	16.84	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.49	16.82	16.74	**17.0**	**17.0**	**17.0**
		1720MHz	**16.49**	16.81	16.79	**17.0**	**17.0**	**17.0**
	1RB_0	1745MHz	16.33	16.53	16.64	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.34	16.67	16.63	**17.0**	**17.0**	**17.0**
		1720MHz	16.31	16.60	16.56	**17.0**	**17.0**	**17.0**
	50RB_50	1745MHz	16.31	16.35	16.39	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.38	16.38	16.40	**17.0**	**17.0**	**17.0**
		1720MHz	16.47	16.52	16.51	**17.0**	**17.0**	**17.0**
	50RB_25	1745MHz	16.47	16.48	16.50	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.47	16.46	16.48	**17.0**	**17.0**	**17.0**
		1720MHz	16.50	16.49	16.55	**17.0**	**17.0**	**17.0**
	50RB_0	1745MHz	16.51	16.50	16.54	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.55	16.37	16.41	**17.0**	**17.0**	**17.0**
		1720MHz	**16.57**	16.47	16.53	**17.0**	**17.0**	**17.0**
	100RB_0	1745MHz	16.40	16.43	16.49	**17.0**	**17.0**	**17.0**
		1732.5MHz	16.39	16.40	16.43	**17.0**	**17.0**	**17.0**
		1720MHz	16.49	16.52	16.53	**17.0**	**17.0**	**17.0**

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Full Power								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	848.3MHz	23.01	22.28	21.37	**24.0**	**23.0**	**22.0**
		836.5MHz	23.10	22.44	21.43	**24.0**	**23.0**	**22.0**
		824.7MHz	23.03	22.34	21.29	**24.0**	**23.0**	**22.0**
	1RB_3	848.3MHz	23.17	22.45	21.44	**24.0**	**23.0**	**22.0**
		836.5MHz	23.22	22.56	21.49	**24.0**	**23.0**	**22.0**
		824.7MHz	23.18	22.41	21.44	**24.0**	**23.0**	**22.0**
	1RB_0	848.3MHz	23.07	22.32	21.35	**24.0**	**23.0**	**22.0**
		836.5MHz	23.12	22.47	21.39	**24.0**	**23.0**	**22.0**
		824.7MHz	23.08	22.26	21.20	**24.0**	**23.0**	**22.0**
	3RB_3	848.3MHz	23.12	22.07	21.40	**24.0**	**23.0**	**22.0**
		836.5MHz	23.20	22.18	21.32	**24.0**	**23.0**	**22.0**
		824.7MHz	23.17	22.11	21.34	**24.0**	**23.0**	**22.0**
	3RB_1	848.3MHz	23.20	22.15	21.33	**24.0**	**23.0**	**22.0**
		836.5MHz	23.20	22.19	21.37	**24.0**	**23.0**	**22.0**
		824.7MHz	23.19	22.19	21.40	**24.0**	**23.0**	**22.0**
	3RB_0	848.3MHz	23.18	22.07	21.33	**24.0**	**23.0**	**22.0**
		836.5MHz	23.19	22.16	21.37	**24.0**	**23.0**	**22.0**
		824.7MHz	23.22	22.15	21.36	**24.0**	**23.0**	**22.0**
	6RB_0	848.3MHz	22.21	21.21	20.18	**23.0**	**22.0**	**21.0**
		836.5MHz	22.18	21.26	20.21	**23.0**	**22.0**	**21.0**
		824.7MHz	22.23	21.24	20.22	**23.0**	**22.0**	**21.0**

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Full Power								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	847.5MHz	23.13	22.38	21.34	**24.0**	**23.0**	**22.0**
		836.5MHz	23.18	22.47	21.49	**24.0**	**23.0**	**22.0**
		825.5MHz	23.17	22.43	21.41	**24.0**	**23.0**	**22.0**
	1RB_7	847.5MHz	23.35	22.59	21.43	**24.0**	**23.0**	**22.0**
		836.5MHz	23.35	22.64	21.63	**24.0**	**23.0**	**22.0**
		825.5MHz	23.22	22.53	21.54	**24.0**	**23.0**	**22.0**
	1RB_0	847.5MHz	23.16	22.38	21.30	**24.0**	**23.0**	**22.0**
		836.5MHz	23.21	22.52	21.44	**24.0**	**23.0**	**22.0**
		825.5MHz	23.20	22.35	21.42	**24.0**	**23.0**	**22.0**
	8RB_7	847.5MHz	22.15	21.27	20.31	**23.0**	**22.0**	**21.0**
		836.5MHz	22.22	21.31	20.31	**23.0**	**22.0**	**21.0**
		825.5MHz	22.16	21.26	20.32	**23.0**	**22.0**	**21.0**
	8RB_4	847.5MHz	22.19	21.29	20.37	**23.0**	**22.0**	**21.0**
		836.5MHz	22.23	21.37	20.39	**23.0**	**22.0**	**21.0**
		825.5MHz	22.21	21.30	20.32	**23.0**	**22.0**	**21.0**
	8RB_0	847.5MHz	22.15	21.27	20.33	**23.0**	**22.0**	**21.0**
		836.5MHz	22.21	21.39	20.38	**23.0**	**22.0**	**21.0**
		825.5MHz	22.16	21.28	20.29	**23.0**	**22.0**	**21.0**
	15RB_0	847.5MHz	22.19	21.23	20.20	**23.0**	**22.0**	**21.0**
		836.5MHz	22.26	21.29	20.28	**23.0**	**22.0**	**21.0**
		825.5MHz	22.23	21.24	20.22	**23.0**	**22.0**	**21.0**

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Full Power								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	846.5MHz	23.02	22.23	21.27	**24.0**	**23.0**	**22.0**
		836.5MHz	23.12	22.43	21.31	**24.0**	**23.0**	**22.0**
		826.5MHz	23.07	22.30	21.22	**24.0**	**23.0**	**22.0**
	1RB_12	846.5MHz	23.30	22.54	21.50	**24.0**	**23.0**	**22.0**
		836.5MHz	23.32	22.58	21.53	**24.0**	**23.0**	**22.0**
		826.5MHz	23.43	22.54	21.36	**24.0**	**23.0**	**22.0**
	1RB_0	846.5MHz	23.06	22.21	21.29	**24.0**	**23.0**	**22.0**
		836.5MHz	23.10	22.46	21.34	**24.0**	**23.0**	**22.0**
		826.5MHz	23.11	22.30	21.16	**24.0**	**23.0**	**22.0**
	12RB_13	846.5MHz	22.14	21.13	20.26	**23.0**	**22.0**	**21.0**
		836.5MHz	22.23	21.29	20.29	**23.0**	**22.0**	**21.0**
		826.5MHz	22.23	21.28	20.29	**23.0**	**22.0**	**21.0**
	12RB_6	846.5MHz	22.26	21.27	20.32	**23.0**	**22.0**	**21.0**
		836.5MHz	22.30	21.32	20.32	**23.0**	**22.0**	**21.0**
		826.5MHz	22.28	21.33	20.35	**23.0**	**22.0**	**21.0**
	12RB_0	846.5MHz	22.17	21.16	20.24	**23.0**	**22.0**	**21.0**
		836.5MHz	22.28	21.35	20.33	**23.0**	**22.0**	**21.0**
		826.5MHz	22.18	21.22	20.18	**23.0**	**22.0**	**21.0**
	25RB_0	846.5MHz	22.18	21.23	20.24	**23.0**	**22.0**	**21.0**
		836.5MHz	22.28	21.30	20.32	**23.0**	**22.0**	**21.0**
		826.5MHz	22.24	21.27	20.26	**23.0**	**22.0**	**21.0**

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Full Power								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	844MHz	23.16	22.27	21.38	**24.0**	**23.0**	**22.0**
		836.5MHz	23.22	22.35	21.46	**24.0**	**23.0**	**22.0**
		829MHz	23.25	22.54	21.40	**24.0**	**23.0**	**22.0**
	1RB_24	844MHz	23.28	22.40	21.50	**24.0**	**23.0**	**22.0**
		836.5MHz	**23.36**	22.47	21.57	**24.0**	**23.0**	**22.0**
		829MHz	23.26	22.55	21.58	**24.0**	**23.0**	**22.0**
	1RB_0	844MHz	23.20	22.35	21.38	**24.0**	**23.0**	**22.0**
		836.5MHz	23.21	22.38	21.51	**24.0**	**23.0**	**22.0**
		829MHz	23.18	22.36	21.45	**24.0**	**23.0**	**22.0**
	25RB_25	844MHz	22.26	21.27	20.24	**23.0**	**22.0**	**21.0**
		836.5MHz	22.34	21.34	20.37	**23.0**	**22.0**	**21.0**
		829MHz	22.26	21.29	20.34	**23.0**	**22.0**	**21.0**
	25RB_12	844MHz	22.27	21.32	20.30	**23.0**	**22.0**	**21.0**
		836.5MHz	**22.35**	21.34	20.35	**23.0**	**22.0**	**21.0**
		829MHz	22.28	21.30	20.35	**23.0**	**22.0**	**21.0**
	25RB_0	844MHz	22.24	21.26	20.25	**23.0**	**22.0**	**21.0**
		836.5MHz	22.33	21.45	20.43	**23.0**	**22.0**	**21.0**
		829MHz	22.24	21.28	20.27	**23.0**	**22.0**	**21.0**
	50RB_0	844MHz	22.24	21.26	20.23	**23.0**	**22.0**	**21.0**
		836.5MHz	22.42	21.39	20.39	**23.0**	**22.0**	**21.0**
		829MHz	22.22	21.26	20.27	**23.0**	**22.0**	**21.0**

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Sensor on								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	848.3MHz	21.99	22.15	21.29	23.0	23..0	22.0
		836.5MHz	21.98	22.29	21.33	23.0	23..0	22.0
		824.7MHz	22.01	22.27	21.27	23.0	23..0	22.0
	1RB_3	848.3MHz	22.07	22.28	21.33	23.0	23..0	22.0
		836.5MHz	22.17	22.39	21.45	23.0	23..0	22.0
		824.7MHz	22.19	22.37	21.40	23.0	23..0	22.0
	1RB_0	848.3MHz	21.94	22.16	21.25	23.0	23..0	22.0
		836.5MHz	22.04	22.30	21.35	23.0	23..0	22.0
		824.7MHz	22.02	22.28	21.35	23.0	23..0	22.0
	3RB_3	848.3MHz	22.03	22.03	21.29	23.0	23..0	22.0
		836.5MHz	22.07	22.05	21.28	23.0	23..0	22.0
		824.7MHz	22.13	22.02	21.26	23.0	23..0	22.0
	3RB_1	848.3MHz	22.09	22.07	21.33	23.0	23..0	22.0
		836.5MHz	22.18	22.17	21.35	23.0	23..0	22.0
		824.7MHz	22.14	22.08	21.28	23.0	23..0	22.0
	3RB_0	848.3MHz	22.03	22.06	21.29	23.0	23..0	22.0
		836.5MHz	22.13	22.07	21.37	23.0	23..0	22.0
		824.7MHz	22.10	22.06	21.24	23.0	23..0	22.0
	6RB_0	848.3MHz	22.07	21.19	20.11	23.0	22.0	21.0
		836.5MHz	22.15	21.23	20.21	23.0	22.0	21.0
		824.7MHz	22.15	21.19	20.20	23.0	22.0	21.0

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Sensor on								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	847.5MHz	22.06	22.22	21.43	23.0	23..0	22.0
		836.5MHz	22.10	22.28	21.46	23.0	23..0	22.0
		825.5MHz	22.04	22.22	21.41	23.0	23..0	22.0
	1RB_7	847.5MHz	22.06	22.46	21.48	23.0	23..0	22.0
		836.5MHz	22.31	22.51	21.69	23.0	23..0	22.0
		825.5MHz	22.14	22.37	21.46	23.0	23..0	22.0
	1RB_0	847.5MHz	22.00	22.25	21.37	23.0	23..0	22.0
		836.5MHz	22.08	22.36	21.46	23.0	23..0	22.0
		825.5MHz	22.08	22.26	21.43	23.0	23..0	22.0
	8RB_7	847.5MHz	22.05	21.13	20.20	23.0	22.0	21.0
		836.5MHz	22.10	21.22	20.29	23.0	22.0	21.0
		825.5MHz	22.13	21.19	20.29	23.0	22.0	21.0
	8RB_4	847.5MHz	22.10	21.19	20.24	23.0	22.0	21.0
		836.5MHz	22.13	21.24	20.27	23.0	22.0	21.0
		825.5MHz	22.15	21.23	20.27	23.0	22.0	21.0
	8RB_0	847.5MHz	22.08	21.17	20.19	23.0	22.0	21.0
		836.5MHz	22.11	21.22	20.28	23.0	22.0	21.0
		825.5MHz	22.11	21.16	20.22	23.0	22.0	21.0
	15RB_0	847.5MHz	22.09	21.12	20.21	23.0	22.0	21.0
		836.5MHz	22.13	21.18	20.24	23.0	22.0	21.0
		825.5MHz	22.12	21.15	20.17	23.0	22.0	21.0

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Sensor on								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	846.5MHz	21.97	22.21	21.21	23.0	23..0	22.0
		836.5MHz	22.03	22.33	21.29	23.0	23..0	22.0
		826.5MHz	21.96	22.22	21.33	23.0	23..0	22.0
	1RB_12	846.5MHz	22.23	22.51	21.44	23.0	23..0	22.0
		836.5MHz	22.27	22.56	21.52	23.0	23..0	22.0
		826.5MHz	22.32	22.29	21.58	23.0	23..0	22.0
	1RB_0	846.5MHz	21.91	22.19	21.16	23.0	23..0	22.0
		836.5MHz	22.00	22.32	21.34	23.0	23..0	22.0
		826.5MHz	22.01	22.18	21.31	23.0	23..0	22.0
	12RB_13	846.5MHz	22.02	21.03	20.16	23.0	22.0	21.0
		836.5MHz	22.14	21.16	20.24	23.0	22.0	21.0
		826.5MHz	22.14	21.20	20.30	23.0	22.0	21.0
	12RB_6	846.5MHz	22.18	21.14	20.25	23.0	22.0	21.0
		836.5MHz	22.18	21.24	20.37	23.0	22.0	21.0
		826.5MHz	22.16	21.23	20.29	23.0	22.0	21.0
	12RB_0	846.5MHz	22.09	21.04	20.15	23.0	22.0	21.0
		836.5MHz	22.18	21.22	20.33	23.0	22.0	21.0
		826.5MHz	22.08	21.12	20.19	23.0	22.0	21.0
	25RB_0	846.5MHz	22.09	21.15	20.17	23.0	22.0	21.0
		836.5MHz	22.15	21.17	20.27	23.0	22.0	21.0
		826.5MHz	22.15	21.16	20.22	23.0	22.0	21.0

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Sensor on								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	844MHz	22.11	22.35	21.40	23.0	23..0	22.0
		836.5MHz	22.15	22.34	21.41	23.0	23..0	22.0
		829MHz	22.13	22.43	21.38	23.0	23..0	22.0
	1RB_24	844MHz	22.23	22.42	21.40	23.0	23..0	22.0
		836.5MHz	22.27	22.54	21.54	23.0	23..0	22.0
		829MHz	22.25	22.45	21.33	23.0	23..0	22.0
	1RB_0	844MHz	22.12	22.34	21.31	23.0	23..0	22.0
		836.5MHz	22.14	22.37	21.24	23.0	23..0	22.0
		829MHz	22.09	22.25	21.28	23.0	23..0	22.0
	25RB_25	844MHz	22.17	21.18	20.24	23.0	22.0	21.0
		836.5MHz	22.24	21.25	20.34	23.0	22.0	21.0
		829MHz	22.18	21.17	20.26	23.0	22.0	21.0
	25RB_12	844MHz	22.20	21.17	20.26	23.0	22.0	21.0
		836.5MHz	22.32	21.26	20.35	23.0	22.0	21.0
		829MHz	22.19	21.20	20.31	23.0	22.0	21.0
	25RB_0	844MHz	22.13	21.12	20.20	23.0	22.0	21.0
		836.5MHz	22.30	21.36	20.40	23.0	22.0	21.0
		829MHz	22.11	21.15	20.23	23.0	22.0	21.0
	50RB_0	844MHz	22.14	21.10	20.20	23.0	22.0	21.0
		836.5MHz	22.26	21.32	20.36	23.0	22.0	21.0
		829MHz	22.11	21.17	20.25	23.0	22.0	21.0

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Full Power								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	2567.4MHz	23.72	22.76	21.75	**25.0**	**24.0**	**23.0**
		2535MHz	23.67	22.70	21.71	**25.0**	**24.0**	**23.0**
		2502.5MHz	23.53	22.54	21.60	**25.0**	**24.0**	**23.0**
	1RB_12	2567.4MHz	23.96	23.02	21.99	**25.0**	**24.0**	**23.0**
		2535MHz	23.96	23.00	22.05	**25.0**	**24.0**	**23.0**
		2502.5MHz	23.81	22.81	21.81	**25.0**	**24.0**	**23.0**
	1RB_0	2567.4MHz	23.73	22.66	21.74	**25.0**	**24.0**	**23.0**
		2535MHz	23.68	22.69	21.67	**25.0**	**24.0**	**23.0**
		2502.5MHz	23.49	22.51	21.48	**25.0**	**24.0**	**23.0**
	12RB_13	2567.4MHz	22.94	21.79	20.86	**24.0**	**23.0**	**22.0**
		2535MHz	22.80	21.75	20.83	**24.0**	**23.0**	**22.0**
		2502.5MHz	22.68	21.58	20.64	**24.0**	**23.0**	**22.0**
	12RB_6	2567.4MHz	22.99	21.88	20.93	**24.0**	**23.0**	**22.0**
		2535MHz	22.88	21.78	20.90	**24.0**	**23.0**	**22.0**
		2502.5MHz	22.73	21.62	20.73	**24.0**	**23.0**	**22.0**
	12RB_0	2567.4MHz	22.96	21.85	20.90	**24.0**	**23.0**	**22.0**
		2535MHz	22.81	21.77	20.83	**24.0**	**23.0**	**22.0**
		2502.5MHz	22.70	21.61	20.65	**24.0**	**23.0**	**22.0**
	25RB_0	2567.4MHz	22.95	21.85	20.92	**24.0**	**23.0**	**22.0**
		2535MHz	22.84	21.78	20.82	**24.0**	**23.0**	**22.0**
		2502.5MHz	22.70	21.61	20.64	**24.0**	**23.0**	**22.0**

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Full Power								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	2565MHz	23.89	22.89	21.88	**25.0**	**24.0**	**23.0**
		2535MHz	23.79	22.90	21.84	**25.0**	**24.0**	**23.0**
		2505MHz	23.68	22.84	21.82	**25.0**	**24.0**	**23.0**
	1RB_24	2565MHz	24.05	22.94	22.04	**25.0**	**24.0**	**23.0**
		2535MHz	23.89	22.98	21.98	**25.0**	**24.0**	**23.0**
		2505MHz	23.72	22.84	21.88	**25.0**	**24.0**	**23.0**
	1RB_0	2565MHz	23.83	22.85	21.81	**25.0**	**24.0**	**23.0**
		2535MHz	23.77	22.85	21.75	**25.0**	**24.0**	**23.0**
		2505MHz	23.61	22.69	21.59	**25.0**	**24.0**	**23.0**
	25RB_25	2565MHz	22.99	21.82	20.89	**24.0**	**23.0**	**22.0**
		2535MHz	22.92	21.76	20.79	**24.0**	**23.0**	**22.0**
		2505MHz	22.80	21.61	20.62	**24.0**	**23.0**	**22.0**
	25RB_12	2565MHz	23.07	21.89	20.89	**24.0**	**23.0**	**22.0**
		2535MHz	22.95	21.81	20.79	**24.0**	**23.0**	**22.0**
		2505MHz	22.84	21.64	20.67	**24.0**	**23.0**	**22.0**
	25RB_0	2565MHz	23.04	21.89	20.88	**24.0**	**23.0**	**22.0**
		2535MHz	22.95	21.78	20.79	**24.0**	**23.0**	**22.0**
		2505MHz	22.86	21.67	20.69	**24.0**	**23.0**	**22.0**
	50RB_0	2565MHz	22.97	21.88	20.92	**24.0**	**23.0**	**22.0**
		2535MHz	22.87	21.81	20.81	**24.0**	**23.0**	**22.0**
		2505MHz	22.75	21.68	20.67	**24.0**	**23.0**	**22.0**

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Full Power								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	2562.5MHz	23.86	23.02	21.87	**25.0**	**24.0**	**23.0**
		2535MHz	23.82	22.97	21.90	**25.0**	**24.0**	**23.0**
		2507.5MHz	23.73	22.88	21.70	**25.0**	**24.0**	**23.0**
	1RB_37	2562.5MHz	23.94	23.03	22.00	**25.0**	**24.0**	**23.0**
		2535MHz	23.81	22.99	21.87	**25.0**	**24.0**	**23.0**
		2507.5MHz	23.69	22.80	21.63	**25.0**	**24.0**	**23.0**
	1RB_0	2562.5MHz	23.81	22.94	21.68	**25.0**	**24.0**	**23.0**
		2535MHz	23.73	22.89	21.82	**25.0**	**24.0**	**23.0**
		2507.5MHz	23.56	22.65	21.58	**25.0**	**24.0**	**23.0**
	36RB_38	2562.5MHz	22.99	21.86	20.86	**24.0**	**23.0**	**22.0**
		2535MHz	22.87	21.77	20.75	**24.0**	**23.0**	**22.0**
		2507.5MHz	22.83	21.73	20.69	**24.0**	**23.0**	**22.0**
	36RB_19	2562.5MHz	23.00	21.87	20.89	**24.0**	**23.0**	**22.0**
		2535MHz	22.90	21.82	20.76	**24.0**	**23.0**	**22.0**
		2507.5MHz	22.84	21.72	20.68	**24.0**	**23.0**	**22.0**
	36RB_0	2562.5MHz	22.94	21.84	20.82	**24.0**	**23.0**	**22.0**
		2535MHz	22.86	21.75	20.76	**24.0**	**23.0**	**22.0**
		2507.5MHz	22.80	21.67	20.65	**24.0**	**23.0**	**22.0**
	75RB_0	2562.5MHz	22.99	21.89	20.84	**24.0**	**23.0**	**22.0**
		2535MHz	22.89	21.77	20.74	**24.0**	**23.0**	**22.0**
		2507.5MHz	22.84	21.72	20.70	**24.0**	**23.0**	**22.0**

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Full Power								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	2560MHz	23.78	22.86	21.89	**25.0**	**24.0**	**23.0**
		2535MHz	23.75	22.85	21.72	**25.0**	**24.0**	**23.0**
		2510MHz	23.73	22.83	21.73	**25.0**	**24.0**	**23.0**
	1RB_50	2560MHz	**23.91**	23.00	22.03	**25.0**	**24.0**	**23.0**
		2535MHz	23.85	22.94	21.93	**25.0**	**24.0**	**23.0**
		2510MHz	23.82	22.87	21.79	**25.0**	**24.0**	**23.0**
	1RB_0	2560MHz	23.66	22.84	21.65	**25.0**	**24.0**	**23.0**
		2535MHz	23.61	22.72	21.64	**25.0**	**24.0**	**23.0**
		2510MHz	23.45	22.53	21.50	**25.0**	**24.0**	**23.0**
	50RB_50	2560MHz	22.98	21.85	20.86	**24.0**	**23.0**	**22.0**
		2535MHz	22.83	21.74	20.67	**24.0**	**23.0**	**22.0**
		2510MHz	22.90	21.76	20.72	**24.0**	**23.0**	**22.0**
	50RB_25	2560MHz	**23.08**	21.94	20.95	**24.0**	**23.0**	**22.0**
		2535MHz	22.97	21.83	20.80	**24.0**	**23.0**	**22.0**
		2510MHz	22.87	21.76	20.75	**24.0**	**23.0**	**22.0**
	50RB_0	2560MHz	23.00	21.87	20.83	**24.0**	**23.0**	**22.0**
		2535MHz	22.84	21.78	20.68	**24.0**	**23.0**	**22.0**
		2510MHz	22.89	21.75	20.75	**24.0**	**23.0**	**22.0**
	100RB_0	2560MHz	22.94	21.87	20.87	**24.0**	**23.0**	**22.0**
		2535MHz	22.80	21.71	20.71	**24.0**	**23.0**	**22.0**
		2510MHz	22.89	21.80	20.74	**24.0**	**23.0**	**22.0**

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Sensor on								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	2567.4MHz	15.82	16.10	16.00	**16.5**	**16.5**	**16.5**
		2535MHz	15.63	16.05	15.85	**16.5**	**16.5**	**16.5**
		2502.5MHz	15.48	15.79	15.71	**16.5**	**16.5**	**16.5**
	1RB_12	2567.4MHz	16.03	16.34	16.28	**16.5**	**16.5**	**16.5**
		2535MHz	15.91	16.18	16.14	**16.5**	**16.5**	**16.5**
		2502.5MHz	15.67	16.04	16.02	**16.5**	**16.5**	**16.5**
	1RB_0	2567.4MHz	15.74	16.06	15.89	**16.5**	**16.5**	**16.5**
		2535MHz	15.63	15.98	15.90	**16.5**	**16.5**	**16.5**
		2502.5MHz	15.46	15.74	15.68	**16.5**	**16.5**	**16.5**
	12RB_13	2567.4MHz	15.99	15.93	16.00	**16.5**	**16.5**	**16.5**
		2535MHz	15.80	15.77	15.84	**16.5**	**16.5**	**16.5**
		2502.5MHz	15.63	15.63	15.69	**16.5**	**16.5**	**16.5**
	12RB_6	2567.4MHz	16.03	15.99	16.04	**16.5**	**16.5**	**16.5**
		2535MHz	15.85	15.84	15.93	**16.5**	**16.5**	**16.5**
		2502.5MHz	15.68	15.64	15.69	**16.5**	**16.5**	**16.5**
	12RB_0	2567.4MHz	16.01	15.96	16.00	**16.5**	**16.5**	**16.5**
		2535MHz	15.81	15.77	15.87	**16.5**	**16.5**	**16.5**
		2502.5MHz	15.64	15.56	15.63	**16.5**	**16.5**	**16.5**
	25RB_0	2567.4MHz	16.01	16.03	16.00	**16.5**	**16.5**	**16.5**
		2535MHz	15.82	15.83	15.86	**16.5**	**16.5**	**16.5**
		2502.5MHz	15.65	15.65	15.64	**16.5**	**16.5**	**16.5**

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Sensor on								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	2565MHz	15.91	16.10	16.04	**16.5**	**16.5**	**16.5**
		2535MHz	15.68	16.04	15.86	**16.5**	**16.5**	**16.5**
		2505MHz	15.63	15.86	15.82	**16.5**	**16.5**	**16.5**
	1RB_24	2565MHz	15.95	16.21	16.09	**16.5**	**16.5**	**16.5**
		2535MHz	15.81	16.10	16.03	**16.5**	**16.5**	**16.5**
		2505MHz	15.62	15.98	15.88	**16.5**	**16.5**	**16.5**
	1RB_0	2565MHz	15.82	15.99	15.96	**16.5**	**16.5**	**16.5**
		2535MHz	15.64	15.91	15.77	**16.5**	**16.5**	**16.5**
		2505MHz	15.50	15.74	15.75	**16.5**	**16.5**	**16.5**
	25RB_25	2565MHz	15.99	15.98	16.04	**16.5**	**16.5**	**16.5**
		2535MHz	15.87	15.84	15.90	**16.5**	**16.5**	**16.5**
		2505MHz	15.69	15.66	15.75	**16.5**	**16.5**	**16.5**
	25RB_12	2565MHz	16.02	15.99	16.04	**16.5**	**16.5**	**16.5**
		2535MHz	15.88	15.88	15.90	**16.5**	**16.5**	**16.5**
		2505MHz	15.73	15.72	15.74	**16.5**	**16.5**	**16.5**
	25RB_0	2565MHz	16.01	15.98	16.02	**16.5**	**16.5**	**16.5**
		2535MHz	15.85	15.87	15.87	**16.5**	**16.5**	**16.5**
		2505MHz	15.72	15.67	15.75	**16.5**	**16.5**	**16.5**
	50RB_0	2565MHz	16.03	15.96	16.03	**16.5**	**16.5**	**16.5**
		2535MHz	15.92	15.85	15.90	**16.5**	**16.5**	**16.5**
		2505MHz	15.77	15.68	15.73	**16.5**	**16.5**	**16.5**

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Sensor on								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	2562.5MHz	15.91	16.20	16.13	**16.5**	**16.5**	**16.5**
		2535MHz	15.75	16.03	16.00	**16.5**	**16.5**	**16.5**
		2507.5MHz	15.66	15.97	15.90	**16.5**	**16.5**	**16.5**
	1RB_37	2562.5MHz	15.91	16.12	16.16	**16.5**	**16.5**	**16.5**
		2535MHz	15.75	16.03	16.04	**16.5**	**16.5**	**16.5**
		2507.5MHz	15.63	15.80	15.77	**16.5**	**16.5**	**16.5**
	1RB_0	2562.5MHz	15.76	16.03	16.01	**16.5**	**16.5**	**16.5**
		2535MHz	15.65	15.91	15.77	**16.5**	**16.5**	**16.5**
		2507.5MHz	15.50	15.64	15.58	**16.5**	**16.5**	**16.5**
	36RB_38	2562.5MHz	16.04	15.98	16.03	**16.5**	**16.5**	**16.5**
		2535MHz	15.84	15.81	15.84	**16.5**	**16.5**	**16.5**
		2507.5MHz	15.72	15.69	15.74	**16.5**	**16.5**	**16.5**
	36RB_19	2562.5MHz	16.02	15.99	16.03	**16.5**	**16.5**	**16.5**
		2535MHz	15.85	15.81	15.88	**16.5**	**16.5**	**16.5**
		2507.5MHz	15.73	15.68	15.77	**16.5**	**16.5**	**16.5**
	36RB_0	2562.5MHz	15.92	15.90	15.93	**16.5**	**16.5**	**16.5**
		2535MHz	15.81	15.76	15.83	**16.5**	**16.5**	**16.5**
		2507.5MHz	15.69	15.67	15.68	**16.5**	**16.5**	**16.5**
	75RB_0	2562.5MHz	16.04	15.93	15.98	**16.5**	**16.5**	**16.5**
		2535MHz	15.86	15.82	15.79	**16.5**	**16.5**	**16.5**
		2507.5MHz	15.75	15.74	15.75	**16.5**	**16.5**	**16.5**

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Sensor on								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	2560MHz	15.85	16.13	16.01	**16.5**	**16.5**	**16.5**
		2535MHz	15.76	15.99	15.99	**16.5**	**16.5**	**16.5**
		2510MHz	15.61	15.99	15.92	**16.5**	**16.5**	**16.5**
	1RB_50	2560MHz	**15.93**	16.21	16.05	**16.5**	**16.5**	**16.5**
		2535MHz	15.78	16.06	16.12	**16.5**	**16.5**	**16.5**
		2510MHz	15.70	15.93	15.94	**16.5**	**16.5**	**16.5**
	1RB_0	2560MHz	15.65	15.94	15.75	**16.5**	**16.5**	**16.5**
		2535MHz	15.58	15.81	15.80	**16.5**	**16.5**	**16.5**
		2510MHz	15.45	15.68	15.68	**16.5**	**16.5**	**16.5**
	50RB_50	2560MHz	15.95	15.92	15.98	**16.5**	**16.5**	**16.5**
		2535MHz	15.76	15.73	15.79	**16.5**	**16.5**	**16.5**
		2510MHz	15.79	15.82	15.79	**16.5**	**16.5**	**16.5**
	50RB_25	2560MHz	**16.02**	15.98	16.04	**16.5**	**16.5**	**16.5**
		2535MHz	16.02	15.85	15.87	**16.5**	**16.5**	**16.5**
		2510MHz	15.77	15.76	15.80	**16.5**	**16.5**	**16.5**
	50RB_0	2560MHz	15.92	15.88	15.96	**16.5**	**16.5**	**16.5**
		2535MHz	15.76	15.73	15.79	**16.5**	**16.5**	**16.5**
		2510MHz	15.77	15.80	15.78	**16.5**	**16.5**	**16.5**
	100RB_0	2560MHz	15.93	15.92	15.97	**16.5**	**16.5**	**16.5**
		2535MHz	15.74	15.73	15.77	**16.5**	**16.5**	**16.5**
		2510MHz	15.74	15.77	15.82	**16.5**	**16.5**	**16.5**

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Full Power								
LTE Band 38			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	2617.5 MHz	24.43	23.52	22.26	**25.5**	**24.5**	**23.5**
		2595MHz	24.75	23.61	22.35	**25.5**	**24.5**	**23.5**
		2572.5MHz	24.75	23.61	22.30	**25.5**	**24.5**	**23.5**
	1RB_12	2617.5 MHz	24.48	23.67	22.42	**25.5**	**24.5**	**23.5**
		2595MHz	24.90	23.74	22.45	**25.5**	**24.5**	**23.5**
		2572.5MHz	24.87	23.68	22.40	**25.5**	**24.5**	**23.5**
	1RB_0	2617.5 MHz	24.52	23.54	22.31	**25.5**	**24.5**	**23.5**
		2595MHz	24.76	23.64	22.37	**25.5**	**24.5**	**23.5**
		2572.5MHz	24.76	23.58	22.32	**25.5**	**24.5**	**23.5**
	12RB_13	2617.5 MHz	23.92	22.67	21.71	**24.5**	**23.5**	**22.5**
		2595MHz	23.95	22.81	21.76	**24.5**	**23.5**	**22.5**
		2572.5MHz	23.94	22.73	21.71	**24.5**	**23.5**	**22.5**
	12RB_6	2617.5 MHz	24.02	22.73	21.76	**24.5**	**23.5**	**22.5**
		2595MHz	24.00	22.86	21.81	**24.5**	**23.5**	**22.5**
		2572.5MHz	24.00	22.81	21.78	**24.5**	**23.5**	**22.5**
	12RB_0	2617.5 MHz	23.94	22.68	21.66	**24.5**	**23.5**	**22.5**
		2595MHz	23.98	22.86	21.80	**24.5**	**23.5**	**22.5**
		2572.5MHz	23.96	22.75	21.72	**24.5**	**23.5**	**22.5**
	25RB_0	2617.5 MHz	23.87	22.66	21.61	**24.5**	**23.5**	**22.5**
		2595MHz	23.86	22.78	21.75	**24.5**	**23.5**	**22.5**
		2572.5MHz	23.82	22.70	21.65	**24.5**	**23.5**	**22.5**

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Full Power								
LTE Band 38			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	2615MHz	24.46	23.63	22.38	**25.5**	**24.5**	**23.5**
		2595MHz	24.85	23.70	22.40	**25.5**	**24.5**	**23.5**
		2575MHz	24.85	23.71	22.50	**25.5**	**24.5**	**23.5**
	1RB_24	2615MHz	24.54	23.73	22.54	**25.5**	**24.5**	**23.5**
		2595MHz	24.97	23.83	22.56	**25.5**	**24.5**	**23.5**
		2575MHz	24.94	23.80	22.54	**25.5**	**24.5**	**23.5**
	1RB_0	2615MHz	24.74	23.62	22.40	**25.5**	**24.5**	**23.5**
		2595MHz	24.85	23.74	22.50	**25.5**	**24.5**	**23.5**
		2575MHz	24.84	23.69	22.41	**25.5**	**24.5**	**23.5**
	25RB_25	2615MHz	23.96	22.78	21.70	**24.5**	**23.5**	**22.5**
		2595MHz	23.95	22.83	21.79	**24.5**	**23.5**	**22.5**
		2575MHz	23.89	22.73	21.73	**24.5**	**23.5**	**22.5**
	25RB_12	2615MHz	23.98	22.75	21.69	**24.5**	**23.5**	**22.5**
		2595MHz	23.94	22.82	21.81	**24.5**	**23.5**	**22.5**
		2575MHz	23.92	22.78	21.77	**24.5**	**23.5**	**22.5**
	25RB_0	2615MHz	24.00	22.81	21.75	**24.5**	**23.5**	**22.5**
		2595MHz	23.99	22.87	21.86	**24.5**	**23.5**	**22.5**
		2575MHz	23.97	22.79	21.76	**24.5**	**23.5**	**22.5**
	50RB_0	2615MHz	24.02	22.77	21.57	**24.5**	**23.5**	**22.5**
		2595MHz	23.89	22.67	21.63	**24.5**	**23.5**	**22.5**
		2575MHz	23.90	22.69	21.63	**24.5**	**23.5**	**22.5**

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Full Power								
LTE Band 38			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	2612.5MHz	24.49	23.55	22.30	25.5	24.5	23.5
		2595MHz	24.81	23.60	22.34	25.5	24.5	23.5
		2577.5MHz	24.79	23.66	22.42	25.5	24.5	23.5
	1RB_37	2612.5MHz	24.65	23.66	22.43	25.5	24.5	23.5
		2595MHz	24.87	23.72	22.44	25.5	24.5	23.5
		2577.5MHz	24.84	23.69	22.42	25.5	24.5	23.5
	1RB_0	2612.5MHz	24.81	23.59	22.39	25.5	24.5	23.5
		2595MHz	24.78	23.66	22.41	25.5	24.5	23.5
		2577.5MHz	24.79	23.62	22.36	25.5	24.5	23.5
	36RB_38	2612.5MHz	23.97	22.82	21.69	24.5	23.5	22.5
		2595MHz	24.07	22.84	21.76	24.5	23.5	22.5
		2577.5MHz	24.00	22.76	21.75	24.5	23.5	22.5
	36RB_19	2612.5MHz	24.01	22.87	21.76	24.5	23.5	22.5
		2595MHz	24.10	22.83	21.66	24.5	23.5	22.5
		2577.5MHz	24.05	22.84	21.74	24.5	23.5	22.5
	36RB_0	2612.5MHz	23.97	22.89	21.72	24.5	23.5	22.5
		2595MHz	24.08	22.90	21.86	24.5	23.5	22.5
		2577.5MHz	24.07	22.87	21.78	24.5	23.5	22.5
	75RB_0	2612.5MHz	24.02	22.78	21.65	24.5	23.5	22.5
		2595MHz	23.94	22.72	21.65	24.5	23.5	22.5
		2577.5MHz	23.95	22.74	21.64	24.5	23.5	22.5

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Full Power								
LTE Band 38			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	2610MHz	24.26	23.50	22.25	**25.5**	**24.5**	**23.5**
		2595MHz	24.74	23.50	22.30	**25.5**	**24.5**	**23.5**
		2580MHz	24.69	23.60	22.32	**25.5**	**24.5**	**23.5**
	1RB_50	2610MHz	24.61	23.69	22.50	**25.5**	**24.5**	**23.5**
		2595MHz	**24.92**	23.78	22.51	**25.5**	**24.5**	**23.5**
		2580MHz	24.91	23.76	22.50	**25.5**	**24.5**	**23.5**
	1RB_0	2610MHz	24.75	23.55	22.31	**25.5**	**24.5**	**23.5**
		2595MHz	24.72	23.62	22.33	**25.5**	**24.5**	**23.5**
		2580MHz	24.73	23.55	22.29	**25.5**	**24.5**	**23.5**
	50RB_50	2610MHz	23.88	22.75	21.58	**24.5**	**23.5**	**22.5**
		2595MHz	23.81	22.60	21.54	**24.5**	**23.5**	**22.5**
		2580MHz	23.71	22.59	21.56	**24.5**	**23.5**	**22.5**
	50RB_25	2610MHz	23.91	22.72	21.57	**24.5**	**23.5**	**22.5**
		2595MHz	23.90	22.65	21.58	**24.5**	**23.5**	**22.5**
		2580MHz	23.89	22.64	21.59	**24.5**	**23.5**	**22.5**
	50RB_0	2610MHz	23.90	22.65	21.59	**24.5**	**23.5**	**22.5**
		2595MHz	23.87	22.65	21.63	**24.5**	**23.5**	**22.5**
		2580MHz	**23.92**	22.66	21.63	**24.5**	**23.5**	**22.5**
	100RB_0	2610MHz	24.06	22.91	21.73	**24.5**	**23.5**	**22.5**
		2595MHz	24.05	22.90	21.74	**24.5**	**23.5**	**22.5**
		2580MHz	24.06	22.86	21.66	**24.5**	**23.5**	**22.5**

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Sensor on								
LTE Band 38			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	2617.5 MHz	17.42	17.41	17.15	**18.0**	**18.0**	**18.0**
		2595MHz	17.33	17.38	17.13	**18.0**	**18.0**	**18.0**
		2572.5MHz	17.28	17.38	17.09	**18.0**	**18.0**	**18.0**
	1RB_12	2617.5 MHz	17.44	17.48	17.24	**18.0**	**18.0**	**18.0**
		2595MHz	17.55	17.58	17.30	**18.0**	**18.0**	**18.0**
		2572.5MHz	17.46	17.55	17.27	**18.0**	**18.0**	**18.0**
	1RB_0	2617.5 MHz	17.40	17.39	17.16	**18.0**	**18.0**	**18.0**
		2595MHz	17.33	17.43	17.14	**18.0**	**18.0**	**18.0**
		2572.5MHz	17.34	17.34	17.07	**18.0**	**18.0**	**18.0**
	12RB_13	2617.5 MHz	17.55	17.43	17.48	**18.0**	**18.0**	**18.0**
		2595MHz	17.44	17.37	17.46	**18.0**	**18.0**	**18.0**
		2572.5MHz	17.41	17.33	17.46	**18.0**	**18.0**	**18.0**
	12RB_6	2617.5 MHz	17.60	17.51	17.53	**18.0**	**18.0**	**18.0**
		2595MHz	17.47	17.48	17.54	**18.0**	**18.0**	**18.0**
		2572.5MHz	17.53	17.38	17.44	**18.0**	**18.0**	**18.0**
	12RB_0	2617.5 MHz	17.54	17.45	17.47	**18.0**	**18.0**	**18.0**
		2595MHz	17.46	17.44	17.49	**18.0**	**18.0**	**18.0**
		2572.5MHz	17.48	17.36	17.45	**18.0**	**18.0**	**18.0**
	25RB_0	2617.5 MHz	17.49	17.44	17.46	**18.0**	**18.0**	**18.0**
		2595MHz	17.44	17.45	17.48	**18.0**	**18.0**	**18.0**
		2572.5MHz	17.38	17.48	17.46	**18.0**	**18.0**	**18.0**

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Sensor on								
LTE Band 38			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	2615MHz	17.48	17.49	17.17	**18.0**	**18.0**	**18.0**
		2595MHz	17.43	17.46	17.18	**18.0**	**18.0**	**18.0**
		2575MHz	17.41	17.46	17.19	**18.0**	**18.0**	**18.0**
	1RB_24	2615MHz	17.61	17.56	17.26	**18.0**	**18.0**	**18.0**
		2595MHz	17.50	17.58	17.28	**18.0**	**18.0**	**18.0**
		2575MHz	17.46	17.49	17.12	**18.0**	**18.0**	**18.0**
	1RB_0	2615MHz	17.47	17.51	17.22	**18.0**	**18.0**	**18.0**
		2595MHz	17.37	17.51	17.20	**18.0**	**18.0**	**18.0**
		2575MHz	17.44	17.43	17.15	**18.0**	**18.0**	**18.0**
	25RB_25	2615MHz	17.50	17.49	17.48	**18.0**	**18.0**	**18.0**
		2595MHz	17.49	17.47	17.55	**18.0**	**18.0**	**18.0**
		2575MHz	17.46	17.43	17.42	**18.0**	**18.0**	**18.0**
	25RB_12	2615MHz	17.53	17.47	17.52	**18.0**	**18.0**	**18.0**
		2595MHz	17.49	17.56	17.56	**18.0**	**18.0**	**18.0**
		2575MHz	17.44	17.48	17.49	**18.0**	**18.0**	**18.0**
	25RB_0	2615MHz	17.54	17.53	17.53	**18.0**	**18.0**	**18.0**
		2595MHz	17.49	17.57	17.59	**18.0**	**18.0**	**18.0**
		2575MHz	17.43	17.51	17.55	**18.0**	**18.0**	**18.0**
	50RB_0	2615MHz	17.40	17.35	17.35	**18.0**	**18.0**	**18.0**
		2595MHz	17.44	17.46	17.44	**18.0**	**18.0**	**18.0**
		2575MHz	17.30	17.35	17.34	**18.0**	**18.0**	**18.0**

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Sensor on								
LTE Band 38			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	2612.5MHz	17.42	17.36	17.14	**18.0**	**18.0**	**18.0**
		2595MHz	17.37	17.43	17.16	**18.0**	**18.0**	**18.0**
		2577.5MHz	17.35	17.41	17.15	**18.0**	**18.0**	**18.0**
	1RB_37	2612.5MHz	17.50	17.51	17.23	**18.0**	**18.0**	**18.0**
		2595MHz	17.37	17.48	17.18	**18.0**	**18.0**	**18.0**
		2577.5MHz	17.41	17.41	17.16	**18.0**	**18.0**	**18.0**
	1RB_0	2612.5MHz	17.38	17.45	17.18	**18.0**	**18.0**	**18.0**
		2595MHz	17.31	17.42	17.14	**18.0**	**18.0**	**18.0**
		2577.5MHz	17.27	17.28	17.13	**18.0**	**18.0**	**18.0**
	36RB_38	2612.5MHz	17.58	17.38	17.48	**18.0**	**18.0**	**18.0**
		2595MHz	17.41	17.38	17.42	**18.0**	**18.0**	**18.0**
		2577.5MHz	17.43	17.37	17.39	**18.0**	**18.0**	**18.0**
	36RB_19	2612.5MHz	17.57	17.43	17.47	**18.0**	**18.0**	**18.0**
		2595MHz	17.48	17.47	17.50	**18.0**	**18.0**	**18.0**
		2577.5MHz	17.48	17.41	17.41	**18.0**	**18.0**	**18.0**
	36RB_0	2612.5MHz	17.56	17.38	17.42	**18.0**	**18.0**	**18.0**
		2595MHz	17.49	17.36	17.46	**18.0**	**18.0**	**18.0**
		2577.5MHz	17.46	17.40	17.43	**18.0**	**18.0**	**18.0**
	75RB_0	2612.5MHz	17.42	17.35	17.37	**18.0**	**18.0**	**18.0**
		2595MHz	17.38	17.40	17.39	**18.0**	**18.0**	**18.0**
		2577.5MHz	17.34	17.33	17.34	**18.0**	**18.0**	**18.0**

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Sensor on								
LTE Band 38			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	2610MHz	17.34	17.34	17.07	**18.0**	**18.0**	**18.0**
		2595MHz	17.28	17.32	17.10	**18.0**	**18.0**	**18.0**
		2580MHz	17.24	17.33	17.04	**18.0**	**18.0**	**18.0**
	1RB_50	2610MHz	17.51	17.51	17.22	**18.0**	**18.0**	**18.0**
		2595MHz	**17.65**	17.54	17.28	**18.0**	**18.0**	**18.0**
		2580MHz	17.48	17.48	17.23	**18.0**	**18.0**	**18.0**
	1RB_0	2610MHz	17.23	17.36	17.09	**18.0**	**18.0**	**18.0**
		2595MHz	17.26	17.34	17.11	**18.0**	**18.0**	**18.0**
		2580MHz	17.23	17.22	17.04	**18.0**	**18.0**	**18.0**
	50RB_50	2610MHz	17.31	17.30	17.30	**18.0**	**18.0**	**18.0**
		2595MHz	17.30	17.36	17.35	**18.0**	**18.0**	**18.0**
		2580MHz	17.24	17.26	17.30	**18.0**	**18.0**	**18.0**
	50RB_25	2610MHz	17.36	17.31	17.35	**18.0**	**18.0**	**18.0**
		2595MHz	17.33	17.39	17.38	**18.0**	**18.0**	**18.0**
		2580MHz	17.29	17.31	17.32	**18.0**	**18.0**	**18.0**
	50RB_0	2610MHz	17.37	17.36	17.36	**18.0**	**18.0**	**18.0**
		2595MHz	17.36	17.40	17.40	**18.0**	**18.0**	**18.0**
		2580MHz	**17.39**	17.34	17.33	**18.0**	**18.0**	**18.0**
	100RB_0	2610MHz	17.43	17.40	17.40	**18.0**	**18.0**	**18.0**
		2595MHz	17.37	17.42	17.40	**18.0**	**18.0**	**18.0**
		2580MHz	17.32	17.33	17.40	**18.0**	**18.0**	**18.0**

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10.4. Bluetooth and WLAN Measurement result

Table 10.4: The conducted Power measurement results for Bluetooth

Averaged Power (dBm)				
Mode	**Tune up**	Ch.0 (2402MHz)	Ch.39 (2441MHz)	Ch.78 (2480MHz)
GFSK	**10.0**	**8.31**	**9.71**	**9.28**
EDR2M-4_DQPSK	**9.0**	7.49	8.85	8.47
EDR3M-8DPSK	**9.0**	7.50	8.89	8.49
/	**/**	Ch.0 (2402MHz)	Ch.19 (2440MHz)	Ch.39 (2480MHz)
BLE	**-2.0**	-4.00	-2.41	-3.15

Table 10.5: The conducted Power measurement results for WLAN 2.4GHz

Averaged Power (dBm) Duty Cycle: **100%**				
Mode	**Tune up**	Ch.1 (2412MHz)	Ch.6 (2437MHz)	Ch.11 (2462MHz)
802.11b	**12.5**	**11.58**	**11.61**	**11.26**
802.11g	**12.5**	11.16	11.30	10.96
802.11n(20MHz)	**12.5**	11.06	11.17	10.82
/	**/**	Ch.3 (2422MHz)	Ch.6 (2437MHz)	Ch.9 (2452MHz)
802.11n(40MHz)	**11.5**	10.38	10.36	10.12

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Table 10.6: The conducted Power measurement results for WLAN 5GHz

Averaged Power (dBm) Duty Cycle: **100%**								
Mode	802.11a	802.11n -20MHz	802.11ac -20MHz	Mode	802.11n -40MHz	802.11ac -40MHz	Mode	802.11ac -80MHz
Channel	6Mbps	MCS0	MCS0	Channel	MCS0	MCS0	Channel	MCS0
<U-NII-1>								
Tune up	**13.5**	**13.0**	**13.0**	/	**13.0**	**13.0**	/	**13.0**
36(5180MHz)	12.67	12.43	12.63	38(5190MHz)	12.44	12.51	42(5210MHz)	11.90
40(5200MHz)	12.64	12.60	12.51	46(5230MHz)	12.39	12.33	/	/
44(5240MHz)	12.58	12.27	12.50	/	/	/	/	/
<U-NII-2A>								
Tune up	**13.5**	**13.0**	**13.0**	/	**13.0**	**13.0**	/	**13.0**
52(5260MHz)	**12.46**	12.31	12.32	54(5270MHz)	12.29	12.24	58(5290MHz)	11.66
56(5280MHz)	12.46	12.27	12.29	62(5310MHz)	11.67	12.29	/	/
64(5320MHz)	12.42	12.26	12.25	/	/	/	/	/
<U-NII-2C>								
Tune up	**13.0**	**12.5**	**12.5**	/	**12.5**	**12.5**	/	**12.5**
100(5500MHz)	**12.29**	12.14	12.13	102(5510MHz)	11.67	11.57	106(5530MHz)	11.92
116(5580MHz)	11.89	11.86	11.86	110(5550MHz)	11.43	11.41	122(5610MHz)	11.26
140(5700MHz)	11.76	11.38	11.48	134(5670MHz)	11.35	11.32	/	/
<U-NII-3>								
Tune up	**12.5**	**12.0**	**12.0**	/	**12.0**	**12.0**	/	**12.0**
149(5745MHz)	**11.63**	11.58	11.56	151(5755MHz)	11.28	11.25	155(5775MHz)	10.90
157(5785MHz)	11.55	11.41	11.43	159(5795MHz)	11.27	11.18	/	/
165(5825MHz)	11.48	11.40	11.32	/	/	/	/	/

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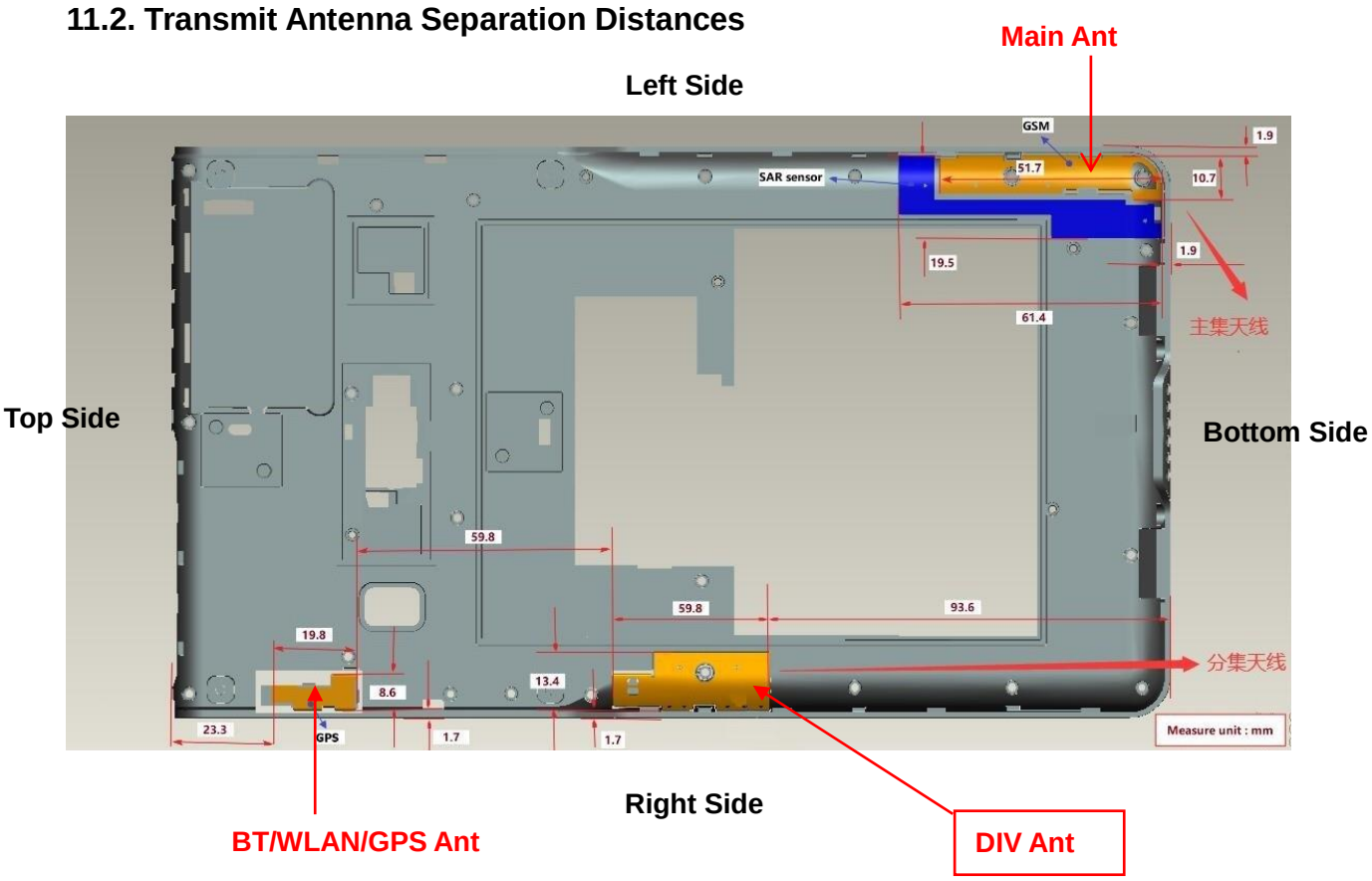
11. Simultaneous TX SAR Considerations

11.1. 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 802.11 a/b/g and Bluetooth devices which may simultaneously transmit with the licensed transmitter.
For this device, the BT and WLAN can transmit simultaneous with other transmitters.

11.2. Transmit Antenna Separation Distances



Picture 11.1 Antenna Locations (Back View)

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11.3. SAR Measurement Positions

SAR measurement positions					
Antenna	Rear	Left edge	Right edge	Top edge	Bottom edge
WWAN	Yes	Yes	No	No	Yes
WLAN	Yes	No	Yes	Yes	No

Note:

1. Per KDB 447498 D01v06, the 1-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances* ≤ 50 mm are determined by:

[(*max. power of channel, including tune-up tolerance, mW*) / (*min. test separation distance, mm*)] · [√f(GHz)] ≤ 3.0 for 1-g SAR, where

f(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation

2. Per KDB 447498 D01v06, For 100 MHz to 6 GHz and *test separation distances* > 50 mm, the 1-g and 10-g *SAR test exclusion thresholds* are determined by the following

1) {[Power allowed at *numeric threshold* for 50 mm in step a)] + [(test separation distance – 50 mm)·(f(MHz)/150)]} mW, for 100 MHz to 1500 MHz

2) {[Power allowed at *numeric threshold* for 50 mm in step a)] + [(test separation distance – 50 mm)·10]} mW, for > 1500 MHz and ≤ 6 GHz

11.4. Standalone SAR Test Exclusion Considerations

Standalone 1-g head or body SAR evaluation by measurement or numerical simulation is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

The 1-g SAR test exclusion threshold for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR, where

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

Table 11.1: Standalone SAR test exclusion considerations

Band/Mode	f(GHz)	Position	SAR test exclusion threshold (mW)	RF output power		SAR test exclusion
				dBm	mW	
Bluetooth	2.4	Body	9.60	10.0	10.00	No
WLAN 2.4GHz	2.4	Body	9.58	17.5	56.23	No
WLAN 5GHz	5.2	Body	6.58	13.5	22.39	No
	5.3	Body	6.52	13.5	22.39	No
	5.6	Body	6.34	13.0	19.95	No
	5.8	Body	6.23	12.5	17.78	No

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12. Evaluation of Simultaneous

Table 12.1: The sum of reported SAR values for main antenna and WLAN 2.4GHz

/	Position	Main Antenna (W/kg)	WLAN 2.4GHz (W/kg)	Sum (W/kg)
Highest reported SAR value for Body	Rear (0mm)	1.30	0.17	1.47

Note: the test positions of above tables are for the worse case that has been evaluated.

Table 12.2: The sum of reported SAR values for main antenna and WLAN 5GHz

/	Position	Main Antenna (W/kg)	WLAN 5GHz (W/kg)	Sum (W/kg)
Highest reported SAR value for Body	Rear (0mm)	1.06	0.53	1.59

Note: the test positions of above tables are for the worse case that has been evaluated.

Table 12.3: The sum of reported SAR values for main antenna and Bluetooth

/	Position	Main Antenna (W/kg)	Bluetooth (W/kg)	Sum (W/kg)
Highest reported SAR value for Body	Rear (0mm)	1.30	0.03	1.33

Note: the test positions of above tables are for the worse case that has been evaluated.

According to the KDB 447498 D01, when the sum of SAR is larger than the limit, SAR test exclusion is determined by the SAR to peak location separation ratio. The ratio is determined by $(SAR1 + SAR2)^{1.5}/Ri$, rounded to two decimal digits, and must be ≤ 0.04 for all antenna pairs in the configuration to qualify for 1-g SAR test exclusion.

The sum of SAR values for Main Antenna and WLAN 5GHz

Position	Main Antenna (W/kg)		WLAN 5GHz (W/kg)	Sum (W/kg)	SPLSR
Rear (0mm)	GSM850	1.08	0.53	1.61	Yes
	WCDMA B5	1.15	0.53	1.68	Yes
	LTE B4	1.17	0.53	1.70	Yes
	LTE B5	1.30	0.53	1.83	Yes

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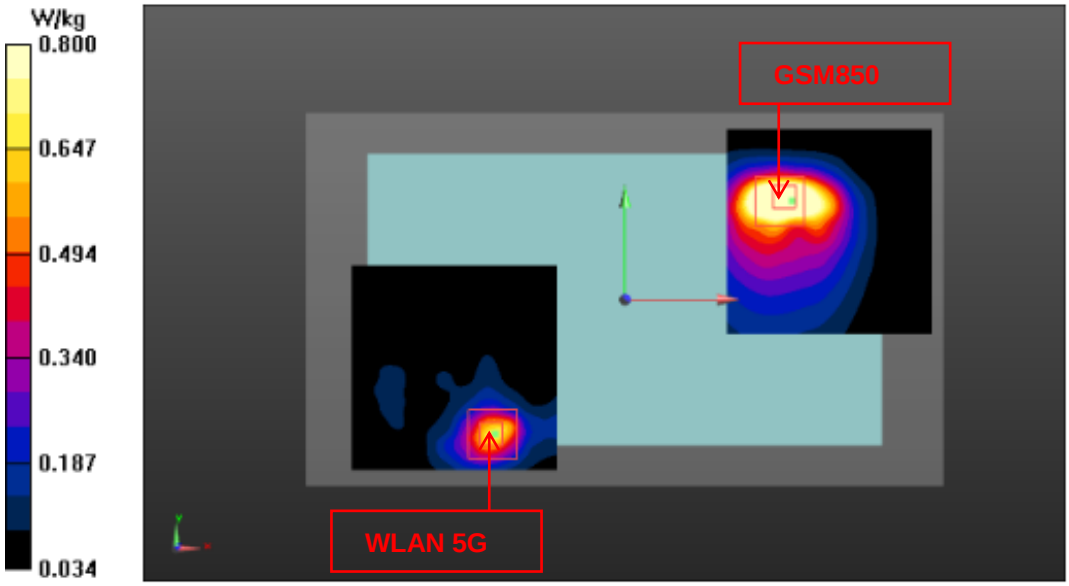
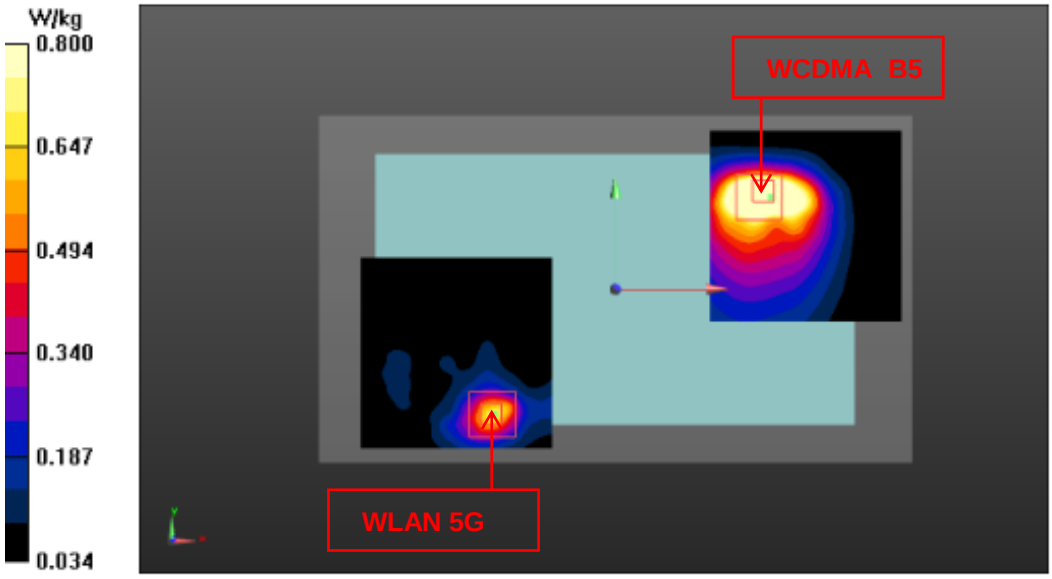
Band	Position	SAR (W/kg)	Gap (cm)	SAR peak location (m)			3D distance(mm)	sum SAR	SPLSR	Simultaneous SAR
				X	Y	Z				
GSM850	Rear	1.08	0	0.0655	0.0435	-0.171	159.7	1.61	0.01	**Not required**
WLAN 5GHz		0.53	0	-0.057	-0.059	-0.170				



Band	Position	SAR (W/kg)	Gap (cm)	SAR peak location (m)			3D distance(mm)	sum SAR	SPLSR	Simultaneous SAR
				X	Y	Z				
WCDMA B5	Rear	1.15	0	0.0655	0.0435	-0.171	159.7	1.68	0.01	**Not required**
WLAN 5GHz		0.53	0	-0.057	-0.059	-0.170				



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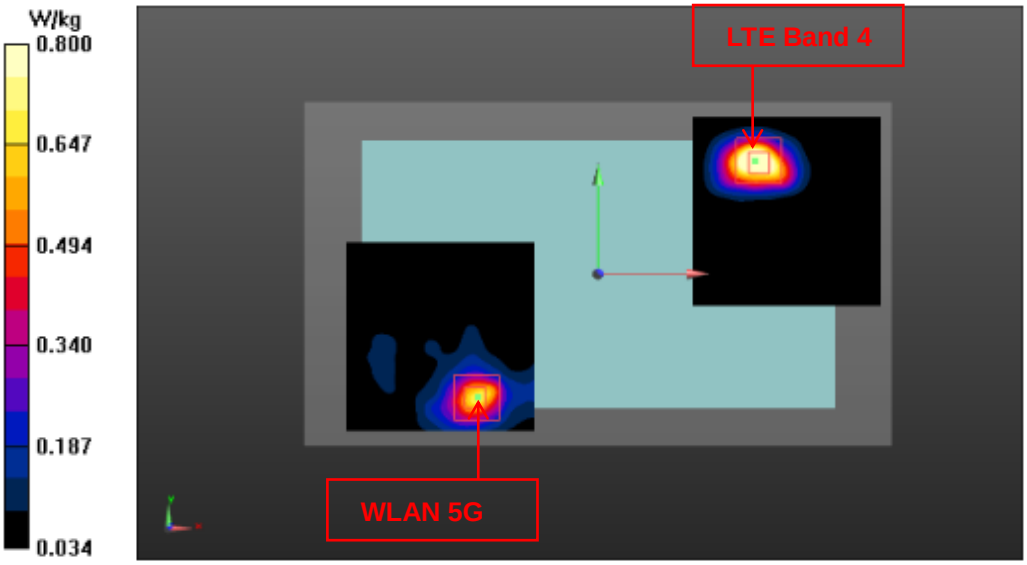
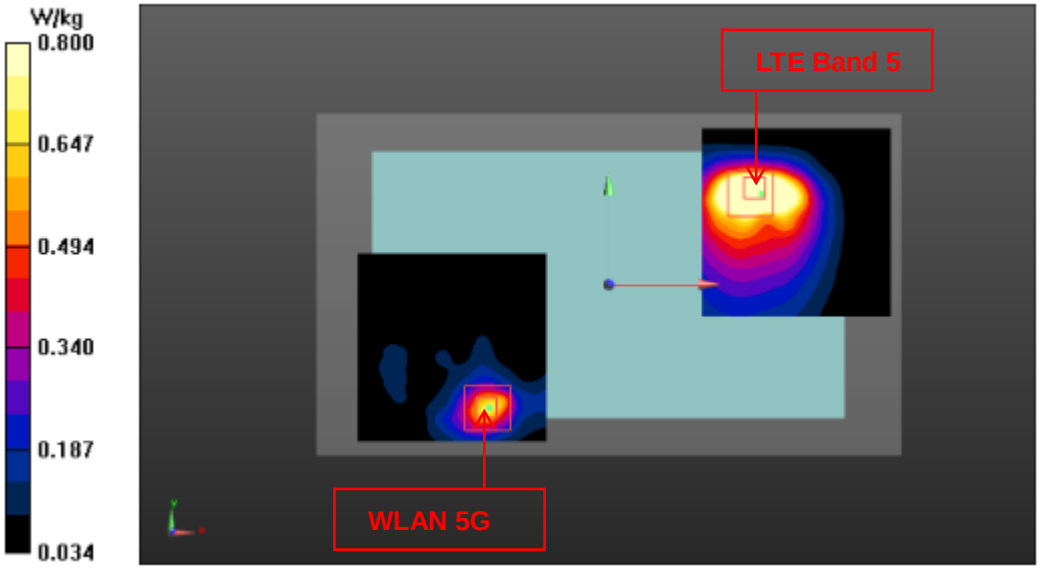
Band	Position	SAR (W/kg)	Gap (cm)	SAR peak location (m)			3D distance(mm)	sum SAR	SPLSR	Simultaneous SAR
				X	Y	Z				
LTE B4	Rear	1.17	0	0.0750	0.0540	-0.171	173.8	1.70	0.01	**Not required**
WLAN 5GHz		0.53	0	-0.057	-0.059	-0.170				



Band	Position	SAR (W/kg)	Gap (cm)	SAR peak location (m)			3D distance(mm)	sum SAR	SPLSR	Simultaneous SAR
				X	Y	Z				
LTE B5	Rear	1.30	0	0.0845	0.0570	-0.171	183.0	1.83	0.01	**Not required**
WLAN 5GHz		0.53	0	-0.057	-0.059	-0.170				



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Conclusion:

According to the above tables, the sum of reported SAR values is 1.51W/kg. So the simultaneous transmission SAR with volume scans is not required.

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13. Summary of Test Results

According to the client's decision rule in the test registration form, which is "based on the measurement results as the basis of the conformity statement", the test conclusion of this report meets the limit requirements.

The calculated SAR is obtained by the following formula:

$$\text{Reported SAR} = \text{Measured SAR} \times 10^{(P_{Target} - P_{Measured})/10}$$

Where P_{Target} is the power of manufacturing upper limit;

$P_{Measured}$ is the measured power in chapter 10.

Note:

C2 (Config1): Non-IRIS SIM (32GB)

C3 (Config2): NIRIS SIM (16GB)

C4 (Config3): NIRIS SIM (32GB)

Duty Cycle

Mode	**Duty Cycle**
GPRS	1:2
WCDMA	1:1
FDD_LTE	1:1
TDD_LTE	1:1.58
Bluetooth	1:1
WLAN	1:1

13.1. Testing Environment

Temperature:	18°C~25°C
Relative humidity:	30%~70%
Ambient noise & Reflection:	< 0.012 W/kg

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13.2. SAR results

Table 13.1: SAR Values (GSM 850 -Body)

Frequency		Test Mode	Test Position	Figure No. / Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
0mm Test Data									
836.6	190	GPRS	Rear	/	24.98	26.0	0.765	0.97	0.05
836.6	190	GPRS	Left	/	24.98	26.0	0.412	0.52	-0.04
836.6	190	GPRS	Bottom	/	24.98	26.0	0.333	0.42	0.11
848.8	251	GPRS	Rear	/	25.06	26.0	0.694	0.86	0.14
824.2	128	GPRS	Rear	/	25.02	26.0	0.643	0.81	0.03
Sensor off Test Data									
836.6	190	GPRS	Rear	14mm	28.99	30.0	0.150	0.19	0.05
836.6	190	GPRS	Left	14mm	28.99	30.0	0.100	0.13	0.01
836.6	190	GPRS	Bottom	4mm	28.99	30.0	0.623	0.79	-0.02
The worst case with Config2&3&4									
836.6	190	GPRS	Rear	**1**/C2	24.98	26.0	**0.854**	**1.08**	-0.03
836.6	190	GPRS	Rear	C3	24.98	26.0	0.813	1.03	0.09
836.6	190	GPRS	Rear	C4	24.98	26.0	0.790	1.00	0.18

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Table 13.2: SAR Values (GSM 1900 - Body)

Frequency		Test Mode	Test Position	Figure No. / Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
0mm Test Data									
1880	661	GPRS	Rear	/	19.73	20.5	0.703	0.84	0.01
1880	661	GPRS	Left	/	19.73	20.5	0.545	0.65	0.10
1880	661	GPRS	Bottom	/	19.73	20.5	0.473	0.56	0.01
1909.8	810	GPRS	Rear	/	19.94	20.5	0.537	0.61	0.05
1850.2	512	GPRS	Rear	/	19.64	20.5	0.754	**0.92**	0.02
Sensor off Test Data									
1850.2	512	GPRS	Rear	14mm	26.47	27.5	0.082	0.10	0.09
1880	661	GPRS	Left	14mm	26.67	27.5	0.111	0.13	0.01
1880	661	GPRS	Bottom	4mm	26.67	27.5	0.501	0.61	0.05
The worst case with Config2&3&4									
1850.2	512	GPRS	Rear	C2	19.64	20.5	0.663	0.81	0.04
1850.2	512	GPRS	Rear	C3	19.64	20.5	0.748	0.91	0.06
1850.2	512	GPRS	Rear	**2**/C4	19.64	20.5	**0.758**	**0.92**	0.09

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Table 13.3: SAR Values (WCDMA Band 2 - Body)

Frequency		Test Mode	Test Position	Figure No. / Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
0mm Test Data									
1880	9400	RMC	Rear	/	16.05	16.5	0.739	0.82	0.06
1880	9400	RMC	Left	/	16.05	16.5	0.449	0.50	0.05
1880	9400	RMC	Bottom	/	16.05	16.5	0.039	0.04	0.01
1907.6	9538	RMC	Rear	/	16.08	16.5	0.575	0.63	0.06
1852.4	9262	RMC	Rear	/	16.01	16.5	0.805	0.90	0.01
Sensor off Test Data									
1852.4	9262	RMC	Rear	14mm	23.55	24.0	1.080	1.20	0.05
1880	9400	RMC	Left	14mm	23.60	24.0	1.030	1.13	0.03
1907.6	9538	RMC	Left	14mm	23.58	24.0	0.778	0.86	0.03
1852.4	9262	RMC	Left	14mm	23.55	24.0	1.030	1.14	0.04
1880	9400	RMC	Bottom	4mm	23.60	24.0	0.428	0.47	0.05
The worst case with Config2&3&4									
1852.4	9262	RMC	Rear	C2	23.55	24.0	0.878	0.97	0.00
1852.4	9262	RMC	Rear	C3	23.55	24.0	0.949	1.05	0.09
1852.4	9262	RMC	Rear	**3**/C4	23.55	24.0	**1.130**	**1.25**	0.03

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Table 13.4: SAR Values (WCDMA Band 5 -Body)

Frequency		Test Mode	Test Position	Figure No. / Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
0mm Test Data									
836.4	4182	RMC	Rear	/	22.13	22.5	0.917	1.00	0.12
836.4	4182	RMC	Left	/	22.13	22.5	0.604	0.66	0.08
836.4	4182	RMC	Bottom	/	22.13	22.5	0.493	0.54	0.08
846.6	4233	RMC	Rear	/	22.05	22.5	0.857	0.95	0.12
826.4	4132	RMC	Rear	/	22.03	22.5	0.952	1.06	0.12
Sensor off Test Data									
826.4	4132	RMC	Rear	14mm	23.05	23.5	0.265	0.29	0.06
836.4	4182	RMC	Left	14mm	23.10	23.5	0.164	0.18	-0.03
836.4	4182	RMC	Bottom	4mm	23.10	23.5	0.415	0.46	-0.12
The worst case with Config2&3&4									
826.4	4132	RMC	Rear	**4**/ C2	22.03	22.5	**1.030**	**1.15**	-0.12
826.4	4132	RMC	Rear	C3	22.03	22.5	0.906	1.01	0.12
826.4	4132	RMC	Rear	C4	22.03	22.5	0.975	1.09	0.01

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Table 13.5: SAR Values (LTE Band 2 - Body)

Frequency		Test Mode	Test Position	Figure No. / Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
0mm Test Data									
1880	18900	1RB_50	Rear	/	16.22	16.5	0.781	0.83	0.06
1860	18700	50RB_0	Rear	/	16.19	16.5	0.789	0.85	0.04
1880	18900	1RB_50	Left	/	16.22	16.5	0.585	0.62	-0.06
1860	18700	50RB_0	Left	/	16.19	16.5	0.627	0.67	0.09
1880	18900	1RB_50	Bottom	/	16.22	16.5	0.070	0.07	0.01
1860	18700	50RB_0	Bottom	/	16.19	16.5	0.067	0.07	0.02
1900	19100	1RB_50	Rear	/	16.21	16.5	0.634	0.68	0.01
1860	18700	1RB_50	Rear	/	16.16	16.5	0.788	0.85	0.08
1900	19100	50RB_0	Rear	/	16.10	16.5	0.692	0.76	0.01
1880	18900	50RB_0	Rear	/	16.15	16.5	0.809	0.88	0.08
1860	18700	100RB	Rear	/	16.10	16.5	0.663	0.73	0.06
Sensor off Test Data									
1880	18900	1RB_50	Rear	14mm	23.76	24.0	1.140	1.20	0.02
1860	18700	50RB_0	Rear	14mm	22.78	23.0	0.903	0.95	0.03
1880	18900	1RB_50	Left	14mm	23.76	24.0	1.010	1.07	0.15
1860	18700	50RB_0	Left	14mm	22.78	23.0	0.825	0.87	0.03
1880	18900	1RB_50	Bottom	4mm	23.76	24.0	0.410	0.43	0.02
1860	18700	50RB_0	Bottom	4mm	22.78	23.0	0.455	0.48	0.17
1900	19100	1RB_50	Rear	14mm	23.65	24.0	0.975	1.06	0.02
1860	18700	1RB_50	Rear	**5**/14mm	23.73	24.0	**1.170**	**1.25**	0.01
1900	19100	50RB_0	Rear	14mm	22.75	23.0	0.817	0.87	0.18
1880	18900	50RB_0	Rear	14mm	22.76	23.0	0.907	0.96	0.05
1880	18900	100RB	Rear	14mm	22.71	23.0	0.947	1.01	0.09
1900	19100	100RB	Rear	14mm	22.66	23.0	0.823	0.89	0.08
1860	18700	100RB	Rear	14mm	22.65	23.0	0.966	1.05	0.03
1900	19100	1RB_50	Left	14mm	23.65	24.0	0.844	0.91	0.02
1860	18700	1RB_50	Left	14mm	23.73	24.0	1.040	1.11	0.02
1900	19100	50RB_0	Left	14mm	22.75	23.0	0.731	0.77	0.03
1880	18900	50RB_0	Left	14mm	22.76	23.0	0.815	0.86	0.04
The worst case with Config2&3&4									
1860	18700	1RB_50	Rear	C2	23.73	24.0	1.150	1.22	0.02
1860	18700	1RB_50	Rear	C3	23.73	24.0	0.943	1.00	0.15
1860	18700	1RB_50	Rear	C4	23.73	24.0	0.990	1.05	-0.09

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Table 13.6: SAR Values (LTE Band 4 - Body)

Frequency		Test Mode	Test Position	Figure No. / Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
0mm Test Data									
1720	20050	1RB_50	Rear	/	16.49	17.0	0.867	0.98	0.07
1720	20050	50RB_0	Rear	/	16.57	17.0	0.830	0.92	0.08
1720	20050	1RB_50	Left	/	16.49	17.0	0.580	0.65	-0.08
1720	20050	50RB_0	Left	/	16.57	17.0	0.650	0.72	0.03
1720	20050	1RB_50	Bottom	/	16.49	17.0	0.178	0.20	0.08
1720	20050	50RB_0	Bottom	/	16.57	17.0	0.171	0.19	0.01
1745	20300	1RB_50	Rear	/	16.48	17.0	0.933	1.05	0.01
1732.5	20175	1RB_50	Rear	/	16.49	17.0	0.966	1.09	0.07
1745	20300	50RB_0	Rear	/	16.51	17.0	0.931	1.04	0.09
1732.5	20175	50RB_0	Rear	/	16.55	17.0	0.958	1.06	0.06
1720	20050	100RB	Rear	/	16.49	17.0	0.937	1.05	0.08
1745	20300	100RB	Rear	/	16.40	17.0	1.010	1.16	0.09
1732.5	20175	100RB	Rear	/	16.39	17.0	1.020	1.17	-0.05
Sensor off Test Data									
1720	20050	1RB_50	Rear	14mm	23.52	24.0	0.784	0.88	0.03
1720	20050	50RB_0	Rear	14mm	22.58	23.0	0.556	0.61	0.02
1720	20050	1RB_50	Left	14mm	23.52	24.0	0.718	0.80	0.01
1720	20050	50RB_0	Left	14mm	22.58	23.0	0.523	0.58	0.02
1720	20050	1RB_50	Bottom	4mm	23.52	24.0	0.498	0.56	0.13
1720	20050	50RB_0	Bottom	4mm	22.58	23.0	0.422	0.46	0.12
1745	20300	1RB_50	Rear	14mm	23.51	24.0	1.050	1.18	0.04
1732.5	20175	1RB_50	Rear	14mm	23.50	24.0	0.925	1.04	0.07
1720	20050	100RB	Rear	14mm	22.55	23.0	0.622	0.69	0.08
The worst case with Config2&3&4									
1745	20300	1RB_50	Rear	**6**/C2	23.51	24.0	**1.080**	**1.21**	0.09
1745	20300	1RB_50	Rear	C3	23.51	24.0	0.828	0.93	0.03
1745	20300	1RB_50	Rear	C4	23.51	24.0	0.842	0.94	0.11

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Table 13.7: SAR Values (LTE Band 5 - Body)

Frequency		Test Mode	Test Position	Figure No. / Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
0mm Test Data									
836.5	20525	1RB_24	Rear	/	22.27	23.0	0.802	0.95	0.13
836.5	20525	25RB_12	Rear	/	22.32	23.0	0.765	0.89	0.07
836.5	20525	1RB_24	Left	/	22.27	23.0	0.677	0.80	0.02
836.5	20525	25RB_12	Left	/	22.32	23.0	0.565	0.66	0.08
836.5	20525	1RB_24	Bottom	/	22.27	23.0	0.615	0.73	0.01
836.5	20525	25RB_12	Bottom	/	22.32	23.0	0.511	0.60	0.06
844	20600	1RB_24	Rear	/	22.23	23.0	0.733	0.88	0.10
829	20450	1RB_24	Rear	/	22.25	23.0	0.836	0.99	0.08
844	20600	25RB_12	Rear	/	22.20	23.0	0.763	0.92	-0.06
829	20450	25RB_12	Rear	/	22.19	23.0	0.817	0.98	0.07
836.5	20525	50RB	Rear	/	22.26	23.0	0.739	0.88	0.06
844	20600	50RB	Rear	/	22.14	23.0	0.724	0.88	0.01
829	20450	50RB	Rear	/	22.11	23.0	0.712	0.87	0.09
Sensor off Test Data									
836.5	20525	1RB_24	Rear	14mm	23.36	24.0	0.206	0.24	0.05
836.5	20525	25RB_12	Rear	14mm	22.35	23.0	0.205	0.24	0.03
836.5	20525	1RB_24	Left	14mm	23.36	24.0	0.186	0.22	0.01
836.5	20525	25RB_12	Left	14mm	22.35	23.0	0.157	0.18	0.06
836.5	20525	1RB_24	Bottom	4mm	23.36	24.0	0.524	0.61	0.07
836.5	20525	25RB_12	Bottom	4mm	22.35	23.0	0.468	0.54	-0.05
The worst case with Config2&3&4									
829	20450	1RB_24	Rear	C2	22.25	23.0	0.999	1.19	0.09
829	20450	1RB_24	Rear	**7**/C3	22.25	23.0	**1.090**	**1.30**	0.03
829	20450	1RB_24	Rear	C4	22.25	23.0	0.869	1.03	0.09

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Table 13.8: SAR Values (LTE Band 7 - Body)

Frequency		Test Mode	Test Position	Figure No. / Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
0mm Test Data									
2560	21350	1RB_50	Rear	/	15.93	16.5	0.856	0.98	0.10
2560	21350	50RB_25	Rear	/	16.02	16.5	0.727	0.81	0.05
2560	21350	1RB_50	Left	/	15.93	16.5	0.907	1.03	0.11
2560	21350	50RB_25	Left	/	16.02	16.5	0.840	0.94	0.07
2560	21350	1RB_50	Bottom	/	15.93	16.5	0.132	0.15	-0.07
2560	21350	50RB_25	Bottom	/	16.02	16.5	0.126	0.14	-0.03
2535	21100	1RB_50	Rear	/	15.78	16.5	0.591	0.70	0.04
2510	20850	1RB_50	Rear	/	15.70	16.5	0.562	0.68	0.08
2535	21100	50RB_25	Rear	/	16.02	16.5	0.502	0.56	-0.05
2510	20850	50RB_25	Rear	/	15.77	16.5	0.477	0.56	0.08
2535	21100	1RB_50	Left	/	15.78	16.5	0.763	0.90	0.09
2510	20850	1RB_50	Left	/	15.70	16.5	0.630	0.76	0.08
2535	21100	50RB_25	Left	/	16.02	16.5	0.684	0.76	0.03
2510	20850	50RB_25	Left	/	15.77	16.5	0.579	0.68	0.10
2560	21350	100RB	Left	/	15.93	16.5	0.824	0.94	0.05
2535	21100	100RB	Left	/	15.74	16.5	0.693	0.83	0.08
2510	20850	100RB	Left	/	15.74	16.5	0.572	0.68	-0.07
Sensor off Test Data									
2560	21350	1RB_50	Rear	14mm	23.91	25.0	0.478	0.61	0.11
2560	21350	50RB_25	Rear	14mm	23.08	24.0	0.396	0.49	0.10
2560	21350	1RB_50	Left	14mm	23.91	25.0	0.502	0.65	0.04
2560	21350	50RB_25	Left	14mm	23.08	24.0	0.404	0.50	0.04
2560	21350	1RB_50	Bottom	4mm	23.91	25.0	0.385	0.49	0.07
2560	21350	50RB_25	Bottom	4mm	23.08	24.0	0.309	0.38	0.05
The worst case with Config2&3&4									
2560	21350	1RB_50	Left	C2	15.93	16.5	0.907	1.03	0.11
2560	21350	1RB_50	Left	**8**/C3	15.93	16.5	**1.090**	**1.24**	0.09
2560	21350	1RB_50	Left	C4	15.93	16.5	0.737	0.84	0.02

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Table 13.9: SAR Values (LTE Band 38 - Body)

Frequency		Test Mode	Test Position	Figure No. / Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
0mm Test Data									
2595	38000	1RB_50	Rear	/	17.65	18.0	0.652	0.71	0.08
2580	37850	50RB_0	Rear	/	17.39	18.0	0.648	0.75	0.09
2595	38000	1RB_50	Left	/	17.65	18.0	0.647	0.70	-0.12
2580	37850	50RB_0	Left	/	17.39	18.0	0.769	0.88	0.02
2595	38000	1RB_50	Bottom	/	17.65	18.0	0.409	0.44	-0.13
2580	37850	50RB_0	Bottom	/	17.39	18.0	0.344	0.40	-0.08
2610	38150	50RB_0	Left	/	17.37	18.0	0.718	0.83	-0.09
2595	38000	50RB_0	Left	/	17.36	18.0	0.741	0.86	0.08
2610	38150	100RB	Left	/	17.43	18.0	0.705	0.80	-0.02
Sensor off Test Data									
2595	38000	1RB_50	Rear	14mm	24.92	25.5	0.411	0.47	0.05
2580	37850	50RB_0	Rear	14mm	23.92	24.5	0.308	0.35	0.03
2595	38000	1RB_50	Left	14mm	24.92	25.5	0.423	0.48	0.08
2580	37850	50RB_0	Left	14mm	23.92	24.5	0.345	0.39	0.05
2595	38000	1RB_50	Bottom	4mm	24.92	25.5	0.289	0.33	0.03
2580	37850	50RB_0	Bottom	4mm	23.92	24.5	0.242	0.28	0.04
The worst case with Config2&3&4									
2580	37850	50RB_0	Left	C2	17.39	18.0	0.532	0.61	0.01
2580	37850	50RB_0	Left	**9**/C3	17.39	18.0	**0.795**	**0.91**	0.03
2580	37850	50RB_0	Left	C4	17.39	18.0	0.478	0.55	0.01

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Table 13.10: SAR Values (Bluetooth - Body)

Frequency		Test Mode	Test Position	Figure No. / Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
0mm Test Data									
2441	39	GFSK	Rear	/	9.71	10.0	0.017	0.02	0.07
2441	39	GFSK	Right	/	9.71	10.0	0.009	0.01	0.07
2441	39	GFSK	Top	/	9.71	10.0	0.010	0.01	0.08
The worst case with Config2&3&4									
2441	39	GFSK	Rear	C2	9.71	10.0	0.015	0.02	0.02
2441	39	GFSK	Rear	C3	9.71	10.0	0.017	0.02	0.04
2441	39	GFSK	Rear	**10**/C4	9.71	10.0	**0.021**	**0.02**	0.03

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13.3. WLAN Evaluation for 2.4GHz

According to the KDB248227 D01, SAR is measured for 2.4GHz 802.11b DSSS using the initial test position procedure.

Table 13.11: SAR Values (WLAN 2.4GHz - Body)

Frequency		Test Mode	Test Position	Figure No. / Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
0mm Test Data									
2437	6	802.11b	Rear	/	11.61	12.5	0.137	**0.17**	0.05
2437	6	802.11b	Right	**11**	11.61	12.5	**0.287**	**0.35**	-0.19
2437	6	802.11b	Top	/	11.61	12.5	0.002	**<0.01**	0.03

Note1: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

Table 13.12: SAR Values (WLAN - Body) – 802.11b (Scaled Reported SAR)

Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
MHz	Ch.					
2437	6	Right	100%	100%	0.35	**0.35**

SAR is not required for OFDM because the 802.11b adjusted SAR ≤ 1.2 W/kg.

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13.4. WLAN Evaluation for 5GHz

Table 13.13: SAR Values (WLAN 5GHz - Body)

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
U-NII-2A - 0mm Test Data									
5260	52	802.11a	Rear	/	12.46	13.5	0.241	0.31	-0.08
5260	52	802.11a	Right	/	12.46	13.5	0.377	0.48	-0.14
5260	52	802.11a	Top	/	12.46	13.5	0.047	0.06	0.04
U-NII-2C - 0mm Test Data									
5500	100	802.11a	Rear	/	12.29	13.0	0.317	0.37	0.07
5500	100	802.11a	Right	/	12.29	13.0	0.548	0.65	0.05
5500	100	802.11a	Top	/	12.29	13.0	0.100	0.12	0.04
U-NII-3 - 0mm Test Data									
5745	149	802.11a	Rear	/	11.63	12.5	0.431	0.53	0.04
5745	149	802.11a	Right	**12**	11.63	12.5	**0.572**	**0.70**	0.07
5745	149	802.11a	Top	/	11.63	12.5	0.047	0.06	0.02
The worst case with Config2&3&4									
5745	149	802.11a	Right	/	11.63	12.5	0.566	0.69	0.06
5745	149	802.11a	Right	/	11.63	12.5	0.396	0.48	0.04
5745	149	802.11a	Right	/	11.63	12.5	0.364	0.44	0.04
5745	149	802.11a	Rear	14mm	11.63	12.5	0.047	0.06	-0.02

Note1: U-NII-1 and U-NII-2A bands have the same specified maximum output and tolerance; SAR is measured for U-NII-2A band first. Adjusted SAR of U-NII-2A band is ≤ 1.2W/kg, SAR is not required for U-NII-1 band.

Note2: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

Table 13.14: SAR Values (WLAN - Body) – 802.11a (Scaled Reported SAR)

Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
MHz	Ch.					
5745	149	Right	100%	100%	0.70	**0.70**

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14. 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; steps 2) 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 ≥ 1.45 W/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.

Table 14.1: SAR Measurement Variability for Body – GSM850

Frequency		Test Position	Original	1st Repeated	Ratio	2nd Repeated
MHz	Ch.		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
836.6	190	Rear	0.854	0.839	1.02	/

Table 14.2: SAR Measurement Variability for Body – WCDMA Band 2

Frequency		Test Position	Original	1st Repeated	Ratio	2nd Repeated
MHz	Ch.		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
1852.4	9262	Rear	1.130	1.080	1.05	/

Table 14.3: SAR Measurement Variability for Body – WCDMA Band 5

Frequency		Test Position	Original	1st Repeated	Ratio	2nd Repeated
MHz	Ch.		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
824.4	4132	Rear	1.030	1.000	1.03	/

Table 14.4: SAR Measurement Variability for Body – LTE Band 2

Frequency		Test Position	Original	1st Repeated	Ratio	2nd Repeated
MHz	Ch.		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
1860	18700	Rear	1.030	1.000	1.03	/

Table 14.5: SAR Measurement Variability for Body – LTE Band 4

Frequency		Test Position	Original	1st Repeated	Ratio	2nd Repeated
MHz	Ch.		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
1745	20300	Rear	1.080	1.040	1.04	/

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Table 14.6: SAR Measurement Variability for Body – LTE Band 5

Frequency		Test Position	Original	1st Repeated	Ratio	2nd Repeated
MHz	Ch.		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
829	20450	Rear	1.090	1.070	1.02	/

Table 14.7: SAR Measurement Variability for Body – LTE Band 7

Frequency		Test Position	Original	1st Repeated	Ratio	2nd Repeated
MHz	Ch.		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
2560	21350	Rear	1.090	1.060	1.03	/

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15. Measurement Uncertainty

15.1. 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	12	N	2	1	1	6.0	6.0	∞
2	Axial isotropy	B	4.7	R	$\sqrt{3}$	√0.5	√0.5	4.3	4.3	∞
3	Hemispherical isotropy	B	9.6	R	$\sqrt{3}$	1	1	4.8	4.8	∞
4	Boundary effect	B	1.1	R	$\sqrt{3}$	1	1	0.6	0.6	∞
5	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
6	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
7	Modulation response	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
8	Readout electronics	B	1.0	N	1	1	1	1.0	1.0	∞
9	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
10	Integration time	B	1.7	R	$\sqrt{3}$	1	1	1.0	1.0	∞
11	RF ambient conditions-noise	B	3.0	R	$\sqrt{3}$	1	1	1.7	1.7	∞
12	RF ambient conditions-reflection	B	3.0	R	$\sqrt{3}$	1	1	1.7	1.7	∞
13	Probe positioned mech. restrictions	B	0.35	R	$\sqrt{3}$	1	1	0.2	0.2	∞
14	Probe positioning with respect to phantom shell	B	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞
15	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
Test sample related										
16	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	5
17	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
18	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
19	Phantom uncertainty	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
20	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
21	Liquid conductivity (meas.)	A	1.3	N	1	0.64	0.43	0.83	0.56	9
22	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
23	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	0.96	0.78	9
Combined standard uncertainty		$u_c' = \sqrt{\sum_{i=1}^{23} c_i^2 u_i^2}$						11.3	11.2	95.5
Expanded uncertainty (Confidence interval of 95 %)		$u_e = 2u_c$						22.6	22.4	

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15.2. Measurement Uncertainty for Normal SAR Tests (3GHz~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	13.1	N	2	1	1	6.65	6.65	∞
2	Axial isotropy	B	4.7	R	$\sqrt{3}$	√0.5	√0.5	4.3	4.3	∞
3	Hemispherical isotropy	B	9.6	R	$\sqrt{3}$	1	1	4.8	4.8	∞
4	Boundary effect	B	1.1	R	$\sqrt{3}$	1	1	0.6	0.6	∞
5	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
6	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
7	modulation response	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
8	Readout electronics	B	1.0	N	1	1	1	1.0	1.0	∞
9	Response time	B	0.0	R	$\sqrt{3}$	1	1	0.0	0.0	∞
10	Integration time	B	1.7	R	$\sqrt{3}$	1	1	1.0	1.0	∞
11	RF ambient conditions-noise	B	3.0	R	$\sqrt{3}$	1	1	1.7	1.7	∞
12	RF ambient conditions-reflection	B	3.0	R	$\sqrt{3}$	1	1	1.7	1.7	∞
13	Probe positioned mech. Restrictions	B	0.35	R	$\sqrt{3}$	1	1	0.2	0.2	∞
14	Probe positioning with respect to phantom shell	B	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞
15	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
Test sample related										
16	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	5
17	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
18	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
19	Phantom uncertainty	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
20	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
21	Liquid conductivity (meas.)	A	1.3	N	1	0.64	0.43	0.83	0.56	43
22	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
23	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	0.96	0.78	521
Combined standard uncertainty		$u_c' = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$						11.6	11.5	257
Expanded uncertainty (Confidence interval of 95 %)		$u_e = 2u_c$						23.2	23.0	

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16. Main Test Instruments

Table 16.1: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	E5071C	MY46103759	2021-11-15	One year
02	Dielectric probe	85070E	MY44300317	/	/
03	Power meter	E4418B	MY50000366	2021-12-13	One year
04	Power sensor	E9304A	MY50000188	2021-12-13	One year
05	Power meter	NRP	101260	2021-12-30	One year
06	Power sensor	NRP-Z91	102211	2021-12-30	One year
07	Signal Generator	E8257D	MY47461211	2022-01-14	One year
08	Amplifier	VTL5400	0404	/	/
09	E-field Probe	EX3DV4	7621	2022-05-06	One year
10	DAE	DAE4	1527	2022-06-21	One year
11	Dipole Validation Kit	D835V2	4d057	2021-10-18	Three years
12	Dipole Validation Kit	D1750V2	1152	2022-08-22	Three years
13	Dipole Validation Kit	D1900V2	5d088	2021-10-18	Three years
14	Dipole Validation Kit	D2450V2	873	2021-10-21	Three years
15	Dipole Validation Kit	D2550V2	1010	2021-05-21	Three years
16	Dipole Validation Kit	D5GHzV2	1238	2022-08-17	Three years
17	BTS	MT8820C	6201341853	2022-01-14	One year
18	BTS	E5515C	GB46110722	2022-01-14	One year
19	BTS	CMW500	152499	2022-07-15	One year
20	Software	DASY5	/	/	/

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ANNEX A: Graph Results

GSM850 Body

Date: 2020-6-16

Electronics: DAE4 Sn786

Medium: Head 835MHz

Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.885 S/m; ε_r = 41.833; ρ = 1000 kg/m^3

Communication System: UID 0, GPRS 4Txslot (0) Frequency: 836.6 MHz Duty Cycle: 1:2

Probe: EX3DV4 – SN3633 ConvF (9.59, 9.59, 9.59);

Rear Side Middle/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.42 W/kg

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

Reference Value = 6.532 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.94 W/kg

SAR(1 g) = 0.854 W/kg; SAR(10 g) = 0.426 W/kg

Maximum value of SAR (measured) = 1.27 W/kg

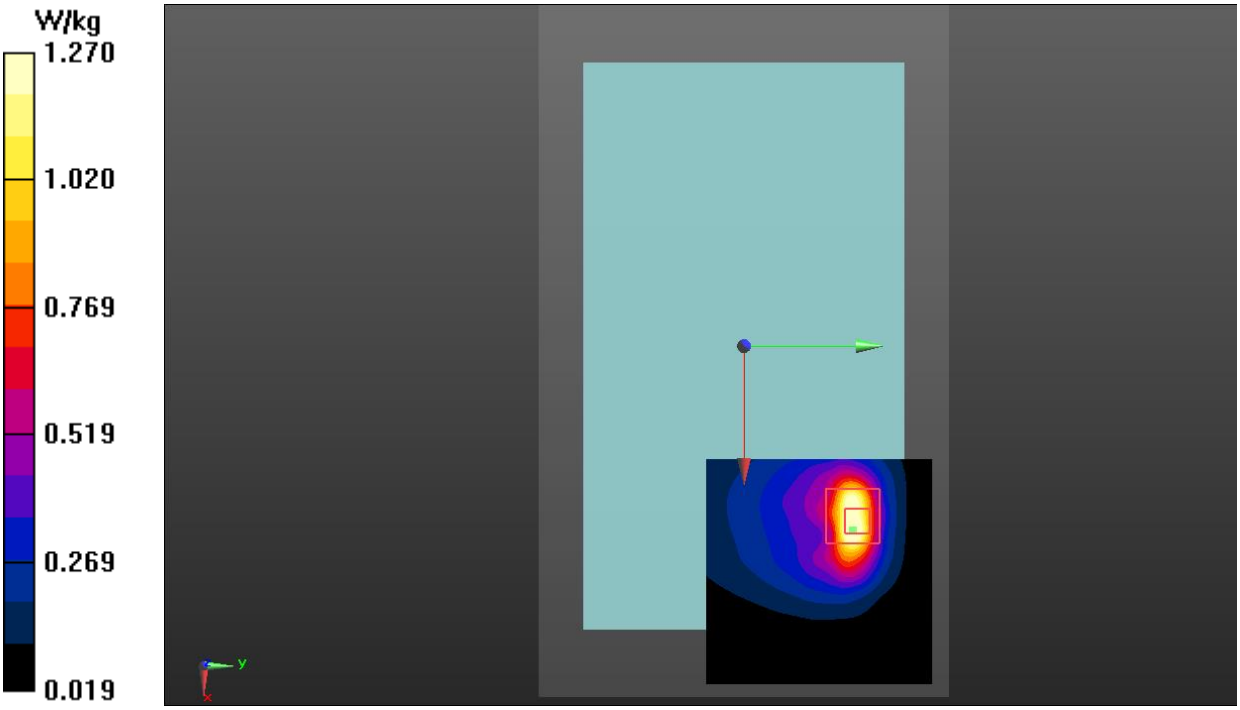

Fig.1 GSM 850 Body

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GSM1900 Body

Date: 2020-6-18

Electronics: DAE4 Sn786

Medium: Head 1900MHz

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.379 S/m; ε_r = 39.468; ρ = 1000 kg/m^3

Communication System: UID 0, GPRS 4Txslot (0) Frequency: 1850.2 MHz Duty Cycle: 1:2

Probe: EX3DV4 – SN3633 ConvF (7.76, 7.76, 7.76);

Rear Side Low/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.17 W/kg

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

Reference Value = 1.862 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.80 W/kg

SAR(1 g) = 0.758 W/kg; SAR(10 g) = 0.313 W/kg

Maximum value of SAR (measured) = 1.25 W/kg

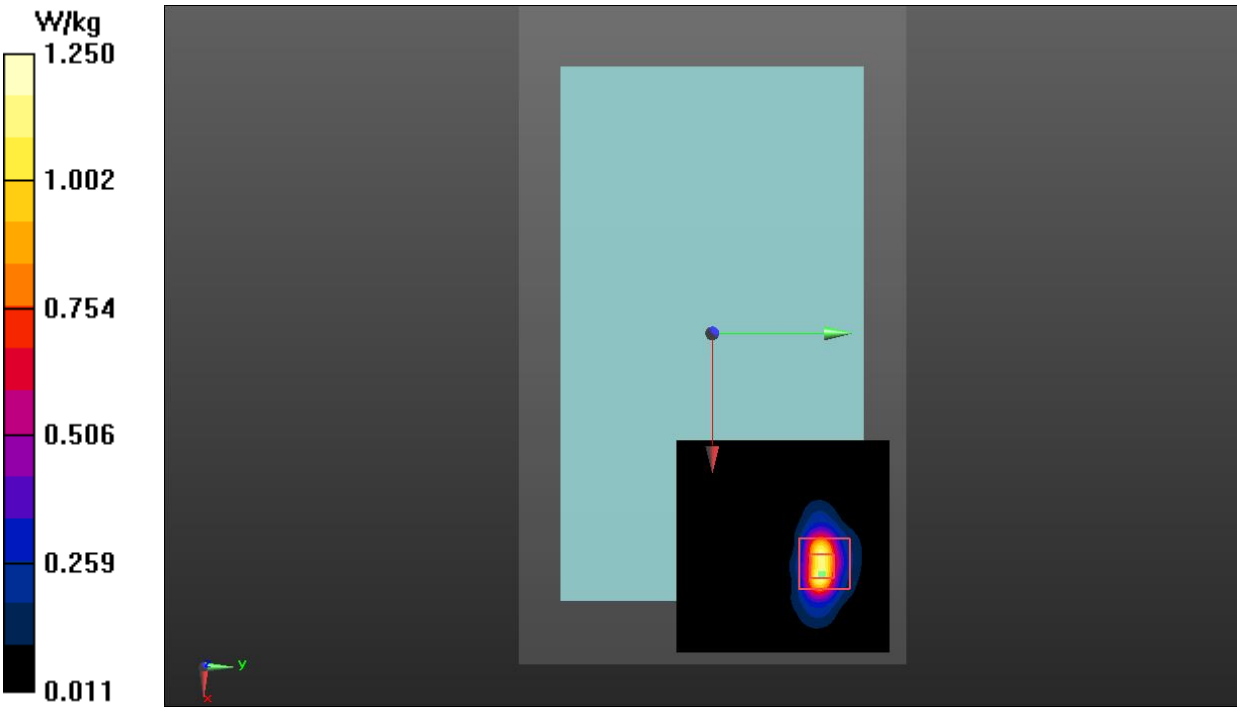

Fig.2 GSM 1900 Body

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WCDMA Band 2 Body

Date: 2020-6-18

Electronics: DAE4 Sn786

Medium: Head 1900MHz

Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.381 S/m; ε_r = 39.46; ρ = 1000 kg/m^3

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

Probe: EX3DV4 – SN3633 ConvF (7.76, 7.76, 7.76);

Rear Side Low/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.35 W/kg

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

Reference Value = 1.785 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.94 W/kg

SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.504 W/kg

Maximum value of SAR (measured) = 1.52 W/kg

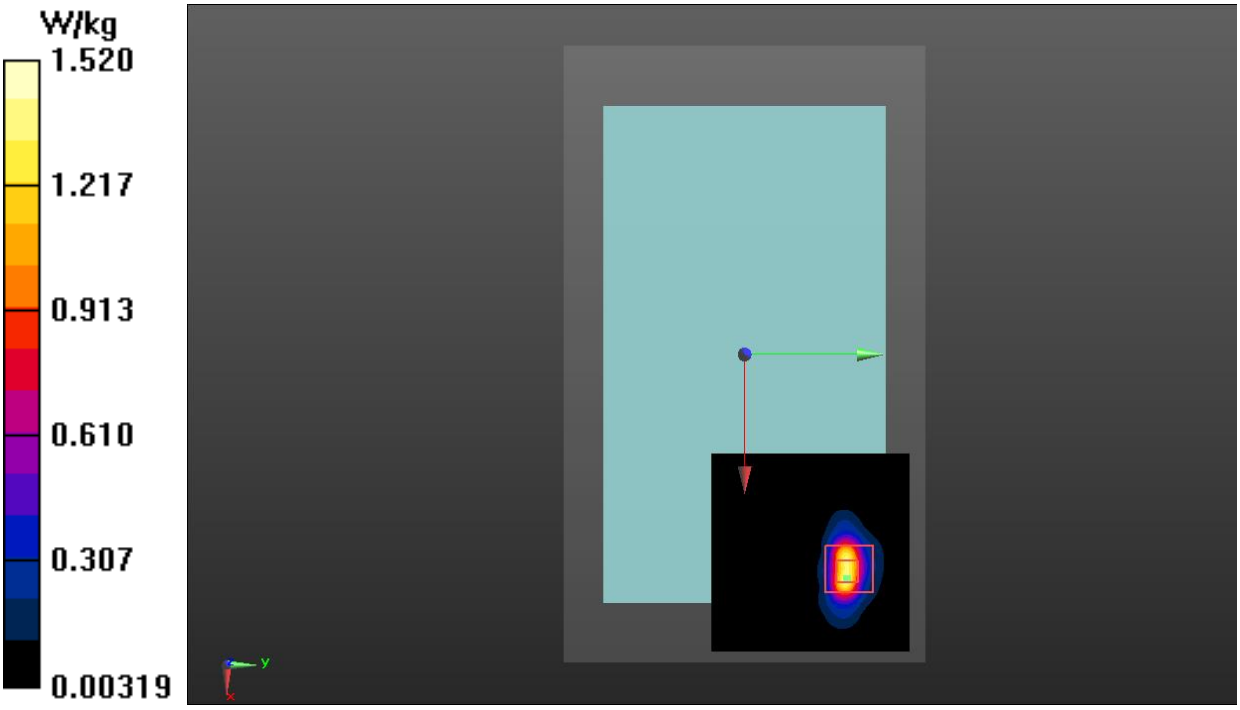

Fig.3 WCDMA Band 2 Body

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WCDMA Band 5 Body

Date: 2020-6-16

Electronics: DAE4 Sn786

Medium: Head 835MHz

Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.876 S/m; ε_r = 41.955; ρ = 1000 kg/m^3

Communication System: UID 0, WCDMA (0) Frequency: 826.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3633 ConvF (9.59, 9.59, 9.59);

Rear Side Low/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.73 W/kg

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

Reference Value = 7.184 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 2.35 W/kg

SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.515 W/kg

Maximum value of SAR (measured) = 1.50 W/kg

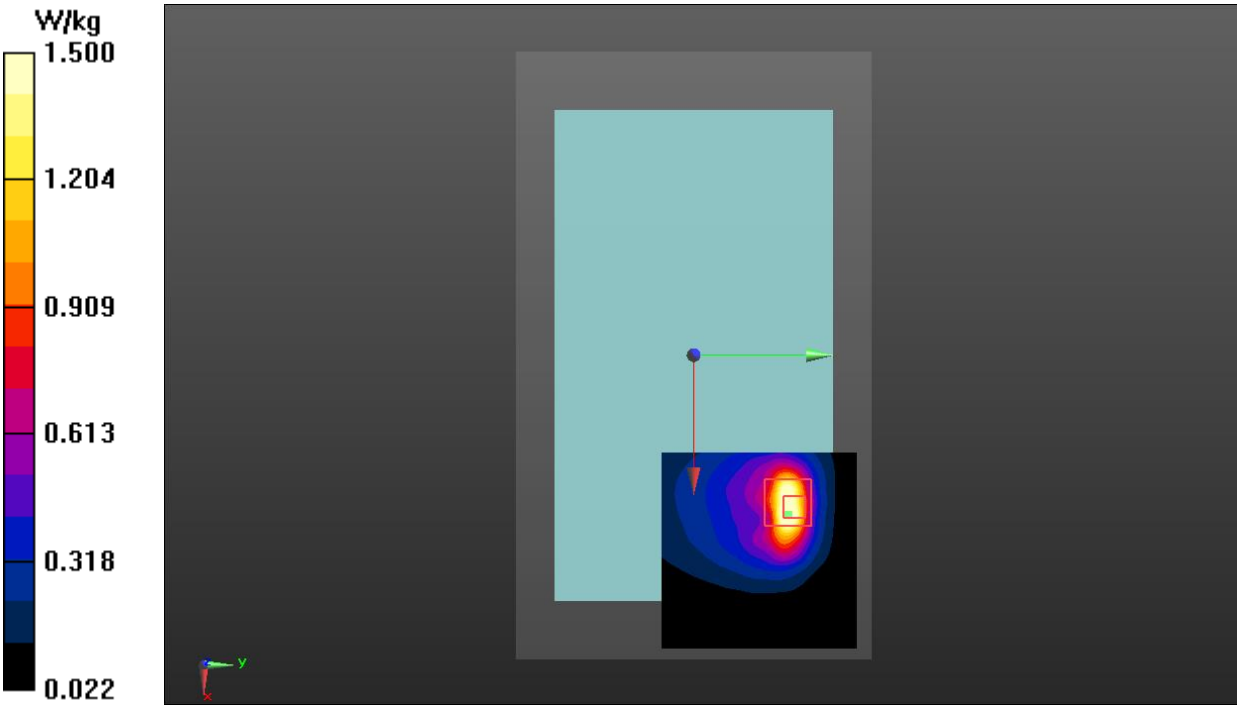

Fig.4 WCDMA Band 5 Body

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LTE Band 2 Body

Date: 2020-6-18

Electronics: DAE4 Sn786

Medium: Head 1900MHz

Medium parameters used: f = 1860 MHz; σ = 1.388 S/m; ε_r = 39.429; ρ = 1000 kg/m^3

Communication System: UID 0, LTE_FDD (0) Frequency: 1860 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3633 ConvF (7.76, 7.76, 7.76);

Rear Side Low 1RB_50/Area Scan (71x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.60 W/kg

Rear Side Low 1RB_50/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.576 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.91 W/kg

SAR(1 g) = 1.17 W/kg; SAR(10 g) = 0.619 W/kg

Maximum value of SAR (measured) = 1.53 W/kg

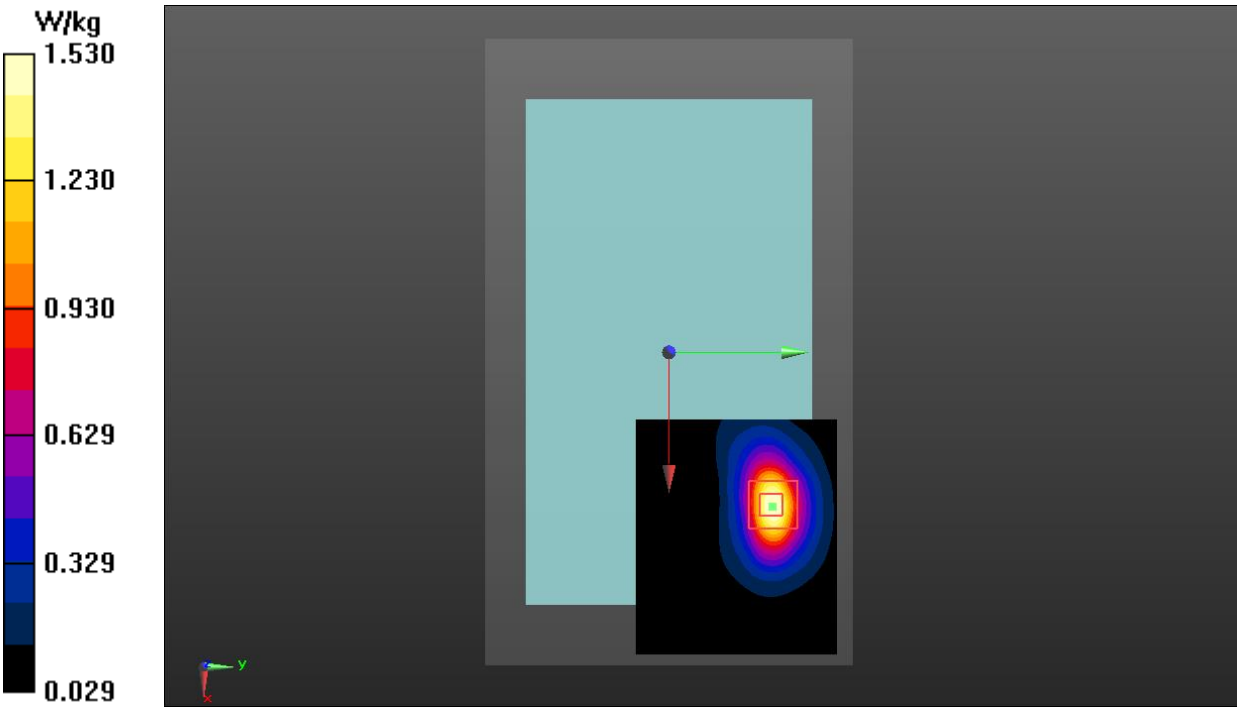

Fig.5 LTE Band 2 Body

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LTE Band 4 Body

Date: 2020-6-11

Electronics: DAE4 Sn786

Medium: Head 1750MHz

Medium parameters used: f = 1745 MHz; σ = 1.382 S/m; ε_r = 39.579; ρ = 1000 kg/m^3

Communication System: UID 0, LTE_FDD (0) Frequency: 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3633 ConvF (8.09, 8.09, 8.09);

Rear Side High 1RB_50/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.29 W/kg

Rear Side High 1RB_50/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.089 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.93 W/kg

SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.372 W/kg

Maximum value of SAR (measured) = 1.40 W/kg

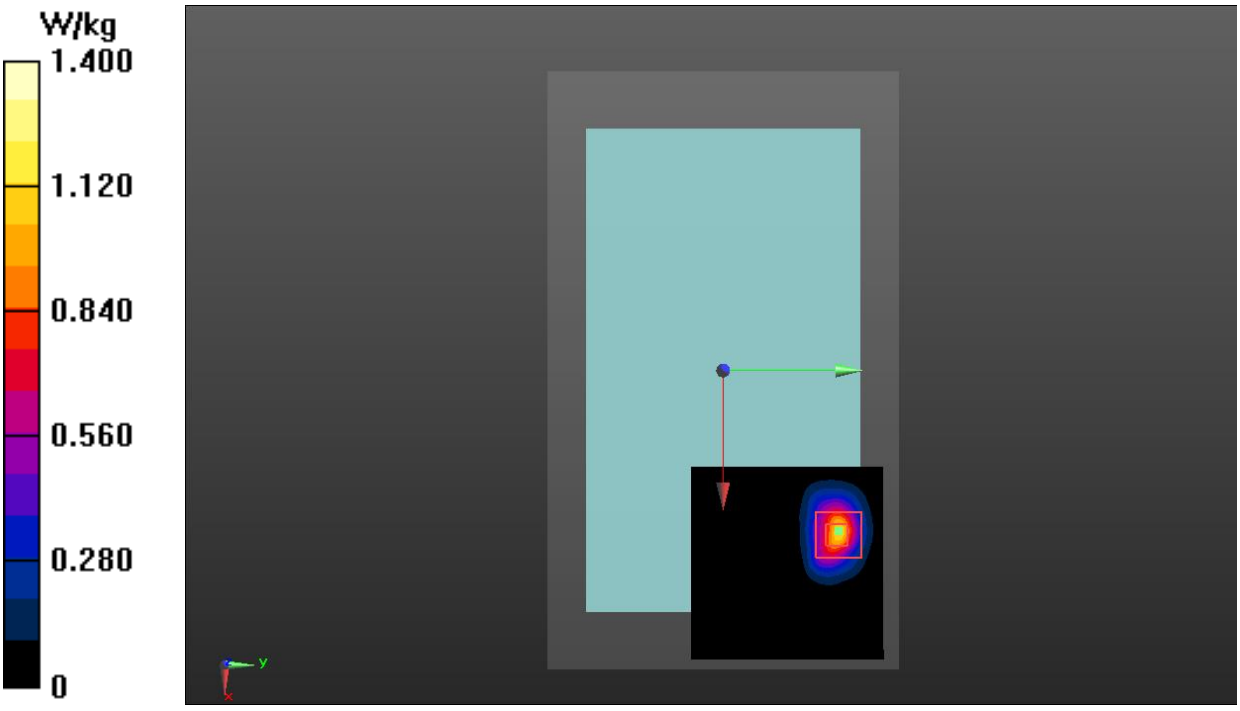

Fig.6 LTE Band 4 Body

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LTE Band 5 Body

Date: 2020-6-16

Electronics: DAE4 Sn786

Medium: Head 1750MHz

Medium parameters used (interpolated): f = 829 MHz; σ = 0.879 S/m; ε_r = 41.924; ρ = 1000 kg/m^3

Communication System: UID 0, LTE_FDD (0) Frequency: 829 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3633 ConvF (9.59, 9.59, 9.59);

Rear Side Low 1RB_25/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.74 W/kg

Rear Side Low 1RB_25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.967 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 2.72 W/kg

SAR(1 g) = 1.09 W/kg; SAR(10 g) = 0.536 W/kg

Maximum value of SAR (measured) = 1.93 W/kg

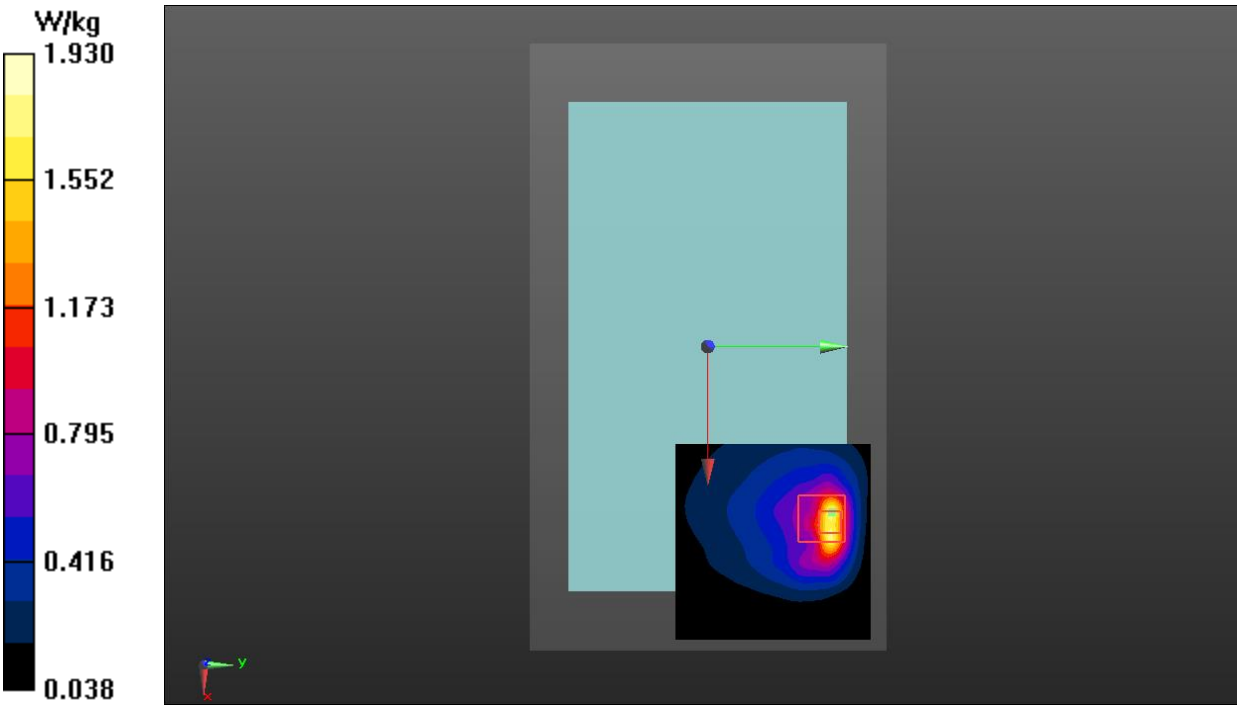

Fig.7 LTE Band 5 Body

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LTE Band 7 Body

Date: 2020-6-15

Electronics: DAE4 Sn786

Medium: Head 2550MHz

Medium parameters used: f = 2560 MHz; σ = 1.954 S/m; ε_r = 37.999; ρ = 1000 kg/m^3

Communication System: UID 0, LTE_FDD (0) Frequency: 2560 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3633 ConvF (7.20, 7.20, 7.20);

Left Side High 1RB_50/Area Scan (121x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.52 W/kg

Left Side High 1RB_50/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.087 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 2.71 W/kg

SAR(1 g) = 1.09 W/kg; SAR(10 g) = 0.414 W/kg

Maximum value of SAR (measured) = 1.91 W/kg

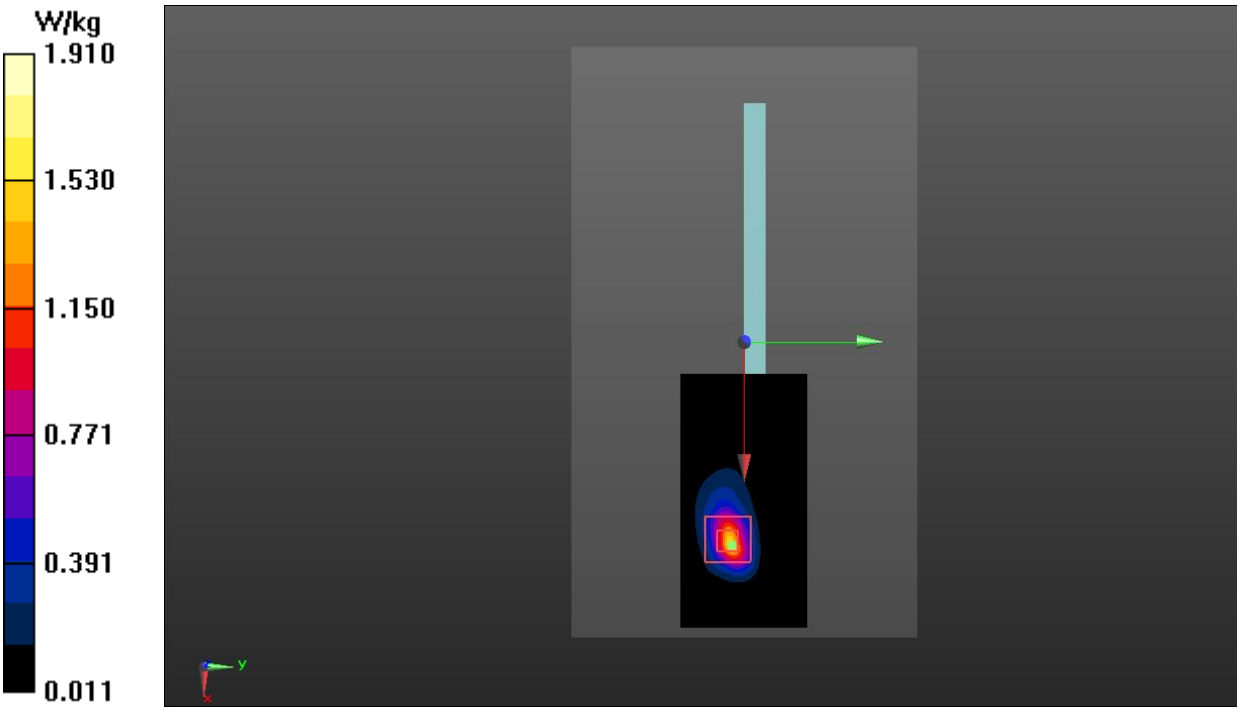

Fig.8 LTE Band 7 Body

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LTE Band 38 Body

Date: 2020-6-15

Electronics: DAE4 Sn786

Medium: Head 2550MHz

Medium parameters used: f = 2580 MHz; σ = 1.977 S/m; ε_r = 39.934; ρ = 1000 kg/m^3

Communication System: UID 0, LTE_TDD (0) Frequency: 2580 MHz Duty Cycle: 1:1.58

Probe: EX3DV4 – SN3633 ConvF (7.20, 7.20, 7.20);

Left Side Low 50RB_0/Area Scan (121x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.01 W/kg

Left Side Low 50RB_0/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.752 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 2.08 W/kg

SAR(1 g) = 0.795 W/kg; SAR(10 g) = 0.306 W/kg

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

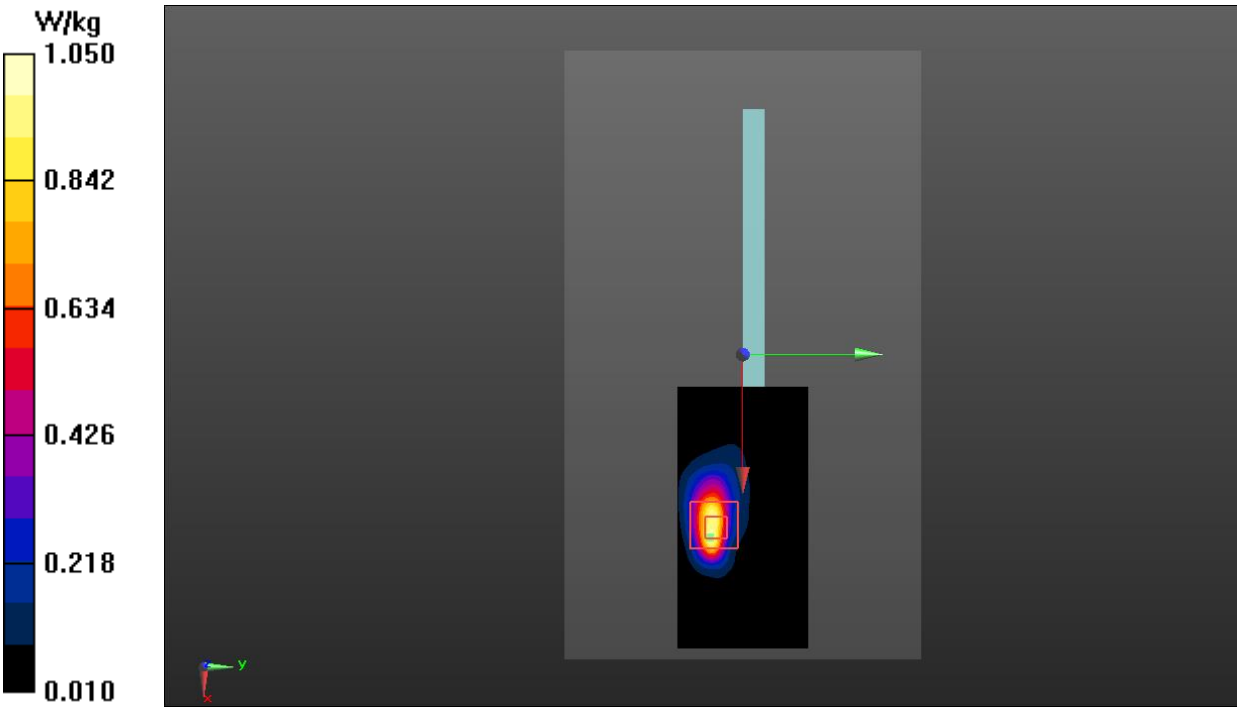

Fig.9 LTE Band 38 Body

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Bluetooth Body

Date: 2020-6-23

Electronics: DAE4 Sn786

Medium: Head 2450MHz

Medium parameters used (interpolated): f = 2441 MHz; σ = 1.824 S/m; ε_r = 38.506; ρ = 1000 kg/m^3

Communication System: UID 0, BT (0) Frequency: 2441 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF (7.43, 7.43, 7.43)

Rear Side CH.39/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.022 W/kg

Rear Side CH.39/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.872 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.040 W/kg

SAR(1 g) = 0.021 W/kg; SAR(10 g) = 0.014 W/kg

Maximum value of SAR (measured) = 0.029 W/kg

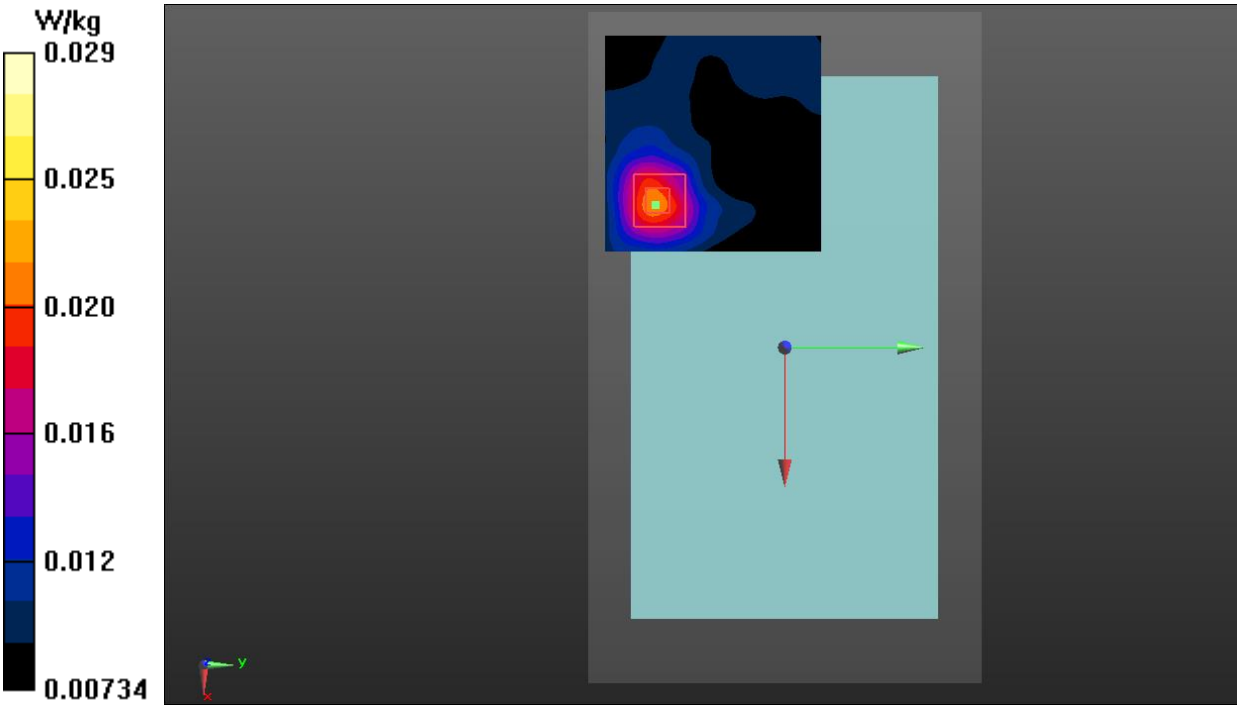

Fig.10 Bluetooth Body

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WLAN 2.4GHz Body

Date: 2022-10-18

Electronics: DAE4 Sn1527

Medium: Head 2450MHz

Medium parameters used (interpolated): f = 2437 MHz; σ = 1.829 S/m; ε_r = 38.167; ρ = 1000 kg/m^3

Communication System: UID 0, WiFi (0) Frequency: 2437 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (8.17, 8.17, 8.17)

Right Side CH.6/Area Scan (141x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.470 W/kg

Right Side CH.6/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.013 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.869 W/kg

SAR(1 g) = 0.287 W/kg; SAR(10 g) = 0.162 W/kg

Maximum value of SAR (measured) = 0.519 W/kg

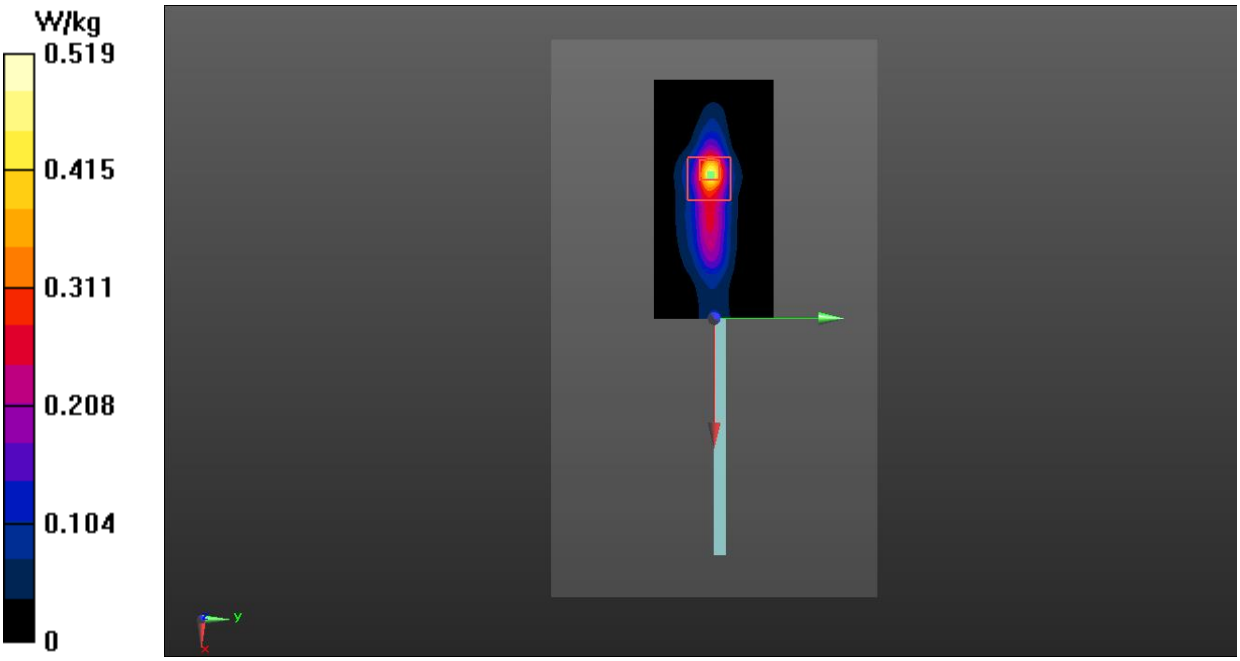

Fig.11 WLAN 2.4GHz Body

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WLAN 5GHz Body

Date: 2020-6-20

Electronics: DAE4 Sn786

Medium: Head 5750MHz

Medium parameters used (interpolated): f = 5745 MHz; σ = 5.148 S/m; ε_r = 35.972; ρ = 1000 kg/m^3

Communication System: UID 0, WiFi (0) Frequency: 5745 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3633 ConvF (4.73, 4.73, 4.73);

Right Side Ch149/Area Scan (91x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

Right Side Ch149/Zoom Scan (8x8x21)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 2.532 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 2.93 W/kg

SAR(1 g) = 0.572 W/kg; SAR(10 g) = 0.146 W/kg

Maximum value of SAR (measured) = 0.956 W/kg

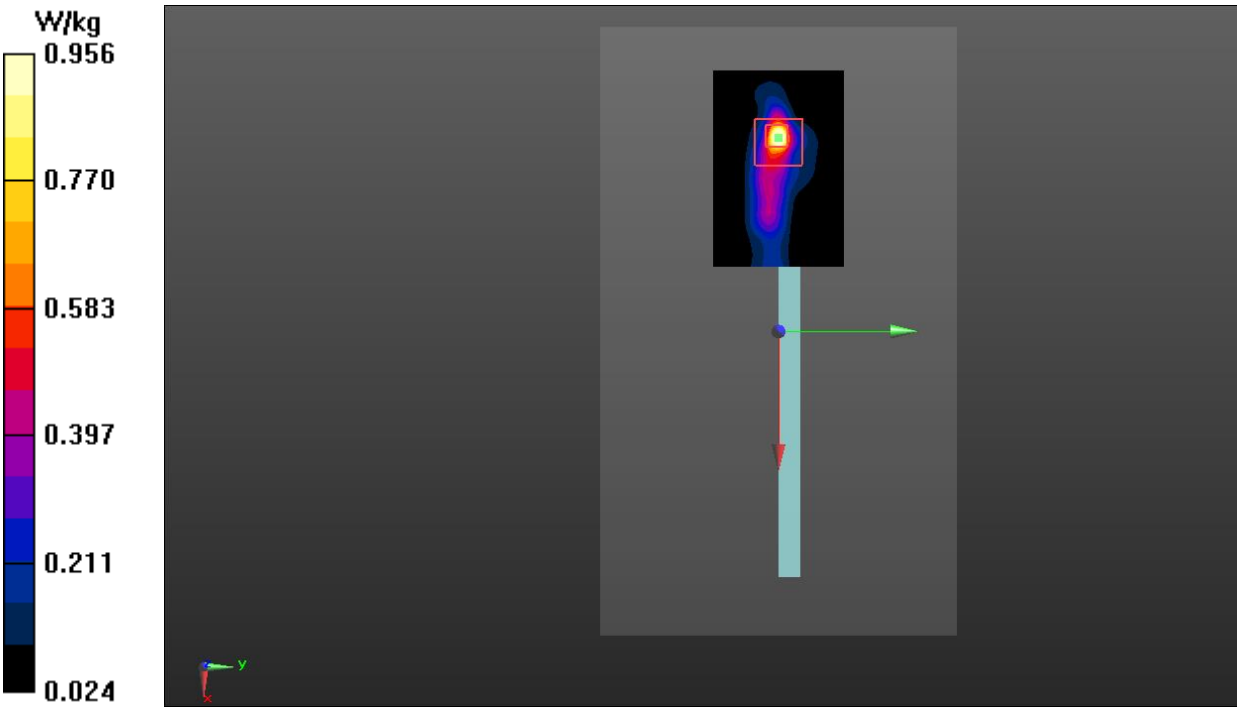

Fig.12 WLAN 5GHz Body

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ANNEX B: SystemVerification Results

835MHz

Date: 2020-6-16

Electronics: DAE4 Sn786

Medium: Head 835MHz

Medium parameters used: f = 835 MHz; σ = 0.884 S/m; εr = 41.852; ρ = 1000 kg/m^3

Communication System: CW_TMC Frequency: 835 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3633 ConvF (9.59, 9.59, 9.59);

System Validation /Area Scan (91x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 59.424 V/m; Power Drift = -0.03 dB

SAR(1 g) = 2.35 W/kg; SAR(10 g) = 1.57 W/kg

Maximum value of SAR (interpolated) = 3.14 W/kg

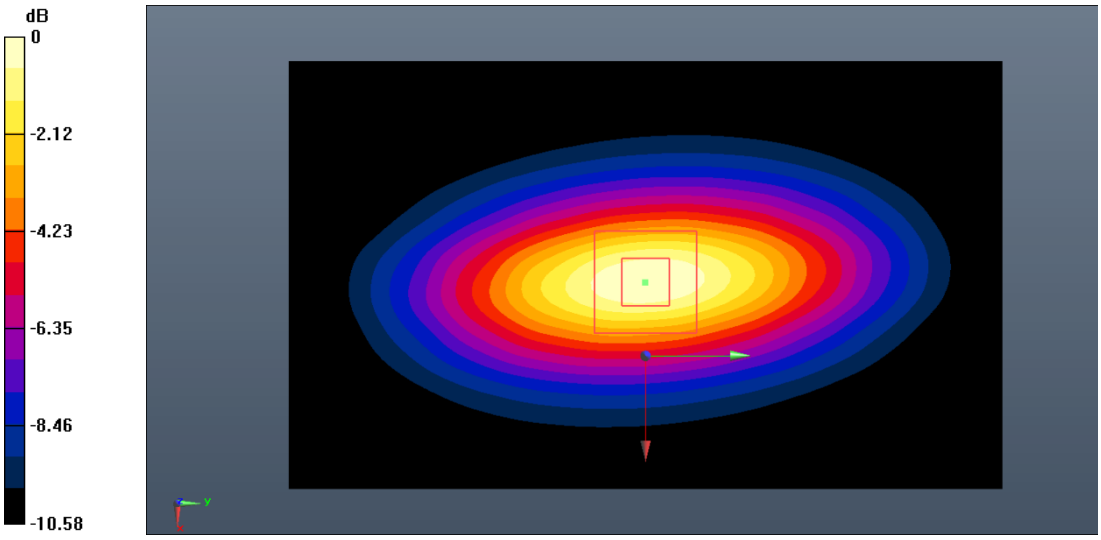
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 59.424 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 3.59 W/kg

SAR(1 g) = 2.31 W/kg; SAR(10 g) = 1.55 W/kg

Maximum value of SAR (measured) = 3.11 W/kg



0 dB = 3.11 W/kg = 4.93 dB W/kg

Fig.B.1. Validation 835MHz 250mW

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1750MHz

Date: 2020-6-11

Electronics: DAE4 Sn786

Medium: Head 1750MHz

Medium parameters used: f = 1750 MHz; σ = 1.386 S/m; ε_r = 39.559; ρ = 1000 kg/m^3

Communication System: CW_TMC Frequency: 1750 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3633 ConvF (8.09, 8.09, 8.09);

System Validation/Area Scan (81x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 78.895 V/m; Power Drift = 0.08 dB

SAR(1 g) = 9.22 W/kg; SAR(10 g) = 4.84 W/kg

Maximum value of SAR (interpolated) = 10.1 W/kg

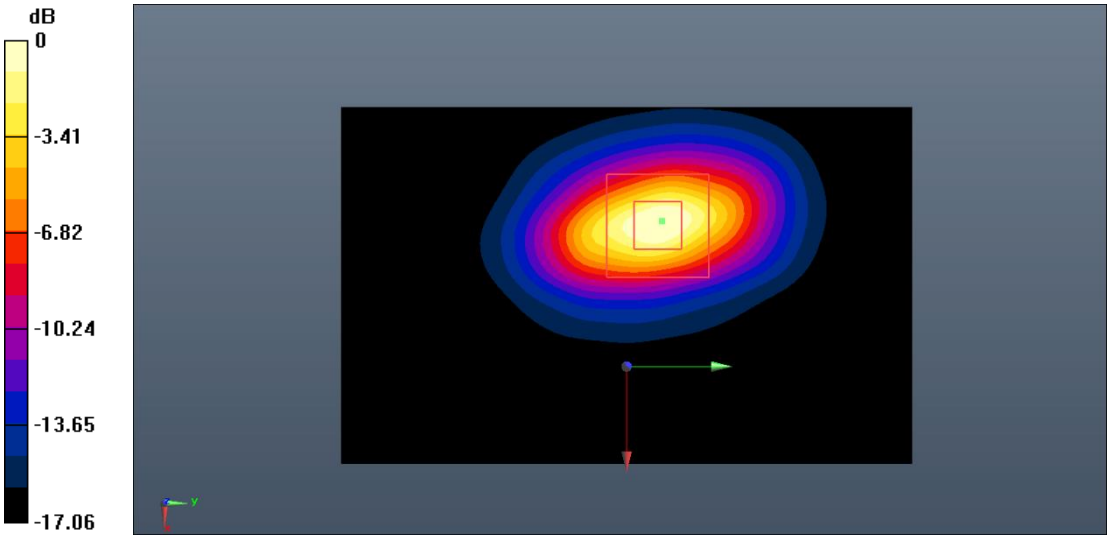
System Validation/Zoom Scan (7x7x7)/Cube0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 78.895 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 19.5 W/kg

SAR(1 g) = 9.36 W/kg; SAR(10 g) = 4.92 W/kg

Maximum value of SAR (measured) = 10.3 W/kg



0 dB = 10.3 W/kg = 10.13 dB W/kg

Fig.B.2. Validation 1750MHz 250mW

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1900MHz

Date: 2020-6-18

Electronics: DAE4 Sn786

Medium: Head 1900MHz

Medium parameters used: f = 1900 MHz; σ = 1.423 S/m; ε_r = 39.274; ρ = 1000 kg/m^3

Communication System: CW_TMC Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3633 ConvF (7.76, 7.76, 7.76);

System Validation/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 81.123 V/m; Power Drift = 0.10 dB

SAR(1 g) = 10.2 W/kg; SAR(10 g) = 5.24 W/kg

Maximum value of SAR (interpolated) = 11.1 W/kg

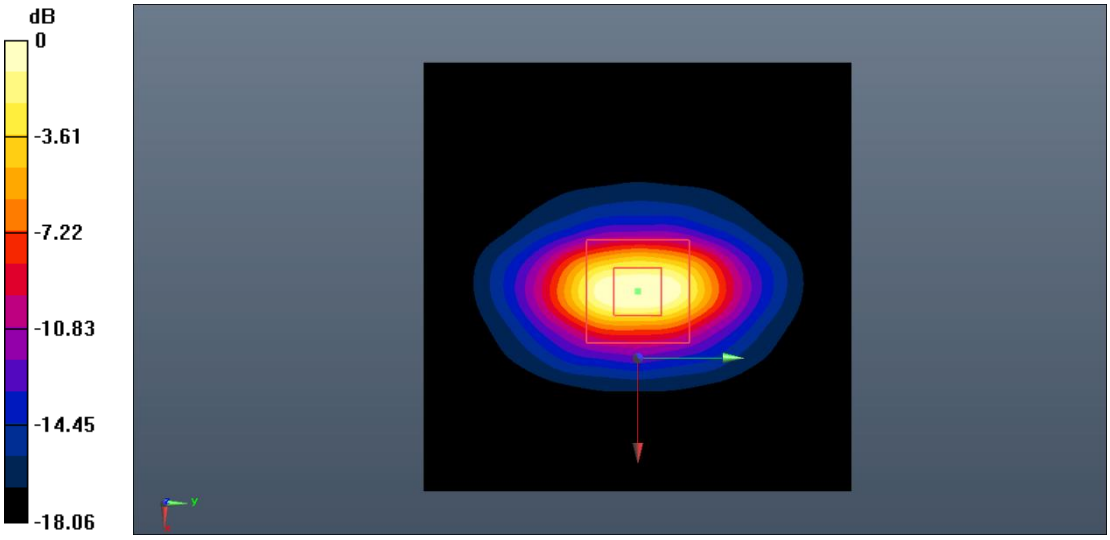
System Validation/Zoom Scan (7x7x7)/Cube0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 81.123 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 21.1 W/kg

SAR(1 g) = 10.4 W/kg; SAR(10 g) = 5.33 W/kg

Maximum value of SAR (measured) = 11.5 W/kg



0 dB = 11.5 W/kg = 10.61 dB W/kg

Fig.B.3. Validation 1900MHz 250mW

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2450MHz

Date: 2020-6-23

Electronics: DAE4 Sn786

Medium: Head 2450MHz

Medium parameters used: f = 2450 MHz; σ = 1.835 S/m; ε_r = 38.476; ρ = 1000 kg/m^3

Communication System: CW_TMC Frequency: 2450 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3633 ConvF (7.43, 7.43, 7.43);

System Validation /Area Scan (81x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 88.124 V/m; Power Drift = -0.06 dB

SAR(1 g) = 13.5 W/kg; SAR(10 g) = 6.15 W/kg

Maximum value of SAR (interpolated) = 14.8 W/kg

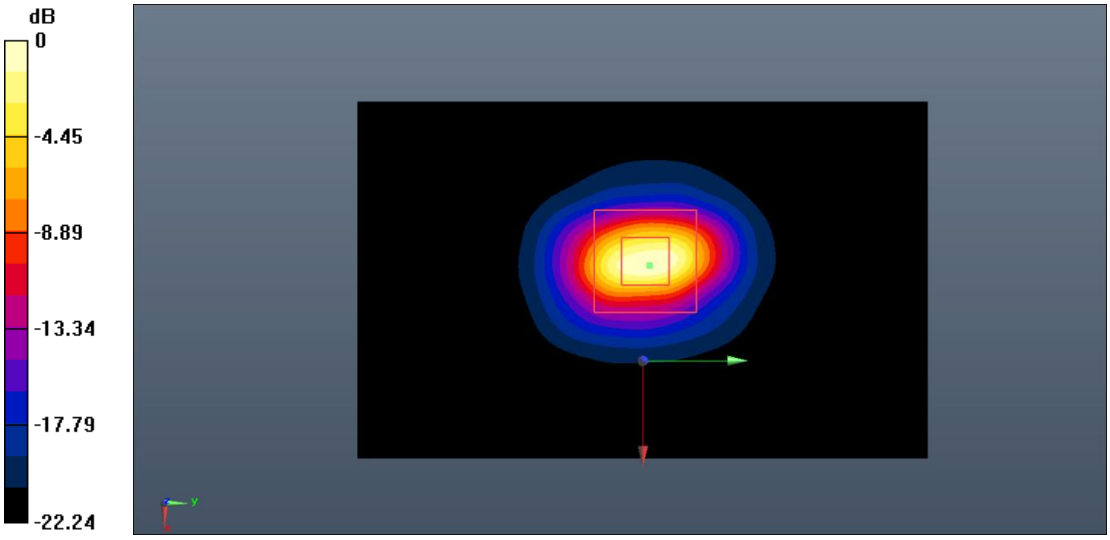
System Validation/Zoom Scan (7x7x7)/Cube0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.124 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 28.2 W/kg

SAR(1 g) = 13.4 W/kg; SAR(10 g) = 6.12 W/kg

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



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

Fig.B.4. Validation 2450MHz 250mW

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