

SAR TEST REPORT

Applicant Xiaomi Communications Co., Ltd.

FCC ID 2AFZZPCA6G

Product Mobile Phone

Brand POCO

Model 2312FPCA6G

Report No. R2309A0988-S1

Issue Date October 27, 2023

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **IEEE 1528-2013, ANSI C95.1: 1992, IEEE C95.1: 1991**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Prepared by: Wei Fangying

Approved by: Fan Guangchang

TA Technology (Shanghai) Co., Ltd.

Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China

TEL: +86-021-50791141/2/3

FAX: +86-021-50791141/2/3-8000

Table of Contents

1	Test Laboratory.....	4
1.1	Notes of the Test Report	4
1.2	Test Facility	4
1.3	Testing Location.....	4
1.4	Laboratory Environment.....	4
2	Statement of Compliance	5
3	Description of Equipment Under Test	8
4	Test Specification, Methods and Procedures	10
5	Operational Conditions during Test	11
5.1	Test Positions.....	11
5.1.1	Against Phantom Head	11
5.1.2	Body Worn Configuration.....	11
5.1.3	Phablet SAR Test Considerations.....	12
5.2	Measurement Variability.....	13
5.3	Test Configuration	14
5.3.1	GSM Test Configuration	14
5.3.2	WCDMA Test Configuration	14
5.3.3	LTE Test Configuration	18
5.3.4	Additional Requirements for TDD LTE Specification.....	19
5.3.5	Wi-Fi Test Configuration	22
5.3.6	Bluetooth Test Configuration.....	23
5.3.7	LTE CA specification	24
5.3.8	Proximity Sensor Configuration	28
5.3.9	Procedures for Determining Proximity Sensor Triggering Distances.....	33
5.3.10	Procedures for Determining Device Tilt Angle Influences to Proximity Sensor Triggering.....	37
5.3.11	SAR Detection Mechanism Specification.....	40
6	SAR Measurements System Configuration	41
6.1	SAR Measurement Set-up	41
6.2	DASY5 E-field Probe System.....	42
6.3	SAR Measurement Procedure	43
7	Main Test Equipment.....	45
8	Tissue Dielectric Parameter Measurements & System Check	47
8.1	Tissue Verification	47
8.2	System Check	49
8.3	SAR System Validation	52
9	Normal and Maximum Output Power	53
9.1	GSM Mode.....	53
9.2	WCDMA Mode	57
9.3	LTE Mode.....	66
9.4	CA Mode (DL)	186

9.5	WLAN Mode.....	187
9.6	Bluetooth Mode.....	196
10	Measured and Reported (Scaled) SAR Results.....	197
10.1	EUT Antenna Locations.....	197
10.2	Measured SAR Results.....	198
10.3	Simultaneous Transmission Analysis.....	232
11	Measurement Uncertainty.....	236
ANNEX A: Test Layout.....		237
ANNEX B: System Check Results.....		239
ANNEX C: Highest Graph Results.....		262
ANNEX D: Probe Calibration Certificate (SN: 3883).....		321
ANNEX E: Probe Calibration Certificate (SN: 3677).....		330
ANNEX F: D750V3 Dipole Calibration Certificate.....		352
ANNEX G: D835V2 Dipole Calibration Certificate.....		358
ANNEX H: D1750V2 Dipole Calibration Certificate.....		364
ANNEX I: D1900V2 Dipole Calibration Certificate.....		370
ANNEX J: D2450V2 Dipole Calibration Certificate.....		376
ANNEX K: D2600V2 Dipole Calibration Certificate.....		382
ANNEX L: D5GHzV2 Dipole Calibration Certificate.....		388
ANNEX M: CLA13 Dipole Calibration Certificate.....		396
ANNEX N: DAE4 Calibration Certificate (SN: 1291).....		402
ANNEX O: DAE4 Calibration Certificate (SN: 1692).....		414
ANNEX P: The EUT Appearance.....		417
ANNEX Q: Test Setup Photos.....		418
ANNEX R: Product Change Description.....		419

1 Test Laboratory

1.1 Notes of the Test Report

This report shall not be reproduced in full or partial, without the written approval of **TA Technology (Shanghai) Co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein .Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2 Test Facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform measurements.

A2LA (Certificate Number: 3857.01)

TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform measurement.

1.3 Testing Location

Company: TA Technology (Shanghai) Co., Ltd.
 Address: Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China
 City: Shanghai
 Post code: 201201
 Country: P. R. China
 Contact: Fan Guangchang
 Telephone: +86-021-50791141/2/3
 Fax: +86-021-50791141/2/3-8000
 Website: <http://www.ta-shanghai.com>
 E-mail: fanguangchang@ta-shanghai.com

1.4 Laboratory Environment

Temperature	Min. = 18°C, Max. = 25 °C
Relative humidity	Min. = 30%, Max. = 70%
Ground system resistance	< 0.5 Ω
Ambient noise is checked and found very low and in compliance with requirement of standards. Reflection of surrounding objects is minimized and in compliance with requirement of standards.	

2 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for the EUT are as follows:

Table 1: Highest Reported SAR

Mode	Highest Reported SAR (W/kg)			
	1g SAR Head	1g SAR Body-worn	1g SAR Hotspot	Product Specific 10-g SAR (Separation 0mm)
GSM 850	0.48	0.35	0.35	NA
GSM 1900	0.83	0.69	0.85	0.96
WCDMA Band II	1.08	0.91	0.91	2.31
WCDMA Band IV	1.09	0.81	1.02	2.13
WCDMA Band V	1.00	0.48	0.48	NA
LTE FDD 2	0.98	0.96	0.73	2.55
LTE FDD 5	0.97	0.50	0.50	NA
LTE FDD 7	0.88	1.01	0.86	1.71
LTE FDD 12 (LTE FDD 17)	0.58	0.37	0.37	NA
LTE FDD 13	0.52	0.29	0.29	NA
LTE FDD 26	0.62	0.46	0.46	NA
LTE TDD 38	1.03	0.61	0.65	NA
LTE TDD 41	0.88	0.78	0.85	1.14
LTE TDD 66 (LTE FDD 4)	1.07	1.09	1.09	1.96
Wi-Fi (2.4G)	0.76	0.22	0.30	NA
Wi-Fi (5G)	0.84	0.42	0.50	1.22
Bluetooth	0.10	0.00	0.04	NA
NFC	NA	NA	NA	0.02
Date of Testing: September 27, 2023 ~ October 19, 2023				
Date of Sample Received: September 20, 2023				
Note:				
1. The device is in compliance with SAR for Uncontrolled Environment /General Population exposure limits (1.6 W/kg and 4.0 W/kg) specified in ANSI C95.1: 1992/IEEE C95.1: 1991, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013.				
2. All indications of Pass/Fail in this report are opinions expressed by TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.				

1) According to TCB workshop October, 2014 RF Exposure Procedures Update (Overlapping LTE Bands):

- a) Low and Upper Antenna SAR for LTE Band 17 (Frequency range: 704-716 MHz) is covered by LTE Band 12 (Frequency range 699-716 MHz); LTE Band 4 (Frequency range 1710-1755 MHz) is covered by LTE Band 66 (Frequency range: 1710-1780 MHz); LTE Band 38 (Frequency range 2570-2620 MHz) is covered by LTE Band 41 (Frequency range: 2496-2690 MHz) due to similar frequency range, same maximum tune up limit and same channel bandwidth.

The device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits according to the FCC rule § 2.1093, the ANSI C95.1: 1992/IEEE C95.1: 1991, and had been tested in accordance with the measurement methods and procedures specified in IEEE Std 1528-2013.

Table 2: Highest Simultaneous Transmission SAR

Exposure Configuration	1g SAR Head	1g SAR Body-worn	1g SAR Hotspot	Product Specific 10-g SAR (Separation 0mm)
Highest Simultaneous Transmission SAR (W/kg)	1.53	1.51	1.57	3.78
Note: The detail for simultaneous transmission consideration is described in chapter 10.3.				

2312FPCA6G (Report No.: R2309A0988-S1) is a variant model of 23117RA68G (Report No.: R2309A0986-S1V1). The difference between the two models is shown in the table below:

Item	Original	Variant
Brand	Redmi	POCO
Model	23117RA68G	2312FPCA6G
Camera(back) Spec	200M+OIS+8M uw	64M+OIS+8M uw
Battery cover material (the thickness are same)	Glass (thickness: 0.68mm)	PC+PMMA (thickness: 0.71mm)
Others	The same	

Tested band refer to the following table.

Band	Original	Variant
GSM 850	Pass	Only tested with worst case of Original
GSM 1900	Pass	
WCDMA Band II	Pass	
WCDMA Band IV	Pass	
WCDMA Band V	Pass	
LTE FDD 2	Pass	
LTE FDD 5	Pass	
LTE FDD 7	Pass	
LTE FDD 12 (LTE FDD 17)	Pass	
LTE FDD 13	Pass	
LTE FDD 26	Pass	
LTE TDD 38	Pass	
LTE TDD 41	Pass	
LTE TDD 66 (LTE FDD 4)	Pass	
Wi-Fi (2.4G)	Pass	
Wi-Fi (5G)	Pass	
Bluetooth	Pass	
NFC	Pass	

The detailed product change description please refers to the *Difference Declaration Letter*.

3 Description of Equipment Under Test

Client Information

Applicant	Xiaomi Communications Co., Ltd.
Applicant address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085
Manufacturer	Xiaomi Communications Co., Ltd.
Manufacturer address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

General Technologies

EUT Stage	Identical Prototype	
Model	2312FPCA6G	
IMEI	Original	IMEI 1: 863357060124906 IMEI 2: 863357060124914
	Variant	IMEI 1: 867584060064149 IMEI 2: 867584060064156
Hardware Version	135100N6M0A01	
Software Version	MIUI 14	
Antenna Type	WWAN/ Wi-Fi/ Bluetooth	PIFA Antenna
	NFC	coil Antenna
Wi-Fi Hotspot	Wi-Fi 2.4G Wi-Fi 5G U-NII-1&U-NII-3	
Power Class	GSM 850: 4 GSM 1900: 1 WCDMA Band II/IV/V: 3 LTE FDD 2/4/5/7/12/13/17/26/66: 3 LTE TDD 38/41: 3	
Power Level	GSM 850: level 5 GSM 1900: level 0 WCDMA Band II/IV/V: all up bits LTE FDD 2/4/5/7/12/13/17/26/66: max power LTE TDD 38/41: max power	
Note: The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.		

Wireless Technology and Frequency Range

Wireless Technology		Modulation	Operating mode	Tx (MHz)	Rx (MHz)		
GSM	850	Voice(GMSK) GPRS(GMSK)	☐ Multi-slot Class:8-1UP ☐ Multi-slot Class:10-2UP	824 ~ 849	869 ~ 894		
	1900	EGPRS(GMSK,8PSK)	☒ Multi-slot Class:12-4UP ☐ Multi-slot Class:33-4UP	1850 ~ 1910	1930 ~ 1990		
	Does this device support DTM (Dual Transfer Mode)? ☐ Yes ☒ No						
WCDMA	Band II	QPSK, 16QAM	HSDPA UE Category:24 HSUPA UE Category:7	1850 ~ 1910	1930 ~ 1990		
	Band IV			1710 ~ 1755	2110 ~ 2155		
	Band V			824 ~ 849	869 ~ 894		
LTE	FDD 2	QPSK, 16QAM, 64QAM	Rel.9 /Category 16	1850 ~ 1910	1930 ~ 1990		
	FDD 4			1710 ~ 1755	2110 ~ 2155		
	FDD 5			824 ~ 849	869 ~ 894		
	FDD 7			2500 ~ 2570	2620 ~ 2690		
	FDD 12			699 ~ 716	729 ~ 746		
	FDD 13			777 ~ 787	746 ~ 756		
	FDD 17			704 ~ 716	734 ~ 746		
	FDD 26			814 ~ 849	859 ~ 894		
	TDD 38			2570 ~ 2620	2570 ~ 2620		
	TDD 41			2496 ~ 2690	2496 ~ 2690		
	FDD 66			1710 ~ 1780	2110 ~ 2180		
	Does this device support Carrier Aggregation (CA) ☒ Yes downlink only ☐ No						
	Does this device support SV-LTE (1xRTT-LTE)? ☐ Yes ☒ No						
Bluetooth	2.4G	Version 5.2 BR/EDR + LE		2402 ~2480	2402 ~2480		
Wi-Fi	2.4G	DSSS, OFDM	802.11b/g/n HT20	2412 ~ 2462	2412 ~ 2462		
	5G	OFDM	802.11a/n HT20/ HT40/ ac VHT20/ VHT40/ VHT80	5150 ~ 5250	5150 ~ 5250		
				5250 ~ 5350	5250 ~ 5350		
				5470 ~ 5725	5470 ~ 5725		
				5725 ~ 5850	5725 ~ 5850		
Does this device support MIMO ☐ Yes ☒ No							
NFC	NFC	ASK	NFC-A; NFC-B; NFC-F; NFC-V	13.56MHz	/		

4 Test Specification, Methods and Procedures

The tests documented in this report were performed in accordance with FCC 47 CFR § 2.1093, IEEE 1528- 2013, ANSI C95.1: 1992, IEEE C95.1: 1991, the following FCC Published RF exposure KDB procedures:

Reference Standards

KDB 248227 D01 802.11Wi-Fi SAR v02r02

KDB 447498 D01 General RF Exposure Guidance v06

KDB 648474 D04 Handset SAR v01r03

KDB 690783 D01 SAR Listings on Grants v01r03

KDB 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04

KDB 865664 D02 RF Exposure Reporting v01r02

KDB 941225 D01 3G SAR Procedures v03r01

KDB 941225 D05 SAR for LTE Devices v02r05

KDB 941225 D06 Hotspot Mode v02r01

5 Operational Conditions during Test

5.1 Test Positions

5.1.1 Against Phantom Head

Measurements were made in “cheek” and “tilt” positions on both the left hand and right hand sides of the phantom.

The positions used in the measurements were according to IEEE 1528 - 2013 "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques".

5.1.2 Body Worn Configuration

Body-worn operating configurations should be tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in normal use configurations.

Per FCC KDB Publication 648474 D04, Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB Publication 447498 D01 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for a body-worn accessory, measured without a headset connected to the handset, is $> 1.2 \text{ W/kg}$, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

Accessories for Body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are tested with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

Body-worn accessories may not always be supplied or available as options for some devices intended to be authorized for body-worn use. In this case, a test configuration with a separation distance between the back of the device and the flat phantom is used. Test position spacing was documented. Transmitters that are designed to operate in front of a person's face, as in push-to-talk configurations, are tested for SAR compliance with the front of the device positioned to face the flat phantom in head fluid. For devices that are carried next to the body such as a shoulder, waist or chest-worn transmitters, SAR compliance is tested with the accessories, including headsets and microphones, attached to the device and positioned against a flat phantom in a normal use configuration.

5.1.3 Phablet SAR Test Considerations

For smart phones, with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, that can provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets and support voice calls next to the ear, unless it is confirmed otherwise through KDB inquiries, the following phablet procedures should be applied to evaluate SAR compliance for each applicable wireless modes and frequency band. Devices marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance.

- a) The normally required head and body-worn accessory SAR test procedures for handsets, including hotspot mode, must be applied.
- b) The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for product specific 10-g SAR according to the body-equivalent tissue dielectric parameters in KDB Publication 865664 D01 to address interactive hand use exposure conditions. The 1-g SAR at 5 mm for UMPC mini-tablets is not required. When hotspot mode applies, product specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold. The normal tablet procedures in KDB Publication 616217 are required when the overall diagonal dimension of the device is > 20.0 cm. Hotspot mode SAR is not required when normal tablet procedures are applied. Product specific 10-g SAR is also not required for the front (top) surface of larger form factor full size tablets. The more conservative normal tablet SAR results can be used to support phablet mode product specific 10-g SAR.
- c) The simultaneous transmission operating configurations applicable to voice and data transmissions for both phone and mini-tablet modes must be taken into consideration separately for 1-g and 10-g SAR to determine the simultaneous transmission SAR test exclusion and measurement requirements for the relevant wireless modes and exposure conditions.

5.2 Measurement Variability

Per FCC KDB Publication 865664 D01, SAR measurement variability was assessed for each frequency band, which was determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media were required for SAR measurements in a frequency band, the variability measurement procedures were applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. These additional measurements were repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device was returned to ambient conditions (normal room temperature) with the battery fully charged before it was re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement Variability was assessed using the following procedures for each frequency band:

- 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.
- 2) A second repeated measurement was performed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg ($\sim 10\%$ from the 1-g SAR limit).
- 3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .
- 4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

The same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.

5.3 Test Configuration

5.3.1 GSM Test Configuration

According to specification 3GPP TS 51.010, the maximum power of the GSM can do the power reduction for the multi-slot. The allowed power reduction in the multi-slot configuration is as following:

Output power of reductions:

Table 3: The allowed power reduction in the multi-slot configuration

Number of timeslots in uplink assignment	Permissible nominal reduction of maximum output power (dB)
1	0
2	0 to 3,0
3	1,8 to 4,8
4	3,0 to 6,0

SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested. GSM voice and GPRS data use GMSK, which is a constant amplitude modulation with minimal peak to average power difference within the time-slot burst. For EDGE, GMSK is used for MCS 1 – MCS 4 and 8-PSK is used for MCS 5 – MCS 9; where 8-PSK has an inherently higher peak-to-average power ratio. The GMSK and 8-PSK EDGE configurations are considered separately for SAR compliance. The GMSK EDGE configurations are grouped with GPRS and considered with respect to time-averaged maximum output power to determine compliance. The 3G SAR test reduction procedure is applied to 8-PSK EDGE with GMSK GPRS/EDGE as the primary mode.

5.3.2 WCDMA Test Configuration

5.3.2.1 3G SAR Test Reduction Procedure

The default test configuration is to measure SAR with an established radio link between the EUT and a communication test set using a 12.2 kbps RMC (reference measurement channel) configured in Test Loop Mode 1. SAR is selectively confirmed for other physical channel configurations modes according to output power, exposure conditions and device operating capabilities. Maximum output power is verified by applying the applicable versions of 3GPP TS 34.121.

5.3.2.2 Head SAR

SAR for next to the ear head exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's". The 3G SAR test reduction procedure is applied to AMR configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for 12.2 kbps AMR in 3.4 kbps SRB (signaling radio bearer) using the highest SAR configuration in 12.2 kbps RMC for head exposure.

5.3.2.3 Body-worn Accessory SAR

SAR for body-worn accessory configurations is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”. The 3G SAR test reduction procedure is applied to other spreading codes and multiple DPDCHn configurations supported by the EUT with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured using an applicable RMC configuration with the corresponding spreading code or DPDCHn, for the highest reported body-worn accessory exposure SAR configuration in 12.2 kbps RMC. When more than 2 DPDCHn are supported by the EUT, it may be necessary to configure additional DPDCHn using FTM (Factory Test Mode) or other chipset based test approaches with parameters similar to those used in 384 kbps and 768 kbps RMC

5.3.2.4 Release 5 HSDPA Test Configuration

The 3G SAR test reduction procedure is applied to HSDPA body-worn accessory configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSDPA using the HSDPA body SAR procedures in the “Release 5 HSDPA Data Devices” section of this document, for the highest SAR body-worn accessory exposure configuration in 12.2 kbps RMC. EUT with both HSDPA and HSUPA are tested according to Release 6 HSPA test procedures.

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

Table 4: Subtests for WCDMA Release 5 HSDPA

Sub-set	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs} (note 1, note 2)	CM(dB) (note 3)	MPR(dB)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (note 4)	15/15 (note 4)	64	12/15 (note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5
Note 1: Δ_{ACK}, Δ_{NACK} and $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$ Note 2: CM=1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. Note 3: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TFC1, TF1) to $\beta_c = 11/15$ and $\beta_d = 15/15$.							

5.3.2.5 Release 6 HSUPA Test Configuration

The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body-worn accessory configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSPA using the HSPA body SAR procedures in the “Release 6 HSPA Data Devices” section of this document, for the highest body-worn accessory exposure SAR configuration in 12.2 kbps RMC. When VOIP is applicable for next to the ear head exposure in HSPA, the 3G SAR test reduction procedure is applied to HSPA with 12.2 kbps RMC as the primary mode; otherwise, the same HSPA configuration used for body-worn accessory measurements is tested for next to the ear head exposure.

Due to inner loop power control requirements in HSPA, a communication test set is required for output power and SAR tests. The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSPA are configured according to the β values indicated in Table 2 and other applicable procedures described in the ‘WCDMA EUT’ and ‘Release 5 HSDPA Data Devices’ sections of this document

Table 5: Sub-Test 5 Setup for Release 6 HSUPA

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

Note 1: Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$.

Note 2: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.

Note 3: For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 10/15$ and $\beta_d = 15/15$.

Note 4: For subtest 5 the β_c/β_d ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 14/15$ and $\beta_d = 15/15$.

Note 5: Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Figure 5.1g.

Note 6: β_{ed} cannot be set directly; it is set by Absolute Grant Value.

Table 6: HSUPA UE Category

UE E-DCH Category	Maximum E-DCH Codes Transmitted	Number of HARQ Processes	E-DCHTTI (ms)	Minimum Spreading Factor	Maximum E-DCH Transport Block Bits	Max Rate (Mbps)
1	1	4	10	4	7110	0.7296
2	2	8	2	4	2798	1.4592
	2	4	10	4	14484	
3	2	4	10	4	14484	1.4592

4	2	8	2	2	5772	2.9185
	2	4	10	2	20000	2.00
5	2	4	10	2	20000	2.00
6 (No DPDCH)	4	8	2	2 SF2 & 2	11484	5.76
	4	4	10	SF4	20000	2.00
7 (No DPDCH)	4	8	2	2 SF2 & 2 SF4	22996	?
	4	4	10		20000	?
NOTE: When 4 codes are transmitted in parallel, two codes shall be transmitted with SF2 and two with SF4. UE Categories 1 to 6 supports QPSK only. UE Category 7 supports QPSK and 16QAM. (TS25.306-7.3.0)						

5.3.2.6 HSPA, HSPA+ and DC-HSDPA Test Configuration

SAR test exclusion may apply to 3GPP Rel. 6 HSPA and Rel. 8 DC-HSDPA. When SAR measurement is required for HSPA or DC-HSDPA, a KDB inquiry is required to confirm that the wireless mode configurations in the test setup have remained stable throughout the SAR measurements. Without prior KDB confirmation to determine the SAR results are acceptable, a PAG is required for equipment approval.

SAR test exclusion for HSPA, HSPA+ and DC-HSDPA is determined according to the following:

1) The HSPA procedures are applied to configure 3GPP Rel. 6 HSPA devices in the required sub-test mode(s) to determine SAR test exclusion.

2) SAR is required for Rel. 7 HSPA+ when SAR is required for Rel. 6 HSPA; otherwise, the 3G SAR test reduction procedure is applied to (uplink) HSPA+ with 12.2 kbps RMC as the primary mode. Power is measured for HSPA+ that supports uplink 16 QAM according to configurations in Table C.11.1.4 of 3GPP TS 34.121-1 to determine SAR test reduction.

3) SAR is required for Rel. 8 DC-HSDPA when SAR is required for Rel. 5 HSDPA; otherwise, the 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

4) Regardless of whether a PBA is required, the following information must be verified and included in the SAR report for devices supporting HSPA, HSPA+ or DC-HSDPA:

a) The output power measurement results and applicable release version(s) of 3GPP TS 34.121.

Power measurement difficulties due to test equipment setup or availability must be resolved between the grantee and its test lab.

b) The power measurement results are in agreement with the individual device implementation and specifications. When Enhanced MPR (E-MPR) applies, the normal MPR targets may be modified according to the Cubic Metric (CM) measured by the device, which must be taken into consideration.

c) The UE category, operating parameters, such as the β and Δ values used to configure the device for testing, power setback procedures described in 3GPP TS 34.121 for the power measurements, and HSPA/HSPA+ channel conditions (active and stable) for the entire duration of the measurement according to the required E-TFCI and AG index values.

5) When SAR measurement is required, the test configurations, procedures and power measurement

results must be clearly described to confirm that the required test parameters are used, including E-TFCI and AG index stability and output power conditions.

Table 7: HS-DSCH UE Category

HS-DSCH category	Maximum number of HS-DSCH codes received	Minimum inter-TTI interval	Maximum number of bits of an HS-DSCH transport block received within an HS-DSCH TTI NOTE 1	Total number of soft channel bits	Supported modulations without MIMO operation or dual cell operation	Supported modulations with MIMO operation and without dual cell operation	Supported modulations with dual cell operation
Category 1	5	3	7298	19200	QPSK, 16QAM	Not applicable (MIMO not supported)	Not applicable (dual cell operation not supported)
Category 2	5	3	7298	28800			
Category 3	5	2	7298	28800			
Category 4	5	2	7298	38400			
Category 5	5	1	7298	57600			
Category 6	5	1	7298	67200			
Category 7	10	1	14411	115200			
Category 8	10	1	14411	134400			
Category 9	15	1	20251	172800			
Category 10	15	1	27952	172800			
Category 11	5	2	3630	14400	QPSK		
Category 12	5	1	3630	28800			
Category 13	15	1	35280	259200	QPSK, 16QAM, 64QAM		
Category 14	15	1	42192	259200			
Category 15	15	1	23370	345600	QPSK, 16QAM		
Category 16	15	1	27952	345600	QPSK, 16QAM		
Category 17 NOTE 2	15	1	35280	259200	QPSK, 16QAM, 64QAM	–	
			23370	345600	–	QPSK, 16QAM	
Category 18 NOTE 3	15	1	42192	259200	QPSK, 16QAM, 64QAM	–	
			27952	345600	–	QPSK, 16QAM	
Category 19	15	1	35280	518400	QPSK, 16QAM, 64QAM		
Category 20	15	1	42192	518400	QPSK, 16QAM, 64QAM		
Category 21	15	1	23370	345600	-	-	QPSK, 16QAM
Category 22	15	1	27952	345600			QPSK, 16QAM, 64QAM
Category 23	15	1	35280	518400			QPSK, 16QAM, 64QAM
Category 24	15	1	42192	518400			QPSK, 16QAM, 64QAM

5.3.3 LTE Test Configuration

LTE modes were tested according to FCC KDB 941225 D05 publication. Please see notes after the tabulated SAR data for required test configurations. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR. The R&S CMW500 was used for LTE output power measurements and SAR testing. Max power control was used so the UE transmits with maximum output power during SAR testing. SAR must be measured with the maximum TTI (transmit time interval) supported by the device in each LTE configuration.

A) Spectrum Plots for RB Configurations

A properly configured base station simulator was used for SAR tests and power measurements. Therefore, spectrum plots for RB configurations were not required to be included in this report.

B) MPR

MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.

C) A-MPR

A-MPR (Additional MPR) has been disabled for all SAR tests by setting NS=01 on the base station simulator.

D) Largest Channel Bandwidth Standalone SAR Test Requirements

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 for 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.

4) Higher order modulations

For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in above sections to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is $> \frac{1}{2}$ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

E) Other Channel Bandwidth Standalone SAR Test Requirements

For the other channel bandwidths used by the device in a frequency band, apply all the procedures required for the largest channel bandwidth in section A) to determine the channels and RB configurations that need SAR testing and only measure SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is $> \frac{1}{2}$ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.

5.3.4 Additional Requirements for TDD LTE Specification

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.

TDD LTE Band supports 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table: Uplink-downlink configurations for uplink-downlink configurations and Table: Configuration of special subframe (lengths of DwPTS/GP/UpPTS) for Special subframe configurations.

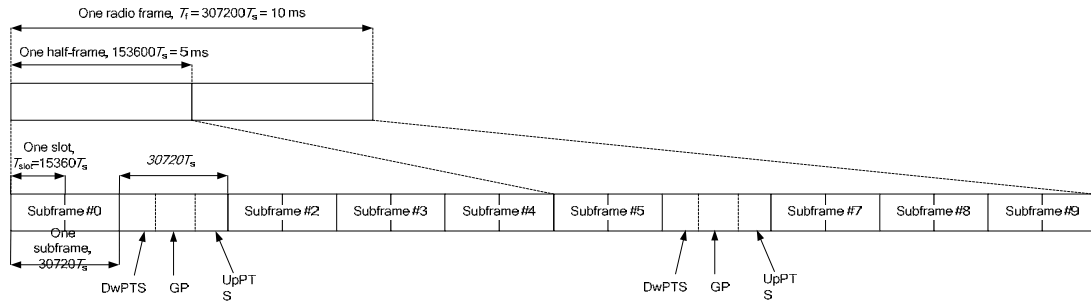


Figure 1: Frame structure type 2

Table 8: Configuration of Special Subframe (Lengths of DwPTS/GP/UpPTS)

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

Table 9: Uplink-Downlink Configurations

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

According to Figure 1, one radio frame is configured by 10 subframes, which consist of Uplink-subframe, Downlink-subframe and Special subframe. For TDD-LTE, the Duty Cycle should be calculated on Uplink-subframes and Special subframes, due to Special subframe containing both

Uplink transmissions. So for one radio frame, Duty Cycle can be calculated with formula as below. The count of Uplink subframes are according to Table: Uplink-downlink configurations:

$$\text{Duty cycle} = (30720\text{Ts} * \text{Ups} + \text{Uplink Component} * \text{Specials}) / (307200\text{Ts})$$

About the uplink component of Special subframes, we can figure out by Table: Configuration of special subframe (lengths of DwPTS/GP/UpPTS):

$$\text{Uplink Component} = \text{UpPTS}$$

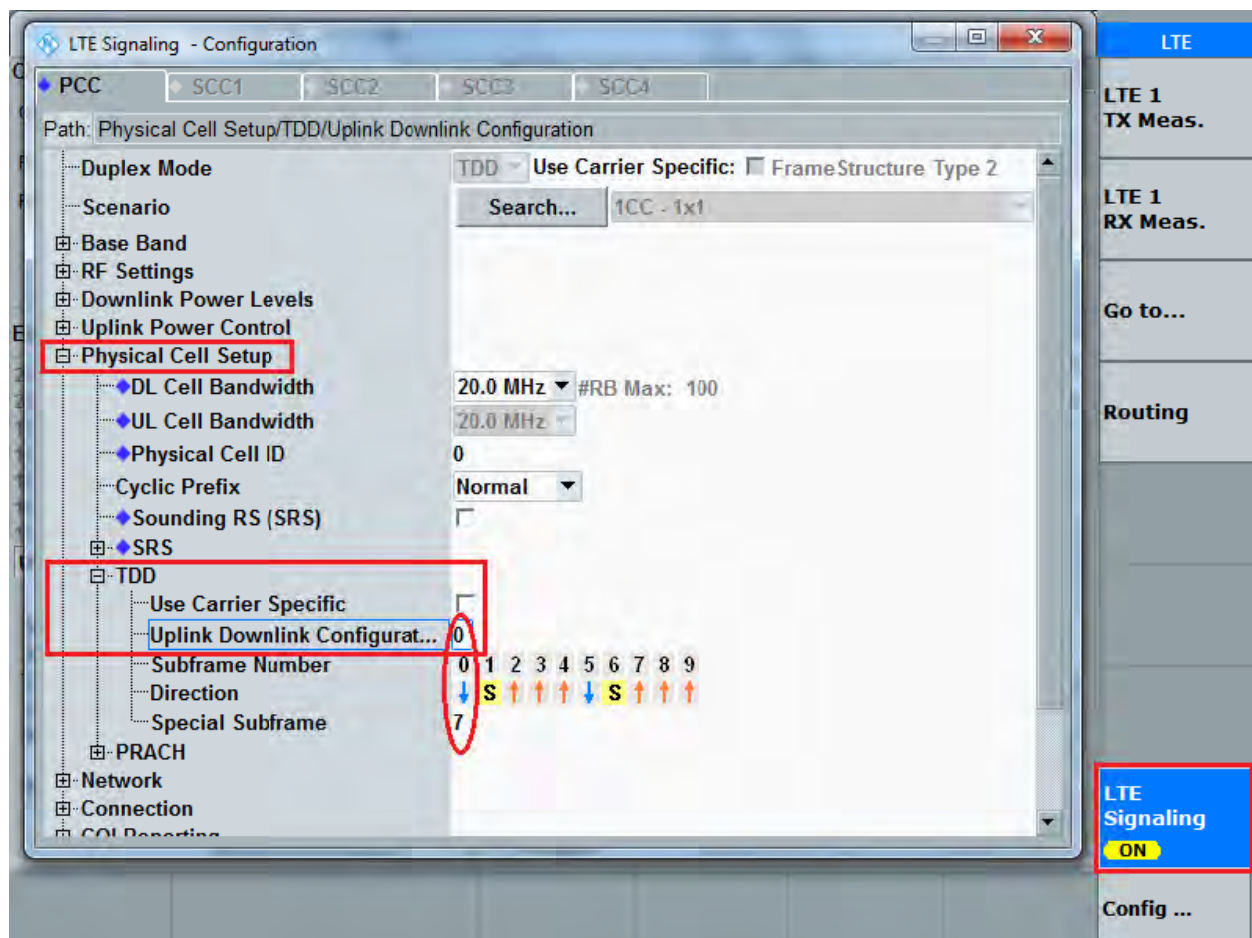
In conclusion, for the TDD LTE Band, Duty Cycle can be calculated with formula as below. All these sets are ok when we test, or we can set as below.

$$\text{Duty cycle} = [(30720\text{Ts} * \text{Ups}) + \text{UpPTS} * \text{Specials}] / (307200\text{Ts})$$

And we can get different Duty cycles under different configurations:

Uplink-downlink configuration	Subframe number			Configuration of special subframe							
				Normal cyclic prefix in downlink				Extended cyclic prefix in downlink			
				Normal cyclic prefix in uplink		Extended cyclic prefix in uplink		Normal cyclic prefix in uplink		Extended cyclic prefix in uplink	
	D	S	U	configuration 0~4	configuration 5~9	configuration 0~4	configuration 5~9	configuration 0~3	configuration 4~7	configuration 0~3	configuration 4~7
0	2	2	6	61.43%	62.85%	61.67%	63.33%	61.43%	62.85%	61.67%	63.33%
1	4	2	4	41.43%	42.85%	41.67%	43.33%	41.43%	42.85%	41.67%	43.33%
2	6	2	2	21.43%	22.85%	21.67%	23.33%	21.43%	22.85%	21.67%	23.33%
3	6	1	3	30.71%	31.43%	30.83%	31.67%	30.71%	31.43%	30.83%	31.67%
4	7	1	2	20.71%	21.43%	20.83%	21.67%	20.71%	21.43%	20.83%	21.67%
5	8	1	1	10.71%	11.43%	10.83%	11.67%	10.71%	11.43%	10.83%	11.67%
6	3	2	5	51.43%	52.85%	51.67%	53.33%	51.43%	52.85%	51.67%	53.33%

SAR test Plan: For TDD LTE, SAR should be tested with the highest transmission duty factor (63.33%) using Uplink-downlink configuration 0 and Special subframe configuration 7 for Frame structure type



5.3.5 Wi-Fi Test Configuration

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

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

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

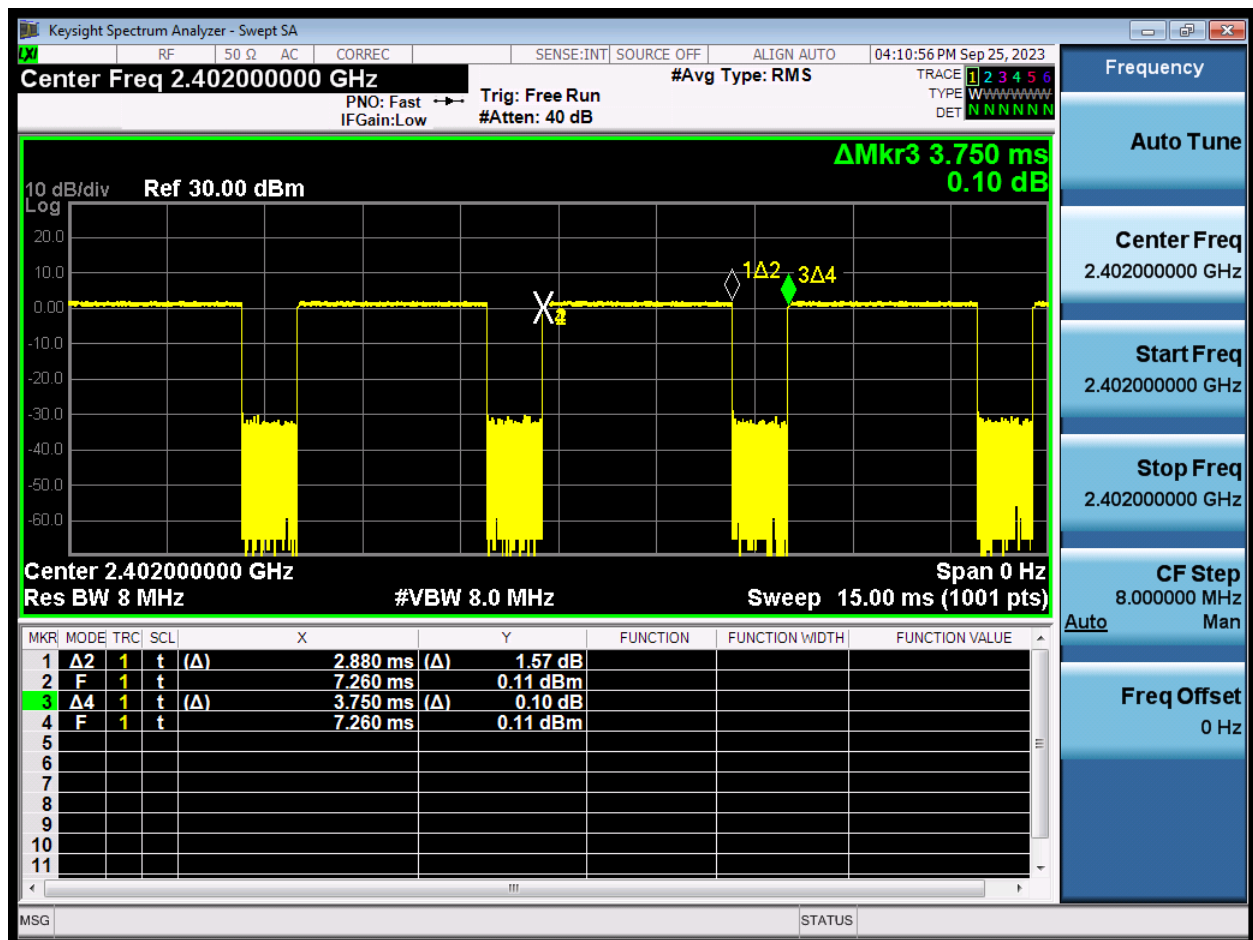
To determine the initial test position, Area Scans were performed to determine the position with the Maximum Value of SAR (measured). The position that produced the highest Maximum Value of SAR is considered the worst case position; thus used as the initial test position.

A Wi-Fi device must be configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools for SAR measurement.

5.3.6 Bluetooth Test Configuration

For Bluetooth SAR testing, Bluetooth engineering testing software installed on the EUT can provide continuous transmitting RF signal with maximum output power. And the CBT control the EUT operating with hoping off and data rate set for DH5.

The SAR measurement takes full account of the Bluetooth duty cycle and is reflected in the report, and the duty factor of the device is as follow:



Note: Duty factor= Ton (ms)/ T(on+off) (ms)=2.880/3.750*100%=76.8%

5.3.7 LTE CA specification

The device supports LTE advanced Rel. 9, Carrier Aggregation (CA) is supported for Intra band contiguous, Intra band non-contiguous and Inter band, more details information is provided in tables below:

1) DL CA Intra band contiguous

E-UTRA CA configuration / Bandwidth combination set								
E-UTRA CA configuration	Downlink CA configurations (NOTE 3)	Component carriers in order of increasing carrier frequency					Maximum aggregated bandwidth [MHz]	Bandwidth combination set
		Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]		
CA_2C		5	20				40	0
		10	15, 20					
		15	10, 15, 20					
		20	5, 10, 15, 20					
CA_7C	CA_7C	15	15				40	0
		20	20					
		10	20				40	1
		15	15, 20					
		20	10, 15, 20				40	2
		15	10, 15					
CA_38C	CA_38C	20	15, 20				40	2
		20	15, 20					
CA_41C	CA_41C	15	15				40	0
		20	20					
		10	20				40	1
		15	15, 20					
		20	10, 15, 20				40	2
		5, 10	20					
		15	15, 20				40	3
		20	5, 10, 15, 20					
		10	15, 20				40	0
		15	10, 15, 20					
CA_66B	-	20	10, 15, 20				20	0
		10	20					
		15	5					
CA_66C	-	5	5, 10, 15				40	0
		10	5, 10					
		15	20					
		20	15, 20					

NOTE 1: The CA configuration refers to an operating band and a CA bandwidth class specified in Table 5.6A-1 (the indexing letter). Absence of a CA bandwidth class for an operating band implies support of all classes.

NOTE 2: For the supported CC bandwidth combinations, the CC downlink and uplink bandwidths are equal.

NOTE 3: Uplink CA configurations are the configurations supported by the present release of specifications.

NOTE 4: Restricted to E-UTRA operation when inter-band carrier aggregation is configured. The downlink operating band is paired with the uplink operating band (external) of the carrier aggregation configuration that is supporting the configured Pcell.

2) DL CA Intra band non-contiguous

E-UTRA CA configuration / Bandwidth combination set						
E-UTRA CA configuration	Uplink CA configurations	Component carriers in order of increasing carrier frequency			Maximum aggregated bandwidth [MHz]	Bandwidth combination set
		Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]		
CA_2A-2A	-	5, 10, 15, 20	5, 10, 15, 20		40	0
CA_4A-4A	CA_4A-4A	5, 10, 15, 20	5, 10, 15, 20		40	0
		5, 10	5, 10		20	1
CA_7A-7A	-	5	15		40	0
		10	10, 15			
		15	15, 20			
		20	20			
		5, 10, 15, 20	5, 10, 15, 20		40	1
		5, 10, 15, 20	5, 10		30	2
		10, 15, 20	10, 15, 20		40	3
CA_41A-41A	-	10, 15, 20	5, 10, 15, 20		40	0
		5, 10, 15, 20	5, 10, 15, 20		40	1
CA_66A-66A	-	5, 10, 15, 20	5, 10, 15, 20		40	0

3) DL CA Inter-band

E-UTRA CA Configuration	E-UTRA Bands	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	Maximum aggregated bandwidth [MHz]	Bandwidth combination set
CA_2A-4A	2	Yes	Yes	Yes	Yes	Yes	Yes	40	0
	4			Yes	Yes	Yes	Yes		
	2			Yes	Yes			20	1
	4			Yes	Yes				
	2			Yes	Yes	Yes	Yes	40	2
	4			Yes	Yes	Yes	Yes		
CA_2A-5A	2			Yes	Yes	Yes	Yes	30	0
	5			Yes	Yes				
	2			Yes	Yes			20	1
	5			Yes	Yes				
CA_2A-7A	2			Yes	Yes	Yes	Yes	40	0
	7			Yes	Yes	Yes	Yes		
CA_2A-66A	2	Yes	Yes	Yes	Yes	Yes	Yes	40	0
	66			Yes	Yes	Yes	Yes		
	2			Yes	Yes			20	1
	66			Yes	Yes				
	2			Yes	Yes	Yes	Yes	40	2
	66			Yes	Yes	Yes	Yes		
CA_4A-5A	4			Yes	Yes			20	0
	5			Yes	Yes				
	4			Yes	Yes	Yes	Yes	30	1
	5			Yes	Yes				
CA_4A-7A	4			Yes	Yes			30	0
	7			Yes	Yes	Yes	Yes		
	4			Yes	Yes	Yes	Yes	40	1
	7			Yes	Yes	Yes	Yes		
CA_5A-7A	5	Yes	Yes	Yes	Yes			30	0
	7				Yes	Yes	Yes		
	5				Yes	Yes		30	1
	7				Yes	Yes	Yes		
CA_5A-66A	5			Yes	Yes			30	0
	66			Yes	Yes	Yes	Yes		
CA_7A-26A	7			Yes	Yes	Yes	Yes	35	0
	26			Yes	Yes	Yes			
CA_7A-66A	7			Yes	Yes	Yes	Yes	40	0
	66			Yes	Yes	Yes	Yes		

CA_12A-66A	12			Yes	Yes			20	0
	66	Yes	Yes	Yes	Yes				
	12			Yes	Yes			30	1
	66	Yes	Yes	Yes	Yes	Yes	Yes		
	12		Yes	Yes	Yes			30	2
	66			Yes	Yes	Yes	Yes		
	12			Yes	Yes			20	3
	66			Yes	Yes				
	12			Yes	Yes			30	4
	66			Yes	Yes	Yes	Yes		
	12			Yes				20	5
	66			Yes	Yes	Yes			
CA_26A-41A	26			Yes	Yes	Yes		35	0
	41			Yes	Yes	Yes	Yes		

NOTE 1: The CA Configuration refers to a combination of an operating band and a CA bandwidth class specified in Table 5.4.2A-1 (the indexing letter). Absence of a CA bandwidth class for an operating band implies support of all classes.

NOTE 2: For each band combination, all combinations of indicated bandwidths belong to the set.

For downlink carrier aggregation, SAR is not required for downlink carrier aggregation in active uplink maximum output power not more than 1/4dB higher than the maximum output power measured when downlink carrier aggregation inactive.

5.3.8 Proximity Sensor Configuration

Due to the operating configurations and exposure conditions required by the device, the proximity sensor is used to indicate when the device 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 of Low Antenna and Div Antenna to ensure SAR compliance. 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.

The following tables summarize the key power reduction information for proximity sensor. The test procedures be applied to determine proximity sensor triggering distances, and sensor coverage for normal and tilt positions. To ensure all production units are compliant, it is generally necessary to reduce the triggering distance determined from the triggering tests by 1 mm, or more if it is necessary, and use the smallest distance for movements to and from the phantom, minus 1 mm, as the sensor triggering distance for determining the SAR measurement distance.

Low Antenna				
Band	Test Position	Sensor Trigger Distance Range (DUT to Phantom)	Power Reduction Amount(dB)	Power Level
GSM 1900	Back Side	0mm≤Distance≤18mm	4.5	DSI-4
		18mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤12mm	4.5	DSI-4
		12mm<Distance	0	DSI-2
	Left Edge	0mm≤Distance≤6mm	4.5	DSI-4
		6mm<Distance	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	/	0	DSI-2
	Bottom Edge	0mm≤Distance≤18mm	4.5	DSI-4
		18mm<Distance	0	DSI-2
WCDMA B2	Back Side	0mm≤Distance≤18mm	6	DSI-4
		18mm<Distance	1.5	DSI-2
	Front Side	0mm≤Distance≤12mm	6	DSI-4
		12mm<Distance	1.5	DSI-2
	Left Edge	0mm≤Distance≤6mm	6	DSI-4
		6mm<Distance	1.5	DSI-2
	Right Edge	/	1.5	DSI-2
	Top Edge	/	1.5	DSI-2
	Bottom Edge	0mm≤Distance≤18mm	6	DSI-4
		18mm<Distance	1.5	DSI-2
WCDMA B4	Back Side	0mm≤Distance≤18mm	5.5	DSI-4
		18mm<Distance	1.5	DSI-2
	Front Side	0mm≤Distance≤12mm	5.5	DSI-4
		12mm<Distance	1.5	DSI-2
	Left Edge	0mm≤Distance≤6mm	5.5	DSI-4

		6mm<Distance	1.5	DSI-2
	Right Edge	/	1.5	DSI-2
	Top Edge	/	1.5	DSI-2
	Bottom Edge	0mm≤Distance≤18mm	5.5	DSI-4
		18mm<Distance	1.5	DSI-2
LTE B2	Back Side	0mm≤Distance≤18mm	5	DSI-4
		18mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤12mm	5	DSI-4
		12mm<Distance	0	DSI-2
	Left Edge	0mm≤Distance≤6mm	5	DSI-4
		6mm<Distance	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	/	0	DSI-2
	Bottom Edge	0mm≤Distance≤18mm	5	DSI-4
		18mm<Distance	0	DSI-2
LTE B4	Back Side	0mm≤Distance≤18mm	1	DSI-4
		18mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤12mm	1	DSI-4
		12mm<Distance	0	DSI-2
	Left Edge	0mm≤Distance≤6mm	1	DSI-4
		6mm<Distance	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	/	0	DSI-2
	Bottom Edge	0mm≤Distance≤18mm	1	DSI-4
		18mm<Distance	0	DSI-2
LTE B7	Back Side	0mm≤Distance≤18mm	3	DSI-4
		18mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤12mm	3	DSI-4
		12mm<Distance	0	DSI-2
	Left Edge	0mm≤Distance≤6mm	3	DSI-4
		6mm<Distance	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	/	0	DSI-2
	Bottom Edge	0mm≤Distance≤18mm	3	DSI-4
		18mm<Distance	0	DSI-2
LTE B26	Back Side	0mm≤Distance≤18mm	1.5	DSI-4
		18mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤12mm	1.5	DSI-4
		12mm<Distance	0	DSI-2
	Left Edge	0mm≤Distance≤6mm	1.5	DSI-4
		6mm<Distance	0	DSI-2
	Right Edge	/	0	DSI-2

	Top Edge	/	0	DSI-2
	Bottom Edge	0mm≤Distance≤18mm	1.5	DSI-4
		18mm<Distance	0	DSI-2
LTE B38	Back Side	0mm≤Distance≤18mm	2	DSI-4
		18mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤12mm	2	DSI-4
		12mm<Distance	0	DSI-2
	Left Edge	0mm≤Distance≤6mm	2	DSI-4
		6mm<Distance	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	/	0	DSI-2
	Bottom Edge	0mm≤Distance≤18mm	2	DSI-4
		18mm<Distance	0	DSI-2
LTE B41	Back Side	0mm≤Distance≤18mm	2.5	DSI-4
		18mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤12mm	2.5	DSI-4
		12mm<Distance	0	DSI-2
	Left Edge	0mm≤Distance≤6mm	2.5	DSI-4
		6mm<Distance	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	/	0	DSI-2
	Bottom Edge	0mm≤Distance≤18mm	2.5	DSI-4
		18mm<Distance	0	DSI-2
Upper Antenna				
Band	Test Position	Sensor Trigger Distance Range (DUT to Phantom)	Power Reduction Amount(dB)	Power Level
GSM 850	Back Side	0mm≤Distance≤18mm	1	DSI-4
		18mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤12mm	1	DSI-4
		12mm<Distance	0	DSI-2
	Left Edge	0mm≤Distance≤6mm	1	DSI-4
		6mm<Distance	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤18mm	1	DSI-4
		18mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2
GSM 1900	Back Side	0mm≤Distance≤18mm	4.5	DSI-4
		18mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤12mm	4.5	DSI-4
		12mm<Distance	0	DSI-2
	Left Edge	0mm≤Distance≤6mm	4.5	DSI-4

		6mm<Distance	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤18mm	4.5	DSI-4
		18mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2
WCDMA B2	Back Side	0mm≤Distance≤18mm	5.5	DSI-4
		18mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤12mm	5.5	DSI-4
		12mm<Distance	0	DSI-2
	Left Edge	0mm≤Distance≤6mm	5.5	DSI-4
		6mm<Distance	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤18mm	5.5	DSI-4
		18mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2
WCDMA B4	Back Side	0mm≤Distance≤18mm	4.5	DSI-4
		18mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤12mm	4.5	DSI-4
		12mm<Distance	0	DSI-2
	Left Edge	0mm≤Distance≤6mm	4.5	DSI-4
		6mm<Distance	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤18mm	4.5	DSI-4
		18mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2
LTE B2	Back Side	0mm≤Distance≤18mm	6	DSI-4
		18mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤12mm	6	DSI-4
		12mm<Distance	0	DSI-2
	Left Edge	0mm≤Distance≤6mm	6	DSI-4
		6mm<Distance	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤18mm	6	DSI-4
		18mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2
LTE B4	Back Side	0mm≤Distance≤18mm	4	DSI-4
		18mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤12mm	4	DSI-4
		12mm<Distance	0	DSI-2
	Left Edge	0mm≤Distance≤6mm	4	DSI-4
		6mm<Distance	0	DSI-2
	Right Edge	/	0	DSI-2
		/	0	DSI-2

	Top Edge	0mm≤Distance≤18mm	4	DSI-4
		18mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2
LTE B5	Back Side	0mm≤Distance≤18mm	0.5	DSI-4
		18mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤12mm	0.5	DSI-4
		12mm<Distance	0	DSI-2
	Left Edge	0mm≤Distance≤6mm	0.5	DSI-4
		6mm<Distance	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤18mm	0.5	DSI-4
		18mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2
LTE B7	Back Side	0mm≤Distance≤18mm	3.5	DSI-4
		18mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤12mm	3.5	DSI-4
		12mm<Distance	0	DSI-2
	Left Edge	0mm≤Distance≤6mm	3.5	DSI-4
		6mm<Distance	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤18mm	3.5	DSI-4
		18mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2
LTE B26	Back Side	0mm≤Distance≤18mm	0.5	DSI-4
		18mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤12mm	0.5	DSI-4
		12mm<Distance	0	DSI-2
	Left Edge	0mm≤Distance≤6mm	0.5	DSI-4
		6mm<Distance	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤18mm	0.5	DSI-4
		18mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2

Note:

To ensure all production units are compliant, the smallest separation distance determined by the sensor triggering and sensor coverage for normal and tilt positions for all usage conditions and applicable sides, minus 1 mm, must be used as the test separation distance for additional SAR testing of each higher power stage.

For the other sides or other frequency bands of the device, SAR is still tested at the maximum full power level with sensor off.

5.3.9 Procedures for Determining Proximity Sensor Triggering Distances

The device was tested by the test lab to determine the proximity sensor triggering distances for the back side, front side, left edge, top edge and bottom edge of the device. To ensure all production units are compliant, the smallest separation distance determined by the sensor triggering minus 1 mm, must be used as the test separation distance for SAR testing.

The Proximity sensor triggering distance measurement method are as below:

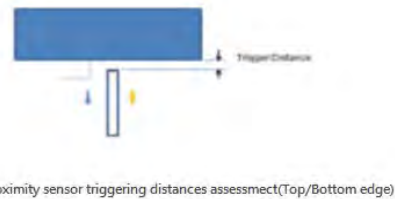
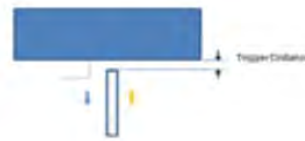
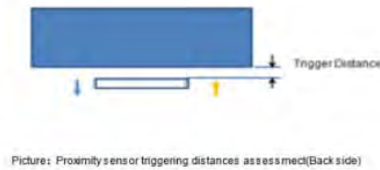


Table: Summary of Trigger Distances for Low Antenna:

Band	Trigger Distance-Back Side		Trigger Distance-Front Side		Trigger Distance-Left Edge		Trigger Distance-Bottom Edge	
	Moving Toward Phantom	Moving Away from Phantom	Moving Toward Phantom	Moving Away from Phantom	Moving Toward Phantom	Moving Away from Phantom	Moving Toward Phantom	Moving Away from Phantom
GSM1900	18	18	12	12	6	6	18	18
WCDMA B2	18	18	12	12	6	6	18	18
WCDMA B4	18	18	12	12	6	6	18	18
LTE B2	18	18	12	12	6	6	18	18
LTE B4	18	18	12	12	6	6	18	18
LTE B7	18	18	12	12	6	6	18	18
LTE B26	18	18	12	12	6	6	18	18
LTE B38	18	18	12	12	6	6	18	18
LTE B41	18	18	12	12	6	6	18	18

Table: Summary of Trigger Distances for Upper Antenna:

Band	Trigger Distance- Back Side		Trigger Distance- Front Side		Trigger Distance- Left Edge		Trigger Distance- Top Edge	
	Moving Toward Phantom	Moving Away from Phantom	Moving Toward Phantom	Moving Away from Phantom	Moving Toward Phantom	Moving Away from Phantom	Moving Toward Phantom	Moving Away from Phantom
GSM 850	18	18	12	12	6	6	18	18
GSM1900	18	18	12	12	6	6	18	18
WCDMA B2	18	18	12	12	6	6	18	18
WCDMA B4	18	18	12	12	6	6	18	18
LTE B2	18	18	12	12	6	6	18	18
LTE B4	18	18	12	12	6	6	18	18
LTE B5	18	18	12	12	6	6	18	18
LTE B7	18	18	12	12	6	6	18	18
LTE B26	18	18	12	12	6	6	18	18

Conclusion: It can be ensured that the proximity sensor can be valid triggered for the body exposure condition (GSM1900, WCDMA Band2/4, LTE Band 2/4/7/26/38/41 with Low Antenna;
GSM 850/1900, WCDMA Band2/4, LTE Band 2/4/5/7/26 with Upper Antenna)

The Roughly Calculated Power Measurement Data to Determine the Triggering Distances is as below:

Table: Power Reduced Status (Moving Toward Phantom)

Position	Ant	Band	Power Reduction Status(dBm)																																						
			37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1		
Back Side	Low Antenna	GSM1900	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30
Back Side	Low Antenna	WCDMA B2	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43
Back Side	Low Antenna	WCDMA B4	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43	22.43
Back Side	Low Antenna	LTE B2	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32
Back Side	Low Antenna	LTE B4	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19
Back Side	Low Antenna	LTE B7	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72	24.72
Back Side	Low Antenna	LTE B26	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08	24.08
Back Side	Low Antenna	LTE R36	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64
Back Side	Low Antenna	LTE B41	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29	24.29

[illegible][illegible]

Position	Ant	Band	Power Reduction (dB/100MHz)																															
			1	2	4	6	8	10	12	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	
Left Edge	Los Angeles	WSPN1950	18.76	18.76	10.76	18.76	18.76	18.76	18.76	18.76	18.76	18.76	18.76	18.76	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30
Left Edge	Los Angeles	WCDMA1920	18.76	18.76	10.76	18.76	18.76	18.76	18.76	18.76	18.76	18.76	18.76	18.76	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30
Left Edge	Los Angeles	WCDMA1920	10.76	10.76	10.76	10.76	10.76	10.76	10.76	10.76	10.76	10.76	10.76	10.76	20.45	20.45	20.45	20.45	20.45	20.45	20.45	20.45	20.45	20.45	20.45	20.45	20.45	20.45	20.45	20.45	20.45	20.45	20.45	
Left Edge	Los Angeles	LTE B7	19.45	19.45	19.45	19.45	19.45	19.45	19.45	19.45	19.45	19.45	19.45	19.45	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.32	
Left Edge	Los Angeles	LTE B7	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	
Left Edge	Los Angeles	LTE B7	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	
Left Edge	Los Angeles	LTE B7	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	
Left Edge	Los Angeles	LTE B7	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	
Left Edge	Los Angeles	LTE B7	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	
Left Edge	Los Angeles	LTE B7	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	
Left Edge	Los Angeles	LTE B7	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	22.59	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	24.64	
Left Edge	Los Angeles	LTE B7	22.59	22.59	22.59	22.5																												

[illegible][illegible][illegible]

Position	Ant	Band	Power Reduction Status(dBm)																															
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Left Edge	Upper Antenna	GSB 850	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30
Left Edge	Upper Antenna	GSB 850	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30	19.30
Left Edge	Upper Antenna	GSB 850	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30
Left Edge	Upper Antenna	WCMA 850	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10
Left Edge	Upper Antenna	LTE B2	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	17.47	
Left Edge	Upper Antenna	LTE B4	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	
Left Edge	Upper Antenna	LTE B5	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	
Left Edge	Upper Antenna	LTE B6	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	
Left Edge	Upper Antenna	LTE B7	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	
Left Edge	Upper Antenna	LTE B8	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	23.81	
Left Edge	Upper Antenna	LTE B9	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	
Left Edge	Upper Antenna	LTE B10	2																															

[illegible]

5.3.10 Procedures for Determining Device Tilt Angle Influences to Proximity Sensor Triggering

The DUT was positioned directly below the flat phantom at the minimum measured trigger distance with Bottom Edge and Top Edge parallel to the base of the flat phantom for each band.

The EUT was rotated about Left Edge and Bottom Edge and Top Edge for angles up to $\pm 45^\circ$. If the output power increased during the rotation the DUT was moved 1mm toward the phantom and the rotation repeated. This procedure was repeated until the power remained reduced for all angles up to $\pm 45^\circ$.

The proximity sensor triggering tilt angle measurement method are as below:

The DUT was positioned directly below the flat phantom at the minimum measured trigger distance with Bottom Edge and Top Edge parallel to the base of the flat phantom for each band.

The EUT was rotated about Bottom Edge and Top Edge for angles up to $\pm 45^\circ$. If the output power increased during the rotation the DUT was moved 1mm toward the phantom and the rotation repeated. This procedure was repeated until the power remained reduced for all angles up to $\pm 45^\circ$.

The proximity sensor triggering tilt angle measurement method are as below:

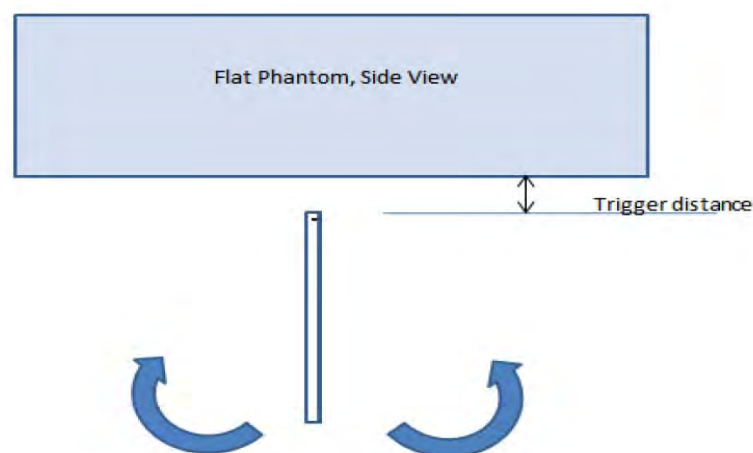


Table: Summary of Tablet Tilt Angle Influence to Proximity Sensor Triggering (Left Edge / Bottom Edge /Top Edge)

Band(MHz)	Position	Minimum Trigger Distance at which Power Reduction was Lowtained over $\pm 45^{\circ}$	Power Reduction Status											
			-45°	-35°	-25°	-15°	-5°	0°	5°	15°	25°	35°	45°	
GSM1900	Left Edge	6mm	on	on	on	on	on	on	on	on	on	on	on	
WCDMA B2	Left Edge	6mm	on	on	on	on	on	on	on	on	on	on	on	
WCDMA B4	Left Edge	6mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B2	Left Edge	6mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B4	Left Edge	6mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B7	Left Edge	6mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B26	Left Edge	6mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B38	Left Edge	6mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B41	Left Edge	6mm	on	on	on	on	on	on	on	on	on	on	on	
GSM1900	Bottom Edge	18mm	on	on	on	on	on	on	on	on	on	on	on	
WCDMA B2	Bottom Edge	18mm	on	on	on	on	on	on	on	on	on	on	on	
WCDMA B4	Bottom Edge	18mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B2	Bottom Edge	18mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B4	Bottom Edge	18mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B7	Bottom Edge	18mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B26	Bottom Edge	18mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B38	Bottom Edge	18mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B41	Bottom Edge	18mm	on	on	on	on	on	on	on	on	on	on	on	
GSM 850	Left Edge	6mm	on	on	on	on	on	on	on	on	on	on	on	
GSM1900	Left Edge	6mm	on	on	on	on	on	on	on	on	on	on	on	
WCDMA B2	Left Edge	6mm	on	on	on	on	on	on	on	on	on	on	on	
WCDMA B4	Left Edge	6mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B2	Left Edge	6mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B4	Left Edge	6mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B5	Left Edge	6mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B7	Left Edge	6mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B26	Left Edge	6mm	on	on	on	on	on	on	on	on	on	on	on	
GSM 850	Top Edge	18mm	on	on	on	on	on	on	on	on	on	on	on	
GSM1900	Top Edge	18mm	on	on	on	on	on	on	on	on	on	on	on	
WCDMA B2	Top Edge	18mm	on	on	on	on	on	on	on	on	on	on	on	
WCDMA B4	Top Edge	18mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B2	Top Edge	18mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B4	Top Edge	18mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B5	Top Edge	18mm	on	on	on	on	on	on	on	on	on	on	on	
LTE B7	Top Edge	18mm	on	on	on	on	on	on	on	on	on	on	on	

LTE B26	Top Edge	18mm	on	on	on	on	on	on	on	on	on	on	on
---------	----------	------	----	----	----	----	----	----	----	----	----	----	----

Conclusion: It can be ensured that the proximity sensor can be valid triggered for the DUT tilt coverage exposure condition.

5.3.11 SAR Detection Mechanism Specification

This device support the receiver and sensor detection mechanism, the main purpose is to minimize triggering associated with power reduction scenarios and provide enhanced user experience.

More details information followings:

Main Antenna			Power Reduction Level Amount (dB)															
Power Reduction Scenario	Power Level	Receiver/Sensor Mode	GSM850	GSM1900	WCDMA B2	WCDMA B4	WCDMA B5	LTE B2	LTE B4	LTE B5	LTE B7	LTE B12	LTE B13	LTE B17	LTE B26	LTE B38	LTE B41	
Full power	DS5	Full power	33.50	30.50	25.00	25.50	25.50	25.00	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	
		Receiver on	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		DS2 Receiver off+Sensor off	0.00	0.00	1.50	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		DS4 Receiver off+Sensor on	0.00	4.50	6.00	5.50	0.00	5.00	1.00	0.00	3.00	0.00	0.00	0.00	1.50	2.00	2.50	
Standalone	DS1	Receiver on	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		DS2 Receiver off+Sensor off	0.00	0.00	1.50	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		DS2 Receiver off+Sensor off	0.00	0.00	1.50	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		DS4 Receiver off+Sensor on	0.00	4.50	6.00	5.50	0.00	5.00	1.00	0.00	3.00	0.00	0.00	0.00	1.50	2.00	2.50	
Simultaneous	Wi-Fi on	Receiver on	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		DS2 Receiver off+Sensor off	0.00	0.00	1.50	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		DS2 Receiver off+Sensor off	0.00	0.00	1.50	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		DS4 Receiver off+Sensor on	0.00	4.50	6.00	5.50	0.00	5.00	1.00	0.00	3.00	0.00	0.00	0.00	1.50	2.00	2.50	

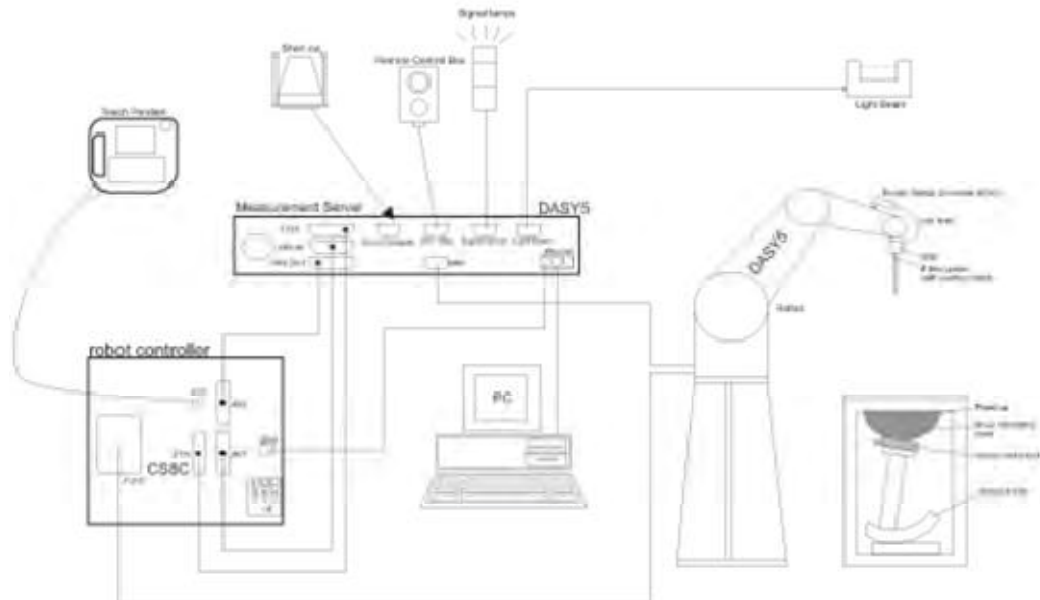
Div Antenna			Power Reduction Level Amount (dB)															
Power Reduction Scenario	Power Level	Receiver/Sensor Mode	GSM850	GSM1900	WCDMA B2	WCDMA B4	WCDMA B5	LTE B2	LTE B4	LTE B5	LTE B7	LTE B12	LTE B13	LTE B17	LTE B26	LTE B38	LTE B41	
Full power	DS5	Full power	33.50	30.50	23.50	25.50	25.50	24.00	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	
		Receiver on	0.00	6.00	7.50	6.50	0.00	7.50	6.50	0.50	7.50	0.00	0.00	0.00	0.50	3.00	5.50	
		DS2 Receiver off+Sensor off	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		DS4 Receiver off+Sensor on	0.00	4.50	5.50	4.50	0.00	6.00	4.00	0.50	3.50	0.00	0.00	0.00	0.50	0.00	0.00	
Standalone	DS1	Receiver on	0.00	6.00	7.50	6.50	0.00	7.50	6.50	0.50	7.50	0.00	0.00	0.00	0.50	3.00	5.50	
		DS2 Receiver off+Sensor off	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		DS4 Receiver off+Sensor on	0.00	4.50	5.50	4.50	0.00	6.00	4.00	0.50	3.50	0.00	0.00	0.00	0.50	0.00	0.00	
		DS2 Receiver off+Sensor off	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Simultaneous	Wi-Fi on	Receiver on	0.00	6.00	7.50	6.50	0.00	7.50	6.50	0.50	7.50	0.00	0.00	0.00	0.50	3.00	5.50	
		DS2 Receiver off+Sensor off	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		DS2 Receiver off+Sensor off	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		DS4 Receiver off+Sensor on	0.00	4.50	5.50	4.50	0.00	6.00	4.00	0.50	3.50	0.00	0.00	0.00	0.50	0.00	0.00	

Wi-Fi Antenna		Power Reduction Level Amount (dB)								
Power Reduction Scenario	Receiver Mode	Wi-Fi 2.4G 802.11b	Wi-Fi 2.4G 802.11g	Wi-Fi 2.4G 802.11n HT20	Wi-Fi 5G 802.11a	Wi-Fi 5G 802.11n HT20	Wi-Fi 5G 802.11n HT40	Wi-Fi 5G 802.11ac-VHT20	Wi-Fi 5G 802.11ac-VHT40	Wi-Fi 5G 802.11ac-VHT80
Full power	off	20.50	19.50	19.50	18.50	17.50	16.00	17.50	15.50	13.50
	on	1.50	1.50	1.50	3.00	3.00	3.00	3.00	0.00	0.00
Standalone	off	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	on	1.50	1.50	1.50	3.00	3.00	3.00	3.00	0.00	0.00
Simultaneous with 2G&3G&4G	off	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	on	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

6 SAR Measurements System Configuration

6.1 SAR Measurement Set-up

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



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running WinXP or Win7 and the DASY software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

6.2 DASY5 E-field Probe System

The SAR measurements were conducted with the dosimetric probe EX3DV4 (manufactured by SPEAG), designed in the classical triangular configuration and optimized for dosimetric evaluation.

EX3DV4 Probe Specification

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)
Dynamic Range	10 μ W/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μ W/g)
Dimensions	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
Application	High precision dosimetric measurements in any exposure Scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.



E-field Probe Calibration

Each probe is calibrated according to a dosimetric assessment procedure with accuracy better than $\pm 10\%$. The spherical isotropy was evaluated and found to be better than ± 0.25 dB. The sensitivity parameters (NormX, NormY, NormZ), the diode compression parameter (DCP) and the conversion factor (ConvF) of the probe are tested.

The free space E-field from amplified probe outputs is determined in a test chamber. This is performed in a TEM cell for frequencies below 1 GHz, and in a wave guide above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees.

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

$$SAR = C \Delta T / \Delta t$$

Where: Δt = Exposure time (30 seconds),
 C = Heat capacity of tissue (brain or muscle),
 ΔT = Temperature increase due to RF exposure.

Or

$$SAR = IEI^2 \sigma / \rho$$

Where: σ = Simulated tissue conductivity,
 ρ = Tissue density (kg/m³).

6.3 SAR Measurement Procedure

Power Reference Measurement

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

Area Scan

The area scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in DASY software can find the maximum found in the scanned area, within a range of the global maximum. The range (in dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan), if only one zoom scan follows the area scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of zoom scans has to be increased accordingly.

Area scan parameters extracted from FCC KDB 865664 D01 SAR measurement 100 MHz to 6 GHz.

	≤3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 ± 1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ 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.	

Zoom Scan

Zoom scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 gram and 10 gram of simulated tissue. The zoom scan measures points (refer to table below) within a cube whose base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the zoom scan evaluates the averaged SAR for 1 gram and 10 gram and displays these values next to the job's label.

Zoom scan parameters extracted from FCC KDB 865664 D01 SAR measurement 100 MHz to 6 GHz.

			≤3GHz	> 3 GHz
Maximum zoom scan spatial resolution: $\Delta x_{\text{zoom}}\Delta y_{\text{zoom}}$			≤2GHz: ≤8mm 2 – 3GHz: ≤5mm*	3 – 4GHz: ≤5mm* 4 – 6GHz: ≤4mm*
Maximum zoom scan spatial resolution, normal to phantom surface	Uniform grid: $\Delta z_{\text{zoom}}(n)$		≤5mm	3 – 4GHz: ≤4mm 4 – 5GHz: ≤3mm 5 – 6GHz: ≤2mm
	Graded grid	$\Delta z_{\text{zoom}}(1)$: between 1 st two points closest to phantom surface	≤4mm	3 – 4GHz: ≤3mm 4 – 5GHz: ≤2.5mm 5 – 6GHz: ≤2mm
		$\Delta z_{\text{zoom}}(n>1)$: between subsequent points	≤1.5• $\Delta z_{\text{zoom}}(n-1)$	
Minimum zoom scan volume	X, y, z		≥30mm	3 – 4GHz: ≥28mm 4 – 5GHz: ≥25mm 5 – 6GHz: ≥22mm
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.				
* When zoom scan is required and the <u>reported</u> SAR from the <i>area scan based 1-g SAR estimation</i> procedures of KDB 447498 is ≤ 1.4W/kg, ≤8mm, ≤7mm and ≤5mm zoom scan resolution may be applied, respectively, for 2GHz to 3GHz, 3GHz to 4GHz and 4GHz to 6GHz.				

Volume Scan Procedures

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

Power Drift Monitoring

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

7 Main Test Equipment

Name of Equipment	Manufacturer	Type/Model	Serial Number	Last Cal.	Cal. Due Date
Network Analyzer	Agilent	E5071B	MY42404014	2023-05-12	2024-05-11
Dielectric Probe Kit	SPEAG	DAK-12	1171	2023-07-17	2024-07-16
Dielectric Probe Kit	SPEAG	DAK-3.5	1332	2023-07-17	2024-07-16
Power Meter	Agilent	E4417A	GB41291714	2023-05-12	2024-05-11
Power Sensor	Agilent	N8481H	MY50350004	2023-05-12	2024-05-11
Power Sensor	Agilent	E9327A	US40441622	2023-05-12	2024-05-11
Power Sensor	Agilent	NRP18S	101955	2023-05-12	2024-05-11
Signal Generator	Agilent	N5181A	MY50140143	2023-05-12	2024-05-11
Dual Directional Coupler	UCL	UCL-DDC0 56G-S	20010600118	/	/
Amplifier	INDEXSAR	TPA-005060 G01	13030502	2023-05-13	2024-05-12
Wireless Communication Tester	Anritsu	MT8820C	6201342015	2022-12-10	2023-12-09
Wireless Communication Tester	Agilent	E5515C	MY48360988	2022-12-10	2023-12-09
Wireless Communication Tester	R&S	CMW 500	146734	2023-05-13	2024-05-12
E-field Probe	SPEAG	EX3DV4	3883	2023-04-10	2024-04-09
DAE	SPEAG	DAE4	1291	2023-05-17	2024-05-16
E-field Probe	SPEAG	EX3DV4	3677	2023-07-20	2024-07-19
DAE	SPEAG	DAE4	1692	2022-11-18	2023-11-17
Validation Kit 750MHz	SPEAG	D750V3	1045	2023-09-12	2026-09-11
Validation Kit 835MHz	SPEAG	D835V2	4d020	2023-09-15	2026-09-14
Validation Kit 1750MHz	SPEAG	D1750V2	1033	2023-03-23	2026-03-22
Validation Kit 1900MHz	SPEAG	D1900V2	5d060	2023-09-12	2026-09-11
Validation Kit 2450MHz	SPEAG	D2450V2	786	2023-09-12	2026-09-11
Validation Kit 2600MHz	SPEAG	D2600V2	1025	2023-04-23	2026-04-22
Validation Kit 5GHz	SPEAG	D5GHzV2	1151	2023-03-24	2026-03-23
Validation Kit 13MHz	SPEAG	CLA13	1024	2022-09-12	2025-09-11
Software for Tissue	SPEAG	DAK 3.0.4.1	/	/	/
Temperature Probe	Tianjin jinming	JM222	22112737	2023-05-13	2024-05-12

SAR Lab 1					
Twin SAM Phantom	SPEAG	SAM1	1534	/	/
Twin SAM Phantom	SPEAG	SAM2	1524	/	/
Twin ELI Phantom	SPEAG	ELI v4.0	1179	/	/
Hygrothermograph	Anymetr	HTC - 1	TA2023A001	2023-05-13	2024-05-12
TX90 XL	SPEAG	Staubli TX90 XL	/	/	/
Software for Test	SPEAG	DASY52	52.10.4.1527	/	/
SAR Lab 2					
Twin SAM Phantom	SPEAG	SAM1	1667	/	/
Twin SAM Phantom	SPEAG	SAM2	1666	/	/
Hygrothermograph	Anymetr	HTC - 1	TA2023A007	2023-05-13	2024-05-12
TX90 XL	SPEAG	Staubli TX90 XL	/	/	/
Software for Test	SPEAG	DASY52	52.10.4.1527	/	/

8 Tissue Dielectric Parameter Measurements & System Check

8.1 Tissue Verification

The temperature of the tissue-equivalent medium used during measurement must also be within 18°C to 25°C and within $\pm 2^\circ\text{C}$ of the temperature when the tissue parameters are characterized. The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements. The parameters should be re-measured after each 24 hours of use; or earlier if the dielectric parameters can become out of tolerance.

Target values

Frequency (MHz)	ϵ_r	$\sigma(\text{s/m})$
750	41.9	0.89
835	41.5	0.90
1750	40.1	1.37
1900	40.0	1.40
2450	39.2	1.80
2600	39.0	1.96
5250	35.9	4.71
5600	35.5	5.07
5750	35.4	5.22
13.56	55.0	0.75

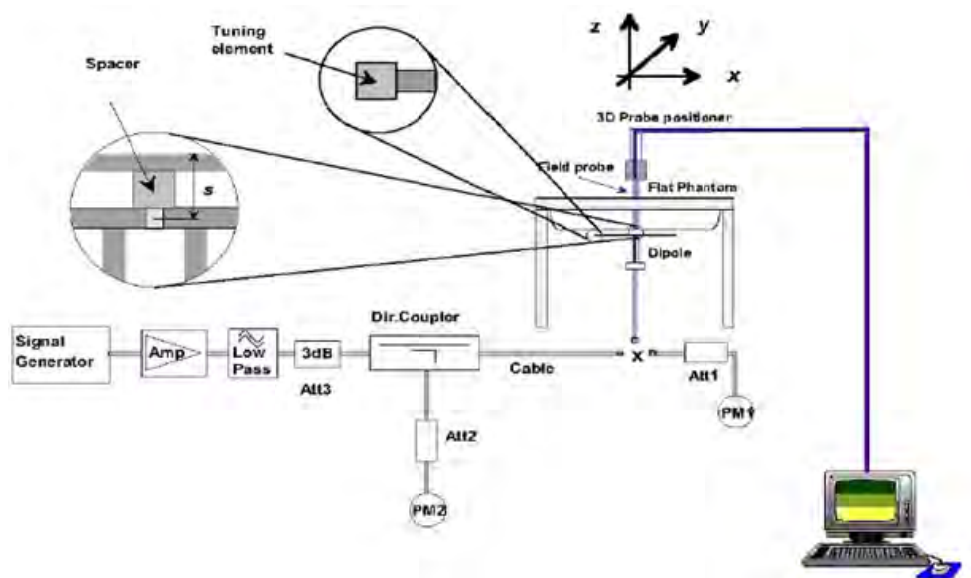
Measurements results

Frequency (MHz)	Test Date	Temp ℃	Measured Dielectric Parameters		Target Dielectric Parameters		Limit (Within $\pm 5\%$)	
			ϵ_r	σ (s/m)	ϵ_r	σ (s/m)	Dev ϵ_r (%)	Dev σ (%)
750	2023/9/28	21.5	42.3	0.88	41.9	0.89	0.95	-1.12
	2023/9/30	21.5	42.0	0.87	41.9	0.89	0.24	-2.25
835	2023/9/27	21.5	41.4	0.88	41.5	0.90	-0.24	-2.22
	2023/10/4	21.5	41.3	0.87	41.5	0.90	-0.48	-3.33
	2023/10/5	21.5	41.4	0.92	41.5	0.90	-0.24	2.22
	2023/10/8	21.5	41.3	0.89	41.5	0.90	-0.48	-1.11
1750	2023/10/7	21.5	40.2	1.34	40.1	1.37	0.25	-2.19
	2023/10/9	21.5	40.1	1.34	40.1	1.37	0.00	-2.19
	2023/10/12	21.5	40.2	1.36	40.1	1.37	0.25	-0.73
	2023/10/17	21.5	39.3	1.37	40.1	1.37	-2.00	0.00
1900	2023/10/6	21.5	40.1	1.41	40.0	1.40	0.25	0.71
	2023/10/13	21.5	40.2	1.43	40.0	1.40	0.50	2.14
	2023/10/14	21.5	40.0	1.40	40.0	1.40	0.00	0.00
	2023/10/16	21.5	40.5	1.34	40.0	1.40	1.25	-4.29
2450	2023/10/18	21.5	38.6	1.81	39.2	1.80	-1.53	0.56
2600	2023/9/29	21.5	38.2	2.01	39.0	1.96	-2.05	2.55
	2023/10/1	21.5	38.4	1.94	39.0	1.96	-1.54	-1.02
	2023/10/2	21.5	38.3	1.99	39.0	1.96	-1.79	1.53
	2023/10/10	21.5	38.5	1.95	39.0	1.96	-1.28	-0.51
5250	2023/10/11	21.5	35.5	4.80	35.9	4.71	-1.11	1.91
5600	2023/10/15	21.5	34.2	5.21	35.5	5.07	-3.66	2.76
5750	2023/10/3	21.5	34.9	5.21	35.4	5.22	-1.41	-0.19
13.56	2023/10/19	21.5	55.1	0.76	55.0	0.75	0.18	1.33
Note: The depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm.								

8.2 System Check

The manufacturer calibrates the probes annually. Dielectric parameters of the tissue simulates were measured using the dielectric probe kit and the network analyzer. A system check measurement for every day was made following the determination of the dielectric parameters of the Tissue simulates, using the dipole validation kit. The dipole antenna was placed under the flat section of the twin SAM phantom.

System check is performed regularly on all frequency bands where tests are performed with the DASY system.



Picture 1 System Check setup



Picture 2 Setup Photo

Justification for Extended SAR Dipole Calibrations

Usage of SAR dipoles calibrated less than 3 years ago but more than 1 year ago were confirmed in maintaining return loss (> 20 dB, within 20% of prior calibration) and impedance (within 5 ohm from prior calibration) requirements per extended calibrations in KDB 865664 D01:

Dipole		Date of Measurement	Return Loss (dB)	Δ %	Impedance (Ω)			
					Real	$\Delta\Omega$	Imaginary	$\Delta\Omega$
Dipole D2600V2 SN: 1025	Head Liquid	4/23/2021	22.9	/	50.1	/	-7.19	/
		4/22/2022	22.4	-2.2	50.7	0.6	-7.23	-0.04
		4/21/2023	22.0	-1.8	50.9	0.2	-7.28	-0.05
Dipole CLA13 SN: 1024	Head Liquid	9/12/2022	-26.9	/	46.3	/	2.40	/
		9/11/2023	-26.0	3.5	47.0	0.7	2.37	-0.03

System Check Results

Frequency (MHz)	Test Date	Temp °C	250mW Measured SAR _{1g} (W/kg)	1W Normalized SAR _{1g} (W/kg)	1W Target SAR _{1g} (W/kg)	Δ % (Limit ±10%)	Plot No.
750	2023/9/28	21.5	2.13	8.52	8.47	0.59	1
	2023/9/30	21.5	2.10	8.40	8.47	-0.83	2
835	2023/9/27	21.5	2.44	9.76	9.75	0.10	3
	2023/10/4	21.5	2.46	9.84	9.75	0.92	4
	2023/10/5	21.5	2.43	9.72	9.75	-0.31	5
	2023/10/8	21.5	2.51	10.04	9.75	2.97	6
1750	2023/10/7	21.5	8.95	35.80	36.60	-2.19	7
	2023/10/9	21.5	9.11	36.44	36.60	-0.44	8
	2023/10/12	21.5	8.96	35.84	36.60	-2.08	9
	2023/10/17	21.5	8.99	35.96	36.60	-1.75	10
1900	2023/10/6	21.5	9.88	39.52	40.40	-2.18	11
	2023/10/13	21.5	9.85	39.40	40.40	-2.48	12
	2023/10/14	21.5	9.55	38.20	40.40	-5.45	13
	2023/10/16	21.5	9.60	38.40	40.40	-4.95	14
2450	2023/10/18	21.5	13.70	54.80	52.60	4.18	15
2600	2023/9/29	21.5	13.90	55.60	56.10	-0.89	16
	2023/10/1	21.5	13.88	55.52	56.10	-1.03	17
	2023/10/2	21.5	13.94	55.76	56.10	-0.61	18
	2023/10/10	21.5	13.90	55.60	56.10	-0.89	19
Frequency (MHz)	Test Date	Temp °C	100mW Measured SAR _{1g} (W/kg)	1W Normalized SAR _{1g} (W/kg)	1W Target SAR _{1g} (W/kg)	Δ % (Limit ±10%)	Plot No.
5250	2023/10/11	21.5	7.87	78.70	77.90	1.03	20
5600	2023/10/15	21.5	7.67	76.70	81.90	-6.35	21
5750	2023/10/3	21.5	7.66	76.60	78.00	-1.79	22
Note: Target Values used derive from the calibration certificate data storage and evaluation.							

Frequency (MHz)	Test Date	Temp °C	1W Measured SAR _{10g} (W/kg)	1W Target SAR _{10g} (W/kg)	Δ % (Limit ±10%)	Plot No.
13.56	2023/10/19	21.5	0.332	0.355	-6.48	23
Note: target values used derive from the calibration certificate data storage and evaluation.						

8.3 SAR System Validation

Per FCC KDB 865664 D02v01, SAR system verification is required to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles are used with the required tissue-equivalent media for system validation, according to the procedures outlined in FCC KDB 865664 D01 and IEEE 1528-2013. Since SAR probe calibrations are frequency dependent, each probe calibration point must be validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media.

A tabulated summary of the system validation status, measurement frequencies, SAR probes, calibrated signal type(s) and tissue dielectric parameters has been included.

Frequency [MHz]	Date	Probe SN	Probe Type	Probe Cal Point		PERM (Er)	COND (Σ)	CW Validation		
								Sensitivity	Probe Linearity	Probe Isotropy
750	2023/04/10	3883	EX3DV4	750	Head	41.9	0.89	PASS	PASS	PASS
835	2023/04/10	3883	EX3DV4	835	Head	41.5	0.90	PASS	PASS	PASS
1750	2023/04/10	3883	EX3DV4	1750	Head	40.1	1.37	PASS	PASS	PASS
1900	2023/04/10	3883	EX3DV4	1900	Head	40.0	1.40	PASS	PASS	PASS
2450	2023/04/10	3883	EX3DV4	2450	Head	39.2	1.80	PASS	PASS	PASS
2600	2023/04/10	3883	EX3DV4	2600	Head	39.0	1.96	PASS	PASS	PASS
5250	2023/04/10	3883	EX3DV4	5250	Head	35.9	4.71	PASS	PASS	PASS
5600	2023/04/10	3883	EX3DV4	5600	Head	35.5	5.07	PASS	PASS	PASS
5750	2023/04/10	3883	EX3DV4	5750	Head	35.4	5.22	PASS	PASS	PASS

Frequency [MHz]	Date	Probe SN	Probe Type	Probe Cal Point		PERM (Er)	COND (Σ)	CW Validation		
								Sensitivity	Probe Linearity	Probe Isotropy
13	2023/07/20	3677	EX3DV4	13	Head	55.0	0.75	PASS	PASS	PASS

NOTE: While the probes have been calibrated for both CW and modulated signals, all measurements were performed using communication systems calibrated for CW signals only. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664D01v01 for scenarios when CW probe calibrations are used with other signal types. SAR systems were validated for modulated signals with a periodic duty cycle, such as GMSK, or with a high peak to average ratio (>5dB), such as OFDM according to KDB 865664.

9 Normal and Maximum Output Power

KDB 447498 D01 at the maximum rated output power and within the tune-up tolerance range specified for the product, but not more than 2 dB lower than the maximum tune-up tolerance limit.

9.1 GSM Mode

GSM850										
DSI 1&2&4--Low Ant		Burst-Averaged Output Power(dBm)				Division	Frame-Averaged Output Power(dBm)			
		Tune-up	Channel/Frequency(MHz)				Tune-up	Channel/Frequency(MHz)		
		MAX	128/824.2	190/836.6	251/848.8	Factors		MAX	128/824.2	190/836.6
GSM	CS	33.50	32.61	32.70	32.72	9.03	24.47	23.58	23.67	23.69
GPRS/EGPRS (GMSK)	1 Tx Slot	33.50	32.62	32.69	32.71	9.03	24.47	23.59	23.66	23.68
	2 Tx Slots	30.50	30.11	30.19	30.26	6.02	24.48	24.09	24.17	24.24
	3 Tx Slots	28.50	28.04	28.10	28.17	4.26	24.24	23.78	23.84	23.91
	4 Tx Slots	27.50	26.90	26.97	27.04	3.01	24.49	23.89	23.96	24.03
EGPRS (8PSK)	1 Tx Slot	28.00	26.52	26.64	26.63	9.03	18.97	17.49	17.61	17.60
	2 Tx Slots	24.50	23.43	23.36	23.51	6.02	18.48	17.41	17.34	17.49
	3 Tx Slots	22.50	21.42	21.33	21.28	4.26	18.24	17.16	17.07	17.02
	4 Tx Slots	21.00	20.24	20.24	20.21	3.01	17.99	17.23	17.23	17.20

Notes: The worst-case configuration and mode for SAR testing is determined to be as follows:

Standalone: GSM 850 GMSK (GPRS) mode with 4 time slots for Max power, based on the output power measurements above.

GSM850										
DSI 1&2-- Upper Ant		Burst-Averaged Output Power(dBm)				Division Factors	Frame-Averaged Output Power(dBm)			
		Tune-up	Channel/Frequency(MHz)				Tune-up	Channel/Frequency(MHz)		
			MAX	128/824.2	190/836.6			251/848.8	MAX	128/824.2
GSM	CS	33.50	32.29	32.15	32.12	9.03	24.47	23.26	23.12	23.09
GPRS/EGPRS (GMSK)	1 Tx Slot	33.50	32.30	32.12	32.13	9.03	24.47	23.27	23.09	23.10
	2 Tx Slots	30.50	29.71	29.66	29.66	6.02	24.48	23.69	23.64	23.64
	3 Tx Slots	28.50	27.64	27.60	27.61	4.26	24.24	23.38	23.34	23.35
	4 Tx Slots	27.50	26.49	26.47	26.50	3.01	24.49	23.48	23.46	23.49
EGPRS (8PSK)	1 Tx Slot	28.00	26.35	26.34	26.43	9.03	18.97	17.32	17.31	17.40
	2 Tx Slots	24.50	22.77	22.81	22.89	6.02	18.48	16.75	16.79	16.87
	3 Tx Slots	22.50	21.14	20.70	20.80	4.26	18.24	16.88	16.44	16.54
	4 Tx Slots	21.00	19.70	19.61	19.79	3.01	17.99	16.69	16.60	16.78

Notes: The worst-case configuration and mode for SAR testing is determined to be as follows:

Standalone: GSM 850 GMSK (GPRS) mode with 4 time slots for Max power, based on the output power measurements above.

GSM850										
DSI 4-- Upper Ant		Burst-Averaged Output Power(dBm)				Division	Frame-Averaged Output Power(dBm)			
		Tune-up	Channel/Frequency(MHz)				Tune-up	Channel/Frequency(MHz)		
		MAX	128/824.2	190/836.6	251/848.8	Factors		MAX	128/824.2	190/836.6
GSM	CS	32.50	31.52	31.43	31.29	9.03	23.47	22.49	22.40	22.26
GPRS/EGPRS (GMSK)	1 Tx Slot	32.50	31.54	31.49	31.27	9.03	23.47	22.51	22.46	22.24
	2 Tx Slots	29.50	28.63	28.53	28.54	6.02	23.48	22.61	22.51	22.52
	3 Tx Slots	27.50	26.46	26.44	26.48	4.26	23.24	22.20	22.18	22.22
	4 Tx Slots	26.50	25.53	25.50	25.54	3.01	23.49	22.52	22.49	22.53
EGPRS (8PSK)	1 Tx Slot	27.00	25.13	25.07	25.33	9.03	17.97	16.10	16.04	16.30
	2 Tx Slots	23.50	21.58	21.62	21.75	6.02	17.48	15.56	15.60	15.73
	3 Tx Slots	21.50	19.64	19.65	19.90	4.26	17.24	15.38	15.39	15.64
	4 Tx Slots	20.00	18.54	18.47	18.56	3.01	16.99	15.53	15.46	15.55

Notes: The worst-case configuration and mode for SAR testing is determined to be as follows:

Standalone: GSM 850 GMSK (GPRS) mode with 4 time slots for Max power, based on the output power measurements above.

GSM 1900										
DSI 1&2--Low Ant		Burst-Averaged Output Power(dBm)				Division	Frame-Averaged Output Power(dBm)			
		Tune-up	Channel/Frequency(MHz)				Factors	Tune-up	Channel/Frequency(MHz)	
		MAX	512/1850.2	661/1880	810/1909.8	MAX		512/1850.2	661/1880	810/1909.8
GSM	CS	30.50	29.47	29.34	29.12	9.03	21.47	20.44	20.31	20.09
GPRS/EGPRS (GMSK)	1 Tx Slot	30.50	29.48	29.32	29.11	9.03	21.47	20.45	20.29	20.08
	2 Tx Slots	27.50	26.83	26.60	26.54	6.02	21.48	20.81	20.58	20.52
	3 Tx Slots	25.50	24.74	24.51	24.47	4.26	21.24	20.48	20.25	20.21
	4 Tx Slots	24.50	23.61	23.30	23.33	3.01	21.49	20.60	20.29	20.32
EGPRS (8PSK)	1 Tx Slot	27.00	25.53	25.75	25.52	9.03	17.97	16.50	16.72	16.49
	2 Tx Slots	24.00	22.42	22.63	22.50	6.02	17.98	16.40	16.61	16.48
	3 Tx Slots	22.00	20.54	20.38	20.24	4.26	17.74	16.28	16.12	15.98
	4 Tx Slots	21.00	19.33	19.14	19.10	3.01	17.99	16.32	16.13	16.09

Notes: The worst-case configuration and mode for SAR testing is determined to be as follows:

Standalone: GSM 1900 GMSK (GPRS) mode with 4 time slots for Max power, based on the output power measurements above.

GSM 1900										
DSI 4--Low Ant		Burst-Averaged Output Power(dBm)				Division	Frame-Averaged Output Power(dBm)			
		Tune-up	Channel/Frequency(MHz)				Tune-up	Channel/Frequency(MHz)		
		MAX	512/1850.2	661/1880	810/1909.8	Factors		MAX	512/1850.2	661/1880
GSM	CS	26.00	25.25	25.02	24.97	9.03	16.97	16.22	15.99	15.94
GPRS/EGPRS (GMSK)	1 Tx Slot	26.00	25.26	25.01	24.96	9.03	16.97	16.23	15.98	15.93
	2 Tx Slots	23.00	22.11	21.90	21.92	6.02	16.98	16.09	15.88	15.90
	3 Tx Slots	21.00	20.12	19.89	19.94	4.26	16.74	15.86	15.63	15.68
	4 Tx Slots	20.00	18.94	18.76	18.83	3.01	16.99	15.93	15.75	15.82
EGPRS (8PSK)	1 Tx Slot	22.50	21.31	21.24	21.25	9.03	13.47	12.28	12.21	12.22
	2 Tx Slots	19.50	18.14	18.17	18.02	6.02	13.48	12.12	12.15	12.00
	3 Tx Slots	17.50	15.80	16.01	16.14	4.26	13.24	11.54	11.75	11.88
	4 Tx Slots	16.50	15.38	15.17	14.87	3.01	13.49	12.37	12.16	11.86
Notes: The worst-case configuration and mode for SAR testing is determined to be as follows: Standalone: GSM 1900 GMSK (GPRS) mode with 4 time slots for Max power, based on the output power measurements above.										

GSM 1900										
DSI 1-- Upper Ant		Burst-Averaged Output Power(dBm)				Division Factors	Frame-Averaged Output Power(dBm)			
		Tune-up	Channel/Frequency(MHz)				Tune-up	Channel/Frequency(MHz)		
		MAX	512/1850.2	661/1880	810/1909.8		MAX	512/1850.2	661/1880	810/1909.8
GSM	CS	24.50	23.33	23.41	23.45	9.03	15.47	14.30	14.38	14.42
GPRS/EGPRS (GMSK)	1 Tx Slot	24.50	23.36	23.45	23.48	9.03	15.47	14.33	14.42	14.45
	2 Tx Slots	21.50	20.13	20.40	21.00	6.02	15.48	14.11	14.38	14.98
	3 Tx Slots	19.50	17.95	18.18	18.95	4.26	15.24	13.69	13.92	14.69
	4 Tx Slots	18.50	16.72	17.05	17.86	3.01	15.49	13.71	14.04	14.85
EGPRS (8PSK)	1 Tx Slot	20.50	19.03	19.12	19.47	9.03	11.47	10.00	10.09	10.44
	2 Tx Slots	17.50	15.97	16.04	16.17	6.02	11.48	9.95	10.02	10.15
	3 Tx Slots	15.50	13.97	13.94	14.00	4.26	11.24	9.71	9.68	9.74
	4 Tx Slots	14.50	12.76	12.87	13.17	3.01	11.49	9.75	9.86	10.16
Notes: The worst-case configuration and mode for SAR testing is determined to be as follows: Standalone: GSM 1900 GMSK (GPRS) mode with 4 time slots for Max power, based on the output power measurements above.										

GSM 1900										
DSI 2-- Upper Ant		Burst-Averaged Output Power(dBm)				Division Factors	Frame-Averaged Output Power(dBm)			
		Tune-up	Channel/Frequency(MHz)				Tune-up	Channel/Frequency(MHz)		
			MAX	512/1850.2	661/1880			810/1909.8	MAX	512/1850.2
GSM	CS	30.50	28.83	28.52	28.54	9.03	21.47	19.80	19.49	19.51
GPRS/EGPRS (GMSK)	1 Tx Slot	30.50	28.84	28.54	28.53	9.03	21.47	19.81	19.51	19.50
	2 Tx Slots	27.50	25.95	25.86	26.02	6.02	21.48	19.93	19.84	20.00
	3 Tx Slots	25.50	23.82	23.75	24.10	4.26	21.24	19.56	19.49	19.84
	4 Tx Slots	24.50	22.67	22.63	23.00	3.01	21.49	19.66	19.62	19.99
EGPRS (8PSK)	1 Tx Slot	26.50	24.92	24.81	24.90	9.03	17.47	15.89	15.78	15.87
	2 Tx Slots	23.50	21.86	21.94	22.04	6.02	17.48	15.84	15.92	16.02
	3 Tx Slots	21.50	19.86	19.54	19.70	4.26	17.24	15.60	15.28	15.44
	4 Tx Slots	20.50	18.51	18.52	18.54	3.01	17.49	15.50	15.51	15.53
Notes: The worst-case configuration and mode for SAR testing is determined to be as follows: Standalone: GSM 1900 GMSK (GPRS) mode with 4 time slots for Max power, based on the output power measurements above.										

GSM 1900										
DSI 4-- Upper Ant		Burst-Averaged Output Power(dBm)				Division Factors	Frame-Averaged Output Power(dBm)			
		Tune-up	Channel/Frequency(MHz)				Tune-up	Channel/Frequency(MHz)		
			MAX	512/1850.2	661/1880			810/1909.8	MAX	512/1850.2
GSM	CS	26.00	24.10	24.04	24.42	9.03	16.97	15.07	15.01	15.39
GPRS/EGPRS (GMSK)	1 Tx Slot	26.00	24.24	24.30	24.71	9.03	16.97	15.21	15.27	15.68
	2 Tx Slots	23.00	21.14	21.31	21.86	6.02	16.98	15.12	15.29	15.84
	3 Tx Slots	21.00	19.13	19.41	20.03	4.26	16.74	14.87	15.15	15.77
	4 Tx Slots	20.00	18.14	18.39	19.07	3.01	16.99	15.13	15.38	16.06
EGPRS (8PSK)	1 Tx Slot	22.50	20.54	20.72	20.62	9.03	13.47	11.51	11.69	11.59
	2 Tx Slots	19.50	17.72	17.84	17.81	6.02	13.48	11.70	11.82	11.79
	3 Tx Slots	17.50	15.61	15.63	15.97	4.26	13.24	11.35	11.37	11.71
	4 Tx Slots	16.50	14.74	14.73	14.71	3.01	13.49	11.73	11.72	11.70
Notes: The worst-case configuration and mode for SAR testing is determined to be as follows: Standalone: GSM 1900 GMSK (GPRS) mode with 4 time slots for Max power, based on the output power measurements above.										

9.2 WCDMA Mode

The following tests were completed according to the test requirements outlined in the 3GPP TS34.121 specification.

WCDMA Band II					
DSI 1--Low Ant		Maximum Output Power (dBm)			
		Channel/Frequency(MHz)			Tune-up
		9262/1852.4	9400/1880	9538/1907.6	
RMC	12.2k	23.88	24.59	24.73	25.00
AMR	12.2k	23.82	24.63	24.81	25.00
HSDPA	Subtest 1	23.53	23.44	23.28	24.00
	Subtest 2	23.31	23.20	23.03	23.50
	Subtest 3	22.88	22.68	22.52	23.00
	Subtest 4	22.84	22.71	22.53	23.00
HSUPA	Subtest 1	21.66	21.54	21.40	22.50
	Subtest 2	21.68	21.55	21.36	22.00
	Subtest 3	22.63	22.54	22.38	23.00
	Subtest 4	21.20	21.03	20.91	21.50
	Subtest 5	22.65	22.50	22.36	23.00
DC-HSDPA	Subtest 1	23.49	23.52	23.24	24.00
	Subtest 2	23.23	23.14	23.19	24.00
	Subtest 3	23.02	22.78	22.52	23.50
	Subtest 4	22.86	22.87	22.59	23.50
HSPA+	16QAM	21.89	22.19	21.96	22.50
Note: Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".					

WCDMA Band II					
DSI 2--Low Ant		Maximum Output Power (dBm)			
		Channel/Frequency(MHz)			Tune-up
		9262/1852.4	9400/1880	9538/1907.6	
RMC	12.2k	21.91	22.69	23.15	23.50
AMR	12.2k	21.74	22.47	22.59	23.50
HSDPA	Subtest 1	21.45	21.41	21.22	22.50
	Subtest 2	21.17	21.08	20.87	22.00
	Subtest 3	20.70	20.67	20.44	21.50
	Subtest 4	20.65	20.73	20.34	21.50
HSUPA	Subtest 1	19.71	19.54	19.23	21.00
	Subtest 2	19.75	19.48	19.37	20.50

	Subtest 3	20.63	20.60	20.43	21.50
	Subtest 4	19.05	19.03	19.01	20.00
	Subtest 5	20.57	20.36	20.18	21.50
DC-HSDPA	Subtest 1	21.67	21.43	21.28	22.50
	Subtest 2	21.29	21.32	20.77	22.50
	Subtest 3	20.80	20.61	20.36	22.00
	Subtest 4	20.87	20.71	20.42	22.00
HSPA+	16QAM	19.59	19.95	19.76	21.00
Note: Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".					

WCDMA Band II					
DSI 4--Low Ant		Maximum Output Power (dBm)			
		Channel/Frequency(MHz)			Tune-up
		9262/1852.4	9400/1880	9538/1907.6	
RMC	12.2k	17.91	18.60	18.76	19.00
AMR	12.2k	17.91	18.64	18.70	19.00
HSDPA	Subtest 1	17.58	17.48	17.37	18.00
	Subtest 2	17.34	17.31	17.04	17.50
	Subtest 3	16.91	16.80	16.53	17.00
	Subtest 4	16.88	16.76	16.55	17.00
HSUPA	Subtest 1	15.70	15.61	15.46	16.50
	Subtest 2	15.74	15.59	15.46	16.00
	Subtest 3	16.70	16.59	16.42	17.00
	Subtest 4	15.22	15.12	15.02	15.50
	Subtest 5	16.72	16.57	16.43	17.00
DC-HSDPA	Subtest 1	17.74	17.60	17.33	18.00
	Subtest 2	17.32	17.41	17.04	18.00
	Subtest 3	17.03	16.84	16.55	17.50
	Subtest 4	16.90	16.74	16.67	17.50
HSPA+	16QAM	15.70	15.98	15.97	16.50
Note: Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".					

WCDMA Band II					
DSI 1--Upper Ant		Maximum Output Power (dBm)			
		Channel/Frequency(MHz)			Tune-up
		9262/1852.4	9400/1880	9538/1907.6	
RMC	12.2k	15.07	15.08	15.01	16.00
AMR	12.2k	15.03	15.12	14.55	16.00

HSDPA	Subtest 1	14.42	14.40	13.40	15.00
	Subtest 2	14.21	14.41	12.99	14.50
	Subtest 3	13.56	13.67	12.71	14.00
	Subtest 4	13.47	13.19	12.24	14.00
HSUPA	Subtest 1	12.64	12.36	11.39	13.00
	Subtest 2	12.68	12.54	11.69	13.00
	Subtest 3	13.26	13.48	12.18	13.50
	Subtest 4	12.24	12.27	10.69	12.50
	Subtest 5	13.78	13.36	12.27	14.00
DC-HSDPA	Subtest 1	14.46	14.84	13.20	15.00
	Subtest 2	14.57	14.23	13.27	15.00
	Subtest 3	13.36	13.65	12.35	14.00
	Subtest 4	13.62	13.51	12.70	14.50
HSPA+	16QAM	12.30	12.26	12.63	13.50
Note: Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".					

WCDMA Band II					
DSI 2--Upper Ant		Maximum Output Power (dBm)			
		Channel/Frequency(MHz)			Tune-up
		9262/1852.4	9400/1880	9538/1907.6	
RMC	12.2k	22.50	22.90	23.24	23.50
AMR	12.2k	22.14	22.97	23.12	23.50
HSDPA	Subtest 1	20.69	21.60	21.74	22.00
	Subtest 2	20.39	21.57	21.62	22.00
	Subtest 3	20.04	20.97	21.01	21.50
	Subtest 4	19.90	20.79	21.24	21.50
HSUPA	Subtest 1	18.81	19.80	19.95	20.50
	Subtest 2	18.81	19.87	20.13	20.50
	Subtest 3	20.04	20.90	20.88	21.00
	Subtest 4	18.44	19.35	19.69	20.00
	Subtest 5	19.90	20.82	21.08	21.50
DC-HSDPA	Subtest 1	20.73	21.70	21.80	22.00
	Subtest 2	20.77	21.47	21.44	22.00
	Subtest 3	20.06	21.11	21.01	21.50
	Subtest 4	20.06	21.17	21.08	21.50
HSPA+	16QAM	19.06	19.68	20.07	20.50
Note: Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".					

WCDMA Band II					
DSI 4--Upper Ant		Maximum Output Power (dBm)			
		Channel/Frequency(MHz)			Tune-up
		9262/1852.4	9400/1880	9538/1907.6	
RMC	12.2k	17.73	17.35	16.78	18.00
AMR	12.2k	17.74	17.39	16.51	18.00
HSDPA	Subtest 1	16.67	16.67	15.95	17.50
	Subtest 2	16.50	16.42	15.14	17.00
	Subtest 3	16.01	16.10	14.78	16.50
	Subtest 4	16.29	15.40	14.57	16.50
HSUPA	Subtest 1	14.91	14.73	13.54	15.50
	Subtest 2	14.89	14.69	13.90	15.50
	Subtest 3	15.90	15.63	14.29	16.00
	Subtest 4	14.51	14.42	13.10	15.00
	Subtest 5	15.79	15.55	14.56	16.50
DC-HSDPA	Subtest 1	16.71	16.83	15.53	17.00
	Subtest 2	16.84	16.34	15.52	17.00
	Subtest 3	16.35	15.82	14.56	16.50
	Subtest 4	15.97	15.82	15.19	16.50
HSPA+	16QAM	14.70	14.62	14.20	15.50
Note: Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".					

WCDMA Band IV					
DSI 1 --Low Ant		Maximum Output Power (dBm)			
		Channel/Frequency(MHz)			Tune-up
		1312/1712.4	1413/1732.6	1513/1752.6	
RMC	12.2k	24.92	24.98	24.61	25.50
AMR	12.2k	24.84	24.58	24.44	25.50
HSDPA	Subtest 1	24.12	23.65	23.06	24.50
	Subtest 2	23.35	23.58	23.20	24.00
	Subtest 3	23.03	22.96	22.57	23.50
	Subtest 4	22.96	22.86	22.50	23.00
HSUPA	Subtest 1	21.87	21.59	21.36	22.00
	Subtest 2	21.93	21.82	21.03	22.00
	Subtest 3	22.78	22.55	22.34	23.00
	Subtest 4	21.54	21.59	20.90	22.00
	Subtest 5	22.73	22.87	22.56	23.00
DC-HSDPA	Subtest 1	23.94	23.75	23.14	24.00

	Subtest 2	23.43	23.56	23.14	24.00
	Subtest 3	23.07	23.28	22.25	23.50
	Subtest 4	22.88	22.90	22.42	23.00
HSPA+	16QAM	21.86	21.71	21.78	22.00
Note: Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".					

WCDMA Band IV					
DSI 2--Low Ant		Maximum Output Power (dBm)			
		Channel/Frequency(MHz)			Tune-up
		1312/1712.4	1413/1732.6	1513/1752.6	
RMC	12.2k	23.28	22.43	22.49	24.00
AMR	12.2k	22.35	22.10	22.28	24.00
HSDPA	Subtest 1	21.73	21.24	21.17	23.00
	Subtest 2	20.72	21.11	20.53	22.50
	Subtest 3	20.40	20.57	20.10	22.00
	Subtest 4	20.53	20.19	19.89	21.50
HSUPA	Subtest 1	19.36	18.98	18.95	20.50
	Subtest 2	19.38	19.27	18.52	20.50
	Subtest 3	20.27	19.98	19.69	21.50
	Subtest 4	19.01	19.18	18.54	20.50
	Subtest 5	20.24	20.38	20.11	21.50
DC-HSDPA	Subtest 1	21.57	21.36	20.56	22.50
	Subtest 2	20.94	21.05	20.60	22.50
	Subtest 3	20.54	20.65	20.16	22.00
	Subtest 4	20.39	20.51	20.05	21.50
HSPA+	16QAM	19.39	19.08	19.25	20.50
Note: Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".					

WCDMA Band IV					
DSI 4--Low Ant		Maximum Output Power (dBm)			
		Channel/Frequency(MHz)			Tune-up
		1312/1712.4	1413/1732.6	1513/1752.6	
RMC	12.2k	19.38	19.50	19.14	20.00
AMR	12.2k	19.22	19.45	19.04	20.00
HSDPA	Subtest 1	18.06	17.97	17.44	18.50
	Subtest 2	17.90	18.06	17.63	18.50
	Subtest 3	17.66	17.25	16.99	18.00
	Subtest 4	17.80	17.55	16.87	18.00

HSUPA	Subtest 1	16.50	16.12	15.74	17.00
	Subtest 2	16.45	16.01	15.85	16.50
	Subtest 3	16.96	17.27	16.98	17.50
	Subtest 4	16.05	15.50	15.13	16.50
	Subtest 5	17.51	17.07	16.77	18.00
DC-HSDPA	Subtest 1	18.34	18.19	17.70	18.50
	Subtest 2	17.90	17.82	17.67	18.00
	Subtest 3	17.54	17.29	16.95	18.00
	Subtest 4	17.70	17.55	16.97	18.00
HSPA+	16QAM	16.42	16.17	15.71	17.00
Note: Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".					

WCDMA Band IV					
DSI 1--Upper Ant		Maximum Output Power (dBm)			
		Channel/Frequency(MHz)			Tune-up
		1312/1712.4	1413/1732.6	1513/1752.6	
RMC	12.2k	18.03	18.19	17.94	19.00
AMR	12.2k	18.28	18.47	17.90	19.00
HSDPA	Subtest 1	16.75	16.76	16.39	17.00
	Subtest 2	16.35	16.37	16.41	17.00
	Subtest 3	16.08	15.76	15.62	16.50
	Subtest 4	16.18	15.80	15.96	16.50
HSUPA	Subtest 1	15.04	14.59	14.32	15.50
	Subtest 2	14.86	14.90	14.75	15.00
	Subtest 3	15.82	15.67	15.36	16.00
	Subtest 4	14.40	14.30	13.81	14.50
	Subtest 5	15.93	15.66	15.32	16.00
DC-HSDPA	Subtest 1	16.85	16.56	16.59	17.00
	Subtest 2	16.71	16.55	16.27	17.00
	Subtest 3	15.96	16.02	16.10	16.50
	Subtest 4	15.98	16.02	15.74	16.50
HSPA+	16QAM	15.06	14.96	15.10	15.50
Note: Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".					

WCDMA Band IV					
DSI 2--Upper Ant		Maximum Output Power (dBm)			
		Channel/Frequency(MHz)			Tune-up
		1312/1712.4	1413/1732.6	1513/1752.6	
RMC	12.2k	24.68	24.65	24.42	25.50
AMR	12.2k	24.65	24.63	24.42	25.50
HSDPA	Subtest 1	23.26	23.12	22.87	23.50
	Subtest 2	22.95	22.97	22.61	23.50
	Subtest 3	22.61	22.20	21.98	23.00
	Subtest 4	22.31	22.24	22.19	23.00
HSUPA	Subtest 1	21.24	21.09	21.10	22.00
	Subtest 2	21.51	21.10	20.86	22.00
	Subtest 3	22.30	22.09	21.95	22.50
	Subtest 4	20.82	20.52	20.66	21.00
	Subtest 5	22.54	22.09	22.04	23.00
DC-HSDPA	Subtest 1	23.40	23.06	22.85	23.50
	Subtest 2	22.79	22.99	22.61	23.50
	Subtest 3	22.61	22.30	22.08	23.00
	Subtest 4	22.39	22.36	21.91	23.00
HSPA+	16QAM	21.30	21.27	21.52	22.00
Note: Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".					

WCDMA Band IV					
DSI 4--Upper Ant		Maximum Output Power (dBm)			
		Channel/Frequency(MHz)			Tune-up
		1312/1712.4	1413/1732.6	1513/1752.6	
RMC	12.2k	20.20	20.10	20.04	21.00
AMR	12.2k	20.54	20.44	20.14	21.00
HSDPA	Subtest 1	19.13	19.04	18.77	19.50
	Subtest 2	19.05	18.59	18.53	19.50
	Subtest 3	18.34	18.08	18.12	19.00
	Subtest 4	18.26	18.20	18.02	19.00
HSUPA	Subtest 1	17.10	17.05	16.76	18.00
	Subtest 2	17.32	16.84	16.67	17.50
	Subtest 3	18.28	17.91	17.68	18.50
	Subtest 4	16.62	16.64	16.39	17.00
	Subtest 5	18.23	18.06	17.70	18.50
DC-HSDPA	Subtest 1	19.01	18.98	18.85	19.50

	Subtest 2	18.83	18.73	18.43	19.50
	Subtest 3	18.28	18.04	18.14	19.00
	Subtest 4	18.48	18.30	18.12	19.00
HSPA+	16QAM	17.60	17.52	17.39	18.00
Note: Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".					

WCDMA Band V					
DSI 1&2&4--Low Ant		Maximum Output Power (dBm)			
		Channel/Frequency(MHz)			Tune-up
		4132/826.4	4183/836.6	4233/846.6	
RMC	12.2k	24.35	24.29	24.23	25.50
AMR	12.2k	24.35	24.21	24.39	25.50
HSDPA	Subtest 1	23.29	23.20	23.07	23.50
	Subtest 2	23.00	22.92	22.82	23.50
	Subtest 3	22.45	22.46	22.31	23.00
	Subtest 4	22.42	22.38	22.19	23.00
HSUPA	Subtest 1	21.28	21.21	21.04	22.00
	Subtest 2	21.30	21.22	21.09	21.50
	Subtest 3	22.28	22.21	22.06	22.50
	Subtest 4	20.87	20.79	20.62	21.00
	Subtest 5	22.31	22.23	22.04	22.50
DC-HSDPA	Subtest 1	23.41	23.36	23.03	23.50
	Subtest 2	23.08	22.92	22.96	23.50
	Subtest 3	22.51	22.60	22.23	23.00
	Subtest 4	22.42	22.28	22.37	23.00
HSPA+	16QAM	22.27	22.23	22.22	22.50
Note: Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".					

WCDMA Band V					
DSI 1&2&4--Upper Ant		Maximum Output Power (dBm)			
		Channel/Frequency(MHz)			Tune-up
		4132/826.4	4183/836.6	4233/846.6	
RMC	12.2k	24.08	24.04	23.99	25.50
AMR	12.2k	23.96	24.20	23.89	25.50
HSDPA	Subtest 1	22.93	22.86	22.77	23.50
	Subtest 2	22.70	22.60	22.54	23.50
	Subtest 3	22.14	22.16	21.95	23.00
	Subtest 4	22.02	22.06	21.89	23.00

HSUPA	Subtest 1	20.93	20.86	20.77	22.00
	Subtest 2	20.93	20.87	20.77	21.50
	Subtest 3	21.91	21.88	21.74	22.50
	Subtest 4	20.47	20.42	20.30	21.00
	Subtest 5	21.89	21.87	21.71	22.50
DC-HSDPA	Subtest 1	22.91	22.74	22.69	23.50
	Subtest 2	22.78	22.68	22.72	23.50
	Subtest 3	22.14	22.34	21.99	23.00
	Subtest 4	22.00	22.04	21.89	23.00
HSPA+	16QAM	21.55	21.53	21.49	22.50
Note: Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".					

9.3 LTE Mode

UE Power Class: 3 (23 +/- 2dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101.

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3

Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3

LTE Band2							
DSI 1&2-Low Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				18607/1850.7	18900/1880	19193/1909.3	
1.4MHz	QPSK	1	0	23.99	24.06	24.40	25.00
		1	2	24.17	24.40	24.60	25.00
		1	5	23.93	24.44	24.13	25.00
		3	0	23.93	24.20	24.59	25.00
		3	2	23.91	24.33	24.58	25.00
		3	3	24.04	24.36	24.41	25.00
		6	0	23.14	23.45	23.49	24.00
	16QAM	1	0	22.94	23.36	23.44	24.00
		1	2	23.51	23.57	23.50	24.00
		1	5	23.08	23.41	23.34	24.00
		3	0	22.92	23.07	23.53	24.00
		3	2	23.17	23.12	23.34	24.00
		3	3	22.77	23.23	23.36	24.00
		6	0	21.75	22.57	22.58	23.00
	64QAM	1	0	22.15	22.53	22.39	23.00
		1	2	22.26	22.46	22.66	23.00
		1	5	22.39	22.63	22.41	23.00
		3	0	21.72	22.31	22.31	23.00
		3	2	21.98	22.35	22.40	23.00
		3	3	21.94	22.29	22.48	23.00
		6	0	21.06	21.48	21.66	22.00
Bandwidth	Modulation	RB	Offset	Channel/Frequency(MHz)			Tune-up

		Allocation		18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	23.85	24.08	24.40	25.00
		1	7	24.03	24.32	24.42	25.00
		1	14	23.99	24.36	24.39	25.00
		8	0	23.09	23.20	23.57	24.00
		8	4	23.19	23.53	23.68	24.00
		8	7	23.10	23.60	23.49	24.00
		15	0	22.86	23.35	23.55	24.00
	16QAM	1	0	23.02	23.14	23.42	24.00
		1	7	23.25	23.51	23.70	24.00
		1	14	23.36	23.33	23.46	24.00
		8	0	22.02	22.35	22.67	23.00
		8	4	22.11	22.50	22.42	23.00
		8	7	21.93	22.39	22.52	23.00
		15	0	21.81	22.45	22.56	23.00
	64QAM	1	0	22.11	22.47	22.47	23.00
		1	7	22.20	22.64	22.60	23.00
		1	14	22.15	22.53	22.31	23.00
		8	0	20.86	21.33	21.61	22.00
		8	4	21.28	21.47	21.50	22.00
		8	7	21.18	21.69	21.42	22.00
		15	0	21.02	21.36	21.48	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	23.61	24.04	24.18	25.00
		1	13	24.09	24.38	24.44	25.00
		1	24	23.95	24.24	24.07	25.00
		12	0	22.79	23.24	23.61	24.00
		12	6	23.09	23.49	23.50	24.00
		12	13	23.20	23.44	23.47	24.00
		25	0	23.02	23.31	23.65	24.00
	16QAM	1	0	22.80	23.32	23.22	24.00
		1	13	23.07	23.53	23.46	24.00
		1	24	23.04	23.27	23.26	24.00
		12	0	21.94	22.33	22.49	23.00
		12	6	22.17	22.32	22.42	23.00
		12	13	22.01	22.53	22.50	23.00
		25	0	21.79	22.39	22.46	23.00
	64QAM	1	0	22.09	22.31	22.25	23.00
		1	13	22.16	22.70	22.36	23.00

		1	24	22.23	22.29	22.23	23.00
		12	0	20.72	21.21	21.65	22.00
		12	6	21.04	21.51	21.46	22.00
		12	13	20.92	21.59	21.30	22.00
		25	0	21.06	21.40	21.42	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	23.95	24.28	24.24	25.00
		1	25	24.17	24.42	24.36	25.00
		1	49	23.93	24.24	24.33	25.00
		25	0	23.11	23.16	23.45	24.00
		25	13	23.13	23.45	23.54	24.00
		25	25	23.04	23.48	23.45	24.00
		50	0	23.12	23.53	23.49	24.00
	16QAM	1	0	22.94	23.24	23.28	24.00
		1	25	23.41	23.55	23.82	24.00
		1	49	23.16	23.41	23.48	24.00
		25	0	21.72	22.33	22.47	23.00
		25	13	22.09	22.56	22.74	23.00
		25	25	21.97	22.35	22.50	23.00
		50	0	21.81	22.47	22.56	23.00
	64QAM	1	0	21.99	22.41	22.31	23.00
		1	25	22.26	22.52	22.64	23.00
		1	49	22.33	22.25	22.59	23.00
		25	0	21.02	21.15	21.73	22.00
		25	13	21.34	21.61	21.82	22.00
		25	25	21.26	21.49	21.56	22.00
		50	0	21.00	21.42	21.54	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	23.91	24.28	24.18	25.00
		1	38	24.29	24.26	24.60	25.00
		1	74	23.99	24.34	24.35	25.00
		36	0	22.83	23.38	23.81	24.00
		36	18	23.19	23.59	23.72	24.00
		36	39	23.18	23.58	23.63	24.00
		75	0	23.02	23.45	23.73	24.00
	16QAM	1	0	23.08	23.34	23.60	24.00
		1	38	23.43	23.57	23.58	24.00
		1	74	23.34	23.23	23.42	24.00

		36	0	21.80	22.45	22.59	23.00
		36	18	22.03	22.60	22.46	23.00
		36	39	21.97	22.53	22.34	23.00
		75	0	21.97	22.47	22.60	23.00
	64QAM	1	0	22.17	22.25	22.43	23.00
		1	38	22.38	22.52	22.72	23.00
		1	74	22.25	22.41	22.33	23.00
		36	0	21.06	21.43	21.51	22.00
		36	18	21.12	21.41	21.52	22.00
		36	39	21.00	21.67	21.56	22.00
		75	0	20.88	21.36	21.46	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	23.81	24.12	24.24	25.00
		1	50	24.11	24.32	24.44	25.00
		1	99	24.09	24.20	24.25	25.00
		50	0	22.93	23.30	23.63	24.00
		50	25	23.17	23.45	23.60	24.00
		50	50	23.10	23.56	23.51	24.00
		100	0	22.96	23.41	23.55	24.00
	16QAM	1	0	22.96	23.24	23.42	24.00
		1	50	23.27	23.45	23.64	24.00
		1	99	23.24	23.35	23.40	24.00
		50	0	21.88	22.27	22.55	23.00
		50	25	22.09	22.42	22.52	23.00
		50	50	22.01	22.49	22.44	23.00
		100	0	21.91	22.35	22.48	23.00
	64QAM	1	0	21.99	22.35	22.39	23.00
		1	50	22.24	22.60	22.56	23.00
		1	99	22.25	22.43	22.37	23.00
		50	0	20.90	21.33	21.61	22.00
		50	25	21.16	21.45	21.60	22.00
		50	50	21.10	21.59	21.50	22.00
		100	0	20.96	21.46	21.54	22.00

LTE Band2							
DSI 4-Low Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				18607/1850.7	18900/1880	19193/1909.3	
1.4MHz	QPSK	1	0	18.77	19.01	19.14	20.00

		1	2	18.97	19.31	19.49	20.00
		1	5	19.07	19.14	19.27	20.00
		3	0	19.18	19.57	19.85	20.00
		3	2	18.85	19.37	19.77	20.00
		3	3	19.20	19.77	19.76	20.00
		6	0	18.95	19.52	19.55	20.00
	16QAM	1	0	18.96	19.34	19.44	20.00
		1	2	19.62	19.81	19.84	20.00
		1	5	19.26	19.61	19.74	20.00
		3	0	18.67	19.37	19.97	20.00
		3	2	19.35	19.73	19.71	20.00
		3	3	18.93	19.51	19.57	20.00
		6	0	19.02	19.44	19.35	20.00
	64QAM	1	0	19.08	19.35	19.35	20.00
		1	2	19.20	19.94	19.59	20.00
		1	5	19.49	19.24	19.63	20.00
		3	0	19.20	19.26	19.83	20.00
		3	2	19.23	19.59	19.48	20.00
		3	3	19.27	19.61	19.54	20.00
		6	0	19.21	19.44	19.72	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	18.81	19.37	19.44	20.00
		1	7	19.21	19.43	19.59	20.00
		1	14	19.19	19.24	19.27	20.00
		8	0	19.06	19.25	19.85	20.00
		8	4	19.25	19.61	19.65	20.00
		8	7	19.28	19.51	19.52	20.00
		15	0	19.11	19.56	19.65	20.00
	16QAM	1	0	19.18	19.44	19.58	20.00
		1	7	19.46	19.77	19.90	20.00
		1	14	19.58	19.65	19.74	20.00
		8	0	18.81	19.25	19.71	20.00
		8	4	19.19	19.53	19.57	20.00
		8	7	19.17	19.67	19.57	20.00
		15	0	18.82	19.42	19.75	20.00
	64QAM	1	0	19.12	19.55	19.59	20.00
		1	7	19.42	19.84	19.73	20.00
		1	14	19.37	19.48	19.81	20.00
		8	0	19.10	19.30	19.61	20.00

		8	4	19.25	19.53	19.56	20.00
		8	7	19.15	19.63	19.60	20.00
		15	0	18.95	19.52	19.56	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	18.69	19.13	19.16	20.00
		1	13	18.95	19.35	19.41	20.00
		1	24	19.11	19.26	19.37	20.00
		12	0	19.04	19.35	19.53	20.00
		12	6	19.19	19.47	19.63	20.00
		12	13	19.20	19.55	19.58	20.00
		25	0	18.91	19.28	19.51	20.00
	16QAM	1	0	18.94	19.42	19.50	20.00
		1	13	19.34	19.85	19.92	20.00
		1	24	19.42	19.69	19.66	20.00
		12	0	18.85	19.15	19.77	20.00
		12	6	19.07	19.33	19.45	20.00
		12	13	18.87	19.71	19.51	20.00
		25	0	18.98	19.36	19.55	20.00
	64QAM	1	0	18.88	19.47	19.53	20.00
		1	13	19.18	19.76	19.69	20.00
		1	24	19.31	19.60	19.47	20.00
		12	0	18.82	19.34	19.61	20.00
		12	6	19.03	19.47	19.46	20.00
		12	13	19.19	19.53	19.40	20.00
		25	0	18.85	19.38	19.54	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	19.01	19.27	19.18	20.00
		1	25	19.01	19.27	19.59	20.00
		1	49	19.23	19.48	19.21	20.00
		25	0	18.98	19.43	19.71	20.00
		25	13	19.07	19.53	19.53	20.00
		25	25	19.18	19.71	19.58	20.00
		50	0	18.79	19.34	19.63	20.00
	16QAM	1	0	19.14	19.64	19.40	20.00
		1	25	19.54	19.89	19.92	20.00
		1	49	19.32	19.53	19.48	20.00
		25	0	19.05	19.41	19.77	20.00
		25	13	19.29	19.65	19.75	20.00

		25	25	19.09	19.47	19.51	20.00
		50	0	18.90	19.58	19.69	20.00
	64QAM	1	0	18.86	19.69	19.67	20.00
		1	25	19.34	19.88	19.81	20.00
		1	49	19.47	19.42	19.83	20.00
		25	0	18.92	19.20	19.61	20.00
		25	13	19.35	19.45	19.72	20.00
		25	25	19.21	19.53	19.74	20.00
		50	0	18.89	19.64	19.60	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	18.93	19.33	19.34	20.00
		1	38	19.07	19.35	19.39	20.00
		1	74	19.03	19.46	19.25	20.00
		36	0	19.06	19.43	19.81	20.00
		36	18	19.07	19.45	19.61	20.00
		36	39	19.14	19.57	19.46	20.00
		75	0	18.93	19.40	19.67	20.00
	16QAM	1	0	19.26	19.56	19.44	20.00
		1	38	19.42	19.85	19.96	20.00
		1	74	19.56	19.55	19.66	20.00
		36	0	18.91	19.45	19.65	20.00
		36	18	19.11	19.65	19.77	20.00
		36	39	19.25	19.77	19.55	20.00
		75	0	18.96	19.52	19.71	20.00
	64QAM	1	0	19.14	19.37	19.53	20.00
		1	38	19.34	19.62	19.85	20.00
		1	74	19.39	19.46	19.63	20.00
		36	0	18.86	19.26	19.69	20.00
		36	18	19.29	19.51	19.58	20.00
		36	39	18.99	19.73	19.54	20.00
		75	0	19.17	19.46	19.72	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	18.83	19.23	19.32	20.00
		1	50	19.15	19.45	19.49	20.00
		1	99	19.11	19.30	19.33	20.00
		50	0	18.96	19.35	19.69	20.00
		50	25	19.17	19.51	19.65	20.00
		50	50	19.14	19.61	19.58	20.00

	16QAM	100	0	18.97	19.44	19.61	20.00
		1	0	19.14	19.52	19.56	20.00
		1	50	19.48	19.83	19.82	20.00
		1	99	19.44	19.65	19.60	20.00
		50	0	18.89	19.33	19.67	20.00
		50	25	19.13	19.49	19.65	20.00
		50	50	19.07	19.63	19.57	20.00
		100	0	18.92	19.46	19.61	20.00
	64QAM	1	0	18.96	19.49	19.61	20.00
		1	50	19.26	19.74	19.83	20.00
		1	99	19.29	19.58	19.65	20.00
		50	0	18.94	19.36	19.67	20.00
		50	25	19.17	19.49	19.64	20.00
		50	50	19.11	19.65	19.60	20.00
		100	0	18.99	19.44	19.62	20.00

LTE Band2							
DSI 1-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				18607/1850.7	18900/1880	19193/1909.3	
1.4MHz	QPSK	1	0	15.70	16.21	15.97	16.50
		1	2	16.10	15.56	14.97	16.50
		1	5	15.58	14.79	14.95	16.50
		3	0	15.94	15.24	15.05	16.50
		3	2	16.12	15.64	15.12	16.50
		3	3	15.89	14.99	14.62	16.50
		6	0	15.82	14.97	14.81	16.50
	16QAM	1	0	16.22	16.01	15.41	16.50
		1	2	16.39	15.58	15.32	16.50
		1	5	16.07	14.93	14.57	16.50
		3	0	15.87	15.10	15.09	16.50
		3	2	16.17	15.60	14.58	16.50
		3	3	15.91	15.23	14.54	16.50
		6	0	15.94	15.47	14.69	16.50
	64QAM	1	0	16.04	15.81	15.25	16.50
		1	2	16.12	15.47	14.91	16.50
		1	5	15.57	14.81	14.72	16.50
		3	0	16.21	15.31	14.94	16.50
		3	2	15.96	15.41	14.97	16.50
		3	3	15.85	15.33	14.80	16.50

		6	0	15.91	14.92	14.92	16.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	16.00	16.23	15.91	16.50
		1	7	15.96	15.54	15.03	16.50
		1	14	15.62	14.87	14.69	16.50
		8	0	16.08	15.54	15.09	16.50
		8	4	16.18	15.44	14.90	16.50
		8	7	15.99	15.13	14.54	16.50
		15	0	15.96	15.15	14.75	16.50
	16QAM	1	0	16.18	15.97	15.43	16.50
		1	7	16.43	15.76	15.28	16.50
		1	14	15.91	15.11	14.57	16.50
		8	0	15.91	15.48	15.19	16.50
		8	4	16.03	15.38	14.98	16.50
		8	7	15.89	15.11	14.64	16.50
		15	0	16.06	15.33	14.84	16.50
	64QAM	1	0	16.02	15.79	15.17	16.50
		1	7	16.32	15.55	15.13	16.50
		1	14	15.67	14.97	14.94	16.50
		8	0	15.93	15.53	15.08	16.50
		8	4	16.22	15.35	15.05	16.50
		8	7	16.07	15.29	14.68	16.50
		15	0	15.87	15.12	14.90	16.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	15.88	16.05	15.69	16.50
		1	13	15.80	15.34	14.93	16.50
		1	24	15.62	14.63	14.67	16.50
		12	0	16.04	15.32	14.93	16.50
		12	6	15.98	15.18	14.70	16.50
		12	13	15.89	15.23	14.62	16.50
		25	0	15.82	15.29	14.75	16.50
	16QAM	1	0	16.24	15.79	15.51	16.50
		1	13	16.19	15.80	15.18	16.50
		1	24	15.79	15.01	14.66	16.50
		12	0	15.83	15.46	14.99	16.50
		12	6	15.97	15.28	14.78	16.50
		12	13	15.83	15.05	14.72	16.50
		25	0	15.72	15.13	14.84	16.50

	64QAM	1	0	15.94	15.77	15.13	16.50
		1	13	16.22	15.31	14.85	16.50
		1	24	15.75	14.65	14.82	16.50
		12	0	15.95	15.21	14.86	16.50
		12	6	15.92	15.27	14.85	16.50
		12	13	15.91	15.09	14.67	16.50
		25	0	15.81	15.10	14.90	16.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	15.94	16.13	15.59	16.50
		1	25	15.88	15.22	14.75	16.50
		1	49	15.46	14.65	14.61	16.50
		25	0	16.06	15.58	15.17	16.50
		25	13	15.90	15.32	14.98	16.50
		25	25	15.79	15.23	14.54	16.50
		50	0	16.12	15.27	14.63	16.50
	16QAM	1	0	16.20	15.85	15.45	16.50
		1	25	16.43	15.72	15.20	16.50
		1	49	16.11	15.03	14.81	16.50
		25	0	15.99	15.42	14.99	16.50
		25	13	15.97	15.28	14.78	16.50
		25	25	15.91	15.29	15.00	16.50
		50	0	15.80	15.05	14.92	16.50
	64QAM	1	0	16.20	15.75	15.13	16.50
		1	25	16.10	15.37	14.97	16.50
		1	49	15.95	14.97	14.76	16.50
		25	0	16.15	15.41	15.10	16.50
		25	13	16.02	15.55	14.75	16.50
		25	25	15.91	15.21	14.66	16.50
		50	0	16.17	15.16	14.86	16.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	16.02	16.35	15.93	16.50
		1	38	16.14	15.48	14.99	16.50
		1	74	15.64	14.75	14.77	16.50
		36	0	15.94	15.38	14.93	16.50
		36	18	16.20	15.32	14.88	16.50
		36	39	15.77	15.21	14.64	16.50
		75	0	16.08	15.09	14.87	16.50
	16QAM	1	0	16.18	15.97	15.39	16.50

		1	38	16.41	15.72	15.22	16.50
		1	74	15.81	15.01	14.73	16.50
		36	0	16.05	15.56	15.21	16.50
		36	18	16.13	15.26	14.98	16.50
		36	39	16.01	15.17	14.76	16.50
		75	0	16.06	15.21	14.98	16.50
	64QAM	1	0	16.16	15.81	15.15	16.50
		1	38	16.18	15.47	15.11	16.50
		1	74	15.87	14.93	14.74	16.50
		36	0	16.11	15.49	15.20	16.50
		36	18	16.16	15.53	15.05	16.50
		36	39	15.99	15.17	14.74	16.50
		75	0	16.03	15.30	14.70	16.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	15.88	16.25	15.75	16.50
		1	50	15.96	15.38	14.91	16.50
		1	99	15.60	14.73	14.77	16.50
		50	0	16.04	15.42	15.03	16.50
		50	25	16.02	15.38	14.90	16.50
		50	50	15.89	15.15	14.64	16.50
		100	0	15.94	15.21	14.81	16.50
	16QAM	1	0	16.14	15.97	15.47	16.50
		1	50	16.27	15.72	15.14	16.50
		1	99	15.89	15.07	14.61	16.50
		50	0	15.99	15.38	15.05	16.50
		50	25	16.01	15.38	14.88	16.50
		50	50	15.89	15.17	14.62	16.50
		100	0	15.90	15.21	14.80	16.50
	64QAM	1	0	16.08	15.69	15.25	16.50
		1	50	16.16	15.45	15.03	16.50
		1	99	15.77	14.83	14.80	16.50
		50	0	16.01	15.39	15.06	16.50
		50	25	16.06	15.41	14.91	16.50
		50	50	15.93	15.21	14.64	16.50
		100	0	15.95	15.22	14.82	16.50

LTE Band2							
DSI 2-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				18607/1850.7	18900/1880	19193/1909.3	
1.4MHz	QPSK	1	0	22.74	22.49	22.88	24.00
		1	2	22.81	22.92	23.06	24.00
		1	5	22.59	22.70	23.12	24.00
		3	0	22.68	22.85	23.16	24.00
		3	2	22.53	23.18	23.39	24.00
		3	3	22.60	23.15	23.13	24.00
		6	0	22.78	22.86	23.18	24.00
	16QAM	1	0	22.73	22.61	22.83	24.00
		1	2	23.08	23.22	23.28	24.00
		1	5	23.13	22.89	23.19	24.00
		3	0	23.04	22.76	23.04	24.00
		3	2	22.71	23.05	23.11	24.00
		3	3	23.41	22.85	23.05	24.00
		6	0	22.35	21.91	21.91	23.00
	64QAM	1	0	21.87	22.15	22.11	23.00
		1	2	22.37	22.09	22.29	23.00
		1	5	22.07	22.11	21.99	23.00
		3	0	21.90	21.80	21.72	23.00
		3	2	22.04	22.22	22.52	23.00
		3	3	22.06	21.74	22.28	23.00
		6	0	21.50	21.04	21.02	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	22.52	22.59	22.86	24.00
		1	7	22.65	23.12	23.20	24.00
		1	14	22.69	22.86	23.22	24.00
		8	0	22.76	22.85	23.36	24.00
		8	4	22.77	23.08	23.27	24.00
		8	7	22.92	23.17	23.43	24.00
		15	0	22.60	23.12	23.44	24.00
	16QAM	1	0	22.59	22.69	22.73	24.00
		1	7	22.98	23.00	23.02	24.00
		1	14	22.99	23.21	22.95	24.00
		8	0	22.18	22.06	22.10	23.00
		8	4	21.91	21.95	22.15	23.00

		8	7	22.51	22.11	22.35	23.00
		15	0	22.21	22.09	22.17	23.00
	64QAM	1	0	21.87	21.87	22.05	23.00
		1	7	22.25	22.25	22.23	23.00
		1	14	22.13	22.15	22.19	23.00
		8	0	21.00	20.82	20.86	22.00
		8	4	21.22	21.34	21.36	22.00
		8	7	21.36	21.04	21.16	22.00
		15	0	21.28	21.14	21.24	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	22.42	22.45	22.70	24.00
		1	13	22.81	22.90	23.16	24.00
		1	24	22.73	22.86	23.08	24.00
		12	0	22.66	22.91	23.24	24.00
		12	6	22.65	23.08	23.45	24.00
		12	13	22.86	22.95	23.39	24.00
		25	0	22.48	22.88	23.10	24.00
	16QAM	1	0	22.67	22.75	22.73	24.00
		1	13	22.72	23.04	22.96	24.00
		1	24	22.99	22.93	22.89	24.00
		12	0	22.14	21.80	21.94	23.00
		12	6	21.77	21.95	21.97	23.00
		12	13	22.57	21.93	22.09	23.00
		25	0	22.23	21.81	21.99	23.00
	64QAM	1	0	21.87	21.91	21.97	23.00
		1	13	21.97	22.11	22.11	23.00
		1	24	22.05	22.17	21.99	23.00
		12	0	20.98	20.68	20.66	22.00
		12	6	21.18	21.08	21.26	22.00
		12	13	21.28	20.96	21.02	22.00
		25	0	21.26	20.90	21.14	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	22.50	22.55	23.08	24.00
		1	25	22.79	23.16	23.22	24.00
		1	49	22.95	22.90	23.26	24.00
		25	0	22.80	22.81	23.36	24.00
		25	13	22.71	23.20	23.17	24.00
		25	25	22.64	23.33	23.35	24.00

	16QAM	50	0	22.74	22.84	23.52	24.00
		1	0	22.53	22.79	22.95	24.00
		1	25	22.74	23.04	23.20	24.00
		1	49	22.95	22.89	23.19	24.00
		25	0	22.36	21.90	21.92	23.00
		25	13	21.91	22.19	22.13	23.00
		25	25	22.39	22.09	22.25	23.00
		50	0	22.01	22.19	21.97	23.00
	64QAM	1	0	22.03	22.09	21.87	23.00
		1	25	22.13	22.11	22.11	23.00
		1	49	22.21	22.15	21.99	23.00
		25	0	20.84	20.90	20.72	22.00
		25	13	21.22	21.14	21.36	22.00
		25	25	21.12	21.28	21.12	22.00
		50	0	21.30	21.24	21.20	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	22.66	22.51	22.96	24.00
		1	38	22.65	23.10	23.34	24.00
		1	74	22.77	22.86	23.02	24.00
		36	0	22.84	22.85	23.38	24.00
		36	18	22.91	23.16	23.23	24.00
		36	39	22.70	23.11	23.47	24.00
		75	0	22.48	23.00	23.18	24.00
	16QAM	1	0	22.73	22.73	22.79	24.00
		1	38	22.88	23.06	23.20	24.00
		1	74	23.07	23.21	23.15	24.00
		36	0	22.18	22.04	22.20	23.00
		36	18	22.03	22.01	22.15	23.00
		36	39	22.63	22.23	22.39	23.00
		75	0	22.09	21.93	21.99	23.00
	64QAM	1	0	21.91	21.93	21.99	23.00
		1	38	22.03	22.07	22.31	23.00
		1	74	22.05	22.37	22.21	23.00
		36	0	21.06	20.84	20.96	22.00
		36	18	21.28	21.28	21.36	22.00
		36	39	21.10	21.12	21.30	22.00
		75	0	21.28	21.18	21.08	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18700/1860	18900/1880	19100/1900	

20MHz	QPSK	1	0	22.60	22.55	22.90	24.00
		1	50	22.71	23.05	23.30	24.00
		1	99	22.90	22.84	23.12	24.00
		50	0	22.74	22.93	23.30	24.00
		50	25	22.92	23.14	23.48	24.00
		50	50	22.78	23.28	23.29	24.00
		100	0	22.58	22.98	23.42	24.00
	16QAM	1	0	22.63	22.69	22.75	24.00
		1	50	22.92	23.04	23.04	24.00
		1	99	23.03	23.05	23.05	24.00
		50	0	22.20	21.92	22.02	23.00
		50	25	21.97	22.05	22.03	23.00
		50	50	22.47	22.13	22.29	23.00
		100	0	22.17	21.99	22.07	23.00
	64QAM	1	0	21.89	21.95	21.95	23.00
		1	50	22.15	22.09	22.19	23.00
		1	99	21.99	22.21	22.11	23.00
		50	0	20.94	20.88	20.86	22.00
		50	25	21.32	21.28	21.44	22.00
		50	50	21.22	21.06	21.20	22.00
		100	0	21.30	21.06	21.18	22.00

LTE Band2							
DSI 4-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				18607/1850.7	18900/1880	19193/1909.3	
1.4MHz	QPSK	1	0	17.70	17.59	16.85	18.50
		1	2	17.85	17.51	16.94	18.50
		1	5	17.39	17.05	16.52	18.50
		3	0	18.02	17.45	17.28	18.50
		3	2	18.12	17.54	17.03	18.50
		3	3	18.00	17.47	16.96	18.50
		6	0	17.90	17.22	16.76	18.50
	16QAM	1	0	18.27	18.04	17.40	18.50
		1	2	18.45	17.79	17.37	18.50
		1	5	18.07	17.44	16.95	18.50
		3	0	17.97	17.57	16.92	18.50
		3	2	17.83	17.60	17.07	18.50
		3	3	17.94	17.65	16.86	18.50
		6	0	17.91	17.38	17.16	18.50

	64QAM	1	0	17.84	17.58	17.32	18.50
		1	2	18.02	17.29	17.16	18.50
		1	5	17.74	16.83	16.92	18.50
		3	0	18.08	17.44	16.91	18.50
		3	2	17.87	17.50	17.04	18.50
		3	3	17.86	17.41	16.95	18.50
		6	0	17.88	17.13	16.86	18.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	17.60	17.23	16.99	18.00
		1	7	17.71	17.19	16.80	18.00
		1	14	17.39	16.83	16.26	18.00
		8	0	17.56	17.31	16.74	18.00
		8	4	17.80	17.60	16.75	18.00
		8	7	17.86	16.93	16.34	18.00
		15	0	17.32	16.98	16.64	18.00
	16QAM	1	0	17.71	17.60	17.20	18.00
		1	7	17.92	17.73	16.91	18.00
		1	14	17.79	17.24	16.79	18.00
		8	0	17.49	17.61	16.90	18.00
		8	4	17.57	17.06	16.89	18.00
		8	7	17.40	16.97	16.76	18.00
		15	0	17.47	17.24	16.76	18.00
	64QAM	1	0	17.30	17.48	16.92	18.00
		1	7	17.74	17.47	16.90	18.00
		1	14	17.18	16.91	16.24	18.00
		8	0	17.78	17.24	16.81	18.00
		8	4	17.90	17.26	17.10	18.00
		8	7	17.70	17.31	16.67	18.00
		15	0	17.94	17.41	16.78	18.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	17.84	17.29	16.67	18.00
		1	13	17.75	17.25	16.86	18.00
		1	24	17.49	16.87	16.48	18.00
		12	0	17.62	17.15	16.82	18.00
		12	6	17.60	17.64	16.89	18.00
		12	13	17.80	17.21	16.36	18.00
		25	0	17.78	17.26	16.58	18.00
	16QAM	1	0	17.61	17.66	17.08	18.00

		1	13	17.94	17.85	16.97	18.00
		1	24	17.77	17.20	16.71	18.00
		12	0	17.55	17.45	16.88	18.00
		12	6	17.65	17.04	17.03	18.00
		12	13	17.54	16.99	16.74	18.00
		25	0	17.69	17.38	16.96	18.00
	64QAM	1	0	17.76	17.50	17.06	18.00
		1	13	17.78	17.55	17.10	18.00
		1	24	17.32	17.01	16.52	18.00
		12	0	17.76	17.22	16.79	18.00
		12	6	17.81	17.32	16.84	18.00
		12	13	17.68	17.25	16.59	18.00
		25	0	17.76	17.37	16.54	18.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	17.96	17.39	16.87	18.00
		1	25	17.79	17.39	16.84	18.00
		1	49	17.55	16.99	16.54	18.00
		25	0	17.70	17.17	16.94	18.00
		25	13	17.76	17.56	16.93	18.00
		25	25	17.78	17.21	16.52	18.00
		50	0	17.72	17.30	16.68	18.00
	16QAM	1	0	17.75	17.66	17.18	18.00
		1	25	17.96	17.85	17.17	18.00
		1	49	17.81	17.28	16.69	18.00
		25	0	17.63	17.59	17.02	18.00
		25	13	17.75	17.16	16.95	18.00
		25	25	17.66	16.99	16.84	18.00
		50	0	17.73	17.54	17.06	18.00
	64QAM	1	0	17.68	17.62	17.16	18.00
		1	25	17.80	17.57	17.10	18.00
		1	49	17.36	16.93	16.52	18.00
		25	0	17.82	17.34	16.85	18.00
		25	13	17.91	17.46	17.00	18.00
		25	25	17.82	17.31	16.59	18.00
		50	0	17.76	17.43	16.72	18.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	17.76	17.69	17.19	18.00
		1	38	17.87	17.41	17.12	18.00

		1	74	17.57	17.17	16.80	18.00
		36	0	17.98	17.43	17.06	18.00
		36	18	17.98	17.62	17.15	18.00
		36	39	17.86	17.47	16.92	18.00
		75	0	17.82	17.42	16.92	18.00
	16QAM	1	0	17.96	17.80	17.28	18.00
		1	38	17.98	17.71	17.15	18.00
		1	74	17.86	17.36	16.93	18.00
		36	0	17.88	17.35	16.98	18.00
		36	18	17.81	17.36	16.93	18.00
		36	39	17.94	17.33	16.94	18.00
		75	0	17.93	17.52	16.82	18.00
	64QAM	1	0	17.96	17.72	17.12	18.00
		1	38	17.90	17.53	17.06	18.00
		1	74	17.66	17.07	16.82	18.00
		36	0	17.84	17.56	16.95	18.00
		36	18	17.91	17.38	17.10	18.00
		36	39	17.96	17.45	16.97	18.00
		75	0	17.66	17.31	16.94	18.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	17.82	17.63	17.09	18.00
		1	50	17.91	17.47	16.98	18.00
		1	99	17.57	17.07	16.62	18.00
		50	0	17.92	17.51	17.10	18.00
		50	25	17.98	17.52	17.05	18.00
		50	50	17.84	17.43	16.80	18.00
		100	0	17.80	17.38	16.92	18.00
	16QAM	1	0	17.93	17.80	17.26	18.00
		1	50	17.92	17.73	17.23	18.00
		1	99	17.85	17.32	16.83	18.00
		50	0	17.85	17.47	17.04	18.00
		50	25	17.91	17.46	17.01	18.00
		50	50	17.80	17.39	16.80	18.00
		100	0	17.79	17.36	16.90	18.00
	64QAM	1	0	17.98	17.60	17.18	18.00
		1	50	17.96	17.57	17.18	18.00
		1	99	17.68	17.13	16.80	18.00
		50	0	17.82	17.44	17.03	18.00
		50	25	17.89	17.48	17.02	18.00

		50	50	17.80	17.35	16.79	18.00
		100	0	17.78	17.39	16.88	18.00

LTE Band4								
DSI 1-Low Ant				Maximum Output Power (dBm)			Tune-up	
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)				
				19957/1710.7	20175/1732.5	20393/1754.3		
1.4MHz	QPSK	1	0	24.94	25.09	24.71	25.50	
		1	2	25.01	25.08	24.50	25.50	
		1	5	25.03	24.84	24.23	25.50	
		3	0	25.04	25.15	25.06	25.50	
		3	2	25.24	24.86	24.94	25.50	
		3	3	24.99	24.90	24.76	25.50	
		6	0	24.19	24.34	23.78	24.50	
	16QAM	1	0	24.11	24.00	23.77	24.50	
		1	2	24.16	24.00	23.68	24.50	
		1	5	24.06	23.77	23.26	24.50	
		3	0	23.80	23.77	23.90	24.50	
		3	2	24.10	23.97	23.66	24.50	
		3	3	23.73	23.70	23.69	24.50	
		6	0	22.91	22.91	22.81	23.50	
	64QAM	1	0	23.17	23.01	22.82	23.50	
		1	2	23.24	22.90	22.80	23.50	
		1	5	22.88	22.81	22.49	23.50	
		3	0	22.96	23.13	22.81	23.50	
		3	2	22.92	23.00	22.55	23.50	
		3	3	22.79	22.89	22.59	23.50	
		6	0	22.17	21.97	22.02	22.50	
	Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
					19965/1711.5	20175/1732.5	20385/1753.5	
	3MHz	QPSK	1	0	24.96	24.95	24.67	25.50
1			7	25.09	25.02	24.82	25.50	
1			14	24.91	24.74	24.29	25.50	
8			0	24.28	24.21	24.04	24.50	
8			4	24.36	24.22	23.90	24.50	
8			7	24.11	24.16	23.70	24.50	
15			0	24.25	24.00	23.92	24.50	
16QAM		1	0	24.07	24.00	23.83	24.50	
		1	7	24.08	24.00	23.88	24.50	
		1	14	23.88	23.85	23.30	24.50	

		8	0	22.92	23.09	22.96	23.50
		8	4	23.20	22.91	22.78	23.50
		8	7	22.93	22.78	22.65	23.50
		15	0	22.91	23.01	22.79	23.50
	64QAM	1	0	23.03	22.89	22.90	23.50
		1	7	23.10	23.02	23.02	23.50
		1	14	22.76	22.81	22.61	23.50
		8	0	22.06	22.19	21.83	22.50
		8	4	22.12	22.16	21.99	22.50
		8	7	22.05	22.01	21.67	22.50
		15	0	22.13	22.09	21.88	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19975/1712.5	20175/1732.5	20375/1752.5	
5MHz	QPSK	1	0	25.00	24.89	24.73	25.50
		1	13	25.19	25.00	24.68	25.50
		1	24	25.03	24.46	24.31	25.50
		12	0	24.02	24.09	24.06	24.50
		12	6	24.34	23.98	23.78	24.50
		12	13	24.17	24.08	23.76	24.50
		25	0	24.11	23.98	23.82	24.50
	16QAM	1	0	23.91	23.80	23.85	24.50
		1	13	23.92	24.04	23.62	24.50
		1	24	23.68	23.73	23.20	24.50
		12	0	22.96	23.13	22.76	23.50
		12	6	22.92	23.09	22.78	23.50
		12	13	23.11	22.64	22.71	23.50
		25	0	22.95	22.81	22.61	23.50
	64QAM	1	0	22.85	22.99	22.90	23.50
		1	13	23.12	22.90	22.76	23.50
		1	24	22.80	22.79	22.53	23.50
		12	0	21.92	22.09	21.89	22.50
		12	6	22.02	21.96	21.67	22.50
		12	13	21.91	21.71	21.65	22.50
		25	0	21.97	21.79	21.66	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	25.20	25.07	24.65	25.50
		1	25	25.33	24.90	24.66	25.50
		1	49	24.75	24.56	24.21	25.50
		25	0	24.16	24.37	24.04	24.50

		25	13	24.48	24.36	24.08	24.50
		25	25	24.41	23.88	23.98	24.50
		50	0	24.05	24.02	24.00	24.50
	16QAM	1	0	24.13	24.00	23.77	24.50
		1	25	24.12	24.20	23.68	24.50
		1	49	23.90	23.73	23.54	24.50
		25	0	23.20	22.87	22.74	23.50
		25	13	23.24	23.09	22.74	23.50
		25	25	23.13	22.86	22.85	23.50
		50	0	23.03	23.09	22.71	23.50
	64QAM	1	0	22.89	23.05	22.80	23.50
		1	25	22.94	23.16	22.82	23.50
		1	49	22.72	22.63	22.65	23.50
		25	0	22.00	21.93	21.87	22.50
		25	13	22.26	22.18	21.87	22.50
		25	25	22.03	21.73	21.55	22.50
		50	0	21.97	21.81	21.80	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20025/1717.5	20175/1732.5	20325/1747.5	
15MHz	QPSK	1	0	25.20	24.97	24.77	25.50
		1	38	25.29	25.08	24.54	25.50
		1	74	25.03	24.64	24.37	25.50
		36	0	24.14	24.27	23.88	24.50
		36	18	24.34	24.32	24.06	24.50
		36	39	24.31	23.98	23.78	24.50
		75	0	24.19	24.10	23.94	24.50
	16QAM	1	0	23.95	23.96	23.87	24.50
		1	38	24.22	23.92	23.66	24.50
		1	74	23.90	23.83	23.44	24.50
		36	0	23.00	23.15	22.78	23.50
		36	18	23.18	23.17	22.78	23.50
		36	39	23.01	22.86	22.85	23.50
		75	0	23.15	22.99	22.81	23.50
	64QAM	1	0	22.91	22.83	22.96	23.50
		1	38	22.96	23.18	23.02	23.50
		1	74	22.78	22.75	22.57	23.50
		36	0	22.08	22.01	21.95	22.50
		36	18	22.26	22.12	21.77	22.50
		36	39	22.23	22.07	21.65	22.50
		75	0	21.91	21.95	21.86	22.50

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	25.06	24.97	24.77	25.50
		1	50	25.17	24.98	24.66	25.50
		1	99	24.93	24.66	24.27	25.50
		50	0	24.20	24.23	23.98	24.50
		50	25	24.34	24.18	23.94	24.50
		50	50	24.21	24.00	23.78	24.50
		100	0	24.17	24.10	23.86	24.50
	16QAM	1	0	23.97	23.98	23.83	24.50
		1	50	24.08	24.00	23.72	24.50
		1	99	23.88	23.73	23.34	24.50
		50	0	23.00	23.05	22.86	23.50
		50	25	23.12	23.01	22.82	23.50
		50	50	23.01	22.84	22.67	23.50
		100	0	22.97	22.95	22.73	23.50
	64QAM	1	0	22.97	22.95	22.92	23.50
		1	50	23.02	23.04	22.90	23.50
		1	99	22.84	22.77	22.47	23.50
		50	0	22.04	22.09	21.89	22.50
		50	25	22.16	22.06	21.87	22.50
		50	50	22.07	21.89	21.71	22.50
		100	0	22.01	21.99	21.78	22.50

LTE Band4							
DSI 2-Low Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				19957/1710.7	20175/1732.5	20393/1754.3	
1.4MHz	QPSK	1	0	23.76	23.56	23.01	24.50
		1	2	23.75	23.19	23.07	24.50
		1	5	23.43	22.81	22.52	24.50
		3	0	23.53	23.28	22.78	24.50
		3	2	23.98	23.17	22.81	24.50
		3	3	23.53	23.03	22.92	24.50
		6	0	23.68	23.38	23.12	24.50
	16QAM	1	0	23.38	23.38	23.34	24.50
		1	2	23.11	23.47	22.95	24.50
		1	5	23.17	23.11	23.17	24.50
		3	0	23.26	23.18	23.44	24.50
		3	2	23.25	23.15	23.17	24.50

		3	3	22.91	23.19	23.01	24.50
		6	0	22.11	22.27	22.27	23.50
	64QAM	1	0	22.37	22.01	22.49	23.50
		1	2	22.70	22.30	22.60	23.50
		1	5	22.11	22.29	22.15	23.50
		3	0	22.30	22.14	22.44	23.50
		3	2	22.36	22.24	22.32	23.50
		3	3	22.22	22.02	22.16	23.50
		6	0	21.13	21.35	21.25	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19965/1711.5	20175/1732.5	20385/1753.5	
3MHz	QPSK	1	0	23.68	23.60	23.09	24.50
		1	7	23.77	23.27	22.85	24.50
		1	14	23.17	22.99	22.64	24.50
		8	0	23.83	23.34	23.18	24.50
		8	4	24.08	23.49	23.09	24.50
		8	7	23.51	23.11	22.96	24.50
		15	0	23.96	23.14	23.00	24.50
	16QAM	1	0	23.52	23.32	23.36	24.50
		1	7	23.03	23.13	22.95	24.50
		1	14	23.27	23.27	23.29	24.50
		8	0	22.58	22.48	22.82	23.50
		8	4	22.25	22.41	22.21	23.50
		8	7	22.17	22.31	22.21	23.50
		15	0	22.15	22.17	22.27	23.50
	64QAM	1	0	22.25	22.17	22.33	23.50
		1	7	22.60	22.40	22.74	23.50
		1	14	22.15	22.33	22.27	23.50
		8	0	21.30	21.50	21.44	22.50
		8	4	21.28	21.36	21.36	22.50
		8	7	21.34	21.12	21.28	22.50
		15	0	21.15	21.25	21.33	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19975/1712.5	20175/1732.5	20375/1752.5	
5MHz	QPSK	1	0	23.76	23.36	22.91	24.50
		1	13	23.81	23.29	22.97	24.50
		1	24	23.35	22.75	22.52	24.50
		12	0	23.73	23.42	23.06	24.50
		12	6	23.78	23.41	22.93	24.50
		12	13	23.71	23.03	22.90	24.50

	16QAM	25	0	23.92	23.08	22.94	24.50
		1	0	23.38	23.40	23.40	24.50
		1	13	22.95	23.19	23.05	24.50
		1	24	23.29	23.21	23.15	24.50
		12	0	22.56	22.40	22.82	23.50
		12	6	22.21	22.29	22.33	23.50
		12	13	22.21	21.99	22.11	23.50
		25	0	22.05	22.19	22.25	23.50
	64QAM	1	0	22.01	21.97	22.23	23.50
		1	13	22.60	22.44	22.52	23.50
		1	24	22.19	22.13	22.01	23.50
		12	0	21.20	21.42	21.26	22.50
		12	6	21.18	21.22	21.38	22.50
		12	13	21.12	20.94	21.18	22.50
		25	0	21.29	21.33	21.15	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	23.78	23.46	22.91	24.50
		1	25	23.61	23.13	22.99	24.50
		1	49	23.27	22.85	22.58	24.50
		25	0	23.57	23.54	22.96	24.50
		25	13	23.92	23.49	22.85	24.50
		25	25	23.71	23.21	23.12	24.50
		50	0	23.64	23.12	22.80	24.50
	16QAM	1	0	23.44	23.40	23.30	24.50
		1	25	23.09	23.13	22.93	24.50
		1	49	23.17	23.25	23.11	24.50
		25	0	22.58	22.46	22.66	23.50
		25	13	22.33	22.11	22.27	23.50
		25	25	22.17	22.01	22.43	23.50
		50	0	21.95	22.15	22.37	23.50
	64QAM	1	0	22.01	22.35	22.23	23.50
		1	25	22.48	22.58	22.78	23.50
		1	49	22.03	22.29	22.33	23.50
		25	0	21.34	21.52	21.48	22.50
		25	13	21.34	21.26	21.42	22.50
		25	25	21.26	20.92	21.22	22.50
		50	0	21.13	21.31	21.29	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20025/1717.5	20175/1732.5	20325/1747.5	

15MHz	QPSK	1	0	23.92	23.54	23.21	24.50
		1	38	23.77	23.37	23.03	24.50
		1	74	23.25	23.01	22.54	24.50
		36	0	23.91	23.40	23.08	24.50
		36	18	24.06	23.57	23.13	24.50
		36	39	23.75	23.03	22.88	24.50
		75	0	23.98	23.24	23.16	24.50
	16QAM	1	0	23.30	23.40	23.44	24.50
		1	38	23.21	23.39	23.03	24.50
		1	74	23.39	23.41	23.29	24.50
		36	0	22.70	22.54	22.64	23.50
		36	18	22.23	22.25	22.19	23.50
		36	39	22.31	22.07	22.25	23.50
		75	0	22.05	22.35	22.15	23.50
	64QAM	1	0	22.19	22.21	22.17	23.50
		1	38	22.62	22.58	22.54	23.50
		1	74	22.23	22.25	22.09	23.50
		36	0	21.32	21.32	21.44	22.50
		36	18	21.20	21.28	21.26	22.50
		36	39	21.18	21.22	21.38	22.50
		75	0	21.41	21.39	21.45	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	23.74	23.46	23.05	24.50
		1	50	23.77	23.19	22.93	24.50
		1	99	23.25	22.91	22.66	24.50
		50	0	23.75	23.42	23.04	24.50
		50	25	23.92	23.47	23.03	24.50
		50	50	23.61	23.09	22.90	24.50
		100	0	23.82	23.16	22.98	24.50
	16QAM	1	0	23.38	23.40	23.44	24.50
		1	50	23.13	23.23	23.01	24.50
		1	99	23.21	23.25	23.23	24.50
		50	0	22.58	22.42	22.76	23.50
		50	25	22.31	22.29	22.31	23.50
		50	50	22.19	22.15	22.29	23.50
		100	0	22.13	22.21	22.21	23.50
	64QAM	1	0	22.17	22.13	22.29	23.50
		1	50	22.54	22.40	22.64	23.50
		1	99	22.19	22.27	22.15	23.50

		50	0	21.40	21.44	21.42	22.50
		50	25	21.32	21.38	21.32	22.50
		50	50	21.18	21.10	21.32	22.50
		100	0	21.25	21.29	21.33	22.50

LTE Band4							
DSI 4-Low Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				19957/1710.7	20175/1732.5	20393/1754.3	
1.4MHz	QPSK	1	0	18.59	18.53	18.63	19.00
		1	2	18.59	18.68	18.34	19.00
		1	5	18.48	18.21	17.96	19.00
		3	0	18.91	18.58	18.38	19.00
		3	2	18.63	18.53	18.66	19.00
		3	3	18.77	18.76	18.40	19.00
		6	0	18.59	18.63	18.57	19.00
	16QAM	1	0	18.59	18.68	18.53	19.00
		1	2	18.81	18.38	18.53	19.00
		1	5	18.48	18.28	17.99	19.00
		3	0	18.58	18.35	18.25	19.00
		3	2	18.54	18.35	18.58	19.00
		3	3	18.51	18.15	18.13	19.00
		6	0	18.53	18.16	18.24	19.00
	64QAM	1	0	18.66	18.43	18.57	19.00
		1	2	18.94	18.72	18.36	19.00
		1	5	18.48	18.03	17.68	19.00
		3	0	18.49	18.51	18.24	19.00
		3	2	18.52	18.47	18.51	19.00
		3	3	18.44	18.35	18.43	19.00
		6	0	18.72	18.31	18.04	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19965/1711.5	20175/1732.5	20385/1753.5	
3MHz	QPSK	1	0	18.55	18.39	18.43	19.00
		1	7	18.81	18.48	18.24	19.00
		1	14	18.36	18.11	17.92	19.00
		8	0	18.81	18.66	18.46	19.00
		8	4	18.83	18.83	18.38	19.00
		8	7	18.75	18.48	18.40	19.00
		15	0	18.67	18.47	18.35	19.00
	16QAM	1	0	18.65	18.66	18.63	19.00

		1	7	18.63	18.78	18.77	19.00
		1	14	18.50	18.54	18.19	19.00
		8	0	18.68	18.69	18.43	19.00
		8	4	18.58	18.71	18.30	19.00
		8	7	18.67	18.29	18.31	19.00
		15	0	18.43	18.58	18.34	19.00
	64QAM	1	0	18.52	18.57	18.37	19.00
		1	7	18.74	18.62	18.34	19.00
		1	14	18.42	18.27	18.00	19.00
		8	0	18.59	18.67	18.52	19.00
		8	4	18.76	18.57	18.35	19.00
		8	7	18.68	18.51	18.23	19.00
		15	0	18.44	18.35	18.34	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19975/1712.5	20175/1732.5	20375/1752.5	
5MHz	QPSK	1	0	18.57	18.43	18.35	19.00
		1	13	18.55	18.58	18.42	19.00
		1	24	18.48	18.27	18.06	19.00
		12	0	18.61	18.48	18.50	19.00
		12	6	18.67	18.77	18.38	19.00
		12	13	18.55	18.36	18.18	19.00
		25	0	18.51	18.51	18.21	19.00
	16QAM	1	0	18.59	18.46	18.41	19.00
		1	13	18.65	18.78	18.51	19.00
		1	24	18.40	18.36	18.09	19.00
		12	0	18.46	18.57	18.25	19.00
		12	6	18.42	18.39	18.48	19.00
		12	13	18.39	18.31	18.17	19.00
		25	0	18.53	18.34	18.10	19.00
	64QAM	1	0	18.46	18.31	18.47	19.00
		1	13	18.72	18.46	18.38	19.00
		1	24	18.60	18.27	17.78	19.00
		12	0	18.43	18.41	18.50	19.00
		12	6	18.56	18.33	18.29	19.00
		12	13	18.40	18.23	18.29	19.00
		25	0	18.46	18.25	18.22	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	18.61	18.71	18.55	19.00
		1	25	18.55	18.36	18.20	19.00

		1	49	18.32	18.17	17.78	19.00
		25	0	18.55	18.84	18.52	19.00
		25	13	18.93	18.49	18.36	19.00
		25	25	18.57	18.54	18.22	19.00
		50	0	18.47	18.47	18.59	19.00
	16QAM	1	0	18.61	18.44	18.75	19.00
		1	25	18.89	18.70	18.79	19.00
		1	49	18.38	18.48	18.31	19.00
		25	0	18.34	18.57	18.49	19.00
		25	13	18.64	18.71	18.62	19.00
		25	25	18.69	18.49	18.33	19.00
		50	0	18.33	18.64	18.50	19.00
	64QAM	1	0	18.44	18.45	18.23	19.00
		1	25	18.64	18.50	18.32	19.00
		1	49	18.68	18.57	17.84	19.00
		25	0	18.37	18.73	18.58	19.00
		25	13	18.46	18.47	18.21	19.00
		25	25	18.52	18.55	18.25	19.00
		50	0	18.58	18.63	18.24	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20025/1717.5	20175/1732.5	20325/1747.5	
15MHz	QPSK	1	0	18.61	18.43	18.45	19.00
		1	38	18.53	18.42	18.44	19.00
		1	74	18.46	18.15	18.00	19.00
		36	0	18.81	18.80	18.42	19.00
		36	18	18.67	18.55	18.46	19.00
		36	39	18.79	18.62	18.18	19.00
		75	0	18.59	18.65	18.33	19.00
	16QAM	1	0	18.51	18.72	18.73	19.00
		1	38	18.59	18.60	18.55	19.00
		1	74	18.50	18.58	18.25	19.00
		36	0	18.58	18.71	18.61	19.00
		36	18	18.60	18.67	18.56	19.00
		36	39	18.53	18.47	18.41	19.00
		75	0	18.65	18.62	18.44	19.00
	64QAM	1	0	18.56	18.49	18.57	19.00
		1	38	18.82	18.70	18.24	19.00
		1	74	18.62	18.39	17.90	19.00
		36	0	18.49	18.65	18.54	19.00
		36	18	18.72	18.63	18.27	19.00

		36	39	18.68	18.39	18.39	19.00
		75	0	18.64	18.31	18.38	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	18.49	18.49	18.43	19.00
		1	50	18.65	18.50	18.34	19.00
		1	99	18.44	18.21	17.96	19.00
		50	0	18.65	18.68	18.50	19.00
		50	25	18.77	18.67	18.46	19.00
		50	50	18.67	18.48	18.30	19.00
		100	0	18.61	18.55	18.41	19.00
	16QAM	1	0	18.57	18.62	18.61	19.00
		1	50	18.67	18.70	18.61	19.00
		1	99	18.52	18.46	18.15	19.00
		50	0	18.52	18.57	18.45	19.00
		50	25	18.62	18.55	18.40	19.00
		50	50	18.53	18.39	18.25	19.00
		100	0	18.49	18.44	18.30	19.00
	64QAM	1	0	18.58	18.51	18.39	19.00
		1	50	18.70	18.52	18.36	19.00
		1	99	18.50	18.35	17.98	19.00
		50	0	18.49	18.55	18.44	19.00
		50	25	18.62	18.53	18.37	19.00
		50	50	18.52	18.37	18.25	19.00
		100	0	18.46	18.43	18.28	19.00

LTE Band4							
DSI 1-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				19957/1710.7	20175/1732.5	20393/1754.3	
1.4MHz	QPSK	1	0	18.07	18.55	18.06	19.00
		1	2	17.98	18.17	18.28	19.00
		1	5	18.40	17.88	17.68	19.00
		3	0	18.12	18.40	18.20	19.00
		3	2	18.44	18.45	18.40	19.00
		3	3	18.22	18.59	18.07	19.00
		6	0	18.37	18.08	18.20	19.00
	16QAM	1	0	18.42	18.05	18.30	19.00
		1	2	18.23	18.26	18.03	19.00
		1	5	18.07	18.30	18.29	19.00

		3	0	18.01	18.24	18.14	19.00
		3	2	18.37	18.04	18.37	19.00
		3	3	18.45	18.39	17.76	19.00
		6	0	18.23	18.16	17.95	19.00
	64QAM	1	0	18.28	18.19	18.31	19.00
		1	2	18.42	18.30	18.31	19.00
		1	5	18.32	18.12	17.90	19.00
		3	0	18.15	18.14	18.05	19.00
		3	2	18.52	18.14	18.49	19.00
		3	3	18.26	17.88	18.18	19.00
		6	0	18.09	18.17	18.24	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19965/1711.5	20175/1732.5	20385/1753.5	
3MHz	QPSK	1	0	18.17	18.39	18.18	19.00
		1	7	18.40	18.13	18.10	19.00
		1	14	18.02	18.08	18.00	19.00
		8	0	18.52	18.50	18.30	19.00
		8	4	18.48	18.59	18.36	19.00
		8	7	18.42	18.19	18.15	19.00
		15	0	18.47	18.42	18.24	19.00
	16QAM	1	0	18.38	18.19	18.20	19.00
		1	7	18.47	18.38	18.53	19.00
		1	14	18.27	18.22	18.01	19.00
		8	0	18.25	18.36	18.16	19.00
		8	4	18.57	18.34	18.27	19.00
		8	7	18.33	18.25	18.16	19.00
		15	0	18.19	18.28	18.19	19.00
	64QAM	1	0	18.36	18.15	18.17	19.00
		1	7	18.40	18.22	18.19	19.00
		1	14	18.30	18.32	18.02	19.00
		8	0	18.27	18.32	18.21	19.00
		8	4	18.34	18.22	18.39	19.00
		8	7	18.46	18.28	18.28	19.00
		15	0	18.37	18.29	18.12	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19975/1712.5	20175/1732.5	20375/1752.5	
5MHz	QPSK	1	0	18.35	18.31	18.08	19.00
		1	13	18.30	18.33	18.08	19.00
		1	24	18.06	18.08	17.92	19.00
		12	0	18.36	18.52	18.30	19.00

		12	6	18.64	18.53	18.48	19.00
		12	13	18.56	18.33	18.27	19.00
		25	0	18.29	18.26	18.38	19.00
	16QAM	1	0	18.28	18.19	18.32	19.00
		1	13	18.33	18.52	18.51	19.00
		1	24	18.13	18.24	18.19	19.00
		12	0	18.25	18.30	18.18	19.00
		12	6	18.37	18.42	18.21	19.00
		12	13	18.19	18.17	18.04	19.00
		25	0	18.29	18.12	18.09	19.00
		1	0	18.48	18.13	18.15	19.00
	64QAM	1	13	18.44	18.34	18.29	19.00
		1	24	18.34	18.30	17.96	19.00
		12	0	18.27	18.46	18.15	19.00
		12	6	18.34	18.44	18.15	19.00
		12	13	18.20	18.06	18.22	19.00
		25	0	18.19	18.25	18.06	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	18.29	18.13	18.02	19.00
		1	25	18.48	18.23	18.30	19.00
		1	49	17.98	17.92	17.86	19.00
		25	0	18.32	18.46	18.34	19.00
		25	13	18.38	18.31	18.16	19.00
		25	25	18.46	18.39	18.03	19.00
		50	0	18.43	18.26	18.10	19.00
	16QAM	1	0	18.56	18.13	18.20	19.00
		1	25	18.47	18.32	18.57	19.00
		1	49	18.21	18.40	17.97	19.00
		25	0	18.19	18.50	18.28	19.00
		25	13	18.47	18.46	18.09	19.00
		25	25	18.19	18.17	18.34	19.00
		50	0	18.25	18.32	18.35	19.00
	64QAM	1	0	18.54	18.35	18.23	19.00
		1	25	18.32	18.30	18.09	19.00
		1	49	18.44	18.36	17.96	19.00
		25	0	18.49	18.24	18.13	19.00
		25	13	18.58	18.46	18.17	19.00
		25	25	18.16	18.38	18.22	19.00
		50	0	18.21	18.01	18.12	19.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20025/1717.5	20175/1732.5	20325/1747.5	
15MHz	QPSK	1	0	18.17	18.17	18.28	19.00
		1	38	18.46	18.35	18.04	19.00
		1	74	18.02	17.88	17.86	19.00
		36	0	18.34	18.46	18.26	19.00
		36	18	18.50	18.61	18.44	19.00
		36	39	18.54	18.23	18.07	19.00
		75	0	18.31	18.22	18.22	19.00
	16QAM	1	0	18.28	18.43	18.26	19.00
		1	38	18.35	18.38	18.27	19.00
		1	74	18.13	18.16	18.27	19.00
		36	0	18.19	18.30	18.16	19.00
		36	18	18.57	18.28	18.27	19.00
		36	39	18.31	18.09	18.30	19.00
		75	0	18.41	18.14	18.31	19.00
	64QAM	1	0	18.28	18.41	18.29	19.00
		1	38	18.44	18.24	18.25	19.00
		1	74	18.42	18.14	17.92	19.00
		36	0	18.45	18.26	18.13	19.00
		36	18	18.46	18.42	18.11	19.00
		36	39	18.24	18.32	18.22	19.00
		75	0	18.29	18.23	18.02	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	18.23	18.23	18.16	19.00
		1	50	18.32	18.23	18.12	19.00
		1	99	18.12	18.00	17.84	19.00
		50	0	18.42	18.46	18.34	19.00
		50	25	18.52	18.43	18.32	19.00
		50	50	18.42	18.27	18.19	19.00
		100	0	18.39	18.32	18.26	19.00
	16QAM	1	0	18.34	18.29	18.30	19.00
		1	50	18.43	18.38	18.37	19.00
		1	99	18.23	18.18	18.11	19.00
		50	0	18.29	18.34	18.26	19.00
		50	25	18.41	18.32	18.25	19.00
		50	50	18.29	18.19	18.12	19.00
		100	0	18.23	18.20	18.17	19.00
	64QAM	1	0	18.36	18.23	18.23	19.00

		1	50	18.48	18.32	18.27	19.00
		1	99	18.26	18.16	18.00	19.00
		50	0	18.29	18.30	18.23	19.00
		50	25	18.38	18.30	18.23	19.00
		50	50	18.30	18.16	18.12	19.00
		100	0	18.23	18.19	18.14	19.00

LTE Band4							
DSI 2-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				19957/1710.7	20175/1732.5	20393/1754.3	
1.4MHz	QPSK	1	0	24.73	24.84	24.69	25.50
		1	2	24.89	24.73	24.65	25.50
		1	5	24.55	24.67	24.31	25.50
		3	0	24.86	25.00	24.88	25.50
		3	2	24.98	24.72	24.68	25.50
		3	3	24.93	24.53	24.60	25.50
		6	0	23.89	23.96	23.77	24.50
	16QAM	1	0	23.76	23.90	23.65	24.50
		1	2	23.98	23.78	23.86	24.50
		1	5	23.68	23.68	23.52	24.50
		3	0	23.58	23.75	23.43	24.50
		3	2	23.79	23.80	23.38	24.50
		3	3	23.75	23.46	23.56	24.50
		6	0	22.73	22.59	22.84	23.50
	64QAM	1	0	22.65	22.83	22.67	23.50
		1	2	22.77	23.06	22.68	23.50
		1	5	22.44	22.76	22.54	23.50
		3	0	22.71	22.71	22.55	23.50
		3	2	22.73	22.88	22.77	23.50
		3	3	22.72	22.41	22.55	23.50
		6	0	21.86	21.66	21.53	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19965/1711.5	20175/1732.5	20385/1753.5	
3MHz	QPSK	1	0	24.83	24.82	24.57	25.50
		1	7	24.91	24.81	24.53	25.50
		1	14	24.77	24.63	24.19	25.50
		8	0	23.88	23.96	23.88	24.50
		8	4	24.12	23.84	23.80	24.50
		8	7	23.93	23.91	23.72	24.50

	16QAM	15	0	23.79	23.76	23.71	24.50
		1	0	23.96	23.74	23.57	24.50
		1	7	23.82	23.76	23.68	24.50
		1	14	23.80	23.66	23.48	24.50
		8	0	22.88	22.85	22.71	23.50
		8	4	22.85	22.94	22.70	23.50
		8	7	22.67	22.56	22.52	23.50
		15	0	22.75	22.79	22.66	23.50
	64QAM	1	0	22.69	22.85	22.83	23.50
		1	7	22.71	22.86	22.72	23.50
		1	14	22.72	22.72	22.58	23.50
		8	0	21.75	21.79	21.91	22.50
		8	4	21.83	21.92	21.87	22.50
		8	7	21.84	21.61	21.69	22.50
		15	0	21.88	21.92	21.81	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19975/1712.5	20175/1732.5	20375/1752.5	
5MHz	QPSK	1	0	24.55	24.78	24.65	25.50
		1	13	24.85	24.73	24.61	25.50
		1	24	24.77	24.39	24.07	25.50
		12	0	23.90	23.82	23.78	24.50
		12	6	24.10	23.92	23.70	24.50
		12	13	23.81	23.87	23.56	24.50
		25	0	23.97	23.84	23.63	24.50
	16QAM	1	0	23.72	23.82	23.49	24.50
		1	13	23.80	23.84	23.68	24.50
		1	24	23.68	23.66	23.42	24.50
		12	0	22.56	22.85	22.69	23.50
		12	6	22.93	22.66	22.72	23.50
		12	13	22.81	22.66	22.58	23.50
		25	0	22.73	22.51	22.68	23.50
	64QAM	1	0	22.71	22.81	22.81	23.50
		1	13	22.67	22.62	22.54	23.50
		1	24	22.48	22.60	22.36	23.50
		12	0	21.63	21.93	21.83	22.50
		12	6	21.90	21.92	21.79	22.50
		12	13	21.72	21.53	21.53	22.50
		25	0	21.64	21.84	21.49	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20000/1715	20175/1732.5	20350/1750	

10MHz	QPSK	1	0	24.61	24.86	24.65	25.50
		1	25	25.05	24.71	24.65	25.50
		1	49	24.75	24.69	24.29	25.50
		25	0	23.84	23.88	23.70	24.50
		25	13	23.96	24.04	23.72	24.50
		25	25	23.79	23.85	23.56	24.50
		50	0	23.83	23.80	23.89	24.50
	16QAM	1	0	23.86	23.78	23.73	24.50
		1	25	23.96	23.94	23.48	24.50
		1	49	23.70	23.64	23.32	24.50
		25	0	22.70	22.91	22.63	23.50
		25	13	22.91	22.62	22.88	23.50
		25	25	22.99	22.78	22.80	23.50
		50	0	22.69	22.53	22.64	23.50
	64QAM	1	0	22.63	22.73	22.61	23.50
		1	25	22.97	22.76	22.90	23.50
		1	49	22.56	22.74	22.44	23.50
		25	0	21.95	21.67	21.63	22.50
		25	13	21.77	21.84	21.65	22.50
		25	25	21.64	21.89	21.51	22.50
		50	0	21.68	21.68	21.81	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20025/1717.5	20175/1732.5	20325/1747.5	
15MHz	QPSK	1	0	24.65	24.86	24.57	25.50
		1	38	25.09	24.85	24.49	25.50
		1	74	24.87	24.51	24.27	25.50
		36	0	23.92	23.92	23.72	24.50
		36	18	24.22	24.10	23.76	24.50
		36	39	24.09	23.87	23.86	24.50
		75	0	23.85	23.96	23.63	24.50
	16QAM	1	0	23.78	23.62	23.61	24.50
		1	38	24.02	24.00	23.78	24.50
		1	74	23.72	23.66	23.20	24.50
		36	0	22.82	22.97	22.87	23.50
		36	18	22.87	22.66	22.72	23.50
		36	39	22.83	22.82	22.76	23.50
		75	0	22.69	22.67	22.68	23.50
	64QAM	1	0	22.67	22.77	22.87	23.50
		1	38	22.79	22.76	22.78	23.50
		1	74	22.56	22.76	22.44	23.50

		36	0	21.89	21.86	21.93	22.50
		36	18	21.92	21.88	21.87	22.50
		36	39	21.92	21.67	21.69	22.50
		75	0	21.92	21.68	21.83	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	24.73	24.72	24.57	25.50
		1	50	24.91	24.77	24.57	25.50
		1	99	24.69	24.51	24.27	25.50
		50	0	23.94	23.94	23.80	24.50
		50	25	24.06	23.94	23.82	24.50
		50	50	23.95	23.77	23.68	24.50
		100	0	23.89	23.82	23.71	24.50
	16QAM	1	0	23.82	23.74	23.65	24.50
		1	50	23.88	23.82	23.62	24.50
		1	99	23.70	23.60	23.32	24.50
		50	0	22.74	22.81	22.69	23.50
		50	25	22.87	22.78	22.70	23.50
		50	50	22.77	22.64	22.58	23.50
		100	0	22.73	22.69	22.60	23.50
	64QAM	1	0	22.71	22.73	22.73	23.50
		1	50	22.75	22.82	22.74	23.50
		1	99	22.58	22.60	22.42	23.50
		50	0	21.79	21.85	21.75	22.50
		50	25	21.91	21.86	21.73	22.50
		50	50	21.82	21.67	21.65	22.50
		100	0	21.76	21.76	21.65	22.50

LTE Band4							
DSI 4-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				19957/1710.7	20175/1732.5	20393/1754.3	
1.4MHz	QPSK	1	0	20.55	20.94	20.44	21.50
		1	2	20.58	20.61	20.51	21.50
		1	5	20.67	20.43	20.45	21.50
		3	0	20.89	20.65	20.53	21.50
		3	2	20.92	20.82	20.58	21.50
		3	3	20.94	20.68	20.62	21.50
		6	0	20.75	20.54	20.73	21.50
	16QAM	1	0	20.85	20.73	20.54	21.50

		1	2	20.70	20.76	20.84	21.50
		1	5	20.84	21.01	20.55	21.50
		3	0	20.55	20.79	20.72	21.50
		3	2	20.86	20.98	20.86	21.50
		3	3	20.76	20.56	20.57	21.50
		6	0	20.63	20.54	20.66	21.50
	64QAM	1	0	20.94	20.39	20.62	21.50
		1	2	20.73	21.05	20.78	21.50
		1	5	20.70	20.61	20.37	21.50
		3	0	20.76	20.88	20.69	21.50
		3	2	20.70	20.69	20.56	21.50
		3	3	20.95	20.65	20.47	21.50
		6	0	20.85	20.50	20.26	21.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19965/1711.5	20175/1732.5	20385/1753.5	
3MHz	QPSK	1	0	20.89	20.74	20.70	21.50
		1	7	20.90	20.67	20.61	21.50
		1	14	20.51	20.37	20.29	21.50
		8	0	20.91	20.99	20.93	21.50
		8	4	20.88	21.04	20.82	21.50
		8	7	21.04	20.82	20.78	21.50
		15	0	20.91	20.68	20.69	21.50
	16QAM	1	0	20.75	20.89	20.80	21.50
		1	7	20.82	20.78	20.86	21.50
		1	14	20.68	20.67	20.49	21.50
		8	0	20.87	20.81	20.64	21.50
		8	4	20.78	20.90	20.72	21.50
		8	7	20.66	20.76	20.55	21.50
		15	0	20.61	20.76	20.58	21.50
	64QAM	1	0	20.84	20.71	20.72	21.50
		1	7	21.05	20.75	20.60	21.50
		1	14	20.78	20.51	20.49	21.50
		8	0	20.68	20.92	20.61	21.50
		8	4	20.94	20.85	20.74	21.50
		8	7	20.63	20.63	20.61	21.50
		15	0	20.79	20.80	20.64	21.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19975/1712.5	20175/1732.5	20375/1752.5	
5MHz	QPSK	1	0	20.63	20.68	20.68	21.50
		1	13	20.84	20.73	20.69	21.50

		1	24	20.59	20.55	20.53	21.50
		12	0	20.93	20.95	20.73	21.50
		12	6	21.14	20.98	20.68	21.50
		12	13	20.92	20.82	20.58	21.50
		25	0	20.79	20.72	20.75	21.50
	16QAM	1	0	20.75	20.71	20.78	21.50
		1	13	20.76	20.88	20.94	21.50
		1	24	20.86	20.87	20.59	21.50
		12	0	20.63	20.73	20.64	21.50
		12	6	20.80	20.72	20.62	21.50
		12	13	20.86	20.72	20.47	21.50
		25	0	20.69	20.60	20.56	21.50
	64QAM	1	0	20.74	20.79	20.70	21.50
		1	13	20.85	20.71	20.80	21.50
		1	24	20.82	20.71	20.33	21.50
		12	0	20.72	20.82	20.85	21.50
		12	6	20.86	20.75	20.84	21.50
		12	13	20.83	20.49	20.47	21.50
		25	0	20.73	20.66	20.74	21.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	20.61	20.58	20.70	21.50
		1	25	20.76	20.71	20.65	21.50
		1	49	20.67	20.63	20.29	21.50
		25	0	20.87	20.85	20.89	21.50
		25	13	21.02	20.80	20.86	21.50
		25	25	20.94	20.86	20.74	21.50
		50	0	21.01	20.90	20.55	21.50
	16QAM	1	0	20.97	20.85	20.58	21.50
		1	25	20.88	20.94	20.98	21.50
		1	49	20.62	20.83	20.53	21.50
		25	0	20.75	20.93	20.56	21.50
		25	13	20.90	20.94	20.60	21.50
		25	25	20.96	20.68	20.67	21.50
		50	0	20.53	20.62	20.80	21.50
	64QAM	1	0	20.62	20.79	20.78	21.50
		1	25	20.77	20.63	20.66	21.50
		1	49	20.88	20.65	20.51	21.50
		25	0	20.62	20.58	20.69	21.50
		25	13	20.72	20.93	20.82	21.50

		25	25	20.83	20.79	20.53	21.50
		50	0	20.89	20.70	20.60	21.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20025/1717.5	20175/1732.5	20325/1747.5	
15MHz	QPSK	1	0	20.63	20.62	20.70	21.50
		1	38	20.76	20.65	20.55	21.50
		1	74	20.51	20.47	20.57	21.50
		36	0	20.75	21.03	20.77	21.50
		36	18	20.94	20.76	20.88	21.50
		36	39	20.92	20.60	20.72	21.50
		75	0	20.73	20.66	20.77	21.50
	16QAM	1	0	20.87	20.67	20.84	21.50
		1	38	20.82	20.96	20.80	21.50
		1	74	20.78	20.61	20.57	21.50
		36	0	20.65	20.79	20.86	21.50
		36	18	21.00	20.96	20.60	21.50
		36	39	20.76	20.56	20.59	21.50
		75	0	20.85	20.62	20.74	21.50
	64QAM	1	0	20.92	20.81	20.66	21.50
		1	38	20.93	20.77	20.56	21.50
		1	74	20.78	20.69	20.45	21.50
		36	0	20.74	20.70	20.67	21.50
		36	18	20.94	20.93	20.68	21.50
		36	39	20.79	20.55	20.69	21.50
		75	0	20.57	20.76	20.76	21.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	20.73	20.64	20.64	21.50
		1	50	20.82	20.71	20.63	21.50
		1	99	20.59	20.47	20.39	21.50
		50	0	20.85	20.91	20.79	21.50
		50	25	20.98	20.88	20.76	21.50
		50	50	20.88	20.70	20.66	21.50
		100	0	20.85	20.78	20.69	21.50
	16QAM	1	0	20.77	20.79	20.76	21.50
		1	50	20.82	20.88	20.84	21.50
		1	99	20.70	20.71	20.55	21.50
		50	0	20.73	20.77	20.68	21.50
		50	25	20.86	20.78	20.70	21.50
		50	50	20.76	20.60	20.57	21.50

		100	0	20.69	20.66	20.62	21.50
	64QAM	1	0	20.80	20.69	20.60	21.50
		1	50	20.89	20.79	20.66	21.50
		1	99	20.68	20.57	20.39	21.50
		50	0	20.72	20.76	20.69	21.50
		50	25	20.82	20.75	20.68	21.50
		50	50	20.73	20.59	20.57	21.50
		100	0	20.69	20.64	20.60	21.50

LTE Band5							
DSI 1&DSI 2&DSI 4--Low Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				20407/824.7	20525/836.5	20643/848.3	
1.4MHz	QPSK	1	0	24.07	24.14	23.99	25.50
		1	2	24.09	24.21	23.94	25.50
		1	5	24.01	24.04	24.04	25.50
		3	0	24.17	23.74	23.96	25.50
		3	2	23.83	24.15	23.91	25.50
		3	3	23.82	23.80	23.86	25.50
		6	0	23.36	22.95	23.09	24.50
	16QAM	1	0	23.57	23.48	23.14	24.50
		1	2	23.53	23.40	23.36	24.50
		1	5	23.15	23.28	23.33	24.50
		3	0	22.94	22.90	22.92	24.50
		3	2	22.79	22.93	23.07	24.50
		3	3	22.80	23.10	22.69	24.50
		6	0	22.39	22.11	21.86	23.50
	64QAM	1	0	22.46	22.15	22.27	23.00
		1	2	22.50	22.41	22.07	23.00
		1	5	22.08	22.34	22.11	23.00
		3	0	21.98	21.90	22.07	23.00
		3	2	22.19	21.95	21.78	23.00
		3	3	21.80	21.87	21.87	23.00
		6	0	21.03	21.15	21.23	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20415/825.5	20525/836.5	20635/847.5	
3MHz	QPSK	1	0	24.01	24.18	24.01	25.50
		1	7	24.11	24.23	24.26	25.50
		1	14	23.99	24.04	24.12	25.50
		8	0	23.31	22.92	23.04	24.50

		8	4	23.05	23.01	23.03	24.50
		8	7	23.16	23.08	22.96	24.50
		15	0	23.26	23.23	22.91	24.50
	16QAM	1	0	23.39	23.22	23.04	24.50
		1	7	23.29	23.44	23.26	24.50
		1	14	23.31	23.22	23.23	24.50
		8	0	22.32	22.24	22.18	23.50
		8	4	22.07	22.27	22.15	23.50
		8	7	22.08	22.30	21.81	23.50
		15	0	22.27	21.97	21.92	23.50
	64QAM	1	0	22.10	22.05	22.13	23.00
		1	7	22.14	22.39	22.07	23.00
		1	14	22.16	21.98	22.33	23.00
		8	0	21.34	21.10	20.89	22.00
		8	4	21.21	21.33	20.92	22.00
		8	7	21.24	20.97	20.83	22.00
		15	0	21.33	21.03	20.81	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20425/826.5	20525/836.5	20625/846.5	
5MHz	QPSK	1	0	24.19	24.08	23.89	25.50
		1	13	24.05	24.07	24.22	25.50
		1	24	24.21	24.20	24.08	25.50
		12	0	23.01	23.00	23.14	24.50
		12	6	23.13	23.17	23.11	24.50
		12	13	23.26	23.20	22.94	24.50
		25	0	23.02	23.13	22.91	24.50
	16QAM	1	0	23.29	23.12	23.32	24.50
		1	13	23.27	23.28	23.36	24.50
		1	24	23.45	23.18	23.17	24.50
		12	0	22.20	21.94	22.14	23.50
		12	6	22.09	22.07	22.07	23.50
		12	13	22.10	22.18	22.01	23.50
		25	0	22.17	22.09	21.92	23.50
	64QAM	1	0	22.26	22.09	22.31	23.00
		1	13	22.46	22.27	22.21	23.00
		1	24	22.28	22.14	22.31	23.00
		12	0	21.12	21.12	21.11	22.00
		12	6	21.11	21.27	21.12	22.00
		12	13	21.08	21.13	21.01	22.00
		25	0	21.17	21.05	21.13	22.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	24.07	24.06	24.01	25.50
		1	25	24.09	24.03	24.04	25.50
		1	49	24.07	24.02	24.02	25.50
		25	0	23.09	23.00	23.00	24.50
		25	13	23.13	23.11	23.07	24.50
		25	25	23.10	23.12	22.88	24.50
		50	0	23.14	23.07	23.01	24.50
	16QAM	1	0	23.37	23.24	23.20	24.50
		1	25	23.37	23.24	23.24	24.50
		1	49	23.31	23.22	23.23	24.50
		25	0	22.10	22.02	21.98	23.50
		25	13	22.11	22.09	22.07	23.50
		25	25	22.10	22.12	21.89	23.50
		50	0	22.15	22.03	21.94	23.50
	64QAM	1	0	22.24	22.21	22.15	23.00
		1	25	22.30	22.21	22.21	23.00
		1	49	22.24	22.14	22.19	23.00
		25	0	21.14	21.04	21.01	22.00
		25	13	21.13	21.11	21.10	22.00
		25	25	21.12	21.15	20.89	22.00
		50	0	21.17	21.07	20.99	22.00

LTE Band5							
DSI 1&2-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				20407/824.7	20525/836.5	20643/848.3	
1.4MHz	QPSK	1	0	23.82	23.71	23.79	25.50
		1	2	24.10	23.81	24.04	25.50
		1	5	24.07	23.90	23.90	25.50
		3	0	23.95	23.51	23.88	25.50
		3	2	23.92	23.86	23.86	25.50
		3	3	23.89	23.61	23.71	25.50
		6	0	22.84	22.74	22.71	24.50
	16QAM	1	0	23.01	23.26	22.94	24.50
		1	2	23.06	22.92	22.97	24.50
		1	5	22.90	23.09	22.98	24.50
		3	0	22.84	22.53	22.87	24.50
		3	2	23.00	22.84	22.85	24.50

		3	3	22.85	22.61	22.58	24.50
		6	0	21.73	21.73	21.73	23.50
	64QAM	1	0	22.05	22.14	22.08	23.00
		1	2	22.28	22.17	22.17	23.00
		1	5	22.04	21.98	22.12	23.00
		3	0	21.65	21.58	21.59	23.00
		3	2	21.80	21.96	21.97	23.00
		3	3	21.91	21.66	21.61	23.00
		6	0	20.96	20.66	20.62	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20415/825.5	20525/836.5	20635/847.5	
3MHz	QPSK	1	0	23.82	23.93	23.67	25.50
		1	7	23.84	23.73	23.86	25.50
		1	14	23.69	23.76	23.82	25.50
		8	0	22.81	22.79	23.00	24.50
		8	4	22.80	22.86	22.92	24.50
		8	7	23.05	22.95	22.63	24.50
		15	0	22.92	22.76	22.77	24.50
	16QAM	1	0	23.25	23.28	22.90	24.50
		1	7	23.24	23.04	23.07	24.50
		1	14	23.12	22.95	22.98	24.50
		8	0	22.04	21.81	21.91	23.50
		8	4	22.14	21.72	21.69	23.50
		8	7	21.91	21.95	21.68	23.50
		15	0	21.71	21.65	21.63	23.50
	64QAM	1	0	21.91	21.96	21.90	23.00
		1	7	22.30	21.89	22.09	23.00
		1	14	22.06	22.12	21.88	23.00
		8	0	20.73	20.68	20.83	22.00
		8	4	21.06	20.94	21.09	22.00
		8	7	21.09	20.92	20.85	22.00
		15	0	20.92	20.70	20.80	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20425/826.5	20525/836.5	20625/846.5	
5MHz	QPSK	1	0	23.86	23.91	23.73	25.50
		1	13	23.98	23.93	23.94	25.50
		1	24	23.89	23.68	23.74	25.50
		12	0	22.75	22.71	22.82	24.50
		12	6	22.86	22.86	22.80	24.50
		12	13	22.77	22.87	22.59	24.50

	16QAM	25	0	23.10	22.88	22.91	24.50
		1	0	23.19	23.04	23.14	24.50
		1	13	23.12	22.98	23.23	24.50
		1	24	23.04	23.05	23.08	24.50
		12	0	22.06	21.67	21.83	23.50
		12	6	22.04	21.84	21.89	23.50
		12	13	22.03	21.93	21.66	23.50
		25	0	21.95	21.97	21.95	23.50
	64QAM	1	0	22.13	22.10	21.86	23.00
		1	13	22.18	22.15	22.03	23.00
		1	24	22.06	21.88	22.06	23.00
		12	0	20.93	20.96	20.89	22.00
		12	6	21.08	21.00	20.99	22.00
		12	13	21.09	20.78	20.79	22.00
		25	0	21.06	20.74	20.86	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	23.86	23.83	23.81	25.50
		1	25	23.88	23.81	23.82	25.50
		1	49	23.85	23.80	23.80	25.50
		25	0	22.87	22.75	22.82	24.50
		25	13	22.90	22.86	22.84	24.50
		25	25	22.89	22.87	22.69	24.50
		50	0	22.94	22.82	22.81	24.50
	16QAM	1	0	23.09	23.08	23.04	24.50
		1	25	23.12	23.06	23.07	24.50
		1	49	23.04	23.03	23.04	24.50
		25	0	21.88	21.75	21.81	23.50
		25	13	21.94	21.86	21.87	23.50
		25	25	21.91	21.83	21.70	23.50
		50	0	21.87	21.79	21.79	23.50
	64QAM	1	0	22.07	22.00	21.90	23.00
		1	25	22.12	21.97	21.93	23.00
		1	49	22.00	21.98	21.98	23.00
		25	0	20.89	20.78	20.83	22.00
		25	13	20.94	20.90	20.89	22.00
		25	25	20.95	20.88	20.73	22.00
		50	0	20.90	20.80	20.78	22.00

LTE Band5							
DSI 4-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				20407/824.7	20525/836.5	20643/848.3	
1.4MHz	QPSK	1	0	23.29	23.23	23.26	25.00
		1	2	23.37	23.20	23.40	25.00
		1	5	23.48	23.35	23.21	25.00
		3	0	23.70	23.40	23.51	25.00
		3	2	23.73	23.61	23.56	25.00
		3	3	23.65	23.82	23.27	25.00
		6	0	22.81	22.77	22.80	24.50
	16QAM	1	0	23.01	22.74	23.08	24.50
		1	2	23.01	22.85	22.79	24.50
		1	5	22.81	22.97	22.89	24.50
		3	0	22.59	22.61	22.55	24.50
		3	2	22.67	22.66	22.74	24.50
		3	3	22.57	22.79	22.60	24.50
		6	0	21.85	21.69	21.60	23.50
	64QAM	1	0	22.10	21.72	21.95	23.00
		1	2	22.03	21.84	21.92	23.00
		1	5	22.06	21.80	21.92	23.00
		3	0	21.47	21.63	21.66	23.00
		3	2	21.59	21.80	21.82	23.00
		3	3	21.57	21.45	21.54	23.00
		6	0	20.97	20.55	20.53	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20415/825.5	20525/836.5	20635/847.5	
3MHz	QPSK	1	0	23.07	23.23	23.06	25.00
		1	7	23.45	23.06	23.08	25.00
		1	14	23.18	23.07	23.35	25.00
		8	0	22.68	22.64	22.67	24.50
		8	4	22.63	22.81	22.60	24.50
		8	7	22.81	22.78	22.77	24.50
		15	0	22.99	22.57	22.60	24.50
	16QAM	1	0	23.03	22.90	22.80	24.50
		1	7	23.05	22.81	22.75	24.50
		1	14	22.91	23.01	22.83	24.50
		8	0	21.83	21.75	21.77	23.50
		8	4	21.95	21.58	21.62	23.50

		8	7	21.99	21.79	21.62	23.50
		15	0	21.93	21.85	21.64	23.50
	64QAM	1	0	22.12	21.74	21.75	23.00
		1	7	21.87	22.02	22.14	23.00
		1	14	21.88	21.82	21.68	23.00
		8	0	20.99	20.57	20.84	22.00
		8	4	21.03	20.70	20.58	22.00
		8	7	20.79	20.59	20.62	22.00
		15	0	20.83	20.83	20.63	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20425/826.5	20525/836.5	20625/846.5	
5MHz	QPSK	1	0	23.17	23.37	23.28	25.00
		1	13	23.23	23.20	23.28	25.00
		1	24	23.42	23.11	23.09	25.00
		12	0	22.74	22.68	22.69	24.50
		12	6	22.93	22.89	22.84	24.50
		12	13	22.87	22.78	22.67	24.50
		25	0	22.73	22.87	22.88	24.50
	16QAM	1	0	22.91	22.88	23.02	24.50
		1	13	23.07	23.01	23.07	24.50
		1	24	22.85	22.81	22.97	24.50
		12	0	21.91	21.53	21.85	23.50
		12	6	21.91	21.80	21.68	23.50
		12	13	21.69	21.69	21.77	23.50
		25	0	21.95	21.65	21.68	23.50
	64QAM	1	0	21.92	21.98	21.71	23.00
		1	13	22.13	21.80	22.02	23.00
		1	24	21.82	22.00	22.04	23.00
		12	0	20.69	20.65	20.74	22.00
		12	6	21.01	20.72	20.78	22.00
		12	13	20.89	20.81	20.58	22.00
		25	0	20.69	20.59	20.59	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	23.25	23.23	23.16	25.00
		1	25	23.29	23.20	23.22	25.00
		1	49	23.26	23.17	23.15	25.00
		25	0	22.76	22.62	22.71	24.50
		25	13	22.79	22.75	22.74	24.50
		25	25	22.77	22.74	22.59	24.50

	16QAM	50	0	22.83	22.71	22.70	24.50
		1	0	22.97	22.90	22.84	24.50
		1	25	22.99	22.85	22.89	24.50
		1	49	22.95	22.85	22.85	24.50
		25	0	21.77	21.63	21.67	23.50
		25	13	21.79	21.74	21.74	23.50
		25	25	21.79	21.73	21.59	23.50
		50	0	21.81	21.69	21.68	23.50
	64QAM	1	0	21.96	21.86	21.83	23.00
		1	25	21.97	21.84	21.92	23.00
		1	49	21.94	21.84	21.86	23.00
		25	0	20.77	20.63	20.70	22.00
		25	13	20.83	20.76	20.76	22.00
		25	25	20.81	20.77	20.58	22.00
		50	0	20.81	20.67	20.67	22.00

LTE Band7							
DSI 1&DSI 2--Low Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				20775/2502.5	21100/2535	21425/2567.5	
5MHz	QPSK	1	0	24.82	24.74	24.59	25.50
		1	13	24.78	24.62	24.93	25.50
		1	24	24.78	24.63	24.70	25.50
		12	0	24.01	23.87	23.84	24.50
		12	6	24.07	23.83	24.03	24.50
		12	13	23.87	23.84	23.97	24.50
		25	0	23.89	23.72	23.80	24.50
	16QAM	1	0	23.78	23.77	23.72	24.50
		1	13	24.09	23.95	23.98	24.50
		1	24	24.03	23.97	23.77	24.50
		12	0	22.86	22.90	22.71	23.50
		12	6	22.82	22.96	22.72	23.50
		12	13	22.87	22.92	22.71	23.50
		25	0	22.95	22.83	22.70	23.50
	64QAM	1	0	22.76	22.60	22.53	23.50
		1	13	23.12	22.77	22.72	23.50
		1	24	22.99	22.86	22.75	23.50
		12	0	21.73	21.70	21.62	22.50
		12	6	21.93	21.94	21.98	22.50
		12	13	21.91	21.90	21.71	22.50

		25	0	21.84	21.91	21.61	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	24.88	24.62	24.61	25.50
		1	25	24.78	24.90	24.71	25.50
		1	49	24.64	24.79	24.74	25.50
		25	0	24.11	23.73	23.80	24.50
		25	13	24.11	24.05	23.89	24.50
		25	25	24.01	23.72	23.79	24.50
		50	0	24.09	24.04	23.70	24.50
	16QAM	1	0	24.00	23.91	23.58	24.50
		1	25	23.93	24.03	23.94	24.50
		1	49	24.09	24.03	23.91	24.50
		25	0	23.02	22.80	22.53	23.50
		25	13	22.78	22.86	22.70	23.50
		25	25	22.91	22.84	22.77	23.50
		50	0	22.93	22.75	22.50	23.50
	64QAM	1	0	22.84	22.54	22.39	23.50
		1	25	22.98	22.75	22.98	23.50
		1	49	23.15	22.64	22.91	23.50
		25	0	21.93	21.88	21.52	22.50
		25	13	21.97	21.92	21.96	22.50
		25	25	21.81	21.82	21.89	22.50
		50	0	21.70	21.59	21.79	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	24.58	24.72	24.61	25.50
		1	38	24.70	24.86	24.67	25.50
		1	74	24.86	24.77	24.86	25.50
		36	0	24.01	23.89	23.86	24.50
		36	18	24.01	23.99	23.87	24.50
		36	39	24.03	23.96	23.89	24.50
		75	0	23.95	23.80	23.74	24.50
	16QAM	1	0	23.96	23.69	23.62	24.50
		1	38	24.11	23.93	23.74	24.50
		1	74	24.01	23.89	23.85	24.50
		36	0	22.92	22.70	22.73	23.50
		36	18	23.06	22.78	22.68	23.50
		36	39	22.83	22.88	22.75	23.50
		75	0	22.81	22.87	22.62	23.50

	64QAM	1	0	22.96	22.82	22.71	23.50
		1	38	23.14	22.93	22.84	23.50
		1	74	22.87	22.82	22.61	23.50
		36	0	21.87	21.72	21.86	22.50
		36	18	21.91	21.90	21.96	22.50
		36	39	21.87	21.94	21.89	22.50
		75	0	22.00	21.67	21.87	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	24.66	24.58	24.53	25.50
		1	50	24.82	24.72	24.77	25.50
		1	99	24.74	24.63	24.68	25.50
		50	0	23.89	23.85	23.76	24.50
		50	25	24.01	23.93	23.89	24.50
		50	50	23.97	23.86	23.87	24.50
		100	0	23.89	23.82	23.78	24.50
	16QAM	1	0	23.78	23.71	23.62	24.50
		1	50	23.95	23.91	23.82	24.50
		1	99	23.87	23.85	23.73	24.50
		50	0	22.80	22.76	22.67	23.50
		50	25	22.92	22.82	22.78	23.50
		50	50	22.89	22.78	22.75	23.50
		100	0	22.81	22.73	22.66	23.50
	64QAM	1	0	22.84	22.70	22.55	23.50
		1	50	23.02	22.85	22.76	23.50
		1	99	22.93	22.76	22.69	23.50
		50	0	21.83	21.78	21.70	22.50
		50	25	21.95	21.88	21.86	22.50
		50	50	21.91	21.82	21.79	22.50
		100	0	21.86	21.77	21.69	22.50

LTE Band7							
DSI 4--Low Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				20775/2502.5	21100/2535	21425/2567.5	
5MHz	QPSK	1	0	21.74	21.92	21.85	22.50
		1	13	22.03	22.11	22.20	22.50
		1	24	22.19	21.95	22.07	22.50
		12	0	22.17	22.23	22.09	22.50
		12	6	22.15	22.21	22.28	22.50

		12	13	22.27	22.38	22.16	22.50
		25	0	21.99	22.19	22.17	22.50
	16QAM	1	0	22.16	22.36	22.29	22.50
		1	13	22.37	22.47	22.43	22.50
		1	24	22.46	22.22	22.39	22.50
		12	0	21.96	22.11	21.98	22.50
		12	6	22.32	22.30	22.21	22.50
		12	13	22.15	22.11	22.05	22.50
		25	0	21.94	22.19	21.94	22.50
		1	0	22.01	22.12	22.03	22.50
	64QAM	1	13	22.20	22.27	22.08	22.50
		1	24	22.37	22.14	22.17	22.50
		12	0	22.17	22.08	22.22	22.50
		12	6	22.22	22.35	22.28	22.50
		12	13	22.22	22.18	22.06	22.50
		25	0	22.20	22.17	22.14	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	21.80	21.88	21.95	22.50
		1	25	21.89	21.95	22.18	22.50
		1	49	22.01	21.95	22.13	22.50
		25	0	21.95	22.29	21.99	22.50
		25	13	22.37	22.31	22.38	22.50
		25	25	22.27	22.08	22.40	22.50
		50	0	22.09	22.13	22.25	22.50
	16QAM	1	0	22.14	22.08	21.99	22.50
		1	25	22.25	22.25	22.35	22.50
		1	49	22.34	22.28	22.11	22.50
		25	0	22.16	22.25	21.94	22.50
		25	13	22.06	22.34	22.25	22.50
		25	25	22.25	22.21	22.09	22.50
		50	0	22.04	22.03	21.90	22.50
	64QAM	1	0	21.85	21.82	21.85	22.50
		1	25	22.46	22.11	22.32	22.50
		1	49	22.31	21.98	22.13	22.50
		25	0	21.89	22.20	21.88	22.50
		25	13	22.06	22.25	22.00	22.50
		25	25	22.24	22.26	22.24	22.50
		50	0	22.08	22.29	22.04	22.50
Bandwidth	Modulation	RB	Offset	Channel/Frequency(MHz)			Tune-up

		Allocation		20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	21.74	21.86	21.87	22.50
		1	38	22.11	22.13	22.02	22.50
		1	74	22.13	22.21	22.15	22.50
		36	0	21.97	22.03	22.03	22.50
		36	18	22.11	22.27	22.24	22.50
		36	39	22.11	22.10	22.20	22.50
		75	0	22.21	22.11	22.17	22.50
	16QAM	1	0	22.16	22.14	22.27	22.50
		1	38	22.25	22.47	22.49	22.50
		1	74	22.20	22.28	22.21	22.50
		36	0	22.14	22.15	22.08	22.50
		36	18	22.28	22.14	22.17	22.50
		36	39	22.07	22.09	22.13	22.50
		75	0	22.10	21.99	22.10	22.50
	64QAM	1	0	22.13	21.98	22.09	22.50
		1	38	22.32	22.19	22.14	22.50
		1	74	22.09	22.10	22.09	22.50
		36	0	22.19	22.10	22.06	22.50
		36	18	22.16	22.25	22.18	22.50
		36	39	22.04	22.36	22.26	22.50
		75	0	22.06	22.11	22.04	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	21.80	21.90	21.89	22.50
		1	50	22.07	22.11	22.08	22.50
		1	99	22.05	22.03	22.05	22.50
		50	0	22.09	22.15	22.13	22.50
		50	25	22.23	22.27	22.20	22.50
		50	50	22.19	22.22	22.18	22.50
		100	0	22.09	22.15	22.11	22.50
	16QAM	1	0	22.10	22.20	22.13	22.50
		1	50	22.35	22.37	22.33	22.50
		1	99	22.32	22.30	22.25	22.50
		50	0	22.00	22.09	22.06	22.50
		50	25	22.18	22.22	22.15	22.50
		50	50	22.11	22.17	22.11	22.50
		100	0	22.02	22.11	22.04	22.50
	64QAM	1	0	22.03	21.98	21.97	22.50
		1	50	22.24	22.23	22.16	22.50

		1	99	22.21	22.16	22.07	22.50
		50	0	22.01	22.12	22.06	22.50
		50	25	22.16	22.21	22.14	22.50
		50	50	22.10	22.18	22.10	22.50
		100	0	22.04	22.11	22.06	22.50

LTE Band7							
DSI 1-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				20775/2502.5	21100/2535	21425/2567.5	
5MHz	QPSK	1	0	16.90	17.71	17.52	18.00
		1	13	17.22	17.11	17.13	18.00
		1	24	17.19	17.28	17.24	18.00
		12	0	17.08	17.03	17.18	18.00
		12	6	17.20	17.27	17.19	18.00
		12	13	17.06	17.31	17.33	18.00
		25	0	17.14	17.11	17.14	18.00
	16QAM	1	0	16.94	17.31	17.16	18.00
		1	13	17.31	17.30	17.29	18.00
		1	24	17.21	17.22	17.43	18.00
		12	0	17.02	16.99	17.23	18.00
		12	6	17.14	17.15	17.31	18.00
		12	13	17.02	17.15	17.17	18.00
		25	0	17.08	17.06	17.04	18.00
	64QAM	1	0	16.82	17.12	17.23	18.00
		1	13	17.16	17.28	17.48	18.00
		1	24	17.36	17.30	17.31	18.00
		12	0	17.05	17.26	17.18	18.00
		12	6	17.06	17.35	17.18	18.00
		12	13	17.01	17.40	17.30	18.00
		25	0	16.89	17.26	17.23	18.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	16.92	17.71	17.42	18.00
		1	25	17.30	17.03	17.33	18.00
		1	49	17.11	17.34	17.26	18.00
		25	0	17.16	17.33	17.12	18.00
		25	13	17.22	17.47	17.23	18.00
		25	25	17.10	17.09	17.37	18.00
		50	0	17.12	17.13	17.18	18.00

	16QAM	1	0	17.18	17.03	17.10	18.00
		1	25	17.41	17.38	17.57	18.00
		1	49	17.47	17.18	17.19	18.00
		25	0	16.92	17.19	17.01	18.00
		25	13	17.04	17.05	17.37	18.00
		25	25	16.86	17.35	17.15	18.00
		50	0	16.96	17.32	17.04	18.00
	64QAM	1	0	17.04	17.16	17.27	18.00
		1	25	17.32	17.52	17.50	18.00
		1	49	17.12	17.18	17.31	18.00
		25	0	16.79	17.10	17.30	18.00
		25	13	17.04	17.11	17.10	18.00
		25	25	16.99	17.34	17.02	18.00
		50	0	17.13	17.18	17.29	18.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	16.70	17.57	17.70	18.00
		1	38	17.12	17.29	17.33	18.00
		1	74	17.05	17.02	17.08	18.00
		36	0	16.98	17.25	17.32	18.00
		36	18	17.14	17.33	17.17	18.00
		36	39	17.14	17.37	17.11	18.00
		75	0	17.00	17.29	17.28	18.00
	16QAM	1	0	17.04	17.11	17.20	18.00
		1	38	17.29	17.48	17.45	18.00
		1	74	17.21	17.40	17.17	18.00
		36	0	16.84	17.11	17.23	18.00
		36	18	17.10	17.11	17.15	18.00
		36	39	17.04	17.31	17.39	18.00
		75	0	16.88	17.26	17.06	18.00
	64QAM	1	0	16.76	17.10	17.27	18.00
		1	38	17.26	17.32	17.34	18.00
		1	74	17.38	17.22	17.21	18.00
		36	0	16.89	17.02	17.34	18.00
		36	18	17.06	17.43	17.28	18.00
		36	39	16.99	17.26	17.12	18.00
		75	0	16.87	17.02	17.25	18.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	16.82	17.55	17.52	18.00

		1	50	17.08	17.21	17.19	18.00
		1	99	17.11	17.14	17.10	18.00
		50	0	17.00	17.13	17.20	18.00
		50	25	17.14	17.29	17.27	18.00
		50	50	17.06	17.25	17.23	18.00
		100	0	17.00	17.15	17.22	18.00
	16QAM	1	0	16.98	17.17	17.18	18.00
		1	50	17.27	17.40	17.37	18.00
		1	99	17.31	17.32	17.29	18.00
		50	0	16.92	17.07	17.17	18.00
		50	25	17.06	17.23	17.23	18.00
		50	50	17.00	17.21	17.21	18.00
		100	0	16.94	17.14	17.14	18.00
	64QAM	1	0	16.86	17.14	17.13	18.00
		1	50	17.10	17.36	17.34	18.00
		1	99	17.22	17.32	17.27	18.00
		50	0	16.93	17.10	17.16	18.00
		50	25	17.06	17.25	17.22	18.00
		50	50	17.01	17.24	17.20	18.00
		100	0	16.93	17.14	17.15	18.00

LTE Band7							
DSI 2-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				20775/2502.5	21100/2535	21425/2567.5	
5MHz	QPSK	1	0	25.04	25.10	24.91	25.50
		1	13	25.19	25.31	24.83	25.50
		1	24	25.16	25.37	24.44	25.50
		12	0	23.99	24.29	24.36	24.50
		12	6	24.25	24.35	24.37	24.50
		12	13	24.17	24.12	24.22	24.50
		25	0	24.20	24.12	24.21	24.50
	16QAM	1	0	23.94	24.14	24.28	24.50
		1	13	24.27	24.40	24.38	24.50
		1	24	24.39	24.43	23.85	24.50
		12	0	23.32	23.32	23.32	23.50
		12	6	23.11	23.33	23.30	23.50
		12	13	23.39	23.43	23.43	23.50
		25	0	23.19	23.35	23.36	23.50
	64QAM	1	0	22.98	23.29	23.06	23.50

		1	13	23.26	23.26	23.35	23.50
		1	24	23.34	23.28	23.22	23.50
		12	0	21.66	21.86	21.82	22.50
		12	6	21.70	21.95	21.74	22.50
		12	13	21.84	21.78	21.81	22.50
		25	0	21.76	21.70	21.98	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	24.88	24.86	24.79	25.50
		1	25	25.43	25.09	24.63	25.50
		1	49	25.34	25.33	24.40	25.50
		25	0	24.15	24.31	24.22	24.50
		25	13	24.21	24.19	24.21	24.50
		25	25	23.97	24.22	24.44	24.50
		50	0	24.00	24.16	24.23	24.50
	16QAM	1	0	23.94	24.28	24.22	24.50
		1	25	24.31	24.50	24.36	24.50
		1	49	24.15	24.33	23.97	24.50
		25	0	23.18	23.48	23.44	23.50
		25	13	23.15	23.35	23.46	23.50
		25	25	23.35	23.35	23.21	23.50
		50	0	23.25	23.15	23.22	23.50
	64QAM	1	0	22.94	23.07	23.12	23.50
		1	25	23.32	23.30	23.11	23.50
		1	49	23.32	23.40	23.14	23.50
		25	0	21.74	21.74	21.98	22.50
		25	13	21.68	21.95	21.72	22.50
		25	25	21.80	21.72	21.57	22.50
		50	0	21.64	21.74	21.82	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	25.02	24.98	25.07	25.50
		1	38	25.25	25.13	24.75	25.50
		1	74	25.40	25.31	24.52	25.50
		36	0	24.11	24.13	24.48	24.50
		36	18	24.21	24.11	24.35	24.50
		36	39	24.05	24.14	24.42	24.50
		75	0	24.10	24.08	24.29	24.50
	16QAM	1	0	24.06	24.20	24.20	24.50
		1	38	24.19	24.34	24.42	24.50

		1	74	24.41	24.41	23.99	24.50
		36	0	23.32	23.44	23.26	23.50
		36	18	23.17	23.17	23.40	23.50
		36	39	23.19	23.37	23.41	23.50
		75	0	23.31	23.29	23.14	23.50
	64QAM	1	0	23.02	23.11	23.34	23.50
		1	38	23.20	23.22	23.39	23.50
		1	74	23.48	23.30	23.36	23.50
		36	0	21.76	21.88	21.90	22.50
		36	18	21.64	21.93	21.62	22.50
		36	39	21.72	21.94	21.89	22.50
		75	0	21.62	21.72	21.94	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	25.00	25.04	24.91	25.50
		1	50	25.23	25.23	24.77	25.50
		1	99	25.24	25.21	24.52	25.50
		50	0	24.09	24.17	24.32	24.50
		50	25	24.21	24.23	24.31	24.50
		50	50	24.15	24.20	24.26	24.50
		100	0	24.08	24.20	24.31	24.50
	16QAM	1	0	23.98	24.18	24.20	24.50
		1	50	24.23	24.32	24.34	24.50
		1	99	24.25	24.27	23.93	24.50
		50	0	23.16	23.26	23.28	23.50
		50	25	23.19	23.29	23.38	23.50
		50	50	23.25	23.29	23.33	23.50
		100	0	23.19	23.19	23.26	23.50
	64QAM	1	0	23.06	23.15	23.16	23.50
		1	50	23.20	23.30	23.23	23.50
		1	99	23.30	23.26	23.22	23.50
		50	0	21.74	21.72	21.86	22.50
		50	25	21.76	21.87	21.74	22.50
		50	50	21.70	21.88	21.71	22.50
		100	0	21.74	21.76	21.86	22.50

LTE Band7							
DSI 4-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				20775/2502.5	21100/2535	21425/2567.5	
5MHz	QPSK	1	0	21.07	21.27	21.28	22.00
		1	13	21.28	21.39	21.51	22.00
		1	24	21.37	21.55	21.66	22.00
		12	0	21.47	21.41	21.58	22.00
		12	6	21.62	21.56	21.63	22.00
		12	13	21.37	21.62	21.81	22.00
		25	0	21.29	21.58	21.51	22.00
	16QAM	1	0	21.13	21.32	21.55	22.00
		1	13	21.56	21.77	21.77	22.00
		1	24	21.39	21.64	21.82	22.00
		12	0	21.21	21.42	21.44	22.00
		12	6	21.34	21.52	21.68	22.00
		12	13	21.36	21.65	21.60	22.00
		25	0	21.31	21.49	21.44	22.00
	64QAM	1	0	21.14	21.25	21.40	22.00
		1	13	21.55	21.68	21.59	22.00
		1	24	21.39	21.64	21.61	22.00
		12	0	21.27	21.48	21.54	22.00
		12	6	21.31	21.49	21.69	22.00
		12	13	21.29	21.59	21.66	22.00
		25	0	21.42	21.34	21.47	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	20.99	21.19	21.26	22.00
		1	25	21.36	21.63	21.59	22.00
		1	49	21.23	21.57	21.64	22.00
		25	0	21.37	21.45	21.56	22.00
		25	13	21.42	21.60	21.49	22.00
		25	25	21.55	21.52	21.73	22.00
		50	0	21.37	21.36	21.77	22.00
	16QAM	1	0	21.41	21.38	21.55	22.00
		1	25	21.60	21.79	21.91	22.00
		1	49	21.71	21.48	21.86	22.00
		25	0	21.13	21.38	21.68	22.00
		25	13	21.42	21.52	21.46	22.00
		25	25	21.24	21.61	21.44	22.00

	64QAM	50	0	21.45	21.47	21.40	22.00
		1	0	21.16	21.17	21.18	22.00
		1	25	21.63	21.54	21.61	22.00
		1	49	21.29	21.66	21.55	22.00
		25	0	21.11	21.20	21.72	22.00
		25	13	21.49	21.75	21.69	22.00
		25	25	21.19	21.39	21.46	22.00
		50	0	21.42	21.64	21.75	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	21.23	21.21	21.30	22.00
		1	38	21.26	21.47	21.43	22.00
		1	74	21.37	21.41	21.62	22.00
		36	0	21.27	21.47	21.70	22.00
		36	18	21.56	21.78	21.71	22.00
		36	39	21.29	21.56	21.77	22.00
		75	0	21.21	21.54	21.47	22.00
	16QAM	1	0	21.37	21.40	21.71	22.00
		1	38	21.58	21.61	21.77	22.00
		1	74	21.57	21.66	21.80	22.00
		36	0	21.33	21.40	21.56	22.00
		36	18	21.30	21.76	21.68	22.00
		36	39	21.44	21.73	21.58	22.00
		75	0	21.27	21.59	21.58	22.00
	64QAM	1	0	21.42	21.33	21.32	22.00
		1	38	21.49	21.66	21.45	22.00
		1	74	21.39	21.54	21.59	22.00
		36	0	21.33	21.46	21.44	22.00
		36	18	21.55	21.67	21.67	22.00
		36	39	21.33	21.53	21.68	22.00
		75	0	21.22	21.58	21.63	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	21.05	21.19	21.30	22.00
		1	50	21.32	21.43	21.55	22.00
		1	99	21.35	21.45	21.58	22.00
		50	0	21.33	21.43	21.65	22.00
		50	25	21.46	21.60	21.68	22.00
		50	50	21.39	21.58	21.67	22.00
		100	0	21.31	21.44	21.57	22.00

	16QAM	1	0	21.23	21.42	21.55	22.00
		1	50	21.46	21.69	21.73	22.00
		1	99	21.49	21.62	21.68	22.00
		50	0	21.29	21.44	21.52	22.00
		50	25	21.42	21.58	21.62	22.00
		50	50	21.38	21.57	21.60	22.00
		100	0	21.31	21.47	21.54	22.00
	64QAM	1	0	21.24	21.33	21.26	22.00
		1	50	21.47	21.58	21.51	22.00
		1	99	21.47	21.54	21.49	22.00
		50	0	21.27	21.38	21.54	22.00
		50	25	21.41	21.55	21.61	22.00
		50	50	21.35	21.55	21.60	22.00
		100	0	21.28	21.44	21.53	22.00

LTE Band12							
DSI 1&DSI 2&DSI 4-Low Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				23017/699.7	23095/707.5	23173/715.3	
1.4MHz	QPSK	1	0	24.03	23.91	24.12	25.50
		1	2	24.02	23.85	24.01	25.50
		1	5	24.20	24.06	23.95	25.50
		3	0	23.90	23.65	24.00	25.50
		3	2	23.77	23.76	24.09	25.50
		3	3	24.06	23.74	23.84	25.50
		6	0	23.20	23.20	23.02	24.50
	16QAM	1	0	23.01	23.29	23.28	24.50
		1	2	23.37	23.26	23.03	24.50
		1	5	23.50	23.37	23.06	24.50
		3	0	22.89	22.58	22.98	24.50
		3	2	23.08	22.85	22.94	24.50
		3	3	23.08	22.77	22.95	24.50
		6	0	21.80	22.04	22.09	23.50
	64QAM	1	0	21.97	22.20	22.08	23.00
		1	2	22.10	22.22	22.06	23.00
		1	5	22.12	22.35	22.09	23.00
		3	0	21.63	21.89	22.12	23.00
		3	2	22.17	21.87	21.82	23.00
		3	3	22.03	22.04	21.85	23.00
		6	0	20.79	21.03	21.23	22.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				23025/700.5	23095/707.5	23165/714.5	
3MHz	QPSK	1	0	23.75	23.93	23.84	25.50
		1	7	24.02	24.11	23.81	25.50
		1	14	24.16	23.94	23.91	25.50
		8	0	22.94	22.83	23.22	24.50
		8	4	23.03	22.98	22.99	24.50
		8	7	23.24	22.88	23.14	24.50
		15	0	22.88	23.04	23.10	24.50
	16QAM	1	0	23.07	23.13	23.24	24.50
		1	7	23.43	23.22	23.07	24.50
		1	14	23.28	23.27	23.20	24.50
		8	0	21.89	22.00	21.98	23.50
		8	4	22.08	22.17	22.18	23.50
		8	7	21.98	21.83	22.15	23.50
		15	0	21.92	22.04	22.09	23.50
	64QAM	1	0	22.05	22.06	22.20	23.00
		1	7	22.30	22.16	22.22	23.00
		1	14	22.46	22.01	22.05	23.00
		8	0	20.93	20.93	21.26	22.00
		8	4	21.25	21.23	21.12	22.00
		8	7	21.11	21.04	21.11	22.00
		15	0	21.17	21.07	21.09	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				23035/701.5	23095/707.5	23155/713.5	
5MHz	QPSK	1	0	23.93	23.81	24.00	25.50
		1	13	24.06	24.13	24.05	25.50
		1	24	23.94	23.98	23.93	25.50
		12	0	22.98	23.09	23.04	24.50
		12	6	23.03	23.18	23.11	24.50
		12	13	23.16	22.94	23.12	24.50
		25	0	23.06	22.92	23.04	24.50
	16QAM	1	0	23.05	23.27	23.02	24.50
		1	13	23.33	23.32	23.33	24.50
		1	24	23.34	23.37	23.24	24.50
		12	0	21.95	21.78	22.04	23.50
		12	6	22.10	21.97	21.92	23.50
		12	13	21.90	21.93	22.01	23.50
		25	0	21.80	22.04	22.09	23.50
	64QAM	1	0	22.23	22.22	21.92	23.00

		1	13	22.26	22.18	22.18	23.00
		1	24	22.40	22.33	21.97	23.00
		12	0	20.81	20.81	21.22	22.00
		12	6	21.09	20.97	21.18	22.00
		12	13	21.01	21.08	21.23	22.00
		25	0	21.01	20.99	21.19	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				23060/704	23095/707.5	23130/711	
10MHz	QPSK	1	0	23.91	23.91	23.92	25.50
		1	25	24.02	23.99	23.97	25.50
		1	49	24.04	24.00	24.01	25.50
		25	0	22.86	22.93	23.06	24.50
		25	13	23.07	23.06	23.07	24.50
		25	25	23.04	22.96	23.08	24.50
		50	0	22.98	22.98	23.12	24.50
	16QAM	1	0	23.11	23.15	23.12	24.50
		1	25	23.27	23.24	23.19	24.50
		1	49	23.26	23.25	23.10	24.50
		25	0	21.87	21.88	22.06	23.50
		25	13	22.04	22.03	22.02	23.50
		25	25	22.00	21.93	22.07	23.50
		50	0	21.92	21.94	22.09	23.50
	64QAM	1	0	22.13	22.12	22.04	23.00
		1	25	22.24	22.16	22.12	23.00
		1	49	22.26	22.19	22.07	23.00
		25	0	20.87	20.93	21.08	22.00
		25	13	21.09	21.07	21.06	22.00
		25	25	21.07	20.96	21.07	22.00
		50	0	20.95	20.91	21.07	22.00

LTE Band12							
DSI 1&DSI 2&4-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				23017/699.7	23095/707.5	23173/715.3	
1.4MHz	QPSK	1	0	24.43	24.68	24.46	25.50
		1	2	24.77	24.56	24.86	25.50
		1	5	24.86	24.75	24.79	25.50
		3	0	24.53	24.59	24.62	25.50
		3	2	24.74	24.72	24.48	25.50
		3	3	24.61	24.61	24.87	25.50

	16QAM	6	0	23.41	23.55	23.96	24.50
		1	0	23.64	23.72	23.57	24.50
		1	2	23.66	23.91	23.94	24.50
		1	5	23.77	23.86	23.93	24.50
		3	0	23.34	23.37	23.61	24.50
		3	2	23.64	23.38	23.47	24.50
		3	3	23.52	23.67	23.86	24.50
		6	0	22.47	22.79	22.93	23.50
	64QAM	1	0	22.69	22.64	22.56	23.00
		1	2	22.85	22.89	22.93	23.00
		1	5	22.80	22.76	22.70	23.00
		3	0	22.16	22.44	22.69	23.00
		3	2	22.61	22.65	22.73	23.00
		3	3	22.63	22.46	22.52	23.00
		6	0	21.50	21.58	21.69	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				23025/700.5	23095/707.5	23165/714.5	
3MHz	QPSK	1	0	24.45	24.78	24.40	25.50
		1	7	24.47	24.48	24.54	25.50
		1	14	24.84	24.83	24.59	25.50
		8	0	23.65	23.65	23.84	24.50
		8	4	23.72	23.74	23.72	24.50
		8	7	23.45	23.61	23.85	24.50
		15	0	23.61	23.49	24.00	24.50
	16QAM	1	0	23.90	23.88	23.57	24.50
		1	7	24.04	23.85	23.72	24.50
		1	14	23.85	23.96	23.79	24.50
		8	0	22.66	22.75	22.71	23.50
		8	4	22.66	22.48	22.57	23.50
		8	7	22.68	22.61	22.94	23.50
		15	0	22.47	22.67	22.93	23.50
	64QAM	1	0	22.95	22.62	22.70	23.00
		1	7	22.73	22.81	22.93	23.00
		1	14	22.68	22.72	22.78	23.00
		8	0	21.38	21.82	21.85	22.00
		8	4	21.89	21.55	21.87	22.00
		8	7	21.43	21.56	21.88	22.00
		15	0	21.68	21.80	21.77	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				23035/701.5	23095/707.5	23155/713.5	

5MHz	QPSK	1	0	24.45	24.46	24.48	25.50
		1	13	24.57	24.78	24.58	25.50
		1	24	24.88	24.83	24.59	25.50
		12	0	23.65	23.73	23.70	24.50
		12	6	23.70	23.84	23.64	24.50
		12	13	23.65	23.75	23.79	24.50
		25	0	23.67	23.55	23.72	24.50
	16QAM	1	0	23.86	23.90	23.77	24.50
		1	13	23.94	23.83	23.96	24.50
		1	24	23.95	23.90	23.69	24.50
		12	0	22.56	22.71	22.77	23.50
		12	6	22.60	22.82	22.59	23.50
		12	13	22.74	22.77	22.82	23.50
		25	0	22.43	22.51	22.93	23.50
	64QAM	1	0	22.71	22.72	22.72	23.00
		1	13	22.79	22.81	22.99	23.00
		1	24	22.82	22.72	22.80	23.00
		12	0	21.38	21.60	21.73	22.00
		12	6	21.71	21.69	21.63	22.00
		12	13	21.53	21.80	21.70	22.00
		25	0	21.68	21.70	21.81	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				23060/704	23095/707.5	23130/711	
10MHz	QPSK	1	0	24.57	24.58	24.56	25.50
		1	25	24.65	24.66	24.64	25.50
		1	49	24.70	24.67	24.63	25.50
		25	0	23.51	23.67	23.72	24.50
		25	13	23.70	23.70	23.72	24.50
		25	25	23.57	23.65	23.79	24.50
		50	0	23.53	23.65	23.80	24.50
	16QAM	1	0	23.76	23.76	23.73	24.50
		1	25	23.82	23.83	23.86	24.50
		1	49	23.89	23.88	23.75	24.50
		25	0	22.54	22.61	22.73	23.50
		25	13	22.70	22.66	22.71	23.50
		25	25	22.56	22.63	22.78	23.50
		50	0	22.49	22.59	22.77	23.50
	64QAM	1	0	22.73	22.76	22.72	23.00
		1	25	22.87	22.81	22.81	23.00
		1	49	22.86	22.84	22.76	23.00

		25	0	21.44	21.62	21.75	22.00
		25	13	21.69	21.69	21.73	22.00
		25	25	21.59	21.64	21.82	22.00
		50	0	21.50	21.62	21.77	22.00

LTE Band13							
DSI 1&DSI 2&DSI 4-Low Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				23205/779.5	23230/782	23255/784.5	
5MHz	QPSK	1	0	24.12	24.16	23.96	25.50
		1	13	24.08	24.04	23.98	25.50
		1	24	24.22	24.18	23.94	25.50
		12	0	23.13	23.07	22.85	24.50
		12	6	23.28	23.32	23.10	24.50
		12	13	23.16	23.12	23.00	24.50
		25	0	23.28	23.24	23.00	24.50
	16QAM	1	0	23.48	23.30	23.22	24.50
		1	13	23.30	23.16	23.20	24.50
		1	24	23.39	23.27	23.29	24.50
		12	0	21.87	21.95	21.91	23.50
		12	6	22.17	22.03	22.19	23.50
		12	13	22.04	22.10	21.92	23.50
		25	0	22.00	22.10	22.04	23.50
	64QAM	1	0	22.27	22.21	22.25	23.00
		1	13	22.41	22.45	22.29	23.00
		1	24	22.09	22.15	22.29	23.00
		12	0	20.99	21.01	21.07	22.00
		12	6	21.03	21.15	21.29	22.00
		12	13	21.27	21.25	21.07	22.00
		25	0	21.03	20.89	20.87	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				/	23230/782	/	
10MHz	QPSK	1	0	/	23.98	/	25.50
		1	25	/	24.06	/	25.50
		1	49	/	24.06	/	25.50
		25	0	/	22.95	/	24.50
		25	13	/	23.16	/	24.50
		25	25	/	23.10	/	24.50
		50	0	/	23.08	/	24.50
	16QAM	1	0	/	23.16	/	24.50

		1	25	/	23.22	/	24.50
		1	49	/	23.21	/	24.50
		25	0	/	21.91	/	23.50
		25	13	/	22.11	/	23.50
		25	25	/	22.04	/	23.50
		50	0	/	22.00	/	23.50
	64QAM	1	0	/	22.15	/	23.00
		1	25	/	22.27	/	23.00
		1	49	/	22.25	/	23.00
		25	0	/	20.93	/	22.00
		25	13	/	21.13	/	22.00
		25	25	/	21.11	/	22.00
		50	0	/	20.99	/	22.00

LTE Band13							
DSI 1&DSI 2&4-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				23205/779.5	23230/782	23255/784.5	
5MHz	QPSK	1	0	24.52	24.35	24.36	25.50
		1	13	24.57	24.59	24.55	25.50
		1	24	24.30	24.44	24.54	25.50
		12	0	23.19	23.41	23.35	24.50
		12	6	23.41	23.49	23.57	24.50
		12	13	23.31	23.43	23.33	24.50
		25	0	23.56	23.52	23.34	24.50
	16QAM	1	0	23.78	23.62	23.54	24.50
		1	13	23.85	23.71	23.59	24.50
		1	24	23.77	23.87	23.71	24.50
		12	0	22.46	22.30	22.30	23.50
		12	6	22.44	22.38	22.60	23.50
		12	13	22.57	22.39	22.33	23.50
		25	0	22.47	22.53	22.43	23.50
	64QAM	1	0	22.55	22.61	22.53	23.00
		1	13	22.80	22.72	22.74	23.00
		1	24	22.70	22.56	22.64	23.00
		12	0	21.42	21.34	21.24	22.00
		12	6	21.43	21.61	21.43	22.00
		12	13	21.27	21.47	21.51	22.00
		25	0	21.29	21.53	21.39	22.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				/	23230/782	/	
10MHz	QPSK	1	0	/	24.36	/	25.50
		1	25	/	24.43	/	25.50
		1	49	/	24.42	/	25.50
		25	0	/	23.35	/	24.50
		25	13	/	23.51	/	24.50
		25	25	/	23.45	/	24.50
		50	0	/	23.42	/	24.50
	16QAM	1	0	/	23.56	/	24.50
		1	25	/	23.67	/	24.50
		1	49	/	23.71	/	24.50
		25	0	/	22.32	/	23.50
		25	13	/	22.48	/	23.50
		25	25	/	22.39	/	23.50
		50	0	/	22.37	/	23.50
	64QAM	1	0	/	22.51	/	23.00
		1	25	/	22.62	/	23.00
		1	49	/	22.64	/	23.00
		25	0	/	21.34	/	22.00
		25	13	/	21.49	/	22.00
		25	25	/	21.45	/	22.00
		50	0	/	21.37	/	22.00

LTE Band17							
DSI 1&DSI 2&DSI 4-Low Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				23755/706.5	23790/710	23825/713.5	
5MHz	QPSK	1	0	23.79	23.79	23.87	25.50
		1	13	24.14	23.99	24.07	25.50
		1	24	23.90	23.95	23.89	25.50
		12	0	23.05	23.13	23.21	24.50
		12	6	23.21	23.05	23.21	24.50
		12	13	22.94	23.04	23.22	24.50
		25	0	23.08	23.20	23.17	24.50
	16QAM	1	0	23.03	23.19	22.98	24.50
		1	13	23.29	23.20	23.22	24.50
		1	24	23.09	23.17	23.23	24.50
		12	0	21.86	22.06	22.08	23.50
		12	6	21.95	22.13	22.19	23.50

		12	13	22.12	22.17	21.97	23.50
		25	0	21.92	21.94	22.12	23.50
	64QAM	1	0	22.06	22.02	21.90	23.00
		1	13	22.06	22.21	22.15	23.00
		1	24	22.33	22.24	22.09	23.00
		12	0	20.90	20.91	20.99	22.00
		12	6	21.02	20.92	20.93	22.00
		12	13	20.91	21.23	21.01	22.00
		25	0	21.11	21.18	21.11	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				23780/709	23790/710	23800/711	
10MHz	QPSK	1	0	23.87	23.87	23.85	25.50
		1	25	24.00	23.97	23.93	25.50
		1	49	24.00	23.99	23.95	25.50
		25	0	22.97	23.01	23.05	24.50
		25	13	23.05	23.05	23.05	24.50
		25	25	22.98	23.02	23.06	24.50
		50	0	23.02	23.06	23.07	24.50
	16QAM	1	0	23.09	23.11	23.08	24.50
		1	25	23.17	23.18	23.20	24.50
		1	49	23.17	23.13	23.13	24.50
		25	0	21.98	22.00	22.00	23.50
		25	13	22.03	22.03	22.01	23.50
		25	25	21.98	22.01	22.01	23.50
		50	0	21.94	22.02	22.02	23.50
	64QAM	1	0	22.06	22.06	22.02	23.00
		1	25	22.18	22.19	22.11	23.00
		1	49	22.19	22.14	22.17	23.00
		25	0	21.00	21.01	21.05	22.00
		25	13	21.04	21.04	21.03	22.00
		25	25	21.01	21.05	21.07	22.00
		50	0	20.99	21.06	21.07	22.00

LTE Band17							
DSI 1&DSI 2&DSI 4-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				23755/706.5	23790/710	23825/713.5	
5MHz	QPSK	1	0	24.23	24.33	24.06	25.50
		1	13	24.22	24.40	24.21	25.50
		1	24	24.38	24.45	24.41	25.50

		12	0	23.50	23.48	23.28	24.50
		12	6	23.23	23.38	23.40	24.50
		12	13	23.44	23.31	23.34	24.50
		25	0	23.48	23.39	23.29	24.50
	16QAM	1	0	23.51	23.31	23.54	24.50
		1	13	23.68	23.62	23.50	24.50
		1	24	23.59	23.50	23.35	24.50
		12	0	22.34	22.42	22.45	23.50
		12	6	22.48	22.35	22.33	23.50
		12	13	22.40	22.33	22.36	23.50
		25	0	22.22	22.29	22.49	23.50
	64QAM	1	0	22.43	22.37	22.19	23.00
		1	13	22.45	22.63	22.49	23.00
		1	24	22.43	22.29	22.58	23.00
		12	0	21.39	21.35	21.26	22.00
		12	6	21.53	21.22	21.50	22.00
		12	13	21.49	21.63	21.36	22.00
		25	0	21.41	21.55	21.54	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				23780/709	23790/710	23800/711	
10MHz	QPSK	1	0	24.19	24.17	24.18	25.50
		1	25	24.30	24.26	24.29	25.50
		1	49	24.34	24.27	24.31	25.50
		25	0	23.36	23.38	23.34	24.50
		25	13	23.35	23.34	23.32	24.50
		25	25	23.38	23.41	23.42	24.50
		50	0	23.40	23.45	23.41	24.50
	16QAM	1	0	23.45	23.41	23.36	24.50
		1	25	23.52	23.52	23.46	24.50
		1	49	23.51	23.50	23.43	24.50
		25	0	22.36	22.34	22.33	23.50
		25	13	22.36	22.33	22.33	23.50
		25	25	22.40	22.39	22.40	23.50
		50	0	22.34	22.39	22.39	23.50
	64QAM	1	0	22.29	22.29	22.31	23.00
		1	25	22.41	22.47	22.43	23.00
		1	49	22.47	22.41	22.42	23.00
		25	0	21.39	21.37	21.36	22.00
		25	13	21.37	21.34	21.34	22.00
		25	25	21.41	21.45	21.42	22.00

		50	0	21.37	21.45	21.42	22.00
--	--	----	---	-------	-------	-------	-------

LTE Band26							
DSI 1&DSI 2-Low Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				26697/814.7	26865/831.5	27033/848.3	
1.4MHz	QPSK	1	0	24.16	24.18	23.85	25.50
		1	2	23.94	23.92	23.81	25.50
		1	5	24.02	24.07	24.09	25.50
		3	0	23.85	23.87	23.74	25.50
		3	2	23.83	24.01	24.02	25.50
		3	3	23.78	23.93	23.75	25.50
		6	0	23.23	23.04	22.88	24.50
	16QAM	1	0	23.40	23.26	23.25	24.50
		1	2	23.24	23.12	23.19	24.50
		1	5	23.44	23.16	23.19	24.50
		3	0	23.02	22.84	22.66	24.50
		3	2	22.83	23.04	23.11	24.50
		3	3	23.10	22.98	22.63	24.50
		6	0	22.17	22.02	21.78	23.50
	64QAM	1	0	22.05	22.11	22.34	23.00
		1	2	22.34	22.18	22.14	23.00
		1	5	22.52	22.35	22.03	23.00
		3	0	21.68	21.88	21.84	23.00
		3	2	22.04	22.14	21.96	23.00
		3	3	22.10	21.85	21.87	23.00
		6	0	21.06	20.93	20.95	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26705/815.5	26865/831.5	27025/847.5	
3MHz	QPSK	1	0	24.00	24.00	23.71	25.50
		1	7	23.94	23.88	24.05	25.50
		1	14	24.00	24.05	23.81	25.50
		8	0	23.07	23.01	22.92	24.50
		8	4	22.99	22.99	23.12	24.50
		8	7	22.88	23.09	22.73	24.50
		15	0	23.09	23.16	23.06	24.50
	16QAM	1	0	23.14	23.24	23.23	24.50
		1	7	23.14	23.36	22.95	24.50
		1	14	23.30	23.06	23.01	24.50
		8	0	21.84	21.88	21.88	23.50

		8	4	22.01	22.16	21.95	23.50
		8	7	21.98	22.04	21.97	23.50
		15	0	21.95	21.84	22.00	23.50
	64QAM	1	0	22.23	22.13	22.14	23.00
		1	7	22.22	22.30	22.06	23.00
		1	14	22.38	21.97	21.99	23.00
		8	0	21.04	20.88	21.04	22.00
		8	4	21.20	21.12	20.86	22.00
		8	7	21.04	20.97	20.79	22.00
		15	0	20.98	21.15	20.79	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26715/816.5	26865/831.5	27015/846.5	
5MHz	QPSK	1	0	23.80	23.84	24.01	25.50
		1	13	24.04	24.00	23.79	25.50
		1	24	24.04	24.11	23.85	25.50
		12	0	23.19	23.13	22.90	24.50
		12	6	22.97	23.05	22.94	24.50
		12	13	23.16	22.93	22.91	24.50
		25	0	23.27	23.00	23.06	24.50
	16QAM	1	0	23.14	23.38	23.21	24.50
		1	13	23.12	23.18	22.99	24.50
		1	24	23.24	23.30	23.07	24.50
		12	0	22.16	22.18	22.14	23.50
		12	6	21.99	22.32	21.99	23.50
		12	13	22.20	22.12	22.13	23.50
		25	0	21.93	22.22	22.04	23.50
	64QAM	1	0	22.25	21.95	22.08	23.00
		1	13	22.50	22.26	22.28	23.00
		1	24	22.34	22.33	22.13	23.00
		12	0	21.06	21.10	20.82	22.00
		12	6	21.18	21.00	21.14	22.00
		12	13	21.20	21.09	20.97	22.00
		25	0	21.24	21.11	21.13	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26740/819	26865/831.5	26990/844	
10MHz	QPSK	1	0	24.06	24.00	23.95	25.50
		1	25	24.16	24.06	23.93	25.50
		1	49	24.20	24.11	23.87	25.50
		25	0	22.85	23.07	22.88	24.50
		25	13	23.15	22.95	22.92	24.50

		25	25	23.08	22.99	22.95	24.50
		50	0	23.15	23.02	22.90	24.50
	16QAM	1	0	23.38	23.14	23.21	24.50
		1	25	23.32	23.36	23.21	24.50
		1	49	23.20	23.08	23.03	24.50
		25	0	22.04	22.10	21.92	23.50
		25	13	22.03	22.20	21.99	23.50
		25	25	22.06	22.06	21.93	23.50
		50	0	22.13	22.18	21.92	23.50
		1	0	22.21	22.05	22.22	23.00
	64QAM	1	25	22.30	22.16	22.14	23.00
		1	49	22.42	22.11	22.19	23.00
		25	0	21.02	21.08	21.12	22.00
		25	13	21.28	21.22	20.98	22.00
		25	25	21.06	21.25	21.01	22.00
		50	0	20.96	21.23	21.05	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26765/821.5	26865/831.5	26965/841.5	
15MHz	QPSK	1	0	23.96	23.96	23.91	25.50
		1	38	24.04	24.08	23.97	25.50
		1	74	24.02	23.97	23.93	25.50
		36	0	22.97	23.01	22.94	24.50
		36	18	23.09	23.07	23.02	24.50
		36	39	23.04	23.05	22.93	24.50
		75	0	23.05	23.06	22.96	24.50
	16QAM	1	0	23.22	23.22	23.15	24.50
		1	38	23.30	23.28	23.15	24.50
		1	74	23.30	23.16	23.13	24.50
		36	0	21.94	22.00	21.94	23.50
		36	18	22.09	22.10	22.03	23.50
		36	39	22.06	22.04	21.93	23.50
		75	0	21.99	22.04	21.94	23.50
	64QAM	1	0	22.17	22.13	22.12	23.00
		1	38	22.28	22.20	22.18	23.00
		1	74	22.28	22.11	22.15	23.00
		36	0	21.00	21.04	20.98	22.00
		36	18	21.14	21.10	21.06	22.00
		36	39	21.10	21.09	20.95	22.00
		75	0	21.04	21.05	20.93	22.00

LTE Band26							
DSI 4-Low Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				26697/814.7	26865/831.5	27033/848.3	
1.4MHz	QPSK	1	0	22.60	22.27	22.37	24.00
		1	2	22.39	22.59	22.54	24.00
		1	5	22.51	22.32	22.58	24.00
		3	0	22.49	22.58	22.47	24.00
		3	2	22.77	22.58	22.42	24.00
		3	3	22.46	22.80	22.45	24.00
		6	0	22.51	22.64	22.27	24.00
	16QAM	1	0	22.61	22.53	22.85	24.00
		1	2	22.69	22.66	22.84	24.00
		1	5	22.83	22.66	22.67	24.00
		3	0	22.86	23.04	22.70	24.00
		3	2	23.07	23.21	22.95	24.00
		3	3	22.76	22.99	22.83	24.00
		6	0	22.09	22.20	22.00	23.00
	64QAM	1	0	22.27	22.47	21.95	23.00
		1	2	22.47	22.12	21.94	23.00
		1	5	22.25	22.20	22.03	23.00
		3	0	22.10	21.98	21.89	23.00
		3	2	22.07	21.90	22.15	23.00
		3	3	22.00	22.14	22.07	23.00
		6	0	20.96	21.20	21.12	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26705/815.5	26865/831.5	27025/847.5	
3MHz	QPSK	1	0	22.60	22.55	22.37	24.00
		1	7	22.55	22.57	22.50	24.00
		1	14	22.51	22.40	22.38	24.00
		8	0	22.43	22.42	22.55	24.00
		8	4	22.73	22.48	22.68	24.00
		8	7	22.52	22.52	22.39	24.00
		15	0	22.49	22.56	22.57	24.00
	16QAM	1	0	22.77	22.83	22.79	24.00
		1	7	22.67	22.66	22.90	24.00
		1	14	22.79	22.68	22.75	24.00
		8	0	21.94	21.94	21.92	23.00
		8	4	22.25	22.21	21.91	23.00

		8	7	22.08	22.05	21.99	23.00
		15	0	22.15	22.06	21.94	23.00
	64QAM	1	0	22.23	22.31	22.05	23.00
		1	7	22.25	22.38	22.04	23.00
		1	14	22.29	22.30	22.17	23.00
		8	0	20.96	21.12	21.03	22.00
		8	4	21.17	21.16	21.03	22.00
		8	7	21.16	21.18	20.93	22.00
		15	0	20.94	21.00	21.02	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26715/816.5	26865/831.5	27015/846.5	
5MHz	QPSK	1	0	22.54	22.57	22.27	24.00
		1	13	22.51	22.45	22.56	24.00
		1	24	22.73	22.54	22.34	24.00
		12	0	22.69	22.62	22.45	24.00
		12	6	22.79	22.42	22.38	24.00
		12	13	22.68	22.44	22.47	24.00
		25	0	22.73	22.66	22.47	24.00
	16QAM	1	0	22.71	22.57	22.79	24.00
		1	13	22.77	22.64	22.98	24.00
		1	24	22.99	22.84	22.79	24.00
		12	0	21.94	22.18	21.88	23.00
		12	6	22.03	21.93	21.95	23.00
		12	13	22.04	22.05	21.83	23.00
		25	0	22.23	22.14	22.10	23.00
	64QAM	1	0	22.27	22.27	22.03	23.00
		1	13	22.19	22.14	22.06	23.00
		1	24	22.45	22.02	21.93	23.00
		12	0	21.18	20.96	20.87	22.00
		12	6	21.29	21.30	21.07	22.00
		12	13	21.10	21.24	20.81	22.00
		25	0	21.20	21.22	20.96	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26740/819	26865/831.5	26990/844	
10MHz	QPSK	1	0	22.42	22.37	22.37	24.00
		1	25	22.79	22.47	22.62	24.00
		1	49	22.59	22.48	22.44	24.00
		25	0	22.35	22.50	22.35	24.00
		25	13	22.57	22.54	22.60	24.00
		25	25	22.46	22.64	22.29	24.00

	16QAM	50	0	22.43	22.74	22.63	24.00
		1	0	22.69	22.77	22.65	24.00
		1	25	22.87	22.70	22.80	24.00
		1	49	23.01	22.66	22.63	24.00
		25	0	21.96	21.90	22.04	23.00
		25	13	22.21	22.21	22.07	23.00
		25	25	21.98	22.13	22.07	23.00
		50	0	21.93	21.94	22.02	23.00
	64QAM	1	0	22.17	22.31	22.07	23.00
		1	25	22.19	22.24	22.12	23.00
		1	49	22.37	22.20	22.09	23.00
		25	0	20.94	21.16	20.93	22.00
		25	13	21.07	21.14	21.23	22.00
		25	25	21.28	21.04	20.95	22.00
		50	0	20.98	21.20	21.02	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26765/821.5	26865/831.5	26965/841.5	
15MHz	QPSK	1	0	22.50	22.47	22.43	24.00
		1	38	22.61	22.59	22.52	24.00
		1	74	22.59	22.46	22.46	24.00
		36	0	22.47	22.52	22.47	24.00
		36	18	22.59	22.56	22.54	24.00
		36	39	22.54	22.56	22.41	24.00
		75	0	22.51	22.56	22.45	24.00
	16QAM	1	0	22.71	22.73	22.69	24.00
		1	38	22.77	22.76	22.76	24.00
		1	74	22.83	22.70	22.73	24.00
		36	0	21.98	22.02	21.92	23.00
		36	18	22.11	22.05	22.01	23.00
		36	39	22.06	22.03	21.91	23.00
		75	0	22.01	22.02	21.92	23.00
	64QAM	1	0	22.21	22.21	22.01	23.00
		1	38	22.29	22.26	22.06	23.00
		1	74	22.29	22.16	22.05	23.00
		36	0	21.00	21.06	20.97	22.00
		36	18	21.13	21.10	21.05	22.00
		36	39	21.10	21.08	20.95	22.00
		75	0	21.02	21.04	20.94	22.00

LTE Band26							
DSI 1&DSI 4-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				26697/814.7	26865/831.5	27033/848.3	
1.4MHz	QPSK	1	0	24.01	24.23	23.94	25.00
		1	2	24.04	24.15	23.66	25.00
		1	5	24.12	24.24	23.62	25.00
		3	0	24.61	24.23	23.86	25.00
		3	2	24.68	24.53	23.95	25.00
		3	3	24.51	24.25	23.89	25.00
		6	0	23.64	23.25	23.55	24.50
	16QAM	1	0	23.63	23.94	23.40	24.50
		1	2	24.08	24.13	23.59	24.50
		1	5	23.72	23.95	22.96	24.50
		3	0	23.50	23.39	23.04	24.50
		3	2	23.40	23.57	23.11	24.50
		3	3	23.53	23.12	23.00	24.50
		6	0	22.79	22.41	22.09	23.50
	64QAM	1	0	22.63	22.80	22.15	23.50
		1	2	22.81	22.61	22.29	23.50
		1	5	22.84	22.59	22.05	23.50
		3	0	22.43	22.40	22.04	23.50
		3	2	22.39	22.34	22.09	23.50
		3	3	22.39	22.26	21.90	23.50
		6	0	21.50	21.35	21.03	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26705/815.5	26865/831.5	27025/847.5	
3MHz	QPSK	1	0	23.95	24.11	23.80	25.00
		1	7	24.28	23.85	23.80	25.00
		1	14	24.10	24.22	23.68	25.00
		8	0	23.79	23.37	23.12	24.50
		8	4	23.72	23.39	23.31	24.50
		8	7	23.49	23.51	22.97	24.50
		15	0	23.56	23.45	23.33	24.50
	16QAM	1	0	23.75	23.96	23.34	24.50
		1	7	23.92	23.91	23.63	24.50
		1	14	23.60	23.97	23.18	24.50
		8	0	22.66	22.31	22.08	23.50
		8	4	22.68	22.57	22.21	23.50

		8	7	22.51	22.30	22.20	23.50
		15	0	22.71	22.49	22.01	23.50
	64QAM	1	0	22.73	22.52	22.31	23.50
		1	7	22.79	22.57	22.53	23.50
		1	14	22.94	22.85	22.17	23.50
		8	0	21.35	21.30	21.48	22.00
		8	4	21.61	21.46	21.23	22.00
		8	7	21.47	21.44	21.10	22.00
		15	0	21.44	21.37	21.27	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26715/816.5	26865/831.5	27015/846.5	
5MHz	QPSK	1	0	24.07	24.19	23.90	25.00
		1	13	24.40	24.13	23.96	25.00
		1	24	23.84	24.36	23.66	25.00
		12	0	23.77	23.57	23.26	24.50
		12	6	23.84	23.41	23.45	24.50
		12	13	23.27	23.47	23.09	24.50
		25	0	23.64	23.31	23.37	24.50
	16QAM	1	0	23.65	23.90	23.38	24.50
		1	13	23.98	23.85	23.53	24.50
		1	24	23.46	23.89	23.16	24.50
		12	0	22.62	22.57	22.02	23.50
		12	6	22.70	22.53	22.49	23.50
		12	13	22.31	22.52	22.20	23.50
		25	0	22.65	22.57	21.87	23.50
	64QAM	1	0	22.91	22.48	22.25	23.50
		1	13	22.89	22.49	22.37	23.50
		1	24	22.60	22.85	22.03	23.50
		12	0	21.31	21.50	21.48	22.00
		12	6	21.67	21.42	21.27	22.00
		12	13	21.31	21.52	21.06	22.00
		25	0	21.26	21.37	21.33	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26740/819	26865/831.5	26990/844	
10MHz	QPSK	1	0	23.93	24.25	23.92	25.00
		1	25	24.20	24.03	23.84	25.00
		1	49	23.96	24.30	23.68	25.00
		25	0	23.67	23.33	23.14	24.50
		25	13	23.74	23.53	23.41	24.50
		25	25	23.35	23.61	23.07	24.50

	16QAM	50	0	23.64	23.29	23.37	24.50
		1	0	23.81	23.68	23.38	24.50
		1	25	24.06	23.93	23.45	24.50
		1	49	23.80	23.79	23.24	24.50
		25	0	22.68	22.33	22.14	23.50
		25	13	22.64	22.47	22.29	23.50
		25	25	22.57	22.46	22.08	23.50
		50	0	22.69	22.51	21.97	23.50
	64QAM	1	0	22.69	22.50	22.25	23.50
		1	25	22.87	22.49	22.29	23.50
		1	49	22.92	22.69	21.93	23.50
		25	0	21.57	21.48	21.22	22.00
		25	13	21.67	21.54	20.95	22.00
		25	25	21.57	21.60	21.04	22.00
		50	0	21.42	21.29	21.03	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26765/821.5	26865/831.5	26965/841.5	
15MHz	QPSK	1	0	24.01	24.07	23.74	25.00
		1	38	24.20	23.95	23.80	25.00
		1	74	24.00	24.14	23.54	25.00
		36	0	23.71	23.41	23.06	24.50
		36	18	23.76	23.47	23.27	24.50
		36	39	23.45	23.47	23.07	24.50
		75	0	23.64	23.39	23.31	24.50
	16QAM	1	0	23.77	23.80	23.30	24.50
		1	38	23.98	24.01	23.55	24.50
		1	74	23.62	23.87	23.08	24.50
		36	0	22.50	22.37	22.08	23.50
		36	18	22.68	22.59	22.31	23.50
		36	39	22.49	22.40	22.04	23.50
		75	0	22.59	22.47	21.97	23.50
	64QAM	1	0	22.75	22.60	22.19	23.50
		1	38	22.73	22.53	22.37	23.50
		1	74	22.78	22.71	22.03	23.50
		36	0	21.41	21.34	21.32	22.00
		36	18	21.53	21.54	21.07	22.00
		36	39	21.47	21.52	20.94	22.00
		75	0	21.44	21.23	21.13	22.00

LTE Band26							
DSI 2-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				26697/814.7	26865/831.5	27033/848.3	
1.4MHz	QPSK	1	0	23.55	23.60	23.74	25.50
		1	2	24.12	23.85	23.89	25.50
		1	5	23.74	23.96	23.74	25.50
		3	0	23.59	23.62	23.76	25.50
		3	2	23.59	23.91	23.62	25.50
		3	3	23.90	23.88	23.57	25.50
		6	0	23.02	22.69	22.90	24.50
	16QAM	1	0	22.83	22.85	22.99	24.50
		1	2	22.95	23.04	22.96	24.50
		1	5	23.33	22.90	22.83	24.50
		3	0	22.67	22.56	22.55	24.50
		3	2	22.91	22.85	22.78	24.50
		3	3	22.91	22.83	22.74	24.50
		6	0	21.67	21.74	21.67	23.50
	64QAM	1	0	21.85	21.91	21.73	23.50
		1	2	22.21	22.12	21.81	23.50
		1	5	22.12	21.96	21.97	23.50
		3	0	21.61	21.68	21.77	23.50
		3	2	21.82	21.70	21.69	23.50
		3	3	21.78	21.65	21.78	23.50
		6	0	20.80	20.91	20.82	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26705/815.5	26865/831.5	27025/847.5	
3MHz	QPSK	1	0	23.73	23.84	23.76	25.50
		1	7	23.96	23.87	23.95	25.50
		1	14	23.76	23.68	23.66	25.50
		8	0	22.81	22.86	22.80	24.50
		8	4	22.95	22.85	22.78	24.50
		8	7	22.76	22.88	22.61	24.50
		15	0	22.84	22.75	22.78	24.50
	16QAM	1	0	23.01	22.93	23.09	24.50
		1	7	23.03	22.96	22.92	24.50
		1	14	23.15	23.00	23.07	24.50
		8	0	21.77	21.72	21.80	23.50
		8	4	21.77	22.01	21.70	23.50

		8	7	21.91	21.81	21.68	23.50
		15	0	21.95	21.98	21.81	23.50
	64QAM	1	0	22.13	21.97	21.95	23.50
		1	7	22.13	22.20	22.01	23.50
		1	14	22.22	22.00	21.79	23.50
		8	0	20.75	20.90	20.87	22.00
		8	4	20.88	20.86	20.95	22.00
		8	7	20.78	20.85	20.62	22.00
		15	0	20.86	20.81	20.70	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26715/816.5	26865/831.5	27015/846.5	
5MHz	QPSK	1	0	23.59	23.82	23.60	25.50
		1	13	24.02	23.77	23.63	25.50
		1	24	24.00	23.62	23.90	25.50
		12	0	22.87	22.86	22.70	24.50
		12	6	22.87	22.97	22.72	24.50
		12	13	22.90	22.68	22.65	24.50
		25	0	22.82	22.91	22.92	24.50
	16QAM	1	0	22.89	23.13	23.15	24.50
		1	13	23.09	23.00	22.88	24.50
		1	24	23.23	22.82	23.11	24.50
		12	0	21.87	21.80	21.78	23.50
		12	6	21.91	21.95	21.68	23.50
		12	13	21.71	21.67	21.62	23.50
		25	0	21.87	21.94	21.59	23.50
	64QAM	1	0	22.03	22.13	21.95	23.50
		1	13	22.29	21.96	21.95	23.50
		1	24	22.24	22.00	22.05	23.50
		12	0	20.87	20.88	20.97	22.00
		12	6	20.74	20.70	20.87	22.00
		12	13	21.04	21.07	20.78	22.00
		25	0	20.70	20.75	20.84	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26740/819	26865/831.5	26990/844	
10MHz	QPSK	1	0	23.63	23.80	23.68	25.50
		1	25	23.82	23.75	23.73	25.50
		1	49	23.98	23.90	23.76	25.50
		25	0	22.93	22.84	22.62	24.50
		25	13	22.77	22.81	22.84	24.50
		25	25	22.80	22.88	22.73	24.50

	16QAM	50	0	22.88	22.87	22.68	24.50
		1	0	22.85	23.09	23.07	24.50
		1	25	23.11	23.14	23.18	24.50
		1	49	23.11	22.98	22.97	24.50
		25	0	21.69	21.72	21.74	23.50
		25	13	21.85	21.79	21.92	23.50
		25	25	21.81	21.89	21.82	23.50
		50	0	21.89	22.00	21.91	23.50
	64QAM	1	0	22.07	21.93	21.99	23.50
		1	25	22.11	22.22	21.87	23.50
		1	49	22.16	21.96	21.81	23.50
		25	0	20.85	20.90	20.73	22.00
		25	13	20.86	21.06	20.99	22.00
		25	25	20.78	21.01	20.62	22.00
		50	0	20.74	20.97	20.70	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26765/821.5	26865/831.5	26965/841.5	
15MHz	QPSK	1	0	23.71	23.70	23.68	25.50
		1	38	23.88	23.83	23.79	25.50
		1	74	23.84	23.72	23.74	25.50
		36	0	22.77	22.78	22.70	24.50
		36	18	22.87	22.85	22.84	24.50
		36	39	22.84	22.84	22.71	24.50
		75	0	22.82	22.83	22.76	24.50
	16QAM	1	0	22.97	22.97	22.93	24.50
		1	38	23.11	23.06	23.02	24.50
		1	74	23.09	22.94	22.99	24.50
		36	0	21.75	21.78	21.72	23.50
		36	18	21.87	21.85	21.80	23.50
		36	39	21.83	21.83	21.72	23.50
		75	0	21.79	21.82	21.73	23.50
	64QAM	1	0	22.01	21.99	21.83	23.50
		1	38	22.15	22.06	21.95	23.50
		1	74	22.12	21.96	21.87	23.50
		36	0	20.79	20.82	20.77	22.00
		36	18	20.90	20.88	20.85	22.00
		36	39	20.82	20.87	20.72	22.00
		75	0	20.80	20.81	20.74	22.00

LTE Band38							
DSI 1&DSI 2--Low Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				37775/2572.5	38000/2595	38225/2617.5	
5MHz	QPSK	1	0	24.48	24.47	24.43	25.50
		1	13	24.44	24.68	24.67	25.50
		1	24	24.66	24.73	24.78	25.50
		12	0	23.49	23.56	23.76	24.50
		12	6	23.65	23.86	23.89	24.50
		12	13	23.78	23.86	23.81	24.50
		25	0	23.80	23.73	23.89	24.50
	16QAM	1	0	23.59	23.44	23.54	24.50
		1	13	23.60	23.82	23.76	24.50
		1	24	23.78	23.70	23.76	24.50
		12	0	22.46	22.66	22.75	23.50
		12	6	22.70	22.77	22.72	23.50
		12	13	22.78	22.77	22.73	23.50
		25	0	22.54	22.86	22.68	23.50
	64QAM	1	0	22.44	22.56	22.64	23.50
		1	13	22.57	22.62	22.76	23.50
		1	24	22.47	22.62	22.59	23.50
		12	0	21.66	21.70	21.85	22.50
		12	6	21.66	21.84	21.84	22.50
		12	13	21.72	21.80	21.81	22.50
		25	0	21.62	21.65	21.67	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	24.34	24.27	24.57	25.50
		1	25	24.68	24.64	24.89	25.50
		1	49	24.72	24.57	24.84	25.50
		25	0	23.63	23.54	23.78	24.50
		25	13	23.71	23.96	24.01	24.50
		25	25	23.64	23.64	23.73	24.50
		50	0	23.68	23.71	23.79	24.50
	16QAM	1	0	23.61	23.70	23.46	24.50
		1	25	23.60	23.70	23.92	24.50
		1	49	23.64	23.52	23.82	24.50
		25	0	22.56	22.54	22.93	23.50
		25	13	22.82	22.79	22.94	23.50

		25	25	22.50	22.85	22.79	23.50
		50	0	22.72	22.86	22.96	23.50
	64QAM	1	0	22.44	22.34	22.72	23.50
		1	25	22.69	22.50	22.88	23.50
		1	49	22.55	22.74	22.83	23.50
		25	0	21.64	21.86	21.97	22.50
		25	13	21.84	21.86	21.82	22.50
		25	25	21.88	21.84	21.69	22.50
		50	0	21.46	21.81	21.63	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	24.26	24.49	24.57	25.50
		1	38	24.54	24.60	24.89	25.50
		1	74	24.42	24.61	24.82	25.50
		36	0	23.49	23.80	23.90	24.50
		36	18	23.69	23.74	24.03	24.50
		36	39	23.76	23.90	23.83	24.50
		75	0	23.78	23.75	23.79	24.50
	16QAM	1	0	23.33	23.52	23.44	24.50
		1	38	23.80	23.62	23.78	24.50
		1	74	23.76	23.84	23.60	24.50
		36	0	22.72	22.52	22.67	23.50
		36	18	22.54	22.65	22.84	23.50
		36	39	22.56	22.75	22.85	23.50
		75	0	22.54	22.80	22.80	23.50
	64QAM	1	0	22.40	22.32	22.42	23.50
		1	38	22.65	22.68	22.60	23.50
		1	74	22.43	22.56	22.63	23.50
		36	0	21.56	21.64	21.81	22.50
		36	18	21.58	21.80	21.92	22.50
		36	39	21.84	21.70	21.93	22.50
		75	0	21.52	21.91	21.93	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	24.34	24.41	24.53	25.50
		1	50	24.54	24.64	24.73	25.50
		1	99	24.54	24.61	24.66	25.50
		50	0	23.57	23.66	23.78	24.50
		50	25	23.71	23.80	23.87	24.50
		50	50	23.72	23.80	23.85	24.50

	16QAM	100	0	23.68	23.75	23.83	24.50
		1	0	23.45	23.50	23.56	24.50
		1	50	23.66	23.72	23.78	24.50
		1	99	23.64	23.70	23.72	24.50
		50	0	22.56	22.64	22.73	23.50
		50	25	22.66	22.77	22.82	23.50
		50	50	22.68	22.77	22.79	23.50
		100	0	22.64	22.70	22.76	23.50
	64QAM	1	0	22.40	22.44	22.54	23.50
		1	50	22.61	22.68	22.72	23.50
		1	99	22.53	22.64	22.67	23.50
		50	0	21.58	21.64	21.77	22.50
		50	25	21.68	21.80	21.84	22.50
		50	50	21.72	21.80	21.81	22.50
		100	0	21.64	21.75	21.77	22.50

LTE Band38							
DSI 4--Low Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				37775/2572.5	38000/2595	38225/2617.5	
5MHz	QPSK	1	0	22.68	22.84	22.81	23.50
		1	13	22.83	22.93	22.76	23.50
		1	24	22.91	22.86	22.67	23.50
		12	0	22.91	22.94	22.90	23.50
		12	6	22.85	23.00	22.84	23.50
		12	13	22.87	22.97	22.92	23.50
		25	0	22.81	23.05	22.96	23.50
	16QAM	1	0	22.78	22.95	22.94	23.50
		1	13	23.06	22.98	22.39	23.50
		1	24	22.97	22.97	22.74	23.50
		12	0	22.83	22.98	22.91	23.50
		12	6	23.02	23.05	23.03	23.50
		12	13	23.07	23.02	22.96	23.50
		25	0	22.93	22.97	22.99	23.50
	64QAM	1	0	22.70	22.70	22.63	23.50
		1	13	23.00	22.93	22.73	23.50
		1	24	22.73	22.73	22.56	23.50
		12	0	21.92	21.83	21.96	22.50
		12	6	22.09	21.96	21.83	22.50
		12	13	22.06	21.85	21.94	22.50

		25	0	22.00	21.93	21.89	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	22.64	22.72	22.79	23.50
		1	25	22.77	22.73	23.00	23.50
		1	49	22.97	22.92	22.63	23.50
		25	0	22.79	23.08	22.78	23.50
		25	13	22.73	22.78	22.86	23.50
		25	25	22.79	23.01	22.80	23.50
		50	0	22.83	23.07	22.82	23.50
	16QAM	1	0	22.96	22.91	22.96	23.50
		1	25	23.02	22.88	22.29	23.50
		1	49	23.01	23.01	22.70	23.50
		25	0	22.67	22.86	22.65	23.50
		25	13	23.14	22.91	22.77	23.50
		25	25	22.95	23.10	22.86	23.50
		50	0	22.75	23.09	22.83	23.50
	64QAM	1	0	22.78	22.86	22.63	23.50
		1	25	23.00	22.87	22.65	23.50
		1	49	22.83	22.93	22.70	23.50
		25	0	21.78	22.03	21.68	22.50
		25	13	21.97	21.78	21.95	22.50
		25	25	21.90	22.11	21.80	22.50
		50	0	21.94	22.05	21.91	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	22.80	22.66	22.57	23.50
		1	38	22.97	22.79	22.74	23.50
		1	74	22.69	22.68	22.63	23.50
		36	0	22.91	22.92	23.00	23.50
		36	18	22.97	23.08	22.94	23.50
		36	39	22.93	23.01	22.70	23.50
		75	0	23.07	22.99	22.84	23.50
	16QAM	1	0	22.86	22.77	22.96	23.50
		1	38	23.00	23.12	22.49	23.50
		1	74	22.83	22.87	22.76	23.50
		36	0	22.91	23.00	22.89	23.50
		36	18	22.90	23.09	22.91	23.50
		36	39	23.05	22.98	22.90	23.50
		75	0	22.77	22.89	22.95	23.50

	64QAM	1	0	22.54	22.80	22.67	23.50
		1	38	22.88	22.87	22.89	23.50
		1	74	22.73	22.83	22.68	23.50
		36	0	21.98	21.97	22.00	22.50
		36	18	22.05	22.10	22.07	22.50
		36	39	22.06	22.05	22.02	22.50
		75	0	21.84	22.07	21.99	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	22.66	22.68	22.69	23.50
		1	50	22.87	22.87	22.82	23.50
		1	99	22.79	22.78	22.69	23.50
		50	0	22.81	22.86	22.84	23.50
		50	25	22.91	22.96	22.90	23.50
		50	50	22.93	22.95	22.82	23.50
		100	0	22.91	22.89	22.86	23.50
	16QAM	1	0	22.80	22.81	22.82	23.50
		1	50	22.98	23.00	22.43	23.50
		1	99	22.91	22.91	22.80	23.50
		50	0	22.81	22.84	22.83	23.50
		50	25	22.92	22.93	22.87	23.50
		50	50	22.91	22.92	22.80	23.50
		100	0	22.87	22.87	22.83	23.50
	64QAM	1	0	22.64	22.68	22.69	23.50
		1	50	22.86	22.85	22.79	23.50
		1	99	22.79	22.77	22.64	23.50
		50	0	21.84	21.87	21.84	22.50
		50	25	21.93	21.96	21.91	22.50
		50	50	21.96	21.95	21.84	22.50
		100	0	21.90	21.89	21.83	22.50

LTE Band38							
DSI 1-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				37775/2572.5	38000/2595	38225/2617.5	
5MHz	QPSK	1	0	21.89	21.83	21.64	22.50
		1	13	22.03	21.85	21.49	22.50
		1	24	21.96	21.53	21.33	22.50
		12	0	22.00	21.85	21.62	22.50
		12	6	22.14	21.85	21.63	22.50

		12	13	22.21	21.74	21.55	22.50
		25	0	22.10	21.96	21.55	22.50
	16QAM	1	0	21.91	21.96	21.69	22.50
		1	13	22.05	21.94	21.49	22.50
		1	24	21.80	21.67	21.49	22.50
		12	0	21.81	21.91	21.61	22.50
		12	6	21.89	21.89	21.45	22.50
		12	13	21.90	21.85	21.39	22.50
		25	0	21.88	21.93	21.54	22.50
		1	0	21.72	21.56	21.56	22.50
	64QAM	1	13	21.97	21.74	21.48	22.50
		1	24	21.81	21.44	21.14	22.50
		12	0	21.87	21.94	21.66	22.50
		12	6	22.04	21.72	21.47	22.50
		12	13	21.83	21.84	21.31	22.50
		25	0	22.08	21.67	21.62	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	21.85	21.79	21.52	22.50
		1	25	21.89	21.67	21.61	22.50
		1	49	22.04	21.43	21.25	22.50
		25	0	22.12	21.73	21.82	22.50
		25	13	22.06	21.83	21.61	22.50
		25	25	21.93	21.68	21.43	22.50
		50	0	22.28	21.78	21.65	22.50
	16QAM	1	0	21.77	21.72	21.81	22.50
		1	25	21.95	21.76	21.55	22.50
		1	49	21.72	21.67	21.25	22.50
		25	0	22.09	21.77	21.43	22.50
		25	13	21.97	21.67	21.57	22.50
		25	25	22.02	21.69	21.63	22.50
		50	0	22.12	21.83	21.72	22.50
	64QAM	1	0	21.74	21.64	21.60	22.50
		1	25	21.79	21.60	21.70	22.50
		1	49	21.59	21.70	21.26	22.50
		25	0	21.73	21.94	21.44	22.50
		25	13	21.88	21.92	21.37	22.50
		25	25	21.85	21.60	21.59	22.50
		50	0	21.92	21.91	21.36	22.50
Bandwidth	Modulation	RB	Offset	Channel/Frequency(MHz)			Tune-up

		Allocation		37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	21.85	21.67	21.66	22.50
		1	38	22.07	21.75	21.71	22.50
		1	74	21.70	21.55	21.23	22.50
		36	0	22.02	21.79	21.50	22.50
		36	18	22.06	22.03	21.61	22.50
		36	39	22.11	21.90	21.47	22.50
		75	0	22.26	21.84	21.63	22.50
	16QAM	1	0	21.87	21.82	21.75	22.50
		1	38	21.99	21.96	21.53	22.50
		1	74	21.98	21.71	21.47	22.50
		36	0	21.95	21.85	21.47	22.50
		36	18	21.87	22.03	21.61	22.50
		36	39	22.12	21.71	21.43	22.50
		75	0	21.86	21.93	21.64	22.50
	64QAM	1	0	21.92	21.62	21.54	22.50
		1	38	21.77	21.74	21.66	22.50
		1	74	21.65	21.44	21.36	22.50
		36	0	21.83	21.66	21.46	22.50
		36	18	22.08	21.88	21.45	22.50
		36	39	22.11	21.90	21.57	22.50
		75	0	21.86	21.75	21.46	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	21.87	21.71	21.56	22.50
		1	50	22.03	21.83	21.55	22.50
		1	99	21.82	21.59	21.25	22.50
		50	0	21.98	21.85	21.62	22.50
		50	25	22.06	21.93	21.63	22.50
		50	50	22.05	21.84	21.47	22.50
		100	0	22.08	21.90	21.59	22.50
	16QAM	1	0	21.91	21.80	21.63	22.50
		1	50	22.03	21.88	21.59	22.50
		1	99	21.86	21.65	21.33	22.50
		50	0	21.91	21.79	21.57	22.50
		50	25	21.97	21.85	21.55	22.50
		50	50	21.96	21.77	21.41	22.50
		100	0	21.98	21.81	21.52	22.50
	64QAM	1	0	21.78	21.66	21.50	22.50
		1	50	21.89	21.74	21.48	22.50

		1	99	21.73	21.52	21.20	22.50
		50	0	21.87	21.78	21.54	22.50
		50	25	21.96	21.82	21.55	22.50
		50	50	21.93	21.74	21.41	22.50
		100	0	21.96	21.77	21.50	22.50

LTE Band38							
DSI 2&4-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				37775/2572.5	38000/2595	38225/2617.5	
5MHz	QPSK	1	0	24.76	24.61	24.55	25.50
		1	13	24.92	24.80	24.43	25.50
		1	24	24.63	24.46	24.28	25.50
		12	0	24.09	23.94	23.75	24.50
		12	6	24.02	23.85	23.69	24.50
		12	13	23.92	23.71	23.56	24.50
		25	0	24.07	23.90	23.78	24.50
	16QAM	1	0	23.77	23.79	23.52	24.50
		1	13	23.86	23.86	23.47	24.50
		1	24	23.88	23.47	23.34	24.50
		12	0	22.94	22.94	22.71	23.50
		12	6	22.95	22.91	22.72	23.50
		12	13	23.03	22.81	22.63	23.50
		25	0	22.93	22.91	22.54	23.50
	64QAM	1	0	22.64	22.64	22.50	23.00
		1	13	22.82	22.84	22.51	23.00
		1	24	22.71	22.65	22.18	23.00
		12	0	21.62	21.48	21.31	22.50
		12	6	21.82	21.65	21.35	22.50
		12	13	21.58	21.44	21.17	22.50
		25	0	21.82	21.46	21.35	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	24.90	24.71	24.43	25.50
		1	25	25.02	24.60	24.57	25.50
		1	49	24.73	24.58	24.14	25.50
		25	0	23.75	24.02	23.69	24.50
		25	13	24.04	23.79	23.69	24.50
		25	25	24.00	23.99	23.58	24.50
		50	0	24.17	23.76	23.72	24.50

	16QAM	1	0	23.97	23.81	23.70	24.50
		1	25	23.72	23.90	23.51	24.50
		1	49	23.62	23.51	23.14	24.50
		25	0	22.80	22.66	22.59	23.50
		25	13	23.13	22.65	22.76	23.50
		25	25	23.15	22.81	22.41	23.50
		50	0	23.01	22.87	22.52	23.50
	64QAM	1	0	22.74	22.48	22.46	23.00
		1	25	22.96	22.98	22.49	23.00
		1	49	22.81	22.51	22.44	23.00
		25	0	21.54	21.40	21.51	22.50
		25	13	21.64	21.55	21.51	22.50
		25	25	21.70	21.66	21.01	22.50
		50	0	21.82	21.64	21.31	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	24.64	24.65	24.47	25.50
		1	38	24.96	24.90	24.51	25.50
		1	74	24.75	24.70	24.34	25.50
		36	0	24.03	23.86	23.71	24.50
		36	18	24.14	23.79	23.79	24.50
		36	39	24.00	23.81	23.60	24.50
		75	0	24.05	23.82	23.52	24.50
	16QAM	1	0	23.91	23.67	23.76	24.50
		1	38	23.88	23.64	23.43	24.50
		1	74	23.66	23.55	23.28	24.50
		36	0	22.90	22.82	22.49	23.50
		36	18	22.83	22.97	22.68	23.50
		36	39	23.11	22.69	22.43	23.50
		75	0	23.09	22.93	22.60	23.50
	64QAM	1	0	22.80	22.66	22.64	23.00
		1	38	23.00	22.88	22.47	23.00
		1	74	22.71	22.51	22.24	23.00
		36	0	21.50	21.62	21.23	22.50
		36	18	21.66	21.57	21.39	22.50
		36	39	21.60	21.62	21.33	22.50
		75	0	21.68	21.64	21.27	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	24.74	24.65	24.51	25.50

		1	50	24.88	24.76	24.49	25.50
		1	99	24.73	24.54	24.20	25.50
		50	0	23.93	23.86	23.65	24.50
		50	25	24.04	23.91	23.65	24.50
		50	50	24.02	23.81	23.50	24.50
		100	0	24.01	23.88	23.64	24.50
	16QAM	1	0	23.75	23.71	23.58	24.50
		1	50	23.88	23.76	23.55	24.50
		1	99	23.78	23.57	23.32	24.50
		50	0	22.86	22.80	22.61	23.50
		50	25	22.95	22.83	22.60	23.50
		50	50	22.93	22.77	22.47	23.50
		100	0	22.95	22.79	22.52	23.50
	64QAM	1	0	22.72	22.64	22.52	23.00
		1	50	22.84	22.76	22.51	23.00
		1	99	22.71	22.57	22.24	23.00
		50	0	21.58	21.52	21.35	22.50
		50	25	21.66	21.59	21.33	22.50
		50	50	21.66	21.52	21.19	22.50
		100	0	21.66	21.52	21.29	22.50

LTE Band41									
DSI 1&DSI 2-Low Ant				Maximum Output Power (dBm)					Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)					
				39675/2498.5	40148/2545.8	40620/2593	41093/2640.3	41565/2687.5	
5MHz	QPSK	1	0	24.16	24.14	24.07	24.27	23.82	25.50
		1	13	24.40	24.24	24.35	24.48	23.94	25.50
		1	24	24.26	24.16	24.42	24.14	23.60	25.50
		12	0	23.32	23.24	23.23	23.46	22.96	24.50
		12	6	23.59	23.31	23.34	23.46	23.04	24.50
		12	13	23.40	23.22	23.53	23.53	22.98	24.50
		25	0	23.54	23.31	23.36	23.47	22.94	24.50
	16QAM	1	0	23.32	23.28	23.08	23.41	22.77	24.50
		1	13	23.48	23.33	23.42	23.38	22.75	24.50
		1	24	23.30	23.25	23.29	23.17	22.57	24.50
		12	0	22.32	22.33	22.36	22.43	21.86	23.50
		12	6	22.59	22.32	22.52	22.60	22.05	23.50
		12	13	22.60	22.35	22.60	22.45	21.81	23.50
		25	0	22.36	22.32	22.37	22.49	21.92	23.50
	64QAM	1	0	22.22	21.98	22.28	22.32	21.71	23.00
		1	13	22.57	22.23	22.30	22.52	21.71	23.00

		1	24	22.32	22.34	22.38	22.18	21.60	23.00
		12	0	21.37	21.27	21.24	21.60	20.88	22.50
		12	6	21.58	21.41	21.42	21.47	21.07	22.50
		12	13	21.38	21.31	21.43	21.45	20.85	22.50
		25	0	21.53	21.27	21.56	21.40	20.79	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)					Tune-up
				39700/2501	40160/2547	40620/2593	41080/2639	41540/2685	
10MHz	QPSK	1	0	24.26	24.16	24.01	24.27	23.94	25.50
		1	25	24.40	24.38	24.57	24.22	24.02	25.50
		1	49	24.42	24.30	24.48	23.98	23.80	25.50
		25	0	23.22	23.28	23.43	23.50	23.02	24.50
		25	13	23.51	23.33	23.60	23.68	23.20	24.50
		25	25	23.34	23.34	23.35	23.41	22.86	24.50
		50	0	23.68	23.23	23.36	23.45	22.98	24.50
	16QAM	1	0	23.42	23.08	23.12	23.21	23.01	24.50
		1	25	23.70	23.33	23.58	23.46	22.95	24.50
		1	49	23.50	23.37	23.57	23.33	22.75	24.50
		25	0	22.40	22.23	22.34	22.55	21.76	23.50
		25	13	22.63	22.38	22.52	22.36	22.15	23.50
		25	25	22.44	22.17	22.36	22.57	21.77	23.50
		50	0	22.56	22.36	22.47	22.51	21.86	23.50
	64QAM	1	0	22.12	22.22	22.00	22.10	21.63	23.00
		1	25	22.53	22.21	22.34	22.28	21.93	23.00
		1	49	22.14	22.20	22.56	22.08	21.70	23.00
		25	0	21.59	21.07	21.20	21.54	20.80	22.50
		25	13	21.44	21.15	21.58	21.43	20.81	22.50
		25	25	21.66	21.51	21.61	21.25	20.71	22.50
		50	0	21.69	21.41	21.62	21.52	21.07	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)					Tune-up
				39725/2503.5	40173/2548.3	40620/2593	41068/2637.8	41515/2682.5	
15MHz	QPSK	1	0	24.12	23.94	24.05	24.17	23.72	25.50
		1	38	24.50	24.10	24.37	24.34	23.92	25.50
		1	74	24.20	24.08	24.50	24.12	23.68	25.50
		36	0	23.52	23.32	23.43	23.50	23.16	24.50
		36	18	23.45	23.43	23.42	23.44	23.14	24.50
		36	39	23.62	23.30	23.53	23.59	22.88	24.50
		75	0	23.52	23.37	23.44	23.71	22.94	24.50
	16QAM	1	0	23.50	23.30	23.24	23.23	22.81	24.50
		1	38	23.52	23.23	23.36	23.52	22.97	24.50
		1	74	23.46	23.31	23.51	23.27	22.51	24.50
		36	0	22.24	22.25	22.32	22.55	22.04	23.50
		36	18	22.49	22.36	22.46	22.36	22.07	23.50
		36	39	22.52	22.29	22.36	22.47	21.67	23.50

	64QAM	75	0	22.40	22.34	22.29	22.45	21.88	23.50
		1	0	22.42	22.18	22.08	22.34	21.75	23.00
		1	38	22.41	22.23	22.44	22.38	21.83	23.00
		1	74	22.32	22.12	22.44	22.10	21.62	23.00
		36	0	21.27	21.25	21.46	21.40	21.02	22.50
		36	18	21.66	21.31	21.52	21.47	20.87	22.50
		36	39	21.56	21.41	21.61	21.29	20.63	22.50
		75	0	21.51	21.13	21.34	21.44	20.79	22.50
		75	0	21.51	21.13	21.34	21.44	20.79	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)					Tune-up
				39750/2506	40185/2549.5	40620/2593	41055/2636.5	41490/2680	
20MHz	QPSK	1	0	24.16	23.90	23.99	24.21	23.72	25.50
		1	50	24.28	24.10	24.29	24.32	23.76	25.50
		1	99	24.14	24.00	24.24	24.08	23.54	25.50
		50	0	23.30	23.12	23.25	23.44	22.94	24.50
		50	25	23.43	23.23	23.36	23.46	22.92	24.50
		50	50	23.40	23.22	23.39	23.35	22.76	24.50
		100	0	23.40	23.21	23.38	23.45	22.88	24.50
		100	0	23.40	23.21	23.38	23.45	22.88	24.50
	16QAM	1	0	23.26	23.04	23.10	23.23	22.75	24.50
		1	50	23.40	23.23	23.36	23.34	22.77	24.50
		1	99	23.24	23.13	23.31	23.15	22.53	24.50
		50	0	22.28	22.11	22.24	22.37	21.86	23.50
		50	25	22.41	22.20	22.36	22.40	21.85	23.50
		50	50	22.38	22.21	22.36	22.29	21.67	23.50
		100	0	22.36	22.20	22.31	22.37	21.80	23.50
		100	0	22.36	22.20	22.31	22.37	21.80	23.50
	64QAM	1	0	22.22	21.98	22.04	22.20	21.71	23.00
		1	50	22.33	22.17	22.30	22.30	21.71	23.00
		1	99	22.20	22.10	22.26	22.10	21.55	23.00
		50	0	21.31	21.13	21.26	21.38	20.88	22.50
		50	25	21.44	21.23	21.38	21.43	20.89	22.50
		50	50	21.38	21.25	21.39	21.33	20.67	22.50
		100	0	21.39	21.17	21.32	21.38	20.81	22.50
		100	0	21.39	21.17	21.32	21.38	20.81	22.50

LTE Band41									
DSI 4-Low Ant				Maximum Output Power (dBm)					Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)					
				39675/2498.5	40148/2545.8	40620/2593	41093/2640.3	41565/2687.5	
5MHz	QPSK	1	0	22.58	22.40	22.49	22.32	21.71	23.00
		1	13	22.78	22.65	22.68	22.23	21.88	23.00
		1	24	22.45	22.34	22.59	22.13	21.72	23.00
		12	0	22.56	22.61	22.61	22.50	21.99	23.00
		12	6	22.90	22.64	22.77	22.43	22.06	23.00
		12	13	22.86	22.58	22.83	22.24	21.74	23.00
		25	0	22.72	22.69	22.81	22.35	21.82	23.00

	16QAM	1	0	22.76	22.41	22.63	22.37	21.94	23.00
		1	13	22.78	22.80	22.79	22.50	21.98	23.00
		1	24	22.70	22.69	22.80	22.20	21.70	23.00
		12	0	22.51	22.45	22.66	22.44	21.91	23.00
		12	6	22.77	22.64	22.54	22.41	21.96	23.00
		12	13	22.65	22.47	22.64	22.28	21.72	23.00
		25	0	22.62	22.41	22.73	22.26	21.96	23.00
	64QAM	1	0	22.57	22.39	22.38	22.38	21.71	23.00
		1	13	22.67	22.59	22.62	22.32	21.70	23.00
		1	24	22.44	22.45	22.48	21.97	21.79	23.00
		12	0	22.15	21.90	21.97	21.86	21.52	22.50
		12	6	22.35	21.97	22.06	21.74	21.48	22.50
		12	13	22.20	21.96	22.06	21.72	21.19	22.50
		25	0	22.29	22.12	22.09	21.76	21.37	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)					Tune-up
				39700/2501	40160/2547	40620/2593	41080/2639	41540/2685	
10MHz	QPSK	1	0	22.46	22.22	22.29	22.12	21.53	23.00
		1	25	22.54	22.37	22.58	22.19	21.76	23.00
		1	49	22.57	22.44	22.55	22.05	21.56	23.00
		25	0	22.58	22.29	22.49	22.24	22.13	23.00
		25	13	22.60	22.68	22.75	22.29	22.02	23.00
		25	25	22.62	22.44	22.77	22.30	21.70	23.00
		50	0	22.64	22.53	22.87	22.31	21.82	23.00
	16QAM	1	0	22.66	22.59	22.61	22.55	21.76	23.00
		1	25	22.90	22.80	22.95	22.60	22.06	23.00
		1	49	22.84	22.55	22.78	22.10	21.80	23.00
		25	0	22.57	22.45	22.40	22.28	22.03	23.00
		25	13	22.91	22.50	22.56	22.19	21.70	23.00
		25	25	22.73	22.73	22.46	22.22	21.90	23.00
		50	0	22.58	22.67	22.69	22.32	21.94	23.00
	64QAM	1	0	22.69	22.31	22.24	22.28	21.83	23.00
		1	25	22.63	22.55	22.46	22.22	21.76	23.00
		1	49	22.36	22.43	22.36	22.19	21.53	23.00
		25	0	22.09	22.06	21.97	22.02	21.48	22.50
		25	13	22.07	22.03	22.26	21.96	21.38	22.50
		25	25	22.36	22.08	22.28	21.72	21.29	22.50
		50	0	22.11	21.82	22.03	21.90	21.33	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)					Tune-up
				39725/2503.5	40173/2548.3	40620/2593	41068/2637.8	41515/2682.5	
15MHz	QPSK	1	0	22.66	22.44	22.41	22.20	21.69	23.00
		1	38	22.58	22.57	22.50	22.27	21.84	23.00
		1	74	22.41	22.30	22.41	21.93	21.70	23.00
		36	0	22.78	22.57	22.59	22.28	21.93	23.00

		36	18	22.82	22.60	22.75	22.41	21.94	23.00
		36	39	22.70	22.78	22.71	22.14	21.86	23.00
		75	0	22.86	22.53	22.69	22.55	21.92	23.00
	16QAM	1	0	22.74	22.43	22.55	22.55	21.76	23.00
		1	38	22.70	22.68	22.71	22.36	22.10	23.00
		1	74	22.68	22.61	22.58	22.10	21.96	23.00
		36	0	22.61	22.59	22.54	22.30	21.99	23.00
		36	18	22.81	22.50	22.78	22.43	21.78	23.00
		36	39	22.67	22.63	22.78	22.24	21.72	23.00
		75	0	22.54	22.47	22.69	22.40	21.74	23.00
	64QAM	1	0	22.43	22.37	22.34	22.24	21.89	23.00
		1	38	22.77	22.71	22.56	22.20	21.76	23.00
		1	74	22.68	22.39	22.66	22.11	21.71	23.00
		36	0	22.09	21.88	22.09	22.00	21.36	22.50
		36	18	22.33	22.13	22.06	22.00	21.54	22.50
		36	39	22.30	22.20	22.12	21.80	21.19	22.50
		75	0	22.15	21.90	22.17	21.68	21.17	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)					Tune-up
				39750/2506	40185/2549.5	40620/2593	41055/2636.5	41490/2680	
20MHz	QPSK	1	0	22.52	22.30	22.37	22.20	21.71	23.00
		1	50	22.64	22.51	22.60	22.25	21.82	23.00
		1	99	22.51	22.42	22.51	22.01	21.68	23.00
		50	0	22.62	22.45	22.57	22.36	21.93	23.00
		50	25	22.76	22.58	22.71	22.39	21.96	23.00
		50	50	22.70	22.60	22.67	22.24	21.80	23.00
		100	0	22.74	22.59	22.67	22.37	21.92	23.00
	16QAM	1	0	22.66	22.45	22.53	22.37	21.88	23.00
		1	50	22.82	22.66	22.77	22.44	21.96	23.00
		1	99	22.68	22.57	22.66	22.18	21.78	23.00
		50	0	22.57	22.41	22.50	22.30	21.87	23.00
		50	25	22.71	22.52	22.62	22.33	21.88	23.00
		50	50	22.69	22.55	22.60	22.18	21.72	23.00
		100	0	22.62	22.47	22.57	22.30	21.82	23.00
	64QAM	1	0	22.51	22.31	22.36	22.26	21.73	23.00
		1	50	22.65	22.53	22.62	22.28	21.80	23.00
		1	99	22.50	22.45	22.50	22.05	21.65	23.00
		50	0	22.07	21.92	22.03	21.84	21.38	22.50
		50	25	22.21	22.01	22.14	21.82	21.38	22.50
		50	50	22.16	22.06	22.12	21.70	21.21	22.50
		100	0	22.13	22.00	22.05	21.78	21.29	22.50

LTE Band41									
DSI 1-Upper Ant				Maximum Output Power (dBm)					Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)					
				39675/2498.5	40148/2545.8	40620/2593	41093/2640.3	41565/2687.5	
5MHz	QPSK	1	0	18.29	18.91	19.26	18.71	18.28	20.00
		1	13	18.53	19.23	19.38	18.82	18.44	20.00
		1	24	18.69	19.14	19.20	18.58	18.08	20.00
		12	0	18.30	18.94	19.08	18.66	18.20	20.00
		12	6	18.67	19.09	19.42	18.77	18.40	20.00
		12	13	18.66	19.06	19.19	18.57	18.04	20.00
		25	0	18.42	19.20	19.38	18.77	18.18	20.00
	16QAM	1	0	18.44	18.48	19.25	18.82	18.26	20.00
		1	13	18.78	18.76	19.24	18.80	18.47	20.00
		1	24	18.73	18.99	19.09	18.71	18.22	20.00
		12	0	18.36	18.36	19.22	18.28	18.47	20.00
		12	6	18.82	18.78	19.32	18.74	18.37	20.00
		12	13	18.68	18.60	19.43	18.52	18.39	20.00
		25	0	18.53	18.75	19.24	18.83	18.37	20.00
	64QAM	1	0	18.25	18.31	18.93	18.05	18.33	20.00
		1	13	18.47	18.37	19.27	18.49	18.14	20.00
		1	24	18.32	18.50	19.01	18.14	18.10	20.00
		12	0	18.70	18.76	19.17	18.70	18.34	20.00
		12	6	18.74	18.58	19.37	18.74	18.33	20.00
		12	13	18.55	18.61	19.33	18.61	18.12	20.00
		25	0	18.65	18.55	19.23	18.65	18.40	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)					Tune-up
				39700/2501	40160/2547	40620/2593	41080/2639	41540/2685	
10MHz	QPSK	1	0	18.53	18.99	19.20	18.93	18.50	20.00
		1	25	18.39	19.27	19.36	18.96	18.56	20.00
		1	49	18.59	19.18	19.18	18.60	18.07	20.00
		25	0	18.16	19.06	19.24	18.90	18.12	20.00
		25	13	18.71	19.15	19.28	18.99	18.28	20.00
		25	25	18.50	19.32	19.23	18.79	18.11	20.00
		50	0	18.56	19.06	19.48	18.75	18.06	20.00
	16QAM	1	0	18.26	18.74	19.05	18.70	18.22	20.00
		1	25	18.84	18.72	19.28	18.78	18.43	20.00
		1	49	18.55	18.91	19.13	18.67	18.08	20.00
		25	0	18.28	18.54	19.10	18.18	18.45	20.00
		25	13	18.66	18.68	19.18	18.80	18.21	20.00
		25	25	18.86	18.56	19.39	18.50	18.25	20.00
		50	0	18.69	18.69	19.44	18.71	18.09	20.00
	64QAM	1	0	18.23	18.11	18.79	18.11	18.13	20.00

		1	25	18.49	18.47	19.41	18.15	18.08	20.00
		1	49	18.58	18.46	18.87	18.28	18.10	20.00
		25	0	18.66	18.90	19.23	18.98	18.26	20.00
		25	13	18.56	18.36	19.41	18.62	18.27	20.00
		25	25	18.47	18.65	19.31	18.75	18.40	20.00
		50	0	18.57	18.57	19.25	18.57	18.20	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)					Tune-up
				39725/2503.5	40173/2548.3	40620/2593	41068/2637.8	41515/2682.5	
15MHz	QPSK	1	0	18.49	18.67	19.28	18.79	18.48	20.00
		1	38	18.59	19.27	19.28	18.82	18.30	20.00
		1	74	18.71	19.12	19.00	18.74	18.01	20.00
		36	0	18.26	18.82	18.98	18.68	18.14	20.00
		36	18	18.45	19.23	19.42	18.83	18.38	20.00
		36	39	18.60	19.30	19.03	18.59	18.18	20.00
		75	0	18.50	18.92	19.14	18.95	18.32	20.00
	16QAM	1	0	18.52	18.64	19.37	18.70	18.32	20.00
		1	38	18.70	18.84	19.50	18.94	18.39	20.00
		1	74	18.69	18.99	19.13	18.93	18.05	20.00
		36	0	18.36	18.20	19.20	18.10	18.29	20.00
		36	18	18.64	19.02	19.16	18.72	18.27	20.00
		36	39	18.66	18.58	19.31	18.50	18.17	20.00
		75	0	18.49	18.59	19.36	18.57	18.11	20.00
	64QAM	1	0	18.29	18.19	18.97	18.11	18.21	20.00
		1	38	18.45	18.57	19.29	18.39	18.26	20.00
		1	74	18.28	18.34	18.91	18.38	18.06	20.00
		36	0	18.86	18.78	19.13	18.88	18.48	20.00
		36	18	18.58	18.42	19.43	18.62	18.43	20.00
		36	39	18.61	18.55	19.33	18.87	18.34	20.00
		75	0	18.49	18.67	19.23	18.69	18.12	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)					Tune-up
				39750/2506	40185/2549.5	40620/2593	41055/2636.5	41490/2680	
20MHz	QPSK	1	0	18.35	18.79	19.14	18.81	18.32	20.00
		1	50	18.55	19.30	19.28	18.84	18.36	20.00
		1	99	18.57	19.12	19.08	18.56	18.03	20.00
		50	0	18.34	18.90	19.10	18.74	18.26	20.00
		50	25	18.55	19.05	19.21	18.79	18.26	20.00
		50	50	18.58	19.24	19.15	18.65	18.04	20.00
		100	0	18.44	19.04	19.26	18.81	18.18	20.00
	16QAM	1	0	18.38	18.52	19.19	18.70	18.34	20.00
		1	50	18.64	18.72	19.32	18.88	18.37	20.00
		1	99	18.67	18.83	19.19	18.81	18.06	20.00
		50	0	18.44	18.32	19.20	18.20	18.39	20.00
		50	25	18.68	18.86	19.26	18.80	18.37	20.00

		50	50	18.66	18.54	19.27	18.52	18.25	20.00
		100	0	18.55	18.63	19.24	18.69	18.23	20.00
	64QAM	1	0	18.13	18.17	18.97	18.07	18.17	20.00
		1	50	18.47	18.43	19.21	18.33	18.20	20.00
		1	99	18.40	18.34	18.95	18.22	18.03	20.00
		50	0	18.72	18.86	19.25	18.78	18.44	20.00
		50	25	18.60	18.50	19.29	18.64	18.41	20.00
		50	50	18.57	18.65	19.31	18.69	18.22	20.00
		100	0	18.55	18.53	19.23	18.51	18.24	20.00

LTE Band41									
DSI 2&4-Upper Ant				Maximum Output Power (dBm)					Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)					
				39675/2498.5	40148/2545.8	40620/2593	41093/2640.3	41565/2687.5	
5MHz	QPSK	1	0	24.59	24.68	24.88	24.11	24.08	25.50
		1	13	24.80	25.06	25.09	24.05	24.06	25.50
		1	24	24.69	24.99	24.90	23.69	23.83	25.50
		12	0	23.69	23.84	23.95	23.45	23.22	24.50
		12	6	23.82	24.20	24.25	23.20	23.25	24.50
		12	13	24.02	24.27	24.06	23.00	23.26	24.50
		25	0	23.89	24.04	24.19	23.29	23.23	24.50
	16QAM	1	0	23.53	23.84	23.88	23.24	23.13	24.50
		1	13	23.84	24.00	24.01	23.21	23.32	24.50
		1	24	23.86	23.99	23.92	22.87	22.96	24.50
		12	0	22.82	22.89	23.08	22.29	22.41	23.50
		12	6	22.80	23.05	22.98	22.13	22.38	23.50
		12	13	22.94	22.96	23.09	21.99	22.25	23.50
		25	0	22.85	23.03	23.14	22.32	22.24	23.50
	64QAM	1	0	22.56	22.79	22.84	22.11	22.17	23.50
		1	13	22.78	23.07	22.82	22.09	22.26	23.50
		1	24	22.78	22.94	22.92	21.66	21.84	23.50
		12	0	21.71	21.93	22.02	21.32	21.42	22.50
		12	6	21.72	21.92	21.96	21.15	21.33	22.50
		12	13	21.82	21.87	21.88	21.14	21.05	22.50
		25	0	21.53	21.95	21.78	21.31	21.22	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)					Tune-up
				39700/2501	40160/2547	40620/2593	41080/2639	41540/2685	
10MHz	QPSK	1	0	24.61	24.92	24.84	24.23	24.06	25.50
		1	25	24.74	25.00	24.83	24.09	24.26	25.50
		1	49	24.79	24.89	24.88	23.89	23.63	25.50
		25	0	23.79	23.94	24.25	23.21	23.28	24.50
		25	13	23.96	24.28	24.29	23.26	23.09	24.50
		25	25	23.84	24.35	23.98	22.96	23.28	24.50

	16QAM	50	0	23.85	24.20	24.25	23.31	23.13	24.50
		1	0	23.37	23.82	23.74	23.10	23.13	24.50
		1	25	23.84	23.98	24.15	23.29	23.52	24.50
		1	49	23.56	23.99	23.90	22.79	22.90	24.50
		25	0	22.74	23.03	22.90	22.33	22.47	23.50
		25	13	22.90	23.03	23.04	22.35	22.38	23.50
		25	25	22.78	22.98	22.85	21.85	22.29	23.50
		50	0	22.93	22.89	22.82	22.34	22.10	23.50
	64QAM	1	0	22.46	22.91	22.64	22.01	22.15	23.50
		1	25	22.58	22.81	23.06	21.97	22.14	23.50
		1	49	22.60	22.70	22.64	21.88	21.66	23.50
		25	0	21.89	21.97	22.00	21.48	21.28	22.50
		25	13	21.68	22.04	21.88	21.17	21.39	22.50
		25	25	21.84	21.73	21.70	21.04	20.93	22.50
		50	0	21.67	21.93	22.00	21.33	21.42	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)					Tune-up
				39725/2503.5	40173/2548.3	40620/2593	41068/2637.8	41515/2682.5	
15MHz	QPSK	1	0	24.71	24.76	24.74	24.17	23.98	25.50
		1	38	24.84	25.04	25.07	24.09	24.16	25.50
		1	74	24.79	25.03	24.96	23.81	23.83	25.50
		36	0	23.89	23.94	24.05	23.23	23.28	24.50
		36	18	23.96	24.02	24.11	23.40	23.21	24.50
		36	39	24.02	24.01	23.94	23.02	23.30	24.50
		75	0	23.99	24.18	24.13	23.35	23.13	24.50
	16QAM	1	0	23.67	23.90	23.76	23.30	23.09	24.50
		1	38	23.94	24.16	24.03	23.09	23.36	24.50
		1	74	23.78	23.83	23.96	22.93	23.06	24.50
		36	0	22.80	23.03	22.86	22.33	22.21	23.50
		36	18	22.90	22.87	23.14	22.37	22.22	23.50
		36	39	22.74	23.22	23.09	22.07	22.19	23.50
		75	0	22.73	23.17	23.06	22.20	22.24	23.50
	64QAM	1	0	22.70	22.63	22.88	22.29	22.07	23.50
		1	38	22.92	23.05	23.08	22.11	22.26	23.50
		1	74	22.72	22.96	22.92	21.68	21.76	23.50
		36	0	21.67	22.07	22.14	21.38	21.22	22.50
		36	18	21.80	21.94	21.88	21.21	21.17	22.50
		36	39	21.54	22.01	21.76	21.14	21.17	22.50
		75	0	21.77	21.93	21.94	21.07	21.38	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)					Tune-up
				39750/2506	40185/2549.5	40620/2593	41055/2636.5	41490/2680	
20MHz	QPSK	1	0	24.55	24.70	24.82	24.17	24.02	25.50
		1	50	24.76	24.98	25.01	24.09	24.14	25.50
		1	99	24.71	24.91	24.80	23.71	23.79	25.50

		50	0	23.77	23.94	24.03	23.29	23.18	24.50
		50	25	23.92	24.10	24.11	23.24	23.21	24.50
		50	50	23.92	24.13	24.04	23.06	23.20	24.50
		100	0	23.87	24.08	24.07	23.23	23.17	24.50
	16QAM	1	0	23.55	23.74	23.78	23.20	23.21	24.50
		1	50	23.78	23.98	23.95	23.11	23.38	24.50
		1	99	23.74	23.89	23.80	22.79	23.00	24.50
		50	0	22.70	22.87	22.92	22.23	22.33	23.50
		50	25	22.84	22.99	23.00	22.19	22.28	23.50
		50	50	22.84	23.04	22.95	22.01	22.15	23.50
		100	0	22.81	22.99	22.98	22.16	22.22	23.50
	64QAM	1	0	22.52	22.69	22.76	22.15	22.07	23.50
		1	50	22.76	22.93	22.90	22.11	22.24	23.50
		1	99	22.68	22.86	22.76	21.74	21.84	23.50
		50	0	21.71	21.89	21.96	21.26	21.28	22.50
		50	25	21.66	21.82	21.84	21.23	21.29	22.50
		50	50	21.66	21.89	21.78	21.04	20.99	22.50
		100	0	21.61	21.83	21.88	21.17	21.30	22.50

LTE Band66							
DSI 1-Low Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				131979/1710.7	132322/1745	132665/1779.3	
1.4MHz	QPSK	1	0	25.27	24.85	24.33	25.50
		1	2	25.36	24.78	24.12	25.50
		1	5	24.93	24.62	23.51	25.50
		3	0	25.27	24.91	24.22	25.50
		3	2	25.03	24.95	24.05	25.50
		3	3	24.99	24.91	23.77	25.50
		6	0	24.40	23.84	23.31	24.50
	16QAM	1	0	24.25	23.75	23.41	24.50
		1	2	24.33	23.90	23.14	24.50
		1	5	24.18	23.48	22.75	24.50
		3	0	23.91	23.70	23.24	24.50
		3	2	24.15	23.67	22.98	24.50
		3	3	23.83	23.76	23.02	24.50
		6	0	22.99	22.88	22.23	23.50
	64QAM	1	0	23.16	22.77	22.23	23.50
		1	2	23.10	22.87	22.22	23.50
		1	5	22.96	22.53	21.90	23.50
		3	0	22.88	22.83	22.29	23.50

		3	2	22.96	22.62	21.96	23.50
		3	3	22.93	22.59	21.85	23.50
		6	0	22.22	22.03	21.30	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131987/1711.5	132322/1745	132657/1778.5	
3MHz	QPSK	1	0	25.23	24.93	24.19	25.50
		1	7	25.30	24.84	24.18	25.50
		1	14	24.89	24.42	23.67	25.50
		8	0	24.17	24.03	23.24	24.50
		8	4	24.25	23.91	23.23	24.50
		8	7	24.27	23.93	22.99	24.50
		15	0	24.34	24.00	23.33	24.50
	16QAM	1	0	24.09	23.85	23.39	24.50
		1	7	24.35	23.94	23.28	24.50
		1	14	23.94	23.42	22.79	24.50
		8	0	22.97	22.92	22.24	23.50
		8	4	23.27	22.89	22.28	23.50
		8	7	23.15	22.66	21.90	23.50
		15	0	23.11	22.94	22.15	23.50
	64QAM	1	0	22.96	22.91	22.31	23.50
		1	7	23.12	22.99	22.36	23.50
		1	14	23.02	22.49	21.96	23.50
		8	0	22.18	21.99	21.29	22.50
		8	4	22.16	21.98	21.26	22.50
		8	7	22.03	21.81	21.05	22.50
		15	0	22.08	21.79	21.26	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131997/1712.5	132322/1745	132647/1777.5	
5MHz	QPSK	1	0	25.15	24.73	23.97	25.50
		1	13	25.06	24.86	23.92	25.50
		1	24	24.97	24.28	23.59	25.50
		12	0	24.05	23.91	23.26	24.50
		12	6	24.41	23.87	23.37	24.50
		12	13	24.05	23.89	22.83	24.50
		25	0	24.24	23.88	23.27	24.50
	16QAM	1	0	24.17	23.79	23.23	24.50
		1	13	24.03	23.90	23.12	24.50
		1	24	23.92	23.44	22.51	24.50
		12	0	22.99	22.74	22.24	23.50
		12	6	23.19	22.73	22.12	23.50

		12	13	23.15	22.76	21.98	23.50
		25	0	22.95	22.84	22.01	23.50
	64QAM	1	0	22.80	22.87	22.43	23.50
		1	13	22.98	22.83	22.10	23.50
		1	24	22.94	22.41	21.76	23.50
		12	0	22.12	21.99	21.13	22.50
		12	6	22.06	21.74	21.30	22.50
		12	13	22.09	21.65	20.99	22.50
		25	0	21.96	21.79	21.10	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132022/1715	132322/1745	132622/1775	
10MHz	QPSK	1	0	25.17	25.01	24.15	25.50
		1	25	25.06	24.96	23.88	25.50
		1	49	25.05	24.42	23.85	25.50
		25	0	24.25	24.03	23.36	24.50
		25	13	24.40	23.87	23.45	24.50
		25	25	24.27	23.67	23.15	24.50
		50	0	24.22	23.72	23.13	24.50
	16QAM	1	0	23.93	23.93	23.05	24.50
		1	25	24.31	23.96	23.30	24.50
		1	49	24.02	23.32	22.91	24.50
		25	0	23.03	23.10	22.06	23.50
		25	13	23.21	22.67	22.16	23.50
		25	25	23.13	22.80	22.06	23.50
		50	0	23.07	22.78	22.13	23.50
	64QAM	1	0	23.22	22.97	22.27	23.50
		1	25	23.08	22.89	22.16	23.50
		1	49	22.80	22.31	21.88	23.50
		25	0	22.28	21.77	21.35	22.50
		25	13	22.18	22.10	21.14	22.50
		25	25	22.09	21.89	21.15	22.50
		50	0	22.26	21.99	21.06	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132047/1717.5	132322/1745	132597/1772.5	
15MHz	QPSK	1	0	25.19	24.95	24.05	25.50
		1	38	25.16	24.76	24.00	25.50
		1	74	24.87	24.50	23.81	25.50
		36	0	24.33	24.15	23.18	24.50
		36	18	24.21	24.07	23.45	24.50
		36	39	24.13	23.75	23.11	24.50

	16QAM	75	0	24.22	23.78	23.13	24.50
		1	0	24.09	24.03	23.11	24.50
		1	38	24.37	23.86	23.12	24.50
		1	74	23.94	23.50	22.73	24.50
		36	0	23.03	22.98	22.28	23.50
		36	18	23.07	22.91	22.26	23.50
		36	39	23.15	22.78	22.14	23.50
		75	0	23.17	22.94	21.99	23.50
	64QAM	1	0	23.08	23.09	22.53	23.50
		1	38	23.22	22.73	22.32	23.50
		1	74	23.06	22.47	22.02	23.50
		36	0	22.16	21.79	21.43	22.50
		36	18	22.14	21.86	21.18	22.50
		36	39	22.05	21.87	21.13	22.50
		75	0	22.20	21.91	21.16	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132072/1720	132322/1745	132572/1770	
20MHz	QPSK	1	0	25.07	24.87	24.11	25.50
		1	50	25.20	24.80	24.04	25.50
		1	99	24.93	24.38	23.67	25.50
		50	0	24.19	23.99	23.30	24.50
		50	25	24.33	23.99	23.27	24.50
		50	50	24.23	23.83	23.03	24.50
		100	0	24.18	23.88	23.17	24.50
	16QAM	1	0	24.09	23.91	23.23	24.50
		1	50	24.21	23.86	23.14	24.50
		1	99	24.02	23.46	22.71	24.50
		50	0	23.03	22.88	22.22	23.50
		50	25	23.17	22.85	22.20	23.50
		50	50	23.07	22.70	21.98	23.50
		100	0	23.05	22.78	22.09	23.50
	64QAM	1	0	23.00	22.91	22.35	23.50
		1	50	23.12	22.85	22.28	23.50
		1	99	22.90	22.45	21.86	23.50
		50	0	22.08	21.91	21.25	22.50
		50	25	22.20	21.90	21.24	22.50
		50	50	22.09	21.75	20.99	22.50
		100	0	22.06	21.83	21.10	22.50

LTE Band66

DSI 2-Low Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				131979/1710.7	132322/1745	132665/1779.3	
1.4MHz	QPSK	1	0	23.76	23.34	22.85	24.50
		1	2	23.95	22.97	22.90	24.50
		1	5	23.48	22.65	22.78	24.50
		3	0	24.06	22.95	22.93	24.50
		3	2	23.86	22.75	23.14	24.50
		3	3	23.63	23.00	23.32	24.50
		6	0	23.67	23.10	22.90	24.50
	16QAM	1	0	23.47	23.03	23.11	24.50
		1	2	23.05	23.01	22.87	24.50
		1	5	22.91	22.93	23.19	24.50
		3	0	22.83	23.11	22.89	24.50
		3	2	22.68	22.98	22.80	24.50
		3	3	22.53	22.67	22.85	24.50
		6	0	22.10	21.96	21.98	23.50
	64QAM	1	0	22.56	22.44	22.18	23.50
		1	2	21.87	22.27	21.93	23.50
		1	5	22.04	22.06	22.16	23.50
		3	0	22.28	22.06	21.92	23.50
		3	2	21.62	22.10	22.06	23.50
		3	3	21.77	21.81	21.51	23.50
		6	0	21.44	20.90	20.92	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131987/1711.5	132322/1745	132657/1778.5	
3MHz	QPSK	1	0	23.74	23.42	22.63	24.50
		1	7	23.65	22.81	23.16	24.50
		1	14	23.50	22.69	22.86	24.50
		8	0	24.06	23.09	22.89	24.50
		8	4	23.72	22.91	23.00	24.50
		8	7	23.89	22.88	23.34	24.50
		15	0	23.93	22.98	23.08	24.50
	16QAM	1	0	23.59	22.93	23.31	24.50
		1	7	22.97	23.19	22.93	24.50
		1	14	23.21	23.05	23.19	24.50
		8	0	22.01	21.83	22.27	23.50
		8	4	22.16	22.08	22.10	23.50
		8	7	21.91	21.89	22.11	23.50
		15	0	21.84	22.14	21.86	23.50

	64QAM	1	0	22.50	22.10	21.90	23.50
		1	7	21.79	22.19	22.05	23.50
		1	14	22.04	22.12	21.96	23.50
		8	0	21.30	21.00	20.92	22.50
		8	4	20.96	20.98	20.84	22.50
		8	7	20.79	20.70	20.67	22.50
		15	0	21.08	21.02	21.30	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131997/1712.5	132322/1745	132647/1777.5	
5MHz	QPSK	1	0	23.98	23.08	22.77	24.50
		1	13	23.81	22.83	23.06	24.50
		1	24	23.14	22.65	23.00	24.50
		12	0	24.20	23.13	23.03	24.50
		12	6	23.76	22.85	23.02	24.50
		12	13	23.91	23.08	23.16	24.50
		25	0	23.91	22.90	22.98	24.50
	16QAM	1	0	23.25	23.33	23.43	24.50
		1	13	22.95	23.17	22.95	24.50
		1	24	23.17	23.13	23.13	24.50
		12	0	22.15	22.19	22.29	23.50
		12	6	21.92	22.00	22.10	23.50
		12	13	21.83	21.83	21.91	23.50
		25	0	21.94	21.98	21.98	23.50
	64QAM	1	0	22.44	22.38	22.30	23.50
		1	13	22.09	22.01	21.99	23.50
		1	24	22.10	22.00	21.94	23.50
		12	0	21.18	21.18	21.26	22.50
		12	6	21.02	20.96	21.06	22.50
		12	13	20.67	20.81	20.93	22.50
		25	0	21.26	21.16	21.02	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132022/1715	132322/1745	132622/1775	
10MHz	QPSK	1	0	24.02	23.00	22.65	24.50
		1	25	23.87	23.13	22.96	24.50
		1	49	23.42	22.60	22.70	24.50
		25	0	24.22	23.11	22.89	24.50
		25	13	23.96	22.83	22.96	24.50
		25	25	23.71	22.80	23.44	24.50
		50	0	23.57	23.02	23.14	24.50
	16QAM	1	0	23.47	23.39	23.39	24.50

		1	25	22.79	23.19	22.99	24.50
		1	49	23.21	23.05	23.01	24.50
		25	0	22.27	22.15	22.03	23.50
		25	13	21.80	22.14	21.96	23.50
		25	25	22.01	21.89	21.99	23.50
		50	0	21.88	21.92	21.74	23.50
	64QAM	1	0	22.38	22.48	22.40	23.50
		1	25	22.03	21.97	22.25	23.50
		1	49	22.04	22.12	22.20	23.50
		25	0	21.16	21.24	20.94	22.50
		25	13	21.16	20.98	20.80	22.50
		25	25	20.91	20.99	20.97	22.50
		50	0	21.20	21.12	21.02	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132047/1717.5	132322/1745	132597/1772.5	
15MHz	QPSK	1	0	23.94	23.04	22.67	24.50
		1	38	23.85	22.87	23.08	24.50
		1	74	23.26	22.63	22.88	24.50
		36	0	24.00	23.15	23.03	24.50
		36	18	23.80	23.09	23.16	24.50
		36	39	23.95	22.90	23.24	24.50
		75	0	23.63	23.08	23.22	24.50
	16QAM	1	0	23.27	23.29	23.39	24.50
		1	38	22.73	23.03	22.87	24.50
		1	74	23.11	23.25	23.13	24.50
		36	0	22.03	22.11	22.13	23.50
		36	18	22.02	22.08	22.12	23.50
		36	39	22.01	21.99	21.79	23.50
		75	0	22.02	22.14	22.08	23.50
	64QAM	1	0	22.38	22.38	22.38	23.50
		1	38	22.01	22.23	21.97	23.50
		1	74	22.06	22.16	21.94	23.50
		36	0	21.40	21.24	21.02	22.50
		36	18	20.82	21.08	20.94	22.50
		36	39	20.67	20.97	20.91	22.50
		75	0	21.08	20.94	21.06	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132072/1720	132322/1745	132572/1770	
20MHz	QPSK	1	0	23.82	23.12	22.63	24.50
		1	50	23.75	22.91	22.98	24.50

		1	99	23.24	22.65	22.88	24.50
		50	0	24.06	23.11	22.95	24.50
		50	25	23.86	22.93	23.08	24.50
		50	50	23.83	22.94	23.24	24.50
		100	0	23.75	23.00	23.04	24.50
	16QAM	1	0	23.35	23.17	23.27	24.50
		1	50	22.85	23.03	22.91	24.50
		1	99	23.05	23.07	23.13	24.50
		50	0	22.11	22.03	22.15	23.50
		50	25	21.90	22.02	21.96	23.50
		50	50	21.83	21.89	21.91	23.50
		100	0	21.96	22.00	21.90	23.50
	64QAM	1	0	22.34	22.30	22.20	23.50
		1	50	21.99	22.11	22.09	23.50
		1	99	22.12	22.10	22.04	23.50
		50	0	21.28	21.08	21.10	22.50
		50	25	20.94	21.06	20.98	22.50
		50	50	20.75	20.83	20.77	22.50
		100	0	21.20	21.02	21.08	22.50

LTE Band66							
DSI 4-Low Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				131979/1710.7	132322/1745	132665/1779.3	
1.4MHz	QPSK	1	0	18.52	18.73	17.95	19.00
		1	2	18.89	18.42	17.53	19.00
		1	5	18.75	18.21	17.30	19.00
		3	0	18.74	18.56	17.71	19.00
		3	2	18.60	18.54	18.03	19.00
		3	3	18.68	18.24	17.84	19.00
		6	0	18.49	18.57	17.83	19.00
	16QAM	1	0	18.75	18.73	17.95	19.00
		1	2	18.65	18.66	17.71	19.00
		1	5	18.43	18.04	17.91	19.00
		3	0	18.80	18.67	17.86	19.00
		3	2	18.81	18.73	17.77	19.00
		3	3	18.65	18.30	17.75	19.00
		6	0	18.76	18.66	17.78	19.00
	64QAM	1	0	18.65	18.60	18.09	19.00
		1	2	18.76	18.70	17.89	19.00

		1	5	18.53	18.15	17.34	19.00
		3	0	18.38	18.71	17.96	19.00
		3	2	18.69	18.48	17.93	19.00
		3	3	18.60	18.34	17.45	19.00
		6	0	18.58	18.56	17.79	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131987/1711.5	132322/1745	132657/1778.5	
3MHz	QPSK	1	0	18.66	18.63	17.95	19.00
		1	7	18.69	18.46	17.77	19.00
		1	14	18.65	17.95	17.32	19.00
		8	0	18.72	18.60	18.13	19.00
		8	4	18.68	18.66	17.97	19.00
		8	7	18.80	18.36	17.70	19.00
		15	0	18.69	18.63	17.91	19.00
	16QAM	1	0	18.75	18.63	18.07	19.00
		1	7	18.97	18.66	18.03	19.00
		1	14	18.87	18.22	17.61	19.00
		8	0	18.74	18.63	17.86	19.00
		8	4	18.65	18.61	18.03	19.00
		8	7	18.75	18.40	17.63	19.00
		15	0	18.58	18.40	17.90	19.00
	64QAM	1	0	18.79	18.60	18.15	19.00
		1	7	18.76	18.62	17.99	19.00
		1	14	18.69	18.17	17.52	19.00
		8	0	18.58	18.43	17.80	19.00
		8	4	18.59	18.58	17.99	19.00
		8	7	18.58	18.42	17.61	19.00
		15	0	18.62	18.54	17.89	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131997/1712.5	132322/1745	132647/1777.5	
5MHz	QPSK	1	0	18.70	18.65	17.97	19.00
		1	13	18.81	18.50	17.81	19.00
		1	24	18.39	18.07	17.36	19.00
		12	0	18.70	18.42	17.91	19.00
		12	6	18.62	18.46	18.07	19.00
		12	13	18.76	18.26	17.56	19.00
		25	0	18.57	18.35	17.69	19.00
	16QAM	1	0	18.65	18.53	18.01	19.00
		1	13	18.85	18.42	18.05	19.00
		1	24	18.77	18.12	17.71	19.00

		12	0	18.56	18.39	17.70	19.00
		12	6	18.73	18.61	17.87	19.00
		12	13	18.65	18.20	17.63	19.00
		25	0	18.58	18.32	17.70	19.00
	64QAM	1	0	18.53	18.72	17.91	19.00
		1	13	18.66	18.62	17.81	19.00
		1	24	18.41	18.27	17.60	19.00
		12	0	18.58	18.51	17.90	19.00
		12	6	18.71	18.46	17.83	19.00
		12	13	18.62	18.18	17.75	19.00
		25	0	18.52	18.40	17.85	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132022/1715	132322/1745	132622/1775	
10MHz	QPSK	1	0	18.80	18.55	18.13	19.00
		1	25	18.65	18.60	17.73	19.00
		1	49	18.43	18.23	17.58	19.00
		25	0	18.70	18.68	17.95	19.00
		25	13	18.54	18.40	18.15	19.00
		25	25	18.54	18.56	17.94	19.00
		50	0	18.81	18.71	18.03	19.00
	16QAM	1	0	18.79	18.61	18.05	19.00
		1	25	18.70	18.46	18.19	19.00
		1	49	18.87	18.38	17.59	19.00
		25	0	18.50	18.51	17.74	19.00
		25	13	18.79	18.61	17.95	19.00
		25	25	18.85	18.18	17.67	19.00
		50	0	18.68	18.52	17.60	19.00
	64QAM	1	0	18.61	18.80	18.23	19.00
		1	25	18.80	18.84	17.89	19.00
		1	49	18.73	18.07	17.70	19.00
		25	0	18.64	18.35	18.00	19.00
		25	13	18.67	18.50	18.07	19.00
		25	25	18.80	18.38	17.87	19.00
		50	0	18.48	18.56	17.67	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132047/1717.5	132322/1745	132597/1772.5	
15MHz	QPSK	1	0	18.74	18.49	17.99	19.00
		1	38	18.83	18.48	17.75	19.00
		1	74	18.43	17.99	17.50	19.00
		36	0	18.64	18.70	18.03	19.00

		36	18	18.80	18.64	17.91	19.00
		36	39	18.70	18.56	17.76	19.00
		75	0	18.79	18.49	17.99	19.00
	16QAM	1	0	18.83	18.85	18.11	19.00
		1	38	18.91	18.58	18.21	19.00
		1	74	18.83	18.18	17.79	19.00
		36	0	18.66	18.55	17.78	19.00
		36	18	18.75	18.53	17.91	19.00
		36	39	18.75	18.44	17.55	19.00
		75	0	18.50	18.44	17.84	19.00
	64QAM	1	0	18.51	18.64	17.99	19.00
		1	38	18.66	18.80	18.05	19.00
		1	74	18.57	18.19	17.54	19.00
		36	0	18.62	18.51	17.82	19.00
		36	18	18.59	18.48	17.93	19.00
		36	39	18.70	18.34	17.63	19.00
		75	0	18.66	18.56	17.77	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132072/1720	132322/1745	132572/1770	
20MHz	QPSK	1	0	18.60	18.55	17.95	19.00
		1	50	18.77	18.44	17.81	19.00
		1	99	18.55	18.03	17.42	19.00
		50	0	18.72	18.58	17.99	19.00
		50	25	18.74	18.58	17.97	19.00
		50	50	18.70	18.44	17.74	19.00
		100	0	18.71	18.51	17.83	19.00
	16QAM	1	0	18.77	18.67	18.13	19.00
		1	50	18.85	18.62	18.03	19.00
		1	99	18.71	18.22	17.69	19.00
		50	0	18.60	18.51	17.90	19.00
		50	25	18.73	18.51	17.87	19.00
		50	50	18.63	18.36	17.67	19.00
		100	0	18.60	18.42	17.76	19.00
	64QAM	1	0	18.63	18.64	18.05	19.00
		1	50	18.74	18.62	17.99	19.00
		1	99	18.53	18.23	17.58	19.00
		50	0	18.58	18.49	17.90	19.00
		50	25	18.69	18.48	17.87	19.00
		50	50	18.58	18.36	17.65	19.00
		100	0	18.58	18.42	17.77	19.00

LTE Band66							
DSI 1-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				131979/1710.7	132322/1745	132665/1779.3	
1.4MHz	QPSK	1	0	18.46	18.17	17.71	19.00
		1	2	18.13	18.11	18.05	19.00
		1	5	18.28	17.86	17.75	19.00
		3	0	18.50	18.20	18.05	19.00
		3	2	18.43	18.06	18.32	19.00
		3	3	18.51	18.17	18.29	19.00
		6	0	18.22	18.29	17.87	19.00
	16QAM	1	0	18.30	18.04	17.83	19.00
		1	2	18.76	18.51	18.16	19.00
		1	5	18.47	17.90	17.88	19.00
		3	0	18.51	18.53	17.92	19.00
		3	2	18.29	18.49	18.09	19.00
		3	3	18.46	18.15	17.59	19.00
		6	0	18.27	18.13	17.94	19.00
	64QAM	1	0	18.32	18.36	17.82	19.00
		1	2	18.20	18.23	18.09	19.00
		1	5	18.16	18.07	17.86	19.00
		3	0	18.42	18.30	18.27	19.00
		3	2	18.25	18.31	17.97	19.00
		3	3	18.34	17.90	17.92	19.00
		6	0	18.34	18.17	17.92	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131987/1711.5	132322/1745	132657/1778.5	
3MHz	QPSK	1	0	18.20	18.07	17.85	19.00
		1	7	18.23	18.25	17.89	19.00
		1	14	18.00	17.76	17.79	19.00
		8	0	18.56	18.30	18.05	19.00
		8	4	18.67	18.24	18.26	19.00
		8	7	18.29	18.03	18.11	19.00
		15	0	18.52	18.21	18.11	19.00
	16QAM	1	0	18.44	18.28	18.21	19.00
		1	7	18.64	18.31	18.24	19.00
		1	14	18.17	18.22	18.06	19.00
		8	0	18.29	18.31	17.98	19.00
		8	4	18.43	18.29	18.01	19.00

		8	7	18.28	18.25	17.85	19.00
		15	0	18.37	18.17	17.74	19.00
	64QAM	1	0	18.28	18.32	17.92	19.00
		1	7	18.46	18.29	18.03	19.00
		1	14	18.14	17.81	17.92	19.00
		8	0	18.34	18.14	17.81	19.00
		8	4	18.35	18.11	17.91	19.00
		8	7	18.16	18.22	17.86	19.00
		15	0	18.22	18.15	17.78	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131997/1712.5	132322/1745	132647/1777.5	
5MHz	QPSK	1	0	18.16	18.31	18.05	19.00
		1	13	18.35	18.31	18.17	19.00
		1	24	18.20	18.00	17.79	19.00
		12	0	18.62	18.40	18.21	19.00
		12	6	18.71	18.26	18.18	19.00
		12	13	18.63	18.29	18.17	19.00
		25	0	18.50	18.31	17.99	19.00
	16QAM	1	0	18.40	18.42	18.17	19.00
		1	13	18.66	18.55	18.26	19.00
		1	24	18.39	18.04	17.94	19.00
		12	0	18.37	18.41	18.08	19.00
		12	6	18.53	18.19	17.97	19.00
		12	13	18.40	18.11	17.87	19.00
		25	0	18.25	18.09	17.96	19.00
	64QAM	1	0	18.22	18.32	18.00	19.00
		1	13	18.60	18.29	17.97	19.00
		1	24	18.20	17.97	18.02	19.00
		12	0	18.38	18.42	18.13	19.00
		12	6	18.35	18.23	18.07	19.00
		12	13	18.42	18.34	18.06	19.00
		25	0	18.32	18.13	17.86	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132022/1715	132322/1745	132622/1775	
10MHz	QPSK	1	0	18.10	18.21	18.09	19.00
		1	25	18.31	18.21	18.09	19.00
		1	49	18.08	18.10	17.77	19.00
		25	0	18.56	18.22	18.33	19.00
		25	13	18.41	18.56	18.02	19.00
		25	25	18.37	18.39	18.01	19.00

	16QAM	50	0	18.28	18.21	18.25	19.00
		1	0	18.38	18.24	18.11	19.00
		1	25	18.54	18.33	18.08	19.00
		1	49	18.51	18.02	17.92	19.00
		25	0	18.31	18.39	17.88	19.00
		25	13	18.57	18.29	18.01	19.00
		25	25	18.52	18.37	18.09	19.00
		50	0	18.23	18.23	17.96	19.00
	64QAM	1	0	18.48	18.44	18.08	19.00
		1	25	18.46	18.43	17.91	19.00
		1	49	18.20	17.93	17.86	19.00
		25	0	18.44	18.40	18.05	19.00
		25	13	18.39	18.29	18.17	19.00
		25	25	18.14	18.08	18.04	19.00
		50	0	18.10	18.09	17.96	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132047/1717.5	132322/1745	132597/1772.5	
15MHz	QPSK	1	0	18.16	18.39	18.01	19.00
		1	38	18.47	18.25	18.13	19.00
		1	74	18.08	17.94	17.99	19.00
		36	0	18.56	18.42	18.01	19.00
		36	18	18.49	18.44	18.14	19.00
		36	39	18.59	18.29	18.09	19.00
		75	0	18.48	18.41	17.99	19.00
	16QAM	1	0	18.46	18.24	18.27	19.00
		1	38	18.54	18.47	18.34	19.00
		1	74	18.23	18.04	18.20	19.00
		36	0	18.23	18.33	18.02	19.00
		36	18	18.33	18.25	17.93	19.00
		36	39	18.42	18.27	17.95	19.00
		75	0	18.19	18.23	18.02	19.00
	64QAM	1	0	18.34	18.20	17.86	19.00
		1	38	18.32	18.41	17.97	19.00
		1	74	18.16	17.99	18.06	19.00
		36	0	18.26	18.14	18.17	19.00
		36	18	18.39	18.19	18.21	19.00
		36	39	18.30	18.20	17.86	19.00
		75	0	18.20	18.11	17.86	19.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132072/1720	132322/1745	132572/1770	
20MHz	QPSK	1	0	18.26	18.27	18.01	19.00
		1	50	18.37	18.21	18.05	19.00
		1	99	18.16	17.94	17.87	19.00
		50	0	18.46	18.32	18.11	19.00
		50	25	18.57	18.34	18.18	19.00
		50	50	18.47	18.23	18.05	19.00
		100	0	18.42	18.27	18.03	19.00
	16QAM	1	0	18.42	18.30	18.11	19.00
		1	50	18.54	18.39	18.18	19.00
		1	99	18.35	18.14	18.02	19.00
		50	0	18.29	18.25	18.00	19.00
		50	25	18.41	18.27	18.03	19.00
		50	50	18.30	18.17	17.91	19.00
		100	0	18.27	18.19	17.94	19.00
	64QAM	1	0	18.32	18.22	17.96	19.00
		1	50	18.44	18.27	18.05	19.00
		1	99	18.20	17.95	17.88	19.00
		50	0	18.30	18.26	18.01	19.00
		50	25	18.39	18.27	18.05	19.00
		50	50	18.30	18.18	17.94	19.00
		100	0	18.26	18.19	17.96	19.00

LTE Band66							
DSI 2-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				131979/1710.7	132322/1745	132665/1779.3	
1.4MHz	QPSK	1	0	24.84	24.63	24.35	25.50
		1	2	24.78	24.65	24.39	25.50
		1	5	24.73	24.14	23.92	25.50
		3	0	25.01	24.73	24.34	25.50
		3	2	24.77	24.90	24.29	25.50
		3	3	24.86	24.77	24.12	25.50
		6	0	24.18	23.64	23.49	24.50
	16QAM	1	0	23.83	23.53	23.50	24.50
		1	2	23.73	23.69	23.62	24.50
		1	5	23.88	23.50	23.26	24.50
		3	0	23.82	23.47	23.33	24.50
		3	2	23.84	23.44	23.07	24.50

		3	3	23.75	23.67	22.91	24.50
		6	0	22.74	22.88	22.50	23.50
	64QAM	1	0	22.86	22.65	22.52	23.50
		1	2	23.00	22.65	22.41	23.50
		1	5	22.77	22.39	22.24	23.50
		3	0	22.67	22.64	22.27	23.50
		3	2	22.98	22.61	22.18	23.50
		3	3	22.59	22.53	22.11	23.50
		6	0	21.69	21.75	21.48	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131987/1711.5	132322/1745	132657/1778.5	
3MHz	QPSK	1	0	24.84	24.61	24.35	25.50
		1	7	24.76	24.69	24.45	25.50
		1	14	24.67	24.30	24.04	25.50
		8	0	23.91	23.81	23.40	24.50
		8	4	24.13	23.96	23.63	24.50
		8	7	23.88	23.65	23.30	24.50
		15	0	24.02	23.78	23.51	24.50
	16QAM	1	0	23.77	23.63	23.48	24.50
		1	7	23.81	23.59	23.42	24.50
		1	14	23.56	23.36	23.30	24.50
		8	0	22.86	22.79	22.35	23.50
		8	4	22.80	22.88	22.43	23.50
		8	7	22.89	22.67	22.37	23.50
		15	0	22.92	22.70	22.36	23.50
	64QAM	1	0	22.82	22.73	22.24	23.50
		1	7	22.94	22.67	22.37	23.50
		1	14	22.85	22.37	22.26	23.50
		8	0	21.73	21.76	21.33	22.50
		8	4	21.90	21.79	21.56	22.50
		8	7	21.95	21.77	21.19	22.50
		15	0	21.83	21.59	21.22	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131997/1712.5	132322/1745	132647/1777.5	
5MHz	QPSK	1	0	24.74	24.43	24.19	25.50
		1	13	24.80	24.53	24.35	25.50
		1	24	24.49	24.32	24.08	25.50
		12	0	24.01	23.81	23.40	24.50
		12	6	24.19	23.66	23.55	24.50
		12	13	24.02	23.71	23.24	24.50

	16QAM	25	0	23.92	23.80	23.41	24.50
		1	0	23.65	23.67	23.22	24.50
		1	13	23.69	23.75	23.40	24.50
		1	24	23.48	23.24	23.06	24.50
		12	0	22.80	22.67	22.29	23.50
		12	6	23.00	22.82	22.41	23.50
		12	13	22.89	22.73	22.17	23.50
		25	0	22.68	22.74	22.32	23.50
	64QAM	1	0	22.70	22.85	22.20	23.50
		1	13	23.06	22.71	22.41	23.50
		1	24	22.59	22.55	22.12	23.50
		12	0	21.85	21.58	21.39	22.50
		12	6	21.78	21.81	21.42	22.50
		12	13	21.73	21.67	21.31	22.50
		25	0	21.85	21.63	21.10	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132022/1715	132322/1745	132622/1775	
10MHz	QPSK	1	0	24.56	24.69	24.09	25.50
		1	25	24.80	24.75	24.15	25.50
		1	49	24.59	24.48	24.02	25.50
		25	0	23.83	23.65	23.62	24.50
		25	13	24.07	23.86	23.35	24.50
		25	25	23.92	23.85	23.50	24.50
		50	0	24.06	23.78	23.31	24.50
	16QAM	1	0	23.95	23.63	23.28	24.50
		1	25	24.09	23.77	23.60	24.50
		1	49	23.80	23.34	23.12	24.50
		25	0	22.96	22.77	22.39	23.50
		25	13	22.80	22.58	22.57	23.50
		25	25	22.97	22.77	22.05	23.50
		50	0	22.58	22.72	22.36	23.50
	64QAM	1	0	22.72	22.63	22.22	23.50
		1	25	23.22	22.93	22.25	23.50
		1	49	22.97	22.67	22.24	23.50
		25	0	21.86	21.84	21.43	22.50
		25	13	21.90	21.81	21.66	22.50
		25	25	21.81	21.83	21.49	22.50
		50	0	21.71	21.87	21.38	22.50

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132047/1717.5	132322/1745	132597/1772.5	
15MHz	QPSK	1	0	24.72	24.75	24.39	25.50
		1	38	25.02	24.69	24.21	25.50
		1	74	24.53	24.18	24.08	25.50
		36	0	24.03	23.89	23.44	24.50
		36	18	24.01	23.80	23.67	24.50
		36	39	23.86	23.87	23.42	24.50
		75	0	23.88	23.82	23.31	24.50
	16QAM	1	0	23.77	23.69	23.46	24.50
		1	38	23.95	23.83	23.32	24.50
		1	74	23.82	23.46	23.08	24.50
		36	0	22.70	22.87	22.23	23.50
		36	18	22.90	22.86	22.47	23.50
		36	39	22.93	22.79	22.15	23.50
		75	0	22.94	22.76	22.18	23.50
	64QAM	1	0	23.00	22.83	22.34	23.50
		1	38	23.18	22.89	22.51	23.50
		1	74	22.97	22.33	22.00	23.50
		36	0	21.88	21.76	21.35	22.50
		36	18	21.90	21.87	21.48	22.50
		36	39	21.79	21.71	21.25	22.50
		75	0	21.79	21.63	21.46	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132072/1720	132322/1745	132572/1770	
20MHz	QPSK	1	0	24.72	24.57	24.27	25.50
		1	50	24.86	24.57	24.31	25.50
		1	99	24.65	24.28	24.08	25.50
		50	0	23.95	23.83	23.48	24.50
		50	25	24.09	23.86	23.51	24.50
		50	50	23.98	23.75	23.34	24.50
		100	0	23.94	23.76	23.35	24.50
	16QAM	1	0	23.79	23.63	23.36	24.50
		1	50	23.89	23.67	23.42	24.50
		1	99	23.66	23.38	23.14	24.50
		50	0	22.80	22.71	22.33	23.50
		50	25	22.90	22.76	22.39	23.50
		50	50	22.83	22.63	22.21	23.50
		100	0	22.76	22.64	22.26	23.50
	64QAM	1	0	22.86	22.77	22.30	23.50

		1	50	23.00	22.75	22.41	23.50
		1	99	22.79	22.45	22.12	23.50
		50	0	21.83	21.76	21.39	22.50
		50	25	21.96	21.77	21.44	22.50
		50	50	21.87	21.65	21.27	22.50
		100	0	21.79	21.67	21.30	22.50

LTE Band66							
DSI 4-Upper Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				131979/1710.7	132322/1745	132665/1779.3	
1.4MHz	QPSK	1	0	20.48	20.65	20.29	21.50
		1	2	20.99	20.89	20.69	21.50
		1	5	20.49	20.14	20.64	21.50
		3	0	20.68	20.77	20.59	21.50
		3	2	20.92	20.61	20.45	21.50
		3	3	20.77	20.86	20.48	21.50
		6	0	20.76	20.88	20.19	21.50
	16QAM	1	0	20.76	20.68	20.51	21.50
		1	2	21.02	20.93	20.62	21.50
		1	5	20.80	20.47	20.36	21.50
		3	0	20.85	20.84	20.13	21.50
		3	2	20.80	20.41	20.22	21.50
		3	3	20.74	20.73	20.39	21.50
		6	0	20.81	20.70	20.26	21.50
	64QAM	1	0	20.42	20.88	20.38	21.50
		1	2	21.06	20.39	20.42	21.50
		1	5	20.56	20.46	20.29	21.50
		3	0	20.93	20.48	20.07	21.50
		3	2	20.68	20.74	20.48	21.50
		3	3	20.89	20.29	20.66	21.50
		6	0	20.58	20.42	20.24	21.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131987/1711.5	132322/1745	132657/1778.5	
3MHz	QPSK	1	0	20.92	20.61	20.51	21.50
		1	7	20.91	20.79	20.55	21.50
		1	14	20.65	20.52	20.40	21.50
		8	0	20.90	20.71	20.59	21.50
		8	4	21.12	20.85	20.65	21.50
		8	7	20.99	20.72	20.40	21.50

	16QAM	15	0	20.96	20.62	20.47	21.50
		1	0	20.74	20.78	20.61	21.50
		1	7	21.02	20.93	20.78	21.50
		1	14	20.66	20.55	20.42	21.50
		8	0	20.83	20.66	20.57	21.50
		8	4	20.86	20.61	20.38	21.50
		8	7	20.74	20.63	20.51	21.50
		15	0	20.71	20.50	20.42	21.50
	64QAM	1	0	20.94	20.52	20.26	21.50
		1	7	20.88	20.65	20.56	21.50
		1	14	20.60	20.28	20.33	21.50
		8	0	20.81	20.70	20.45	21.50
		8	4	20.80	20.74	20.46	21.50
		8	7	20.73	20.65	20.40	21.50
		15	0	20.66	20.58	20.22	21.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131997/1712.5	132322/1745	132647/1777.5	
5MHz	QPSK	1	0	20.68	20.49	20.25	21.50
		1	13	20.89	20.57	20.35	21.50
		1	24	20.47	20.20	20.24	21.50
		12	0	20.82	20.67	20.49	21.50
		12	6	21.02	20.73	20.35	21.50
		12	13	20.77	20.44	20.38	21.50
		25	0	20.64	20.76	20.31	21.50
	16QAM	1	0	20.78	20.84	20.53	21.50
		1	13	21.00	20.89	20.70	21.50
		1	24	20.62	20.63	20.54	21.50
		12	0	20.65	20.44	20.37	21.50
		12	6	20.66	20.61	20.56	21.50
		12	13	20.84	20.55	20.19	21.50
		25	0	20.59	20.70	20.40	21.50
	64QAM	1	0	20.82	20.48	20.22	21.50
		1	13	20.78	20.63	20.24	21.50
		1	24	20.66	20.28	20.09	21.50
		12	0	20.61	20.58	20.21	21.50
		12	6	20.72	20.52	20.38	21.50
		12	13	20.77	20.41	20.38	21.50
		25	0	20.56	20.48	20.32	21.50

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132022/1715	132322/1745	132622/1775	
10MHz	QPSK	1	0	20.76	20.51	20.37	21.50
		1	25	20.73	20.61	20.39	21.50
		1	49	20.45	20.44	20.36	21.50
		25	0	20.84	20.93	20.53	21.50
		25	13	21.20	20.97	20.59	21.50
		25	25	21.07	20.78	20.34	21.50
		50	0	20.98	20.80	20.45	21.50
	16QAM	1	0	20.80	20.64	20.59	21.50
		1	25	21.08	20.91	20.80	21.50
		1	49	20.74	20.63	20.68	21.50
		25	0	20.81	20.56	20.41	21.50
		25	13	20.94	20.81	20.48	21.50
		25	25	20.76	20.75	20.53	21.50
		50	0	20.59	20.54	20.44	21.50
	64QAM	1	0	20.80	20.48	20.28	21.50
		1	25	21.04	20.75	20.60	21.50
		1	49	20.52	20.26	20.39	21.50
		25	0	20.73	20.58	20.43	21.50
		25	13	20.66	20.50	20.34	21.50
		25	25	20.59	20.43	20.36	21.50
		50	0	20.54	20.70	20.30	21.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132047/1717.5	132322/1745	132597/1772.5	
15MHz	QPSK	1	0	20.84	20.57	20.41	21.50
		1	38	20.95	20.71	20.65	21.50
		1	74	20.77	20.32	20.36	21.50
		36	0	20.82	20.63	20.61	21.50
		36	18	21.00	20.81	20.51	21.50
		36	39	20.81	20.54	20.34	21.50
		75	0	20.96	20.76	20.39	21.50
	16QAM	1	0	20.86	20.96	20.67	21.50
		1	38	20.94	20.81	20.58	21.50
		1	74	20.78	20.59	20.58	21.50
		36	0	20.71	20.68	20.41	21.50
		36	18	20.74	20.59	20.38	21.50
		36	39	20.74	20.71	20.53	21.50
		75	0	20.79	20.54	20.28	21.50
	64QAM	1	0	20.78	20.70	20.50	21.50

		1	38	21.04	20.79	20.32	21.50
		1	74	20.64	20.56	20.15	21.50
		36	0	20.59	20.78	20.57	21.50
		36	18	20.74	20.78	20.48	21.50
		36	39	20.73	20.45	20.40	21.50
		75	0	20.68	20.64	20.36	21.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132072/1720	132322/1745	132572/1770	
20MHz	QPSK	1	0	20.78	20.63	20.39	21.50
		1	50	20.93	20.63	20.51	21.50
		1	99	20.61	20.38	20.32	21.50
		50	0	20.84	20.75	20.51	21.50
		50	25	21.03	20.75	20.55	21.50
		50	50	20.89	20.64	20.44	21.50
		100	0	20.82	20.70	20.39	21.50
	16QAM	1	0	20.84	20.80	20.51	21.50
		1	50	20.96	20.85	20.62	21.50
		1	99	20.72	20.57	20.46	21.50
		50	0	20.73	20.64	20.41	21.50
		50	25	20.84	20.67	20.48	21.50
		50	50	20.76	20.55	20.35	21.50
		100	0	20.67	20.60	20.34	21.50
	64QAM	1	0	20.78	20.62	20.36	21.50
		1	50	20.86	20.67	20.44	21.50
		1	99	20.70	20.38	20.23	21.50
		50	0	20.71	20.64	20.39	21.50
		50	25	20.82	20.68	20.46	21.50
		50	50	20.73	20.55	20.34	21.50
		100	0	20.68	20.60	20.32	21.50

9.4 CA Mode (DL)

DL Intra Band Contiguous Measured Results													
CA configuration	CC1 UL					CC2 DL			Aggregated BW	MPR	CA Active (dBm)	CA Inactive (dBm)	Delta
	Modle	BW(MHz)	Channel	Fre(MHz)	RB,Offset	BW(MHz)	Channel	Fre(MHz)					
CA_2C	QPSK	20	18801	1870.1	1,50	20	999	1969.9	40	0	24.25	24.30	-0.05
CA_7C	QPSK	20	21001	2525.1	1,50	20	3199	2664.9	40	0	24.61	24.61	0
CA_38C	QPSK	20	37901	2585.1	1,50	20	38099	2604.9	40	0	24.45	24.48	-0.03
CA_41C	QPSK	20	40521	2583.1	1,50	20	40719	2602.9	40	0	24.25	24.25	0
CA_66B	QPSK	15	132273	1740.1	1,50	5	66835	2149.9	20	0	24.93	24.94	-0.01
CA_66C	QPSK	20	132223	1735.1	1,50	20	66885	2154.9	40	0	24.91	24.94	-0.03
DL Intra Band Non-Contiguous Measured Results													
CA configuration	CC1 UL					CC2 DL			Aggregated BW	MPR	CA Inactive (dBm)	CA Active (dBm)	Delta
	Modle	BW(MHz)	Channel	Fre(MHz)	RB,Offset	BW(MHz)	Channel	Fre(MHz)					
CA_2A-2A	QPSK	20	18700	1860	1,50	20	1100	1980	40	0	24.30	24.30	0
CA_4A-4A	QPSK	20	20050	1720	1,50	20	2300	2145	40	0	24.75	24.77	-0.02
CA_7A-7A	QPSK	20	20850	2510	1,50	20	3350	2680	40	0	24.61	24.61	0
CA_41A-41A	QPSK	20	39750	2506	1,50	20	41490	2680	40	0	24.25	24.25	0
CA_66A-66A	QPSK	20	132072	1720	1,50	20	67035	2169.9	40	0	24.94	24.94	0
DL Inter Band(2 Bands)Measured Results													
CA configuration	CC1 UL					CC2 DL			Aggregated BW	MPR	CA Inactive (dBm)	CA Active (dBm)	Delta
	Modle	BW(MHz)	Channel	Fre(MHz)	RB,Offset	BW(MHz)	Channel	Fre(MHz)					
CA_2A-4A	QPSK	20	18900	1880	1,0	20	2175	2132.5	40	0	24.30	24.30	0
CA_2A-5A	QPSK	20	18900	1880	1,0	10	2600	889	30	0	24.30	24.30	0
CA_2A-7A	QPSK	20	18900	1880	1,0	20	3100	2655	40	0	24.29	24.30	-0.01
CA_2A-66A	QPSK	20	18900	1880	1,0	20	66786	2145	40	0	24.30	24.30	0
CA_4A-5A	QPSK	20	20175	1732.5	1,0	10	2525	881.5	30	0	24.77	24.77	0
CA_4A-7A	QPSK	20	20175	1732.5	1,0	20	3100	2655	40	0	24.75	24.77	-0.02
CA_5A-7A	QPSK	10	20525	836.5	50,0	20	3100	2655	30	0	24.00	24.02	-0.02
CA_5A-66A	QPSK	10	20525	836.5	1,0	20	66786	2145	30	0	24.02	24.02	0
CA_7A-26A	QPSK	20	21100	2535	50,0	15	8865	876.5	35	0	24.61	24.61	0
CA_7A-66A	QPSK	20	21100	2535	50,0	20	66786	2145	40	0	24.60	24.61	-0.01
CA_12A-66A	QPSK	10	23095	707.5	1,0	20	66786	2145	30	0	23.95	23.95	0
CA_26A-41A	QPSK	15	26765	821.5	1,0	20	40620	2593	35	0	23.92	23.92	0

9.5 WLAN Mode

Wi-Fi 2.4G Receiver on	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
Mode			
802.11b (1M)	1/2412	19.00	17.20
	6/2437	19.00	17.45
	11/2462	19.00	17.11
802.11g (6M)	1/2412	18.00	16.25
	6/2437	18.00	16.55
	11/2462	18.00	16.49
802.11n-HT20 (MCS0)	1/2412	18.00	16.08
	6/2437	18.00	16.46
	11/2462	18.00	16.06

Note: Initial test configuration is 802.11b mode.

Wi-Fi 2.4G Receiver off	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
Mode			
802.11b (1M)	1/2412	20.50	18.76
	6/2437	20.50	18.83
	11/2462	20.50	18.73
802.11g (6M)	1/2412	19.50	17.71
	6/2437	19.50	18.05
	11/2462	19.50	17.91
802.11n-HT20 (MCS0)	1/2412	19.50	17.62
	6/2437	19.50	17.84
	11/2462	19.50	17.53

Note: Initial test configuration is 802.11b mode.

5GHz Wi-Fi U-NII-1 (Receiver on)	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	36/5180	17.00	15.59
	40/5200	17.00	15.96
	44/5220	17.00	15.68
	48/5240	17.00	16.30
802.11nHT20 (MCS0)	36/5180	16.00	15.09
	40/5200	16.00	14.93
	44/5220	16.00	14.67
	48/5240	16.00	14.95
802.11nHT40 (MCS0)	38/5190	16.00	14.42
	46/5230	16.00	14.84
802.11ac-VHT20 (MCS0)	36/5180	16.00	15.08
	40/5200	16.00	15.09
	44/5220	16.00	14.84
	48/5240	16.00	15.15
802.11ac-VHT40 (MCS0)	38/5190	16.00	14.19
	46/5230	16.00	14.65
802.11ac-VHT80 (MCS0)	42/5210	15.50	13.86
Note. Initial test configuration is 802.11a mode, since the highest maximum output power.			

5GHz Wi-Fi U-NII-2A (Receiver on)	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	52/5260	17.00	16.56
	56/5280	17.00	16.55
	60/5300	17.00	15.82
	64/5320	17.00	16.54
802.11nHT20 (MCS0)	52/5260	16.00	15.30
	56/5280	16.00	15.49
	60/5300	16.00	15.16
	64/5320	16.00	15.46
802.11nHT40 (MCS0)	54/5270	16.00	15.43
	62/5310	16.00	15.14
802.11ac-VHT20 (MCS0)	52/5260	16.00	15.38
	56/5280	16.00	14.73
	60/5300	16.00	14.71
	64/5320	16.00	15.14
802.11ac-VHT40 (MCS0)	54/5270	16.00	15.07
	62/5310	16.00	14.79
802.11ac-VHT80 (MCS0)	58/5290	15.50	14.38
Note. Initial test configuration is 802.11a mode, since the highest maximum output power.			

5GHz Wi-Fi U-NII-2C (Receiver on)	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	100/5500	14.50	13.56
	120/5600	15.50	14.83
	140/5700	15.50	14.53
	144/5720	15.50	13.76
802.11nHT20 (MCS0)	100/5500	13.50	12.36
	120/5600	14.50	13.71
	140/5700	14.50	13.35
	144/5720	14.00	12.65
802.11nHT40 (MCS0)	102/5510	14.50	12.92
	118/5590	13.50	12.65
	134/5670	13.50	12.57
	142/5710	13.50	11.66
802.11ac-VHT20 (MCS0)	100/5500	14.50	13.34
	120/5600	14.50	13.80
	140/5700	14.50	12.86
	144/5720	14.00	12.59
802.11ac-VHT40 (MCS0)	102/5510	15.50	13.96
	118/5590	14.50	13.86
	134/5670	14.50	13.63
	142/5710	14.50	12.71
802.11ac-VHT80 (MCS0)	122/5610	15.50	14.20
	138/5690	15.00	13.24
Note. Initial test configuration is 802.11a mode, since the highest maximum output power.			

5GHz Wi-Fi U-NII-3 (Receiver on)	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a(6M)	144/5720	10.50	8.62
	149/5745	15.50	14.51
	157/5785	15.50	14.87
	165/5825	15.50	14.90
802.11nHT20(MCS0)	144/5720	10.00	8.30
	149/5745	14.50	13.56
	157/5785	14.50	13.77
	165/5825	14.50	13.75
802.11nHT40(MCS0)	142/5710	4.50	2.57
	151/5755	13.50	12.60
	159/5795	13.50	12.80
802.11ac-VHT20(MCS0)	144/5720	10.00	8.36
	149/5745	14.50	13.59
	157/5785	14.50	13.72
	165/5825	14.50	13.83
802.11ac-VHT40(MCS0)	142/5710	5.50	3.81
	151/5755	14.50	13.64
	159/5795	14.50	13.81
802.11ac-VHT80(MCS0)	138/5690	6.00	4.35
	155/5775	15.50	14.24
Note. Initial test configuration is 802.11a mode, since the highest maximum output power.			

5GHz Wi-Fi U-NII-1 (Receiver off)	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	36/5180	18.50	16.97
	40/5200	18.50	17.38
	44/5220	18.50	17.02
	48/5240	18.50	17.46
802.11nHT20 (MCS0)	36/5180	17.50	16.35
	40/5200	17.50	16.30
	44/5220	17.50	16.11
	48/5240	17.50	16.37
802.11nHT40 (MCS0)	38/5190	16.00	14.43
	46/5230	16.00	14.84
802.11ac-VHT20 (MCS0)	36/5180	17.50	16.38
	40/5200	17.50	16.30
	44/5220	17.50	15.98
	48/5240	17.50	16.38
802.11ac-VHT40 (MCS0)	38/5190	17.50	15.53
	46/5230	17.50	16.01
802.11ac-VHT80 (MCS0)	42/5210	15.50	13.87
Note. Initial test configuration is 802.11a mode, since the highest maximum output power.			

5GHz Wi-Fi U-NII-2A (Receiver off)	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	52/5260	18.50	17.65
	56/5280	18.50	17.78
	60/5300	18.50	17.24
	64/5320	18.50	17.76
802.11nHT20 (MCS0)	52/5260	17.50	16.54
	56/5280	17.50	16.67
	60/5300	17.50	16.30
	64/5320	17.50	16.63
802.11nHT40 (MCS0)	54/5270	16.00	15.44
	62/5310	16.00	15.14
802.11ac-VHT20 (MCS0)	52/5260	17.50	16.52
	56/5280	17.50	16.15
	60/5300	17.50	16.03
	64/5320	17.50	16.53
802.11ac-VHT40 (MCS0)	54/5270	17.50	16.42
	62/5310	17.50	16.14
802.11ac-VHT80 (MCS0)	58/5290	15.50	14.38
Note. Initial test configuration is 802.11a mode, since the highest maximum output power.			

5GHz Wi-Fi U-NII-2C (Receiver off)	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	100/5500	17.50	16.23
	120/5600	18.50	17.55
	140/5700	18.50	17.41
	144/5720	18.50	16.67
802.11nHT20 (MCS0)	100/5500	16.50	15.09
	120/5600	17.50	16.43
	140/5700	17.50	16.28
	144/5720	17.00	15.45
802.11nHT40 (MCS0)	102/5510	14.50	12.92
	118/5590	16.50	15.48
	134/5670	16.50	15.51
	142/5710	16.50	14.56
802.11ac-VHT20 (MCS0)	100/5500	17.50	16.17
	120/5600	17.50	16.44
	140/5700	17.50	15.72
	144/5720	17.00	15.39
802.11ac-VHT40 (MCS0)	102/5510	15.50	13.97
	118/5590	17.50	16.56
	134/5670	17.50	16.48
	142/5710	17.50	15.62
802.11ac-VHT80 (MCS0)	122/5610	15.50	14.21
	138/5690	15.00	13.25
Note. Initial test configuration is 802.11a mode, since the highest maximum output power.			

5GHz Wi-Fi U-NII-3 (Receiver off)	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	144/5720	10.50	8.62
	149/5745	18.50	17.40
	157/5785	18.50	17.65
	165/5825	18.50	17.80
802.11nHT20 (MCS0)	144/5720	10.00	8.30
	149/5745	17.50	16.29
	157/5785	17.50	16.45
	165/5825	17.50	16.59
802.11nHT40 (MCS0)	142/5710	4.50	2.57
	151/5755	16.50	15.38
	159/5795	16.50	15.51
802.11ac-VHT20 (MCS0)	144/5720	10.00	8.36
	149/5745	17.50	16.31
	157/5785	17.50	16.45
	165/5825	17.50	16.60
802.11ac-VHT40 (MCS0)	142/5710	5.50	3.81
	151/5755	17.50	16.42
	159/5795	17.50	16.52
802.11ac-VHT80 (MCS0)	138/5690	6.00	4.35
	155/5775	15.50	14.24
Note. Initial test configuration is 802.11a mode, since the highest maximum output power.			

9.6 Bluetooth Mode

Bluetooth	Conducted Power(dBm)				
	Channel/Frequency(MHz)				
	Ch 0/2402 MHz	Ch 39/2441 MHz	Tune-up Limit (dBm)	Ch 78/2480 MHz	Tune-up Limit (dBm)
GFSK	10.89	10.70	12.50	9.10	10.50
$\pi/4$ DQPSK	7.56	7.27	8.50	5.60	6.50
8DPSK	7.64	7.42	8.50	5.74	6.50
Bluetooth LE	Ch 0/2402 MHz	Ch 19/2440 MHz	Tune-up Limit (dBm)	Ch 39/2480 MHz	Tune-up Limit (dBm)
GFSK(1M)	-1.89	-1.01	-0.50	-1.52	-0.50
GFSK(2M)	-1.86	-1.15	-0.50	-1.56	-0.50
GFSK(S=2)	-1.97	-1.05	-0.50	-1.76	-0.50
GFSK(S=8)	-1.97	-1.06	-0.50	-1.69	-0.50

10 Measured and Reported (Scaled) SAR Results

10.1 EUT Antenna Locations

The Detailed Antenna Locations Refer to *Antenna Locations*.

Overall (Length x Width): 161 mm x 74 mm						
Overall Diagonal: 173 mm/Display Diagonal: 169mm						
Distance of the Antenna to the EUT Surface/Edge						
Antenna	Back Side	Front Side	Left Edge	Right Edge	Top Edge	Bottom Edge
Low-Antenna	<25mm	<25mm	<25mm	<25mm	>25mm	<25mm
Upper-Antenna	<25mm	<25mm	<25mm	>25mm	<25mm	>25mm
Bluetooth/Wi-Fi Antenna	<25mm	<25mm	>25mm	<25mm	<25mm	>25mm
Hotspot mode, Positions for SAR Tests						
Mode	Back Side	Front Side	Left Edge	Right Edge	Top Edge	Bottom Edge
Low-Antenna	Yes	Yes	Yes	Yes	N/A	Yes
Upper-Antenna	Yes	Yes	Yes	N/A	Yes	N/A
Bluetooth/Wi-Fi Antenna	Yes	Yes	N/A	Yes	Yes	N/A

Note:

1. Per KDB 941225 D06, when the overall device length and width are $\geq 9\text{cm} \times 5\text{cm}$, the test distance is 10mm. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge.
2. For smart phones with an overall diagonal dimension is 173 mm. Per KDB 648474 D04, for smart phones with a display diagonal dimension $> 15.0\text{ cm}$ or an overall diagonal dimension $> 16.0\text{ cm}$, product specific 10-g SAR must be tested as a phablet to determine SAR compliance. For Phablet, Since hotspot mode 1-g *reported* SAR $< 1.2\text{W/kg}$, product specific 10-g SAR is no required.
3. Per FCC KDB 447498 D01, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - a) $\leq 0.8\text{ W/kg}$ or 2.0 W/kg , for 1-g or 10-g respectively, when the transmission band is $\leq 100\text{MHz}$
 - b) $\leq 0.6\text{ W/kg}$ or 1.5 W/kg , for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz.
 - c) $\leq 0.4\text{ W/kg}$ or 1.0 W/kg , for 1-g or 10-g respectively, when the transmission band is $\geq 200\text{ MHz}$.
4. When the original highest measured SAR is $\geq 0.80\text{ W/kg}$, the measurement was repeated once.
5. Per FCC KDB Publication 648474 D04, SAR was evaluated without a headset connected to the device. Since the reported SAR was $\leq 1.2\text{ W/kg}$, no additional SAR evaluations using a headset cable were required.

10.2 Measured SAR Results

Note:

1. The value with blue color is the maximum SAR Value of each test band.
2. For GSM, when multiple slots are used, SAR should be tested to account for the maximum source-based time-averaged output power.
3. For WCDMA, When the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.
4. For LTE, QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are $\geq 50\%$ limit (1g).
5. . NFC 13.56MHz antenna port is not available on the device to support conducted power measurement, therefore the measured results are referred to as reported SAR.
6. Per 248227, for band U-NII-1 and U-NII-2A, when the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.
7. The highest reported SAR for a test configuration is > 1.2 W/kg, SAR is required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.
Since the band U-NII-2A does not support hotspot function, hotspot SAR for U-NII-1 is required.
8. Accessories that do not contain RF transmitters and have been proven to increase the peak SAR by less than 5 %, such as hands-free kits, do not need SAR tests separate from the SAR tests attached to a main EUT configuration.
9. Hotspot(10mm) power level is same as body worn, the 10mm SAR value are more stringent than 15mm, so 10mm SAR value can cover body worn 15mm .So this product can meet SAR limit under strict conditions

Head SAR

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	Offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g (W/Kg)	Power Drift (dB)	Scaling Factor	Report SAR1g (W/kg)	Plot No.
GSM 850 (Original)	(Low)	Left Cheek	0	GSM	DSI1	N/A	N/A	190/836.6	33.50	32.70	0.123	-0.050	1.20	0.148	/
		Left Tilt	0	GSM	DSI1	N/A	N/A	190/836.6	33.50	32.70	0.078	0.011	1.20	0.094	/
		Right Cheek	0	GSM	DSI1	N/A	N/A	190/836.6	33.50	32.70	0.121	0.032	1.20	0.145	/
		Right Tilt	0	GSM	DSI1	N/A	N/A	190/836.6	33.50	32.70	0.070	0.020	1.20	0.084	/
	(Upper)	Left Cheek	0	GSM	DSI1	N/A	N/A	190/836.6	33.50	32.15	0.188	0.140	1.36	0.257	/
		Left Tilt	0	GSM	DSI1	N/A	N/A	190/836.6	33.50	32.15	0.202	0.041	1.36	0.276	/
		Right Cheek	0	GSM	DSI1	N/A	N/A	190/836.6	33.50	32.15	0.307	0.041	1.36	0.419	/
		Right Tilt	0	GSM	DSI1	N/A	N/A	190/836.6	33.50	32.15	0.235	0.096	1.36	0.321	/
	(Upper)	Right Cheek Battery2 12G+512G	0	GSM	DSI1	N/A	N/A	190/836.6	33.50	32.15	0.348	0.021	1.36	0.475	24
GSM 1900 (Original)	(Low)	Left Cheek	0	GSM	DSI1	N/A	N/A	661/1880	30.50	29.34	0.150	0.024	1.31	0.196	/
		Left Tilt	0	GSM	DSI1	N/A	N/A	661/1880	30.50	29.34	0.057	-0.100	1.31	0.074	/
		Right Cheek	0	GSM	DSI1	N/A	N/A	661/1880	30.50	29.34	0.066	0.110	1.31	0.086	/
		Right Tilt	0	GSM	DSI1	N/A	N/A	661/1880	30.50	29.34	0.062	0.050	1.31	0.081	/

	(Upper)	Left Cheek	0	GSM	DSI1	N/A	N/A	661/1880	24.50	23.41	0.265	0.030	1.29	0.341	/
		Left Tilt	0	GSM	DSI1	N/A	N/A	661/1880	24.50	23.41	0.312	-0.110	1.29	0.401	/
		Right Cheek	0	GSM	DSI1	N/A	N/A	661/1880	24.50	23.41	0.445	0.140	1.29	0.572	/
		Right Tilt	0	GSM	DSI1	N/A	N/A	661/1880	24.50	23.41	0.631	0.160	1.29	0.811	/
		Right Tilt	0	GSM	DSI1	N/A	N/A	512/1850.2	24.50	23.33	0.549	0.170	1.31	0.719	/
		Right Tilt	0	GSM	DSI1	N/A	N/A	810/1909.8	24.50	23.45	0.653	0.020	1.27	0.832	25
	(Upper)	Right Tilt Battery2 12G+512G	0	GSM	DSI1	N/A	N/A	810/1909.8	24.50	23.45	0.457	0.074	1.27	0.582	/
WCDMA II (Original)	(Low)	Left Cheek	0	RMC 12.2K	DSI1	N/A	N/A	9400/1880	25.00	24.59	0.405	-0.160	1.10	0.445	/
		Left Tilt	0	RMC 12.2K	DSI1	N/A	N/A	9400/1880	25.00	24.59	0.223	-0.070	1.10	0.245	/
		Right Cheek	0	RMC 12.2K	DSI1	N/A	N/A	9400/1880	25.00	24.59	0.236	0.026	1.10	0.259	/
		Right Tilt	0	RMC 12.2K	DSI1	N/A	N/A	9400/1880	25.00	24.59	0.246	0.030	1.10	0.270	/
	(Upper)	Left Cheek	0	RMC 12.2K	DSI1	N/A	N/A	9400/1880	16.00	15.08	0.416	0.047	1.24	0.514	/
		Left Tilt	0	RMC 12.2K	DSI1	N/A	N/A	9400/1880	16.00	15.08	0.435	0.079	1.24	0.538	/
		Right Cheek	0	RMC 12.2K	DSI1	N/A	N/A	9400/1880	16.00	15.08	0.613	0.048	1.24	0.758	/
		Right Tilt	0	RMC 12.2K	DSI1	N/A	N/A	9400/1880	16.00	15.08	0.794	0.010	1.24	0.981	/
		Right Tilt	0	RMC 12.2K	DSI1	N/A	N/A	9262/1852.4	16.00	15.07	0.815	0.190	1.24	1.010	/
		Right Tilt	0	RMC 12.2K	DSI1	N/A	N/A	9538/1907.6	16.00	15.01	0.858	0.010	1.26	1.078	/
		Right Tilt Repeat	0	RMC 12.2K	DSI1	N/A	N/A	9538/1907.6	16.00	15.01	0.862	-0.024	1.26	1.083	26
	(Upper)	Right Tilt Battery2 12G+512G	0	RMC 12.2K	DSI1	N/A	N/A	9538/1907.6	16.00	15.01	0.715	-0.011	1.26	0.898	/
WCDMA IV (Original)	(Low)	Left Cheek	0	RMC 12.2K	DSI1	N/A	N/A	1413/1732.6	25.50	24.98	0.219	0.027	1.13	0.247	/
		Left Tilt	0	RMC 12.2K	DSI1	N/A	N/A	1413/1732.6	25.50	24.98	0.101	0.180	1.13	0.114	/
		Right Cheek	0	RMC 12.2K	DSI1	N/A	N/A	1413/1732.6	25.50	24.98	0.126	0.058	1.13	0.142	/
		Right Tilt	0	RMC 12.2K	DSI1	N/A	N/A	1413/1732.6	25.50	24.98	0.136	0.025	1.13	0.153	/
	(Upper)	Left Cheek	0	RMC 12.2K	DSI1	N/A	N/A	1413/1732.6	19.00	18.19	0.351	0.017	1.21	0.423	/
		Left Tilt	0	RMC 12.2K	DSI1	N/A	N/A	1413/1732.6	19.00	18.19	0.388	0.130	1.21	0.468	/
		Right Cheek	0	RMC 12.2K	DSI1	N/A	N/A	1413/1732.6	19.00	18.19	0.571	0.170	1.21	0.688	/
		Right Tilt	0	RMC 12.2K	DSI1	N/A	N/A	1413/1732.6	19.00	18.19	0.838	0.180	1.21	1.010	/
		Right Tilt	0	RMC 12.2K	DSI1	N/A	N/A	1312/1712.4	19.00	18.03	0.872	-0.030	1.25	1.090	27
		Right Tilt	0	RMC 12.2K	DSI1	N/A	N/A	1513/1752.6	19.00	17.94	0.719	-0.120	1.28	0.918	/
		Right Tilt Repeat	0	RMC 12.2K	DSI1	N/A	N/A	1312/1712.4	19.00	18.03	0.865	0.026	1.25	1.081	/
	(Upper)	Right Tilt SIM2	0	RMC 12.2K	DSI1	N/A	N/A	1312/1712.4	19.00	18.03	0.837	-0.014	1.25	1.046	/
		Right Tilt 12G+256G	0	RMC 12.2K	DSI1	N/A	N/A	1312/1712.4	19.00	18.03	0.664	0.012	1.25	0.830	/
		Right Tilt Battery2 12G+512G	0	RMC 12.2K	DSI1	N/A	N/A	1312/1712.4	19.00	18.03	0.645	0.045	1.25	0.806	/
		Right Tilt	0	RMC 12.2K	DSI1	N/A	N/A	1312/1712.4	19.00	18.03	0.769	-0.052	1.25	0.961	/

		Battery2 8G+128G													
		Right Tilt 2nd supplier screen	0	RMC 12.2K	DSI1	N/A	N/A	1312/1712.4	19.00	18.03	0.734	0.011	1.25	0.918	/
WCDMA IV (Variant)	(Upper)	Right Tilt	0	RMC 12.2K	DSI1	N/A	N/A	1312/1712.4	19.00	18.03	0.817	-0.020	1.25	1.021	/
WCDMA V (Original)	(Low)	Left Cheek	0	RMC 12.2K	DSI1	N/A	N/A	4183/836.6	25.50	24.29	0.160	0.100	1.32	0.211	/
		Left Tilt	0	RMC 12.2K	DSI1	N/A	N/A	4183/836.6	25.50	24.29	0.108	-0.020	1.32	0.143	/
		Right Cheek	0	RMC 12.2K	DSI1	N/A	N/A	4183/836.6	25.50	24.29	0.192	0.080	1.32	0.254	/
		Right Tilt	0	RMC 12.2K	DSI1	N/A	N/A	4183/836.6	25.50	24.29	0.105	0.020	1.32	0.139	/
	(Upper)	Left Cheek	0	RMC 12.2K	DSI1	N/A	N/A	4183/836.6	25.50	24.04	0.486	-0.010	1.40	0.680	/
		Left Tilt	0	RMC 12.2K	DSI1	N/A	N/A	4183/836.6	25.50	24.04	0.437	-0.200	1.40	0.612	/
		Right Cheek	0	RMC 12.2K	DSI1	N/A	N/A	4183/836.6	25.50	24.04	0.713	0.030	1.40	0.998	28
		Right Cheek	0	RMC 12.2K	DSI1	N/A	N/A	4132/826.4	25.50	24.08	0.516	0.076	1.39	0.716	/
		Right Cheek	0	RMC 12.2K	DSI1	N/A	N/A	4233/846.6	25.50	23.99	0.671	0.010	1.42	0.950	/
		Right Tilt	0	RMC 12.2K	DSI1	N/A	N/A	4183/836.6	25.50	24.04	0.530	0.040	1.40	0.742	/
	(Upper)	Right Cheek Battery2 12G+512G	0	RMC 12.2K	DSI1	N/A	N/A	4183/836.6	25.50	24.04	0.598	-0.033	1.40	0.837	/
LTE 2 (Original)	(Low)	Left Cheek	0	QPSK	DSI1	1	50	19100/1900	25.00	24.44	0.228	-0.093	1.14	0.259	/
			0	QPSK	DSI1	50%	0	19100/1900	24.00	23.63	0.189	0.080	1.09	0.206	/
		Left Tilt	0	QPSK	DSI1	1	50	19100/1900	25.00	24.44	0.083	0.099	1.14	0.094	/
			0	QPSK	DSI1	50%	0	19100/1900	24.00	23.63	0.070	0.047	1.09	0.076	/
		Right Cheek	0	QPSK	DSI1	1	50	19100/1900	25.00	24.44	0.135	0.052	1.14	0.154	/
			0	QPSK	DSI1	50%	0	19100/1900	24.00	23.63	0.113	0.085	1.09	0.123	/
		Right Tilt	0	QPSK	DSI1	1	50	19100/1900	25.00	24.44	0.088	-0.080	1.14	0.100	/
			0	QPSK	DSI1	50%	0	19100/1900	24.00	23.63	0.075	-0.060	1.09	0.082	/
	(Upper)	Left Cheek	0	QPSK	DSI1	1	0	18900/1880	16.50	16.25	0.338	0.082	1.06	0.358	/
			0	QPSK	DSI1	50%	0	18700/1860	16.50	16.04	0.315	0.076	1.11	0.350	/
		Left Tilt	0	QPSK	DSI1	1	0	18900/1880	16.50	16.25	0.472	-0.070	1.06	0.500	/
			0	QPSK	DSI1	50%	0	18700/1860	16.50	16.04	0.436	0.035	1.11	0.485	/
		Right Cheek	0	QPSK	DSI1	1	0	18900/1880	16.50	16.25	0.575	0.018	1.06	0.609	/
			0	QPSK	DSI1	50%	0	18700/1860	16.50	16.04	0.538	0.075	1.11	0.598	/
		Right Tilt	0	QPSK	DSI1	1	0	18900/1880	16.50	16.25	0.836	-0.032	1.06	0.886	29
			0	QPSK	DSI1	1	50	18700/1860	16.50	15.96	0.695	-0.026	1.13	0.787	/
			0	QPSK	DSI1	1	0	19100/1900	16.50	15.75	0.822	0.040	1.19	0.977	/
			0	QPSK	DSI1	50%	0	18700/1860	16.50	16.04	0.718	0.075	1.11	0.798	/
			0	QPSK	DSI1	100%	0	18700/1860	16.50	15.94	0.684	0.019	1.14	0.778	/
			0	QPSK	DSI1	1	0	19100/1900	16.50	15.75	0.815	0.013	1.19	0.969	/
	(Upper)	Right Tilt Repeat	0	QPSK	DSI1	1	0	19100/1900	16.50	15.75	0.815	0.013	1.19	0.969	/
	(Upper)	Right Tilt	0	QPSK	DSI1	1	0	19100/1900	16.50	15.75	0.608	-0.041	1.19	0.723	/

		Battery2 12G+512G													
LTE 5 (Original)	(Low)	Left Cheek	0	QPSK	DSI1	1	25	20450/829	25.50	24.09	0.138	0.080	1.38	0.191	/
			0	QPSK	DSI1	50%	13	20450/829	24.50	23.13	0.114	0.010	1.37	0.156	/
		Left Tilt	0	QPSK	DSI1	1	25	20450/829	25.50	24.09	0.110	0.130	1.38	0.152	/
			0	QPSK	DSI1	50%	13	20450/829	24.50	23.13	0.085	0.020	1.37	0.116	/
		Right Cheek	0	QPSK	DSI1	1	25	20450/829	25.50	24.09	0.185	0.110	1.38	0.256	/
			0	QPSK	DSI1	50%	13	20450/829	24.50	23.13	0.149	0.090	1.37	0.204	/
		Right Tilt	0	QPSK	DSI1	1	25	20450/829	25.50	24.09	0.095	0.020	1.38	0.132	/
			0	QPSK	DSI1	50%	13	20450/829	24.50	23.13	0.076	0.020	1.37	0.105	/
	(Upper)	Left Cheek	0	QPSK	DSI1	1	25	20450/829	25.50	23.88	0.476	-0.050	1.45	0.691	/
			0	QPSK	DSI1	50%	13	20450/829	24.50	22.90	0.385	0.010	1.45	0.556	/
		Left Tilt	0	QPSK	DSI1	1	25	20450/829	25.50	23.88	0.375	0.020	1.45	0.545	/
			0	QPSK	DSI1	50%	13	20450/829	24.50	22.90	0.304	-0.030	1.45	0.439	/
		Right Cheek	0	QPSK	DSI1	1	25	20450/829	25.50	23.88	0.666	-0.050	1.45	0.967	30
			0	QPSK	DSI1	1	0	20525/836.5	25.50	23.83	0.409	-0.110	1.47	0.601	/
			0	QPSK	DSI1	1	25	20600/844	25.50	23.82	0.458	-0.010	1.47	0.674	/
			0	QPSK	DSI1	50%	13	20450/829	24.50	22.90	0.584	0.120	1.45	0.844	/
			0	QPSK	DSI1	50%	25	20525/836.5	24.50	22.87	0.348	0.030	1.46	0.506	/
			0	QPSK	DSI1	50%	13	20600/844	24.50	22.84	0.370	-0.010	1.47	0.542	/
			0	QPSK	DSI1	100%	0	20450/829	24.50	22.94	0.313	-0.070	1.43	0.448	/
			0	QPSK	DSI1	1	25	20450/829	25.50	23.88	0.548	0.040	1.45	0.796	/
		Right Tilt	0	QPSK	DSI1	50%	13	20450/829	24.50	22.90	0.471	-0.050	1.45	0.681	/
			0	QPSK	DSI1	50%	13	20450/829	24.50	22.90	0.471	-0.050	1.45	0.681	/
	(Upper)	Right Cheek Battery2 12G+512G	0	QPSK	DSI1	1	25	20450/829	25.50	23.88	0.493	0.044	1.45	0.716	/
LTE 7 (Original)	(Low)	Left Cheek	0	QPSK	DSI1	1	50	20850/2510	25.50	24.82	0.394	0.042	1.17	0.461	/
			0	QPSK	DSI1	50%	25	20850/2510	24.50	24.01	0.334	0.021	1.12	0.374	/
		Left Tilt	0	QPSK	DSI1	1	50	20850/2510	25.50	24.82	0.156	0.140	1.17	0.182	/
			0	QPSK	DSI1	50%	25	20850/2510	24.50	24.01	0.091	0.058	1.12	0.102	/
		Right Cheek	0	QPSK	DSI1	1	50	20850/2510	25.50	24.82	0.301	0.045	1.17	0.352	/
			0	QPSK	DSI1	50%	25	20850/2510	24.50	24.01	0.146	0.068	1.12	0.163	/
		Right Tilt	0	QPSK	DSI1	1	50	20850/2510	25.50	24.82	0.238	0.040	1.17	0.278	/
			0	QPSK	DSI1	50%	25	20850/2510	24.50	24.01	0.156	0.043	1.12	0.175	/
	(Upper)	Left Cheek	0	QPSK	DSI1	1	0	21100/2535	18.00	17.55	0.315	0.170	1.11	0.349	/
			0	QPSK	DSI1	50%	25	21100/2535	18.00	17.29	0.303	0.057	1.18	0.357	/
		Left Tilt	0	QPSK	DSI1	1	0	21100/2535	18.00	17.55	0.373	0.043	1.11	0.414	/
			0	QPSK	DSI1	50%	25	21100/2535	18.00	17.29	0.360	0.058	1.18	0.424	/
		Right Cheek	0	QPSK	DSI1	1	0	21100/2535	18.00	17.55	0.587	0.075	1.11	0.651	/
			0	QPSK	DSI1	50%	25	21100/2535	18.00	17.29	0.567	0.080	1.18	0.668	/
		Right Tilt	0	QPSK	DSI1	1	0	21100/2535	18.00	17.55	0.716	0.045	1.11	0.794	/
			0	QPSK	DSI1	50%	25	21100/2535	18.00	17.29	0.745	0.120	1.18	0.877	31
			0	QPSK	DSI1	50%	25	20850/2510	18.00	17.14	0.671	0.040	1.22	0.818	/

			0	QPSK	DSI1	50%	25	21350/2560	18.00	17.27	0.587	0.050	1.18	0.694	/
			0	QPSK	DSI1	100%	0	21350/2560	18.00	17.22	0.706	-0.028	1.20	0.845	/
	(Upper)	Right Tilt Battery2 12G+512G	0	QPSK	DSI1	50%	25	21100/2535	18.00	17.29	0.462	0.096	1.18	0.544	/
			0	QPSK	DSI1	50%	25	21100/2535	18.00	17.29	0.462	0.096	1.18	0.544	/
LTE 12 (Original)	(Low)	Left Cheek	0	QPSK	DSI1	1	49	23060/704	25.50	24.04	0.127	0.080	1.40	0.178	/
			0	QPSK	DSI1	50%	25	23130/711	24.50	23.08	0.102	0.010	1.39	0.141	/
		Left Tilt	0	QPSK	DSI1	1	49	23060/704	25.50	24.04	0.081	-0.080	1.40	0.113	/
			0	QPSK	DSI1	50%	25	23130/711	24.50	23.08	0.065	0.020	1.39	0.090	/
		Right Cheek	0	QPSK	DSI1	1	49	23060/704	25.50	24.04	0.147	0.080	1.40	0.206	/
			0	QPSK	DSI1	50%	25	23130/711	24.50	23.08	0.112	0.080	1.39	0.155	/
		Right Tilt	0	QPSK	DSI1	1	49	23060/704	25.50	24.04	0.088	0.020	1.40	0.123	/
			0	QPSK	DSI1	50%	25	23130/711	24.50	23.08	0.071	0.030	1.39	0.098	/
	(Upper)	Left Cheek	0	QPSK	DSI1	1	49	23060/704	25.50	24.70	0.309	0.000	1.20	0.371	/
			0	QPSK	DSI1	50%	25	23130/711	24.50	23.79	0.280	0.040	1.18	0.330	/
		Left Tilt	0	QPSK	DSI1	1	49	23060/704	25.50	24.70	0.247	0.000	1.20	0.297	/
			0	QPSK	DSI1	50%	25	23130/711	24.50	23.79	0.223	0.020	1.18	0.263	/
		Right Cheek	0	QPSK	DSI1	1	49	23060/704	25.50	24.70	0.484	0.020	1.20	0.582	32
			0	QPSK	DSI1	50%	25	23130/711	24.50	23.79	0.437	0.070	1.18	0.515	/
		Right Tilt	0	QPSK	DSI1	1	49	23060/704	25.50	24.70	0.396	0.050	1.20	0.476	/
			0	QPSK	DSI1	50%	25	23130/711	24.50	23.79	0.357	0.030	1.18	0.420	/
	(Upper)	Right Cheek Battery2 12G+512G	0	QPSK	DSI1	1	49	23060/704	25.50	24.70	0.419	0.011	1.20	0.504	/
LTE 13 (Original)	(Low)	Left Cheek	0	QPSK	DSI1	1	49	23230/782	25.50	24.06	0.089	0.020	1.39	0.123	/
			0	QPSK	DSI1	50%	13	23230/782	24.50	23.16	0.072	0.030	1.36	0.098	/
		Left Tilt	0	QPSK	DSI1	1	25	23230/782	25.50	24.06	0.070	0.060	1.39	0.097	/
			0	QPSK	DSI1	50%	13	23230/782	24.50	23.16	0.057	0.060	1.36	0.077	/
		Right Cheek	0	QPSK	DSI1	1	25	23230/782	25.50	24.06	0.098	0.050	1.39	0.136	/
			0	QPSK	DSI1	50%	13	23230/782	24.50	23.16	0.080	0.030	1.36	0.108	/
		Right Tilt	0	QPSK	DSI1	1	49	23230/782	25.50	24.06	0.056	0.030	1.39	0.078	/
			0	QPSK	DSI1	50%	13	23230/782	24.50	23.16	0.046	0.037	1.36	0.062	/
	(Upper)	Left Cheek	0	QPSK	DSI1	1	25	23230/782	25.50	24.43	0.282	-0.040	1.28	0.361	/
			0	QPSK	DSI1	50%	13	23230/782	24.50	23.51	0.229	0.000	1.26	0.288	/
		Left Tilt	0	QPSK	DSI1	1	25	23230/782	25.50	24.43	0.216	0.030	1.28	0.276	/
			0	QPSK	DSI1	50%	13	23230/782	24.50	23.51	0.175	0.000	1.26	0.220	/
		Right Cheek	0	QPSK	DSI1	1	25	23230/782	25.50	24.43	0.404	0.180	1.28	0.517	33
			0	QPSK	DSI1	50%	13	23230/782	24.50	23.51	0.329	0.200	1.26	0.413	/
		Right Tilt	0	QPSK	DSI1	1	25	23230/782	25.50	24.43	0.302	0.110	1.28	0.386	/
			0	QPSK	DSI1	50%	13	23230/782	24.50	23.51	0.246	0.030	1.26	0.309	/
	(Upper)	Right Cheek Battery2 12G+512G	0	QPSK	DSI1	1	25	23230/782	25.50	24.43	0.282	0.031	1.28	0.361	/

LTE 26 (Original)	(Low)	Left Cheek	0	QPSK	DSI1	1	38	26865/831.5	25.50	24.08	0.156	0.070	1.39	0.216	/
			0	QPSK	DSI1	50%	18	26765/821.5	24.50	23.09	0.114	0.120	1.38	0.158	/
		Left Tilt	0	QPSK	DSI1	1	38	26865/831.5	25.50	24.08	0.109	0.040	1.39	0.151	/
			0	QPSK	DSI1	50%	18	26765/821.5	24.50	23.09	0.082	0.030	1.38	0.113	/
		Right Cheek	0	QPSK	DSI1	1	38	26865/831.5	25.50	24.08	0.176	-0.190	1.39	0.244	/
			0	QPSK	DSI1	50%	18	26765/821.5	24.50	23.09	0.125	0.060	1.38	0.173	/
		Right Tilt	0	QPSK	DSI1	1	38	26865/831.5	25.50	24.08	0.104	0.030	1.39	0.144	/
			0	QPSK	DSI1	50%	18	26765/821.5	24.50	23.09	0.076	0.150	1.38	0.106	/
	(Upper)	Left Cheek	0	QPSK	DSI1	1	38	26765/821.5	25.00	24.20	0.373	-0.020	1.20	0.448	/
			0	QPSK	DSI1	50%	18	26765/821.5	24.50	23.76	0.334	-0.010	1.19	0.396	/
		Left Tilt	0	QPSK	DSI1	1	38	26765/821.5	25.00	24.20	0.324	0.020	1.20	0.390	/
			0	QPSK	DSI1	50%	18	26765/821.5	24.50	23.76	0.284	0.000	1.19	0.337	/
		Right Cheek	0	QPSK	DSI1	1	38	26765/821.5	25.00	24.20	0.518	-0.050	1.20	0.623	34
			0	QPSK	DSI1	50%	18	26765/821.5	24.50	23.76	0.454	0.050	1.19	0.538	/
		Right Tilt	0	QPSK	DSI1	1	38	26765/821.5	25.00	24.20	0.377	0.010	1.20	0.453	/
			0	QPSK	DSI1	50%	18	26765/821.5	24.50	23.76	0.333	0.030	1.19	0.395	/
	(Upper)	Right Cheek Battery2 12G+512G	0	QPSK	DSI1	1	38	26765/821.5	25.00	24.20	0.397	0.077	1.20	0.477	/
LTE 38 (Original)	(Upper)	Left Cheek	0	QPSK	DSI1	1	50	37850/2580	22.50	22.03	0.431	0.057	1.11	0.480	/
			0	QPSK	DSI1	50%	25	37850/2580	22.50	22.06	0.427	0.084	1.11	0.473	/
		Left Tilt	0	QPSK	DSI1	1	50	37850/2580	22.50	22.03	0.510	0.096	1.11	0.568	/
			0	QPSK	DSI1	50%	25	37850/2580	22.50	22.06	0.577	0.070	1.11	0.639	/
		Right Cheek	0	QPSK	DSI1	1	50	37850/2580	22.50	22.03	0.717	0.050	1.11	0.799	/
			0	QPSK	DSI1	50%	25	37850/2580	22.50	22.06	0.709	0.040	1.11	0.785	/
		Right Tilt	0	QPSK	DSI1	1	50	37850/2580	22.50	22.03	0.923	-0.090	1.11	1.028	35
			0	QPSK	DSI1	1	50	38000/2595	22.50	21.83	0.857	0.052	1.17	1.000	/
			0	QPSK	DSI1	1	0	38150/2610	22.50	21.56	0.755	0.052	1.24	0.937	/
			0	QPSK	DSI1	50%	25	37850/2580	22.50	22.06	0.910	0.014	1.11	1.007	/
			0	QPSK	DSI1	50%	25	38000/2595	22.50	21.93	0.849	0.150	1.14	0.968	/
			0	QPSK	DSI1	50%	25	38150/2610	22.50	21.63	0.782	-0.055	1.22	0.955	/
			0	QPSK	DSI1	100%	0	37850/2580	22.50	22.08	0.880	0.026	1.10	0.969	/
			0	QPSK	DSI1	100%	0	38000/2595	22.50	21.90	0.856	0.120	1.15	0.983	/
			0	QPSK	DSI1	100%	0	38150/2610	22.50	21.59	0.760	0.020	1.23	0.937	/
		Right Tilt Repeat	0	QPSK	DSI1	1	50	37850/2580	22.50	22.03	0.917	0.015	1.11	1.022	/
	(Upper)	Right Tilt Battery2 12G+512G	0	QPSK	DSI1	1	50	37850/2580	22.50	22.03	0.645	0.025	1.11	0.719	/
LTE 41	(Low)	Left Cheek	0	QPSK	DSI1	1	50	41055/2636.5	25.50	24.32	0.073	0.021	1.31	0.096	/
			0	QPSK	DSI1	50%	25	41055/2636.5	24.50	23.46	0.058	0.042	1.27	0.073	/
		Left Tilt	0	QPSK	DSI1	1	50	41055/2636.5	25.50	24.32	0.052	0.101	1.31	0.068	/
			0	QPSK	DSI1	50%	25	41055/2636.5	24.50	23.46	0.041	0.118	1.27	0.053	/

		Right Cheek	0	QPSK	DSI1	1	50	41055/2636.5	25.50	24.32	0.060	-0.021	1.31	0.079	/
			0	QPSK	DSI1	50%	25	41055/2636.5	24.50	23.46	0.069	0.189	1.27	0.088	/
		Right Tilt	0	QPSK	DSI1	1	50	41055/2636.5	25.50	24.32	0.048	0.095	1.31	0.063	/
			0	QPSK	DSI1	50%	25	41055/2636.5	24.50	23.46	0.062	0.031	1.27	0.079	/
	(Upper)	Left Cheek	0	QPSK	DSI1	1	50	40185/2549.5	20.00	19.30	0.302	0.170	1.17	0.355	/
			0	QPSK	DSI1	50%	50	40185/2549.5	20.00	19.24	0.292	0.028	1.19	0.348	/
		Left Tilt	0	QPSK	DSI1	1	50	40185/2549.5	20.00	19.30	0.374	0.160	1.17	0.439	/
			0	QPSK	DSI1	50%	50	40185/2549.5	20.00	19.24	0.356	0.079	1.19	0.424	/
		Right Cheek	0	QPSK	DSI1	1	50	40185/2549.5	20.00	19.30	0.613	-0.100	1.17	0.720	/
			0	QPSK	DSI1	50%	50	40185/2549.5	20.00	19.24	0.625	0.047	1.19	0.745	/
		Right Tilt	0	QPSK	DSI1	1	50	40185/2549.5	20.00	19.30	0.752	-0.040	1.17	0.884	36
			0	QPSK	DSI1	1	50	40620/2593	20.00	19.28	0.577	0.010	1.18	0.681	/
			0	QPSK	DSI1	1	50	41490/2680	20.00	18.36	0.297	0.076	1.46	0.433	/
			0	QPSK	DSI1	50%	50	40185/2549.5	20.00	19.24	0.735	0.047	1.19	0.876	/
			0	QPSK	DSI1	50%	25	40620/2593	20.00	19.21	0.406	0.100	1.20	0.487	/
			0	QPSK	DSI1	50%	25	41490/2680	20.00	18.26	0.359	0.090	1.49	0.536	/
			0	QPSK	DSI1	100%	0	40620/2593	20.00	19.26	0.545	0.090	1.19	0.646	/
			0	QPSK	DSI1	1	50	40185/2549.5	20.00	19.30	0.615	-0.012	1.17	0.723	/
			0	QPSK	DSI1	1	50	40185/2549.5	20.00	19.30	0.615	-0.012	1.17	0.723	/
			0	QPSK	DSI1	1	50	40185/2549.5	20.00	19.30	0.615	-0.012	1.17	0.723	/
LTE 66 (Original)	(Low)	Left Cheek	0	QPSK	DSI1	1	50	132072/1720	25.50	25.20	0.145	-0.190	1.07	0.155	/
			0	QPSK	DSI1	50%	25	132072/1720	24.50	24.33	0.118	-0.065	1.04	0.123	/
		Left Tilt	0	QPSK	DSI1	1	50	132072/1720	25.50	25.20	0.078	0.077	1.07	0.084	/
			0	QPSK	DSI1	50%	25	132072/1720	24.50	24.33	0.066	-0.075	1.04	0.069	/
		Right Cheek	0	QPSK	DSI1	1	50	132072/1720	25.50	25.20	0.079	0.086	1.07	0.085	/
			0	QPSK	DSI1	50%	25	132072/1720	24.50	24.33	0.064	0.063	1.04	0.067	/
		Right Tilt	0	QPSK	DSI1	1	50	132072/1720	25.50	25.20	0.057	0.095	1.07	0.061	/
			0	QPSK	DSI1	50%	25	132072/1720	24.50	24.33	0.047	0.180	1.04	0.049	/
	(Upper)	Left Cheek	0	QPSK	DSI1	1	50	132072/1720	19.00	18.37	0.314	0.023	1.16	0.363	/
			0	QPSK	DSI1	50%	25	132072/1720	19.00	18.57	0.327	0.057	1.10	0.361	/
		Left Tilt	0	QPSK	DSI1	1	50	132072/1720	19.00	18.37	0.450	0.010	1.16	0.520	/
			0	QPSK	DSI1	50%	25	132072/1720	19.00	18.57	0.407	0.019	1.10	0.449	/
		Right Cheek	0	QPSK	DSI1	1	50	132072/1720	19.00	18.37	0.769	-0.019	1.16	0.889	/
			0	QPSK	DSI1	1	0	132322/1745	19.00	18.27	0.627	-0.050	1.18	0.742	/
			0	QPSK	DSI1	1	50	132572/1770	19.00	18.05	0.493	-0.030	1.24	0.614	/
			0	QPSK	DSI1	50%	25	132072/1720	19.00	18.57	0.842	0.040	1.10	0.930	/
			0	QPSK	DSI1	50%	25	132322/1745	19.00	18.34	0.600	-0.060	1.16	0.698	/
			0	QPSK	DSI1	50%	25	132572/1770	19.00	18.18	0.502	-0.010	1.21	0.606	/
		Right Tilt	0	QPSK	DSI1	1	50	132072/1720	19.00	18.37	0.921	0.080	1.16	1.065	/
			0	QPSK	DSI1	1	0	132322/1745	19.00	18.27	0.803	0.020	1.18	0.950	/
			0	QPSK	DSI1	1	50	132572/1770	19.00	18.05	0.644	0.010	1.24	0.801	/
			0	QPSK	DSI1	50%	25	132072/1720	19.00	18.57	0.970	0.030	1.10	1.071	37
			0	QPSK	DSI1	50%	25	132322/1745	19.00	18.34	0.776	-0.010	1.16	0.903	/

			0	QPSK	DSI1	50%	25	132572/1770	19.00	18.18	0.656	-0.030	1.21	0.792	/
			0	QPSK	DSI1	100%	0	132072/1720	19.00	18.42	0.930	0.050	1.14	1.063	/
			0	QPSK	DSI1	100%	0	132322/1745	19.00	18.27	0.724	-0.150	1.18	0.857	/
			0	QPSK	DSI1	100%	0	132572/1770	19.00	18.03	0.609	-0.070	1.25	0.761	/
	(Upper)	Right Tilt Repeat	0	QPSK	DSI1	50%	25	132072/1720	19.00	18.57	0.958	0.013	1.10	1.058	/
		Right Tilt Battery2 12G+512G	0	QPSK	DSI1	50%	25	132072/1720	19.00	18.57	0.724	-0.088	1.10	0.799	/

Band	Antenna	Test Position	Dist. (mm)	Mode	Duty Cycle	Power Reduction	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g (W/Kg)	Power Drift (dB)	Scaling Factor	Report SAR1g (W/kg)	Plot No.
2.4G (Original)	Wi-Fi	Left Cheek	0	802.11b	100.0%	Receiver on	6/2437	19.00	17.45	0.534	0.042	1.43	0.763	38
		Left Cheek	0	802.11b	100.0%	Receiver on	6/2437	19.00	17.45	0.464	-0.180	1.43	0.663	/
		Right Cheek	0	802.11b	100.0%	Receiver on	6/2437	19.00	17.45	0.243	0.014	1.43	0.347	/
		Right Tilt	0	802.11b	100.0%	Receiver on	6/2437	19.00	17.45	0.292	-0.020	1.43	0.417	/
		Left Cheek Battery2 12G+512G	0	802.11b	100.0%	Receiver on	6/2437	19.00	17.45	0.382	0.180	1.43	0.546	/
U-NII-1 (Original)	Wi-Fi	Left Cheek	0	802.11b	97.4%	Receiver on	48/5240	17.00	16.30	0.584	0.130	1.21	0.704	/
		Left Tilt	0	802.11a	97.4%	Receiver on	48/5240	17.00	16.30	0.521	0.057	1.21	0.628	/
		Right Cheek	0	802.11a	97.4%	Receiver on	48/5240	17.00	16.30	0.257	0.096	1.21	0.310	/
		Right Tilt	0	802.11a	97.4%	Receiver on	48/5240	17.00	16.30	0.284	0.190	1.21	0.342	/
		Left Cheek Battery2 12G+512G	0	802.11a	97.4%	Receiver on	48/5240	17.00	16.30	0.646	0.120	1.21	0.779	/
U-NII-2A (Original)	Wi-Fi	Left Cheek	0	802.11a	97.4%	Receiver on	52/5260	17.00	16.56	0.658	0.120	1.14	0.748	/
		Left Tilt	0	802.11a	97.4%	Receiver on	52/5260	17.00	16.56	0.702	-0.010	1.14	0.798	39
		Right Cheek	0	802.11a	97.4%	Receiver on	52/5260	17.00	16.56	0.272	-0.110	1.14	0.309	/
		Right Tilt	0	802.11a	97.4%	Receiver on	52/5260	17.00	16.56	0.294	0.052	1.14	0.334	/
		Left Tilt Battery2 12G+512G	0	802.11a	97.4%	Receiver on	52/5260	17.00	16.56	0.596	0.140	1.14	0.677	/
U-NII-2C (Original)	Wi-Fi	Left Cheek	0	802.11a	97.4%	Receiver on	120/5600	15.50	14.83	0.698	-0.033	1.20	0.836	/
		Left Cheek	0	802.11a	97.4%	Receiver on	140/5700	15.50	14.53	0.530	0.110	1.28	0.680	/

SAR Test Report
Report No.: R2309A0988-S1

		Left Cheek	0	802.11a	97.4%	Receiver on	144/5720	15.50	13.76	0.425	0.110	1.53	0.652	/
		Left Tilt	0	802.11a	97.4%	Receiver on	120/5600	15.50	14.83	0.642	0.067	1.20	0.769	/
		Right Cheek	0	802.11a	97.4%	Receiver on	120/5600	15.50	14.83	0.324	0.080	1.20	0.388	/
		Right Tilt	0	802.11a	97.4%	Receiver on	120/5600	15.50	14.83	0.346	0.036	1.20	0.414	/
		Left Cheek Battery2 12G+512G	0	802.11a	97.4%	Receiver on	120/5600	15.50	14.83	0.522	0.074	1.20	0.625	/
U-NII-3 (Original)	Wi-Fi	Left Cheek	0	802.11a	97.4%	Receiver on	165/5825	15.50	14.90	0.571	0.067	1.18	0.673	/
		Left Tilt	0	802.11a	97.4%	Receiver on	165/5825	15.50	14.90	0.543	-0.053	1.18	0.640	/
		Right Cheek	0	802.11a	97.4%	Receiver on	165/5825	15.50	14.90	0.300	0.057	1.18	0.354	/
		Right Tilt	0	802.11a	97.4%	Receiver on	165/5825	15.50	14.90	0.319	0.089	1.18	0.376	/
		Left Cheek Battery2 12G+512G	0	802.11a	97.4%	Receiver on	165/5825	15.50	14.90	0.422	-0.100	1.18	0.497	/
Bluetooth (Original)	Bluetooth	Left Cheek	0	DH5	76.8%	Full Power	0/2402	12.50	10.89	0.055	0.050	1.89	0.104	40
		Left Tilt	0	DH5	76.8%	Full Power	0/2402	12.50	10.89	0.050	0.024	1.89	0.095	/
		Right Cheek	0	DH5	76.8%	Full Power	0/2402	12.50	10.89	0.031	-0.070	1.89	0.058	/
		Right Tilt	0	DH5	76.8%	Full Power	0/2402	12.50	10.89	0.032	0.120	1.89	0.060	/
		Left Cheek Battery2 12G+512G	0	DH5	76.8%	Full Power	0/2402	12.50	10.89	0.046	0.085	1.89	0.087	/

Body-worn SAR

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	Offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g (W/Kg)	Power Drift (dB)	Scaling Factor	Report SAR1g (W/kg)	Plot No.
GSM 850 (Original)	(Low)	Front Side	15	GSM	DSI2	N/A	N/A	190/836.6	33.50	32.70	0.287	0.050	1.20	0.345	41
	(Upper)	Front Side	15	GSM	DSI2	N/A	N/A	190/836.6	33.50	32.15	0.129	-0.043	1.36	0.176	/
	(Low)	Front Side Battery2 12G+512G	15	GSM	DSI2	N/A	N/A	190/836.6	33.50	32.70	0.071	0.130	1.20	0.085	/
GSM 1900 (Original)	(Low)	Front Side	15	GSM	DSI2	N/A	N/A	661/1880	30.50	29.34	0.202	0.030	1.31	0.264	/
	(Upper)	Front Side	15	GSM	DSI2	N/A	N/A	661/1880	28.50	26.79	0.285	0.130	1.48	0.423	42
	(Upper)	Front Side Battery2 12G+512G	15	GSM	DSI2	N/A	N/A	661/1880	28.50	26.79	0.253	0.032	1.48	0.375	/
WCDMA II (Original)	(Low)	Front Side	15	RMC	DSI2	N/A	N/A	9400/1880	23.50	22.43	0.504	-0.050	1.28	0.645	/
	(Upper)	Front Side	15	RMC	DSI2	N/A	N/A	9400/1880	23.50	22.90	0.346	0.080	1.15	0.397	/
	(Low)	Front Side SIM2	15	RMC	DSI2	N/A	N/A	9400/1880	23.50	22.69	0.545	0.130	1.21	0.657	43
		Front Side 12G+256G	15	RMC	DSI2	N/A	N/A	9400/1880	23.50	22.69	0.277	0.063	1.21	0.334	/
		Front Side Battery2 12G+512G	15	RMC	DSI2	N/A	N/A	9400/1880	23.50	22.69	0.338	0.180	1.21	0.407	/
		Front Side Battery2 8G+128G	15	RMC	DSI2	N/A	N/A	9400/1880	23.50	22.69	0.540	0.110	1.21	0.651	/
		Front Side 2nd supplier screen	15	RMC	DSI2	N/A	N/A	9400/1880	23.50	22.69	0.472	0.020	1.21	0.569	/
WCDMA IV (Original)	(Low)	Front Side	15	RMC	DSI2	N/A	N/A	1413/1732.6	24.00	22.43	0.278	0.031	1.44	0.399	/
	(Upper)	Front Side	15	RMC	DSI2	N/A	N/A	1413/1732.6	25.50	24.65	0.348	0.160	1.22	0.423	44
	(Upper)	Front Side Battery2 12G+512G	15	RMC	DSI2	N/A	N/A	1413/1732.6	25.50	24.65	0.290	0.110	1.22	0.353	/
LTE 2 (Original)	(Low)	Front Side	15	QPSK	DSI2	1	50	19100/1900	25.00	24.44	0.236	0.150	1.14	0.268	/
			15	QPSK	DSI2	50%	0	19100/1900	24.00	23.63	0.202	0.170	1.09	0.220	/
	(Upper)	Front Side	15	QPSK	DSI2	1	50	19100/1900	24.00	23.30	0.504	-0.026	1.17	0.592	45
			15	QPSK	DSI2	50%	25	19100/1900	24.00	23.48	0.380	-0.040	1.13	0.428	/
	(Upper)	Front Side Battery2 12G+512G	15	QPSK	DSI2	1	50	19100/1900	24.00	23.30	0.434	0.100	1.17	0.510	/
LTE 5 (Original)	(Upper)	Front Side	15	QPSK	DSI2	1	25	20450/829	25.50	23.88	0.102	-0.040	1.45	0.148	46
			15	QPSK	DSI2	50%	13	20450/829	24.50	22.90	0.044	-0.100	1.45	0.064	/
	(Upper)	Front Side	15	QPSK	DSI2	1	25	20450/829	25.50	23.88	0.076	0.160	1.45	0.110	/

		Battery2 12G+512G													
LTE 7 (Original)	(Low)	Front Side	15	QPSK	DSI2	1	50	20850/2510	25.50	24.82	0.474	0.039	1.17	0.554	47
			15	QPSK	DSI2	50%	25	20850/2510	24.50	24.01	0.438	0.090	1.12	0.490	/
	(Upper)	Front Side	15	QPSK	DSI2	1	99	20850/2510	25.50	25.24	0.262	0.044	1.06	0.278	/
			15	QPSK	DSI2	50%	0	21350/2560	24.50	24.32	0.266	0.050	1.04	0.277	/
	(Low)	Front Side Battery2 12G+512G	15	QPSK	DSI2	1	50	20850/2510	25.50	24.82	0.391	0.110	1.17	0.457	/
LTE 26 (Original)	(Low)	Front Side	15	QPSK	DSI2	1	38	26865/831.5	25.50	24.08	0.151	0.041	1.39	0.209	48
			15	QPSK	DSI2	50%	18	26765/821.5	24.50	23.09	0.120	0.040	1.38	0.166	/
	(Upper)	Front Side	15	QPSK	DSI2	1	38	26765/821.5	25.50	23.88	0.066	0.090	1.45	0.096	/
			15	QPSK	DSI2	50%	18	26765/821.5	24.50	22.87	0.052	0.050	1.46	0.076	/
	(Low)	Front Side Battery2 12G+512G	15	QPSK	DSI2	1	38	26865/831.5	25.50	24.08	0.140	0.016	1.39	0.194	/
LTE 41 TDD (Original)	(Low)	Front Side	15	QPSK	DSI2	1	50	41055/2636.5	25.50	24.32	0.215	0.048	1.31	0.282	49
			15	QPSK	DSI2	50%	25	41055/2636.5	24.50	23.46	0.192	0.020	1.27	0.244	/
	(Upper)	Front Side	15	QPSK	DSI2	1	50	40620/2593	25.50	25.01	0.147	0.025	1.12	0.165	/
			15	QPSK	DSI2	50%	50	40185/2549.5	24.50	24.13	0.146	0.013	1.09	0.159	/
	(Low)	Front Side Battery2 12G+512G	15	QPSK	DSI2	1	50	41055/2636.5	25.50	24.32	0.125	0.052	1.31	0.164	/
LTE 66 (Original)	(Low)	Front Side	15	QPSK	DSI2	1	0	132072/1720	24.50	23.82	0.479	0.025	1.17	0.560	50
			15	QPSK	DSI2	50%	0	132072/1720	24.50	24.06	0.391	0.025	1.11	0.433	/
	(Upper)	Front Side	15	QPSK	DSI2	1	50	132072/1720	25.50	24.86	0.410	0.067	1.16	0.475	/
			15	QPSK	DSI2	50%	25	132072/1720	24.50	24.09	0.336	0.150	1.10	0.369	/
	(Low)	Front Side Battery2 12G+512G	15	QPSK	DSI2	1	0	132072/1720	24.50	23.82	0.367	0.059	1.17	0.429	/

Band	Antenna	Test Position	Dist. (mm)	Mode	Duty Cycle	Power Reduction	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g (W/Kg)	Power Drift (dB)	Scaling Factor	Report SAR1g (W/kg)	Plot No.
U-NII-2A (Original)	Wi-Fi	Back Side	15	802.11a	97.4%	Receiver off	56/5280	18.50	17.78	0.141	-0.041	1.21	0.171	/
		Front Side	15	802.11a	97.4%	Receiver off	56/5280	18.50	17.78	0.106	0.150	1.21	0.129	/
		Back Side Battery2 12G+512G	15	802.11a	97.4%	Receiver off	56/5280	18.50	17.78	0.230	0.085	1.21	0.279	51
U-NII-2C (Original)	Wi-Fi	Back Side	15	802.11a	97.4%	Receiver off	120/5600	18.50	17.55	0.221	-0.063	1.28	0.282	/
		Front Side	15	802.11a	97.4%	Receiver off	120/5600	18.50	17.55	0.174	-0.057	1.28	0.222	/
		Back Side Battery2 12G+512G	15	802.11a	97.4%	Receiver off	120/5600	18.50	17.55	0.203	0.071	1.28	0.259	/

Hotspot SAR

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	Offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g (W/Kg)	Power Drift (dB)	Scaling Factor	Report SAR1g (W/kg)	Plot No.
GSM850 (Original)	(Low)	Back Side	10	GPRS 4TX Slots	DSI4	N/A	N/A	190/836.6	27.50	26.97	0.307	-0.160	1.13	0.347	52
		Front Side	10	GPRS 4TX Slots	DSI4	N/A	N/A	190/836.6	27.50	26.97	0.292	0.026	1.13	0.330	/
		Left Edge	10	GPRS 4TX Slots	DSI2	N/A	N/A	190/836.6	27.50	26.97	0.143	0.020	1.13	0.162	/
		Right Edge	10	GPRS 4TX Slots	DSI2	N/A	N/A	190/836.6	27.50	26.97	0.234	0.010	1.13	0.264	/
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
		Bottom Edge	10	GPRS 4TX Slots	DSI4	N/A	N/A	190/836.6	27.50	26.97	0.147	-0.030	1.13	0.166	/
		Back Side	10	CS	DSI4	N/A	N/A	190/836.6	33.50	32.70	0.194	0.100	1.20	0.233	/
	(Upper)	Back Side	10	GPRS 4TX Slots	DSI4	N/A	N/A	190/836.6	26.50	25.50	0.109	0.015	1.26	0.137	/
		Front Side	10	GPRS 4TX Slots	DSI4	N/A	N/A	190/836.6	26.50	25.50	0.102	0.011	1.26	0.128	/
		Left Edge	10	GPRS 4TX Slots	DSI2	N/A	N/A	190/836.6	27.50	26.47	0.045	0.031	1.27	0.057	/
		Right Edge	10	GPRS 4TX Slots	DSI2	N/A	N/A	190/836.6	27.50	26.47	0.063	-0.020	1.27	0.080	/
		Top Edge	10	GPRS 4TX Slots	DSI4	N/A	N/A	190/836.6	26.50	25.50	0.136	0.040	1.26	0.171	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
		Back Side	10	CS	DSI4	N/A	N/A	190/836.6	32.50	31.43	0.065	0.015	1.28	0.083	/
	(Low)	Back Side Battery2 12G+512G	10	GPRS 4TX Slots	DSI4	N/A	N/A	190/836.6	27.50	26.97	0.170	0.052	1.13	0.192	/
GSM1900 (Original)	(Low)	Back Side	10	GPRS 4TX Slots	DSI4	N/A	N/A	661/1880	20.00	18.76	0.288	0.190	1.33	0.383	/
		Front Side	10	GPRS 4TX Slots	DSI4	N/A	N/A	661/1880	20.00	18.76	0.249	0.025	1.33	0.331	/
		Left Edge	10	GPRS 4TX Slots	DSI2	N/A	N/A	661/1880	24.50	23.30	0.234	0.060	1.32	0.308	/
		Right Edge	10	GPRS 4TX Slots	DSI2	N/A	N/A	661/1880	24.50	23.30	0.001	0.010	1.32	0.001	/
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
		Bottom Edge	10	GPRS 4TX Slots	DSI4	N/A	N/A	661/1880	20.00	18.76	0.390	-0.170	1.33	0.519	/
		Back Side	10	CS	DSI4	N/A	N/A	661/1880	26.00	25.02	0.266	0.100	1.25	0.333	/
	(Upper)	Back Side	10	GPRS 4TX Slots	DSI4	N/A	N/A	661/1880	20.00	18.39	0.275	0.047	1.45	0.398	/
		Front Side	10	GPRS 4TX Slots	DSI4	N/A	N/A	661/1880	20.00	18.39	0.294	0.065	1.45	0.426	/
		Left Edge	10	GPRS 4TX Slots	DSI2	N/A	N/A	661/1880	24.50	22.63	0.173	0.021	1.54	0.266	/
		Right Edge	10	GPRS 4TX Slots	DSI2	N/A	N/A	661/1880	24.50	22.63	0.047	0.014	1.54	0.072	/
		Top Edge	10	GPRS 4TX Slots	DSI4	N/A	N/A	661/1880	20.00	18.39	0.547	-0.140	1.45	0.792	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
		Back Side	10	CS	DSI4	N/A	N/A	661/1880	26.00	24.04	0.248	0.030	1.57	0.389	/
	(Upper)	Top Edge Battery2 12G+512G	10	GPRS 4TX Slots	DSI4	N/A	N/A	661/1880	20.00	18.39	0.584	0.130	1.45	0.846	53
WCDMA II (Original)	(Low)	Back Side	10	RMC	DSI4	N/A	N/A	9400/1880	19.00	18.60	0.577	0.062	1.10	0.633	/
		Front Side	10	RMC	DSI4	N/A	N/A	9400/1880	19.00	18.60	0.243	0.020	1.10	0.266	/
		Left Edge	10	RMC	DSI2	N/A	N/A	9400/1880	23.50	22.69	0.516	0.018	1.21	0.622	/
		Right Edge	10	RMC	DSI2	N/A	N/A	9400/1880	23.50	22.69	0.001	0.042	1.21	0.001	/

SAR Test Report
Report No.: R2309A0988-S1

		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/	
		Bottom Edge	10	RMC	DSI4	N/A	N/A	9400/1880	19.00	18.60	0.772	-0.110	1.10	0.846	54
		Bottom Edge	10	RMC	DSI4	N/A	N/A	9262/1852.4	19.00	17.91	0.466	0.026	1.29	0.599	/
		Bottom Edge	10	RMC	DSI4	N/A	N/A	9538/1907.6	19.00	18.76	0.601	0.010	1.06	0.635	/
	(Upper)	Back Side	10	RMC	DSI4	N/A	N/A	9400/1880	18.50	17.35	0.317	0.028	1.30	0.413	/
		Front Side	10	RMC	DSI4	N/A	N/A	9400/1880	18.50	17.35	0.227	0.030	1.30	0.296	/
		Left Edge	10	RMC	DSI2	N/A	N/A	9400/1880	23.50	22.90	0.346	0.015	1.15	0.397	/
		Right Edge	10	RMC	DSI2	N/A	N/A	9400/1880	23.50	22.90	0.110	0.024	1.15	0.126	/
		Top Edge	10	RMC	DSI4	N/A	N/A	9400/1880	18.50	17.35	0.696	-0.070	1.30	0.907	/
		Top Edge	10	RMC	DSI4	N/A	N/A	9262/1852.4	18.50	17.73	0.538	0.062	1.19	0.642	/
		Top Edge	10	RMC	DSI4	N/A	N/A	9538/1907.6	18.50	16.78	0.607	0.014	1.49	0.902	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
	(Upper)	Top Edge Battery2 12G+512G	10	RMC	DSI4	N/A	N/A	9400/1880	18.50	17.35	0.606	0.190	1.30	0.790	/
WCDMA IV (Original)	(Low)	Back Side	10	RMC	DSI4	N/A	N/A	1413/1732.6	20.00	19.50	0.634	0.010	1.12	0.711	/
		Front Side	10	RMC	DSI4	N/A	N/A	1413/1732.6	20.00	19.50	0.652	0.080	1.12	0.732	/
		Left Edge	10	RMC	DSI2	N/A	N/A	1413/1732.6	24.00	22.43	0.262	0.030	1.44	0.376	/
		Right Edge	10	RMC	DSI2	N/A	N/A	1413/1732.6	24.00	22.43	0.001	0.015	1.44	0.001	/
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
		Bottom Edge	10	RMC	DSI4	N/A	N/A	1413/1732.6	20.00	19.50	0.762	-0.024	1.12	0.855	/
		Bottom Edge	10	RMC	DSI4	N/A	N/A	1312/1712.4	20.00	19.38	0.747	0.010	1.15	0.862	/
		Bottom Edge	10	RMC	DSI4	N/A	N/A	1513/1752.6	20.00	19.14	0.778	0.030	1.22	0.948	/
	(Upper)	Back Side	10	RMC	DSI4	N/A	N/A	1413/1732.6	21.00	20.10	0.661	0.010	1.23	0.813	/
		Back Side	10	RMC	DSI4	N/A	N/A	1312/1712.4	21.00	20.20	0.669	0.030	1.20	0.804	/
		Back Side	10	RMC	DSI4	N/A	N/A	1513/1752.6	21.00	20.04	0.524	0.015	1.25	0.654	/
		Front Side	10	RMC	DSI4	N/A	N/A	1413/1732.6	21.00	20.10	0.287	0.014	1.23	0.353	/
		Left Edge	10	RMC	DSI2	N/A	N/A	1413/1732.6	25.50	24.65	0.189	-0.100	1.22	0.230	/
		Right Edge	10	RMC	DSI2	N/A	N/A	1413/1732.6	25.50	24.65	0.105	0.020	1.22	0.128	/
		Top Edge	10	RMC	DSI4	N/A	N/A	1413/1732.6	21.00	20.10	0.745	0.023	1.23	0.917	/
		Top Edge	10	RMC	DSI4	N/A	N/A	1312/1712.4	21.00	20.20	0.844	-0.120	1.20	1.015	55
		Top Edge	10	RMC	DSI4	N/A	N/A	1513/1752.6	21.00	20.04	0.673	-0.015	1.25	0.839	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
	(Upper)	Top Edge Battery2 12G+512G	10	RMC	DSI4	N/A	N/A	1312/1712.4	21.00	20.20	0.518	0.096	1.20	0.623	/
WCDMA V (Original)	(Low)	Back Side	10	RMC	DSI4	N/A	N/A	4183/836.6	25.50	24.29	0.364	0.120	1.32	0.481	56
		Front Side	10	RMC	DSI4	N/A	N/A	4183/836.6	25.50	24.29	0.248	0.032	1.32	0.328	/
		Left Edge	10	RMC	DSI2	N/A	N/A	4183/836.6	25.50	24.29	0.111	0.018	1.32	0.147	/
		Right Edge	10	RMC	DSI2	N/A	N/A	4183/836.6	25.50	24.29	0.103	0.190	1.32	0.136	/
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
		Bottom Edge	10	RMC	DSI4	N/A	N/A	4183/836.6	25.50	24.29	0.204	0.052	1.32	0.270	/
	(Upper)	Back Side	10	RMC	DSI4	N/A	N/A	4183/836.6	25.50	24.04	0.243	-0.036	1.40	0.340	/

SAR Test Report
Report No.: R2309A0988-S1

		Front Side	10	RMC	DSI4	N/A	N/A	4183/836.6	25.50	24.04	0.142	0.180	1.40	0.199	/
		Left Edge	10	RMC	DSI2	N/A	N/A	4183/836.6	25.50	24.04	0.066	-0.047	1.40	0.092	/
		Right Edge	10	RMC	DSI2	N/A	N/A	4183/836.6	25.50	24.04	0.081	0.085	1.40	0.113	/
		Top Edge	10	RMC	DSI4	N/A	N/A	4183/836.6	25.50	24.04	0.185	0.180	1.40	0.259	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
LTE 2 (Original)	(Low)	Back Side	10	RMC	DSI4	N/A	N/A	4183/836.6	25.50	24.29	0.295	0.096	1.32	0.390	/
	(Low)	Back Side	10	QPSK	DSI4	1	50	19100/1900	20.00	19.49	0.437	0.027	1.12	0.491	/
			10	QPSK	DSI4	50%	0	19100/1900	20.00	19.69	0.475	0.013	1.07	0.510	/
		Front Side	10	QPSK	DSI4	1	50	19100/1900	20.00	19.49	0.163	0.019	1.12	0.183	/
			10	QPSK	DSI4	50%	0	19100/1900	20.00	19.69	0.176	0.040	1.07	0.189	/
		Left Edge	10	QPSK	DSI2	1	50	19100/1900	25.00	24.44	0.363	0.061	1.14	0.413	/
			10	QPSK	DSI2	50%	0	19100/1900	24.00	23.63	0.287	0.011	1.09	0.313	/
		Right Edge	10	QPSK	DSI2	1	50	19100/1900	25.00	24.44	0.001	0.024	1.14	0.001	/
			10	QPSK	DSI2	50%	0	19100/1900	24.00	23.63	0.001	-0.100	1.09	0.001	/
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
		Bottom Edge	10	QPSK	DSI4	1	50	19100/1900	20.00	19.49	0.486	0.030	1.12	0.547	/
			10	QPSK	DSI4	50%	0	19100/1900	20.00	19.69	0.588	0.070	1.07	0.632	/
	(Upper)	Back Side	10	QPSK	DSI4	1	50	18700/1860	18.50	17.91	0.325	0.014	1.15	0.372	/
			10	QPSK	DSI4	50%	25	18700/1860	18.50	17.98	0.304	0.060	1.13	0.343	/
		Front Side	10	QPSK	DSI4	1	50	18700/1860	18.50	17.91	0.231	-0.100	1.15	0.265	/
			10	QPSK	DSI4	50%	25	18700/1860	18.50	17.98	0.231	0.026	1.13	0.260	/
		Left Edge	10	QPSK	DSI2	1	50	19100/1900	24.00	23.30	0.327	0.011	1.17	0.384	/
			10	QPSK	DSI2	50%	25	19100/1900	24.00	23.48	0.252	0.070	1.13	0.284	/
		Right Edge	10	QPSK	DSI2	1	50	19100/1900	24.00	23.30	0.084	0.014	1.17	0.099	/
			10	QPSK	DSI2	50%	25	19100/1900	24.00	23.48	0.073	0.026	1.13	0.082	/
		Top Edge	10	QPSK	DSI4	1	50	18700/1860	18.50	17.91	0.640	0.020	1.15	0.733	57
			10	QPSK	DSI4	50%	25	18700/1860	18.50	17.98	0.636	-0.018	1.13	0.717	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
	(Upper)	Top Edge	10	QPSK	DSI4	1	50	18700/1860	18.50	17.91	0.639	0.059	1.15	0.732	/
LTE 5 (Original)	(Low)	Back Side	10	QPSK	DSI4	1	25	20450/829	25.50	24.09	0.358	0.060	1.38	0.495	58
			10	QPSK	DSI4	50%	13	20450/829	24.50	23.13	0.288	0.011	1.37	0.395	/
		Front Side	10	QPSK	DSI4	1	25	20450/829	25.50	24.09	0.246	-0.100	1.38	0.340	/
			10	QPSK	DSI4	50%	13	20450/829	24.50	23.13	0.201	0.028	1.37	0.276	/
		Left Edge	10	QPSK	DSI2	1	25	20450/829	25.50	24.09	0.111	0.049	1.38	0.154	/
			10	QPSK	DSI2	50%	13	20450/829	24.50	23.13	0.094	0.010	1.37	0.129	/
		Right Edge	10	QPSK	DSI2	1	25	20450/829	25.50	24.09	0.100	-0.020	1.38	0.138	/
			10	QPSK	DSI2	50%	13	20450/829	24.50	23.13	0.105	0.046	1.37	0.144	/

		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/	
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/	
	Bottom Edge	10	QPSK	DSI4	1	25	20450/829	25.50	24.09	0.236	0.027	1.38	0.327	/		
		10	QPSK	DSI4	50%	13	20450/829	24.50	23.13	0.168	0.014	1.37	0.230	/		
	(Upper)	Back Side	10	QPSK	DSI4	1	25	20450/829	25.00	23.29	0.241	-0.062	1.48	0.357	/	
			10	QPSK	DSI4	50%	13	20450/829	24.50	22.79	0.194	0.080	1.48	0.288	/	
		Front Side	10	QPSK	DSI4	1	25	20450/829	25.00	23.29	0.140	0.100	1.48	0.208	/	
			10	QPSK	DSI4	50%	13	20450/829	24.50	22.79	0.109	0.011	1.48	0.162	/	
		Left Edge	10	QPSK	DSI2	1	25	20450/829	25.50	23.88	0.074	0.027	1.45	0.107	/	
			10	QPSK	DSI2	50%	13	20450/829	24.50	22.90	0.073	-0.036	1.45	0.106	/	
		Right Edge	10	QPSK	DSI2	1	25	20450/829	25.50	23.88	0.074	0.049	1.45	0.107	/	
			10	QPSK	DSI2	50%	13	20450/829	24.50	22.90	0.054	0.020	1.45	0.078	/	
		Top Edge	10	QPSK	DSI4	1	25	20450/829	25.00	23.29	0.170	-0.017	1.48	0.252	/	
			10	QPSK	DSI4	50%	13	20450/829	24.50	22.79	0.168	0.020	1.48	0.249	/	
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
	(Low)	Back Side Battery2 12G+512G	10	QPSK	DSI4	1	25	20450/829	25.50	24.09	0.276	0.014	1.38	0.382	/	

LTE 7 (Original)	(Low)	Back Side	10	QPSK	DSI4	1	50	21100/2535	22.50	22.11	0.698	0.070	1.09	0.764	/	
			10	QPSK	DSI4	50%	25	21100/2535	22.50	22.27	0.701	0.018	1.05	0.739	/	
		Front Side	10	QPSK	DSI4	1	50	21100/2535	22.50	22.11	0.573	0.050	1.09	0.627	/	
			10	QPSK	DSI4	50%	25	21100/2535	22.50	22.27	0.615	0.025	1.05	0.648	/	
		Left Edge	10	QPSK	DSI2	1	50	20850/2510	25.50	24.82	0.301	0.019	1.17	0.352	/	
			10	QPSK	DSI2	50%	25	20850/2510	24.50	24.01	0.329	0.056	1.12	0.368	/	
		Right Edge	10	QPSK	DSI2	1	50	20850/2510	25.50	24.82	0.182	-0.026	1.17	0.213	/	
			10	QPSK	DSI2	50%	25	20850/2510	24.50	24.01	0.141	0.053	1.12	0.158	/	
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
		Bottom Edge	10	QPSK	DSI4	1	50	21100/2535	22.50	22.11	0.714	-0.029	1.09	0.781	/	
			10	QPSK	DSI4	50%	25	21100/2535	22.50	22.27	0.786	0.057	1.05	0.829	/	
			10	QPSK	DSI4	50%	25	20850/2510	22.50	22.23	0.812	-0.020	1.06	0.864	59	
			10	QPSK	DSI4	50%	25	21350/2560	22.50	22.20	0.756	0.012	1.07	0.810	/	
		Bottom Edge	10	QPSK	DSI4	100%	0	21100/2535	22.50	22.15	0.729	0.016	1.08	0.790	/	
		Bottom Edge Repeat	10	QPSK	DSI4	50%	25	20850/2510	22.50	22.23	0.809	0.140	1.06	0.861	/	
	(Upper)	Back Side	10	QPSK	DSI4	1	99	21350/2560	22.00	21.58	0.439	0.026	1.10	0.484	/	
			10	QPSK	DSI4	50%	25	21350/2560	22.00	21.68	0.493	0.060	1.08	0.531	/	
		Front Side	10	QPSK	DSI4	1	99	21350/2560	22.00	21.58	0.227	-0.017	1.10	0.250	/	
			10	QPSK	DSI4	50%	25	21350/2560	22.00	21.68	0.249	0.010	1.08	0.268	/	
		Left Edge	10	QPSK	DSI2	1	99	20850/2510	25.50	25.24	0.347	0.012	1.06	0.368	/	
			10	QPSK	DSI2	50%	0	21350/2560	24.50	24.32	0.253	0.038	1.04	0.264	/	
		Right Edge	10	QPSK	DSI2	1	99	20850/2510	25.50	25.24	0.096	0.032	1.06	0.102	/	
			10	QPSK	DSI2	1	99	20850/2510	25.50	25.24	0.096	0.032	1.06	0.102	/	

			10	QPSK	DSI2	50%	0	21350/2560	24.50	24.32	0.076	0.024	1.04	0.079	/	
		Top Edge	10	QPSK	DSI4	1	99	21350/2560	22.00	21.58	0.532	-0.120	1.10	0.586	/	
			10	QPSK	DSI4	50%	25	21350/2560	22.00	21.68	0.536	0.010	1.08	0.577	/	
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/	
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/	
	(Low)	Bottom Edge Battery2 12G+512G	10	QPSK	DSI4	50%	25	20850/2510	22.50	22.23	0.688	0.180	1.06	0.732	/	
LTE 12 (Original)	(Low)	Back Side	10	QPSK	DSI4	1	49	23060/704	25.50	24.04	0.261	-0.040	1.40	0.365	60	
			10	QPSK	DSI4	50%	25	23130/711	24.50	23.08	0.206	0.029	1.39	0.286	/	
		Front Side	10	QPSK	DSI4	1	49	23060/704	25.50	24.04	0.174	0.033	1.40	0.244	/	
			10	QPSK	DSI4	50%	25	23130/711	24.50	23.08	0.135	0.015	1.39	0.187	/	
		Left Edge	10	QPSK	DSI2	1	49	23060/704	25.50	24.04	0.093	-0.140	1.40	0.130	/	
			10	QPSK	DSI2	50%	25	23130/711	24.50	23.08	0.078	0.035	1.39	0.108	/	
		Right Edge	10	QPSK	DSI2	1	49	23060/704	25.50	24.04	0.179	0.026	1.40	0.251	/	
			10	QPSK	DSI2	50%	25	23130/711	24.50	23.08	0.108	0.075	1.39	0.150	/	
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/	
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/	
		Bottom Edge	10	QPSK	DSI4	1	49	23060/704	25.50	24.04	0.119	0.060	1.40	0.167	/	
			10	QPSK	DSI4	50%	25	23130/711	24.50	23.08	0.095	0.032	1.39	0.132	/	
	(Upper)	Back Side	10	QPSK	DSI4	1	49	23060/704	25.50	24.70	0.202	0.100	1.20	0.243	/	
			10	QPSK	DSI4	50%	25	23130/711	24.50	23.79	0.182	-0.049	1.18	0.214	/	
		Front Side	10	QPSK	DSI4	1	49	23060/704	25.50	24.70	0.102	0.051	1.20	0.123	/	
			10	QPSK	DSI4	50%	25	23130/711	24.50	23.79	0.101	0.100	1.18	0.119	/	
		Left Edge	10	QPSK	DSI2	1	49	23060/704	25.50	24.70	0.079	-0.056	1.20	0.095	/	
			10	QPSK	DSI2	50%	25	23130/711	24.50	23.79	0.063	0.070	1.18	0.074	/	
		Right Edge	10	QPSK	DSI2	1	49	23060/704	25.50	24.70	0.067	0.020	1.20	0.081	/	
			10	QPSK	DSI2	50%	25	23130/711	24.50	23.79	0.064	0.018	1.18	0.075	/	
		Top Edge	10	QPSK	DSI4	1	49	23060/704	25.50	24.70	0.127	0.019	1.20	0.153	/	
			10	QPSK	DSI4	50%	25	23130/711	24.50	23.79	0.125	0.025	1.18	0.147	/	
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/	
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/	
	(Low)	Back Side Battery2 12G+512G	10	QPSK	DSI4	1	49	23060/704	25.50	24.04	0.067	0.058	1.40	0.094	/	
	LTE 13 (Original)	(Low)	Back Side	10	QPSK	DSI4	1	49	23230/782	25.50	24.06	0.209	-0.030	1.39	0.291	61
				10	QPSK	DSI4	50%	13	23230/782	24.50	23.16	0.173	0.100	1.36	0.236	/
			Front Side	10	QPSK	DSI4	1	49	23230/782	25.50	24.06	0.135	0.020	1.39	0.188	/
				10	QPSK	DSI4	50%	13	23230/782	24.50	23.16	0.118	0.038	1.36	0.161	/
			Left Edge	10	QPSK	DSI2	1	49	23230/782	25.50	24.06	0.068	0.011	1.39	0.095	/
10				QPSK	DSI2	50%	13	23230/782	24.50	23.16	0.055	-0.026	1.36	0.075	/	
Right Edge			10	QPSK	DSI2	1	49	23230/782	25.50	24.06	0.137	0.040	1.39	0.191	/	
			10	QPSK	DSI2	50%	13	23230/782	24.50	23.16	0.062	0.022	1.36	0.084	/	

		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/	
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/	
		Bottom Edge	10	QPSK	DSI4	1	49	23230/782	25.50	24.06	0.084	0.015	1.39	0.117	/	
			10	QPSK	DSI4	50%	13	23230/782	24.50	23.16	0.090	0.038	1.36	0.123	/	
	(Upper)	Back Side	10	QPSK	DSI4	1	25	23230/782	25.50	24.43	0.177	0.090	1.28	0.226	/	
			10	QPSK	DSI4	50%	13	23230/782	24.50	23.51	0.132	-0.100	1.26	0.166	/	
		Front Side	10	QPSK	DSI4	1	25	23230/782	25.50	24.43	0.098	0.024	1.28	0.125	/	
			10	QPSK	DSI4	50%	13	23230/782	24.50	23.51	0.080	0.036	1.26	0.100	/	
		Left Edge	10	QPSK	DSI2	1	25	23230/782	25.50	24.43	0.065	0.020	1.28	0.083	/	
			10	QPSK	DSI2	50%	13	23230/782	24.50	23.51	0.055	0.015	1.26	0.069	/	
		Right Edge	10	QPSK	DSI2	1	25	23230/782	25.50	24.43	0.062	0.070	1.28	0.079	/	
			10	QPSK	DSI2	50%	13	23230/782	24.50	23.51	0.050	0.090	1.26	0.063	/	
		Top Edge	10	QPSK	DSI4	1	25	23230/782	25.50	24.43	0.127	0.100	1.28	0.162	/	
			10	QPSK	DSI4	50%	13	23230/782	24.50	23.51	0.100	0.022	1.26	0.126	/	
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
	(Low)	Back Side Battery2 12G+512G	10	QPSK	DSI4	1	49	23230/782	25.50	24.06	0.044	0.064	1.39	0.061	/	

LTE 26 (Original)	(Low)	Back Side	10	QPSK	DSI4	1	38	26765/821.5	24.00	22.61	0.313	0.110	1.38	0.431	62	
			10	QPSK	DSI4	50%	18	26765/821.5	24.00	22.59	0.277	0.030	1.38	0.383	/	
		Front Side	10	QPSK	DSI4	1	38	26765/821.5	24.00	22.61	0.230	0.035	1.38	0.317	/	
			10	QPSK	DSI4	50%	18	26765/821.5	24.00	22.59	0.208	0.016	1.38	0.288	/	
		Left Edge	10	QPSK	DSI2	1	38	26865/831.5	25.50	24.08	0.119	0.017	1.39	0.165	/	
			10	QPSK	DSI2	50%	18	26765/821.5	24.50	23.09	0.096	0.019	1.38	0.133	/	
		Right Edge	10	QPSK	DSI2	1	38	26865/831.5	25.50	24.08	0.142	0.020	1.39	0.197	/	
			10	QPSK	DSI2	50%	18	26765/821.5	24.50	23.09	0.103	0.140	1.38	0.143	/	
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
		Bottom Edge	10	QPSK	DSI4	1	38	26765/821.5	24.00	22.61	0.211	0.011	1.38	0.291	/	
			10	QPSK	DSI4	50%	18	26765/821.5	24.00	22.59	0.152	0.048	1.38	0.210	/	
	(Upper)	Back Side	10	QPSK	DSI4	1	38	26765/821.5	25.00	24.20	0.202	0.029	1.20	0.243	/	
			10	QPSK	DSI4	50%	18	26765/821.5	24.50	23.76	0.154	0.033	1.19	0.183	/	
		Front Side	10	QPSK	DSI4	1	38	26765/821.5	25.00	24.20	0.113	0.010	1.20	0.136	/	
			10	QPSK	DSI4	50%	18	26765/821.5	24.50	23.76	0.086	0.025	1.19	0.102	/	
		Left Edge	10	QPSK	DSI2	1	38	26765/821.5	25.50	23.88	0.055	-0.010	1.45	0.080	/	
			10	QPSK	DSI2	50%	18	26765/821.5	24.50	22.87	0.045	0.033	1.46	0.065	/	
		Right Edge	10	QPSK	DSI2	1	38	26765/821.5	25.50	23.88	0.060	0.078	1.45	0.087	/	
			10	QPSK	DSI2	50%	18	26765/821.5	24.50	22.87	0.046	0.020	1.46	0.067	/	
		Top Edge	10	QPSK	DSI4	1	38	26765/821.5	25.00	24.20	0.148	0.014	1.20	0.178	/	
			10	QPSK	DSI4	50%	18	26765/821.5	24.50	23.76	0.119	0.010	1.19	0.141	/	
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/

		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/	
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/	
	(Low)	Bottom Edge Battery2 12G+512G	10	QPSK	DSI4	1	50	40185/2549.5	23.00	22.51	0.400	0.036	1.12	0.448	/	
LTE 66 (Original)	(Low)	Back Side	10	QPSK	DSI4	1	50	132072/1720	19.00	18.77	0.520	0.012	1.05	0.548	/	
			10	QPSK	DSI4	50%	25	132072/1720	19.00	18.74	0.528	0.024	1.06	0.561	/	
		Front Side	10	QPSK	DSI4	1	50	132072/1720	19.00	18.77	0.251	0.070	1.05	0.265	/	
			10	QPSK	DSI4	50%	25	132072/1720	19.00	18.74	0.256	0.048	1.06	0.272	/	
		Left Edge	10	QPSK	DSI2	1	50	132072/1720	25.50	25.20	0.254	-0.130	1.07	0.272	/	
			10	QPSK	DSI2	50%	25	132072/1720	24.50	24.33	0.206	0.069	1.04	0.214	/	
		Right Edge	10	QPSK	DSI2	1	50	132072/1720	25.50	25.20	0.045	0.010	1.07	0.048	/	
			10	QPSK	DSI2	50%	25	132072/1720	24.50	24.33	0.049	0.050	1.04	0.051	/	
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
		Bottom Edge	10	QPSK	DSI4	1	50	132072/1720	19.00	18.77	0.689	0.130	1.05	0.726	/	
			10	QPSK	DSI4	50%	25	132072/1720	19.00	18.74	0.701	0.000	1.06	0.744	/	
	(Upper)	Back Side	10	QPSK	DSI4	1	50	132072/1720	21.50	20.93	0.956	0.027	1.14	1.090	/	
			10	QPSK	DSI4	1	50	132322/1745	21.50	20.63	0.722	0.100	1.22	0.882	/	
			10	QPSK	DSI4	1	50	132572/1770	21.50	20.51	0.596	0.025	1.26	0.749	/	
			10	QPSK	DSI4	50%	25	132072/1720	21.50	21.03	0.980	-0.010	1.11	1.092	65	
			10	QPSK	DSI4	50%	25	132322/1745	21.50	20.75	0.728	0.039	1.19	0.865	/	
			10	QPSK	DSI4	50%	25	132572/1770	21.50	20.55	0.606	0.010	1.24	0.754	/	
		Back Side	10	QPSK	DSI4	100%	0	132072/1720	21.50	20.82	0.548	0.021	1.17	0.641	/	
		Back Side Repeat	10	QPSK	DSI4	50%	25	132072/1720	21.50	21.03	0.974	0.026	1.11	1.085	/	
		Front Side	10	QPSK	DSI4	1	50	132072/1720	21.50	20.93	0.340	0.020	1.14	0.388	/	
			10	QPSK	DSI4	50%	25	132072/1720	21.50	21.03	0.372	0.024	1.11	0.415	/	
		Left Edge	10	QPSK	DSI2	1	0	132072/1720	25.50	24.86	0.231	0.011	1.16	0.268	/	
			10	QPSK	DSI2	50%	0	132072/1720	24.50	24.06	0.190	-0.020	1.11	0.210	/	
		Right Edge	10	QPSK	DSI2	1	0	132072/1720	25.50	24.86	0.110	0.040	1.16	0.127	/	
			10	QPSK	DSI2	50%	0	132072/1720	24.50	24.06	0.092	0.015	1.11	0.102	/	
		Top Edge	10	QPSK	DSI4	1	50	132072/1720	21.50	20.93	0.855	0.030	1.14	0.975	/	
			10	QPSK	DSI4	1	50	132322/1745	21.50	20.63	0.687	0.027	1.22	0.839	/	
			10	QPSK	DSI4	1	50	132572/1770	21.50	20.51	0.631	0.010	1.26	0.793	/	
			10	QPSK	DSI4	50%	25	132072/1720	21.50	21.03	0.962	-0.140	1.11	1.072	/	
			10	QPSK	DSI4	50%	25	132322/1745	21.50	20.75	0.721	0.015	1.19	0.857	/	
			10	QPSK	DSI4	50%	25	132572/1770	21.50	20.55	0.601	0.029	1.24	0.748	/	
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	/
	(Upper)	Back Side SIM2	10	QPSK	DSI4	50%	25	132072/1720	21.50	21.03	0.861	0.096	1.11	0.959	/	
		Back Side	10	QPSK	DSI4	50%	25	132072/1720	21.50	21.03	0.864	0.130	1.11	0.963	/	

		12G+256G													
		Back Side Battery2 12G+512G	10	QPSK	DSI4	50%	25	132072/1720	21.50	21.03	0.688	0.085	1.11	0.767	/
		Back Side Battery2 8G+128G	10	QPSK	DSI4	50%	25	132072/1720	21.50	21.03	0.672	0.086	1.11	0.749	/
		Back Side 2nd supplier screen	10	QPSK	DSI4	50%	25	132072/1720	21.50	21.03	0.682	0.060	1.11	0.760	/
		LTE 66 (Variant)	(Upper)	Back Side	10	QPSK	DSI4	50%	25	132072/1720	21.50	21.03	0.750	0.025	1.11

Band	Antenna	Test Position	Dist. (mm)	Mode	Duty Cycle	Power Reduction	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g (W/Kg)	Power Drift (dB)	Scaling Factor	Report SAR1g (W/kg)	Plot No.
2.4G (Original)	Wi-Fi	Back Side	10	802.11b	100.0%	Receiver off	6/2437	20.50	18.83	0.082	-0.110	1.47	0.120	/
		Front Side	10	802.11b	100.0%	Receiver off	6/2437	20.50	18.83	0.149	0.129	1.47	0.219	/
		Left Edge	10	802.11b	100.0%	Receiver off	6/2437	20.50	18.83	0.001	0.052	1.47	0.001	/
		Right Edge	10	802.11b	100.0%	Receiver off	6/2437	20.50	18.83	0.088	0.134	1.47	0.129	/
		Top Edge	10	802.11b	100.0%	Receiver off	6/2437	20.50	18.83	0.190	-0.025	1.47	0.279	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Top Edge Battery2 12G+512G	10	802.11b	100.0%	Receiver off	6/2437	20.50	18.83	0.202	0.040	1.47	0.297	66
U-NII-1 (Original)	Wi-Fi	Back Side	10	802.11a	97.4%	Receiver off	48/5240	18.50	17.46	0.177	0.026	1.30	0.231	/
		Front Side	10	802.11a	97.4%	Receiver off	48/5240	18.50	17.46	0.203	-0.040	1.30	0.265	/
		Left Edge	10	802.11a	97.4%	Receiver off	48/5240	18.50	17.46	0.072	0.038	1.30	0.094	/
		Right Edge	10	802.11a	97.4%	Receiver off	48/5240	18.50	17.46	0.140	0.100	1.30	0.183	/
		Top Edge	10	802.11a	97.4%	Receiver off	48/5240	18.50	17.46	0.266	-0.068	1.30	0.347	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Top Edge Battery2 12G+512G	10	802.11a	97.4%	Receiver off	48/5240	18.50	17.46	0.274	0.085	1.30	0.357	/
U-NII-3 (Original)	Wi-Fi	Back Side	10	802.11a	97.4%	Receiver off	165/5825	18.50	17.80	0.348	0.010	1.21	0.420	/
		Front Side	10	802.11a	97.4%	Receiver off	165/5825	18.50	17.80	0.300	0.030	1.21	0.362	/

		Left Edge	10	802.11a	97.4%	Receiver off	165/5825	18.50	17.80	0.103	-0.027	1.21	0.124	/
		Right Edge	10	802.11a	97.4%	Receiver off	165/5825	18.50	17.80	0.266	0.022	1.21	0.321	/
		Top Edge	10	802.11a	97.4%	Receiver off	165/5825	18.50	17.80	0.411	0.104	1.21	0.496	67
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Top Edge Battery2 12G+512G	10	802.11a	97.4%	Receiver off	165/5825	18.50	17.80	0.366	0.052	1.21	0.442	/
Bluetooth (Original)	Bluetooth	Back Side	10	DH5	76.8%	Full Power	0/2402	12.50	10.89	0.001	0.056	1.89	0.002	/
		Front Side	10	DH5	76.8%	Full Power	0/2402	12.50	10.89	0.001	0.026	1.89	0.002	/
		Left Edge	10	DH5	76.8%	Full Power	0/2402	12.50	10.89	0.001	0.192	1.89	0.002	/
		Right Edge	10	DH5	76.8%	Full Power	0/2402	12.50	10.89	0.001	-0.140	1.89	0.002	/
		Top Edge	10	DH5	76.8%	Full Power	0/2402	12.50	10.89	0.013	-0.063	1.89	0.025	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Top Edge Battery2 12G+512G	10	DH5	76.8%	Full Power	0/2402	12.50	10.89	0.020	0.060	1.89	0.038	68

Product-specific 10g SAR Evaluation

Band	Antenna	Test Position	Mode	Power Reduction	RB	Offset	Channel Frequency(MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g (W/Kg)	Scaling Factor	Report SAR1g (W/kg)	0mm SAR
GSM850 (Original)	(Low)	Back Side	GPRS 4TX Slots	DSI4	N/A	N/A	190/836.6	27.50	27.50	0.307	1.00	0.307	NO
		Front Side	GPRS 4TX Slots	DSI4	N/A	N/A	190/836.6	27.50	27.50	0.292	1.00	0.292	NO
		Left Edge	GPRS 4TX Slots	DSI2	N/A	N/A	190/836.6	27.50	27.50	0.143	1.00	0.143	NO
		Right Edge	GPRS 4TX Slots	DSI2	N/A	N/A	190/836.6	27.50	27.50	0.234	1.00	0.234	NO
		Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
		Bottom Edge	GPRS 4TX Slots	DSI4	N/A	N/A	190/836.6	27.50	27.50	0.147	1.00	0.147	NO
		Back Side	CS	DSI4	N/A	N/A	190/836.6	33.50	33.50	0.194	1.00	0.194	NO
	(Upper)	Back Side	GPRS 4TX Slots	DSI4	N/A	N/A	190/836.6	27.50	26.50	0.109	1.26	0.137	NO
		Front Side	GPRS 4TX Slots	DSI4	N/A	N/A	190/836.6	27.50	26.50	0.102	1.26	0.128	NO
		Left Edge	GPRS 4TX Slots	DSI2	N/A	N/A	190/836.6	27.50	27.50	0.045	1.00	0.045	NO
		Right Edge	GPRS 4TX Slots	DSI2	N/A	N/A	190/836.6	27.50	27.50	0.063	1.00	0.063	NO
		Top Edge	GPRS 4TX Slots	DSI4	N/A	N/A	190/836.6	27.50	26.50	0.136	1.26	0.171	NO
		Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
		Back Side	CS	DSI4	N/A	N/A	190/836.6	32.50	32.50	0.065	1.00	0.065	NO
GSM1900 (Original)	(Low)	Back Side	GPRS 4TX Slots	DSI4	N/A	N/A	661/1880	24.50	20.00	0.288	2.82	0.812	NO
		Front Side	GPRS 4TX Slots	DSI4	N/A	N/A	661/1880	24.50	20.00	0.249	2.82	0.702	NO
		Left Edge	GPRS 4TX Slots	DSI2	N/A	N/A	661/1880	24.50	24.50	0.234	1.00	0.234	NO
		Right Edge	GPRS 4TX Slots	DSI2	N/A	N/A	661/1880	24.50	24.50	0.001	1.00	0.001	NO
		Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
		Bottom Edge	GPRS 4TX Slots	DSI4	N/A	N/A	661/1880	24.50	20.00	0.390	2.82	1.099	NO
		Back Side	CS	DSI4	N/A	N/A	661/1880	26.00	26.00	0.266	1.00	0.266	NO
	(Upper)	Back Side	GPRS 4TX Slots	DSI4	N/A	N/A	661/1880	24.50	20.00	0.275	2.82	0.775	NO
		Front Side	GPRS 4TX Slots	DSI4	N/A	N/A	661/1880	24.50	20.00	0.294	2.82	0.829	NO
		Left Edge	GPRS 4TX Slots	DSI2	N/A	N/A	661/1880	24.50	24.50	0.173	1.00	0.173	NO
		Right Edge	GPRS 4TX Slots	DSI2	N/A	N/A	661/1880	24.50	24.50	0.047	1.00	0.047	NO
		Top Edge	GPRS 4TX Slots	DSI4	N/A	N/A	661/1880	24.50	20.00	0.547	2.82	1.542	YES
		Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
		Back Side	CS	DSI4	N/A	N/A	661/1880	26.00	26.00	0.248	1.00	0.248	NO
WCDMA II (Original)	(Low)	Back Side	RMC	DSI4	N/A	N/A	9400/1880	23.50	19.00	0.577	2.82	1.626	YES
		Front Side	RMC	DSI4	N/A	N/A	9400/1880	23.50	19.00	0.243	2.82	0.685	NO
		Left Edge	RMC	DSI2	N/A	N/A	9400/1880	23.50	23.50	0.516	1.00	0.516	NO
		Right Edge	RMC	DSI2	N/A	N/A	9400/1880	23.50	23.50	0.001	1.00	0.001	NO
		Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
		Bottom Edge	RMC	DSI4	N/A	N/A	9400/1880	23.50	19.00	0.772	2.82	2.176	YES
	(Upper)	Back Side	RMC	DSI4	N/A	N/A	9400/1880	23.50	18.50	0.317	3.16	1.002	NO
		Front Side	RMC	DSI4	N/A	N/A	9400/1880	23.50	18.50	0.227	3.16	0.718	NO
		Left Edge	RMC	DSI2	N/A	N/A	9400/1880	23.50	23.50	0.346	1.00	0.346	NO
		Right Edge	RMC	DSI2	N/A	N/A	9400/1880	23.50	23.50	0.110	1.00	0.110	NO
		Top Edge	RMC	DSI4	N/A	N/A	9400/1880	23.50	18.50	0.696	3.16	2.201	YES

		Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
WCDMA IV (Original)	(Low)	Back Side	RMC	DSI4	N/A	N/A	1413/1732.6	24.00	20.00	0.634	2.51	1.593	YES
		Front Side	RMC	DSI4	N/A	N/A	1413/1732.6	24.00	20.00	0.652	2.51	1.638	YES
		Left Edge	RMC	DSI2	N/A	N/A	1413/1732.6	24.00	24.00	0.262	1.00	0.262	NO
		Right Edge	RMC	DSI2	N/A	N/A	1413/1732.6	24.00	24.00	0.001	1.00	0.001	NO
		Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
		Bottom Edge	RMC	DSI4	N/A	N/A	1413/1732.6	24.00	20.00	0.762	2.51	1.914	YES
	(Upper)	Back Side	RMC	DSI4	N/A	N/A	1413/1732.6	25.50	21.00	0.661	2.82	1.863	YES
		Front Side	RMC	DSI4	N/A	N/A	1413/1732.6	25.50	21.00	0.287	2.82	0.809	NO
		Left Edge	RMC	DSI2	N/A	N/A	1413/1732.6	25.50	25.50	0.189	1.00	0.189	NO
		Right Edge	RMC	DSI2	N/A	N/A	1413/1732.6	25.50	25.50	0.105	1.00	0.105	NO
		Top Edge	RMC	DSI4	N/A	N/A	1413/1732.6	25.50	21.00	0.745	2.82	2.100	YES
		Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
WCDMA V (Original)	(Low)	Back Side	RMC	DSI4	N/A	N/A	4183/836.6	25.50	25.50	0.364	1.00	0.364	NO
		Front Side	RMC	DSI4	N/A	N/A	4183/836.6	25.50	25.50	0.248	1.00	0.248	NO
		Left Edge	RMC	DSI2	N/A	N/A	4183/836.6	25.50	25.50	0.111	1.00	0.111	NO
		Right Edge	RMC	DSI2	N/A	N/A	4183/836.6	25.50	25.50	0.103	1.00	0.103	NO
		Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
		Bottom Edge	RMC	DSI4	N/A	N/A	4183/836.6	25.50	25.50	0.204	1.00	0.204	NO
	(Upper)	Back Side	RMC	DSI4	N/A	N/A	4183/836.6	25.50	25.50	0.243	1.00	0.243	NO
		Front Side	RMC	DSI4	N/A	N/A	4183/836.6	25.50	25.50	0.142	1.00	0.142	NO
		Left Edge	RMC	DSI2	N/A	N/A	4183/836.6	25.50	25.50	0.066	1.00	0.066	NO
		Right Edge	RMC	DSI2	N/A	N/A	4183/836.6	25.50	25.50	0.081	1.00	0.081	NO
		Top Edge	RMC	DSI4	N/A	N/A	4183/836.6	25.50	25.50	0.185	1.00	0.185	NO
		Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
LTE 2 (Original)	(Low)	Back Side	QPSK	DSI4	1	50	19100/1900	25.00	20.00	0.437	3.16	1.382	YES
			QPSK	DSI4	50%	0	19100/1900	24.00	20.00	0.475	2.51	1.193	NO
		Front Side	QPSK	DSI4	1	50	19100/1900	25.00	20.00	0.163	3.16	0.515	NO
			QPSK	DSI4	50%	0	19100/1900	24.00	20.00	0.176	2.51	0.442	NO
		Left Edge	QPSK	DSI2	1	50	19100/1900	25.00	25.00	0.363	1.00	0.363	NO
			QPSK	DSI2	50%	0	19100/1900	24.00	24.00	0.287	1.00	0.287	NO
		Right Edge	QPSK	DSI2	1	50	19100/1900	25.00	25.00	0.001	1.00	0.001	NO
			QPSK	DSI2	50%	0	19100/1900	24.00	24.00	0.001	1.00	0.001	NO
		Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
		Bottom Edge	QPSK	DSI4	1	50	19100/1900	25.00	20.00	0.486	3.16	1.537	YES
			QPSK	DSI4	50%	0	19100/1900	24.00	20.00	0.588	2.51	1.477	YES
	(Upper)	Back Side	QPSK	DSI4	1	50	18700/1860	24.00	18.50	0.325	3.55	1.153	NO
			QPSK	DSI4	50%	25	18700/1860	24.00	18.50	0.304	3.55	1.079	NO
		Front Side	QPSK	DSI4	1	50	18700/1860	24.00	18.50	0.231	3.55	0.820	NO
			QPSK	DSI4	50%	25	18700/1860	24.00	18.50	0.231	3.55	0.820	NO
		Left Edge	QPSK	DSI2	1	50	19100/1900	24.00	24.00	0.327	1.00	0.327	NO
			QPSK	DSI2	50%	25	19100/1900	24.00	24.00	0.252	1.00	0.252	NO

SAR Test Report

Report No.: R2309A0988-S1

		Right Edge	QPSK	DSI2	1	50	19100/1900	24.00	24.00	0.084	1.00	0.084	NO
			QPSK	DSI2	50%	25	19100/1900	24.00	24.00	0.073	1.00	0.073	NO
		Top Edge	QPSK	DSI4	1	50	18700/1860	24.00	18.50	0.640	3.55	2.271	YES
			QPSK	DSI4	50%	25	18700/1860	24.00	18.50	0.636	3.55	2.257	YES
		Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
LTE 5 (Original)	(Low)	Back Side	QPSK	DSI4	1	25	20450/829	25.50	25.50	0.358	1.00	0.358	NO
			QPSK	DSI4	50%	13	20450/829	24.50	24.50	0.288	1.00	0.288	NO
		Front Side	QPSK	DSI4	1	25	20450/829	25.50	25.50	0.246	1.00	0.246	NO
			QPSK	DSI4	50%	13	20450/829	24.50	24.50	0.201	1.00	0.201	NO
		Left Edge	QPSK	DSI2	1	25	20450/829	25.50	25.50	0.111	1.00	0.111	NO
			QPSK	DSI2	50%	13	20450/829	24.50	24.50	0.094	1.00	0.094	NO
		Right Edge	QPSK	DSI2	1	25	20450/829	25.50	25.50	0.100	1.00	0.100	NO
			QPSK	DSI2	50%	13	20450/829	24.50	24.50	0.105	1.00	0.105	NO
		Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
		Bottom Edge	QPSK	DSI4	1	25	20450/829	25.50	25.50	0.236	1.00	0.236	NO
			QPSK	DSI4	50%	13	20450/829	24.50	24.50	0.168	1.00	0.168	NO
	(Upper)	Back Side	QPSK	DSI4	1	25	20450/829	25.50	25.00	0.241	1.12	0.270	NO
			QPSK	DSI4	50%	13	20450/829	24.50	24.50	0.194	1.00	0.194	NO
		Front Side	QPSK	DSI4	1	25	20450/829	25.50	25.00	0.140	1.12	0.157	NO
			QPSK	DSI4	50%	13	20450/829	24.50	24.50	0.109	1.00	0.109	NO
		Left Edge	QPSK	DSI2	1	25	20450/829	25.50	25.50	0.074	1.00	0.074	NO
			QPSK	DSI2	50%	13	20450/829	24.50	24.50	0.073	1.00	0.073	NO
		Right Edge	QPSK	DSI2	1	25	20450/829	25.50	25.50	0.074	1.00	0.074	NO
			QPSK	DSI2	50%	13	20450/829	24.50	24.50	0.054	1.00	0.054	NO
		Top Edge	QPSK	DSI4	1	25	20450/829	25.50	25.00	0.170	1.12	0.191	NO
			QPSK	DSI4	50%	13	20450/829	24.50	24.50	0.168	1.00	0.168	NO
		Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
LTE 7 (Original)	(Low)	Back Side	QPSK	DSI4	1	50	21100/2535	25.50	22.50	0.698	2.00	1.393	YES
			QPSK	DSI4	50%	25	21100/2535	24.50	22.50	0.701	1.58	1.111	NO
		Front Side	QPSK	DSI4	1	50	21100/2535	25.50	22.50	0.573	2.00	1.143	NO
			QPSK	DSI4	50%	25	21100/2535	24.50	22.50	0.615	1.58	0.975	NO
		Left Edge	QPSK	DSI2	1	50	20850/2510	25.50	25.50	0.301	1.00	0.301	NO
			QPSK	DSI2	50%	25	20850/2510	24.50	24.50	0.329	1.00	0.329	NO
		Right Edge	QPSK	DSI2	1	50	20850/2510	25.50	25.50	0.182	1.00	0.182	NO
			QPSK	DSI2	50%	25	20850/2510	24.50	24.50	0.141	1.00	0.141	NO
		Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
		Bottom Edge	QPSK	DSI4	1	50	21100/2535	25.50	22.50	0.714	2.00	1.425	YES
			QPSK	DSI4	50%	25	21100/2535	24.50	22.50	0.786	1.58	1.246	YES
	(Upper)	Back Side	QPSK	DSI4	1	99	21350/2560	25.50	22.00	0.439	2.24	0.983	NO

		Front Side	QPSK	DSI4	50%	25	21350/2560	24.50	22.00	0.493	1.78	0.877	NO
			QPSK	DSI4	1	99	21350/2560	25.50	22.00	0.227	2.24	0.508	NO
			QPSK	DSI4	50%	25	21350/2560	24.50	22.00	0.249	1.78	0.443	NO
		Left Edge	QPSK	DSI2	1	99	20850/2510	25.50	25.50	0.347	1.00	0.347	NO
			QPSK	DSI2	50%	0	21350/2560	24.50	24.50	0.253	1.00	0.253	NO
		Right Edge	QPSK	DSI2	1	99	20850/2510	25.50	25.50	0.096	1.00	0.096	NO
			QPSK	DSI2	50%	0	21350/2560	24.50	24.50	0.076	1.00	0.076	NO
		Top Edge	QPSK	DSI4	1	99	21350/2560	25.50	22.00	0.532	2.24	1.191	NO
			QPSK	DSI4	50%	25	21350/2560	24.50	22.00	0.536	1.78	0.953	NO
		Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
LTE 12 (Original)	(Low)	Back Side	QPSK	DSI4	1	49	23060/704	25.50	25.50	0.261	1.00	0.261	NO
			QPSK	DSI4	50%	25	23130/711	24.50	24.50	0.206	1.00	0.206	NO
		Front Side	QPSK	DSI4	1	49	23060/704	25.50	25.50	0.174	1.00	0.174	NO
			QPSK	DSI4	50%	25	23130/711	24.50	24.50	0.135	1.00	0.135	NO
		Left Edge	QPSK	DSI2	1	49	23060/704	25.50	25.50	0.093	1.00	0.093	NO
			QPSK	DSI2	50%	25	23130/711	24.50	24.50	0.078	1.00	0.078	NO
		Right Edge	QPSK	DSI2	1	49	23060/704	25.50	25.50	0.179	1.00	0.179	NO
			QPSK	DSI2	50%	25	23130/711	24.50	24.50	0.108	1.00	0.108	NO
		Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
		Bottom Edge	QPSK	DSI4	1	49	23060/704	25.50	25.50	0.119	1.00	0.119	NO
			QPSK	DSI4	50%	25	23130/711	24.50	24.50	0.095	1.00	0.095	NO
	(Upper)	Back Side	QPSK	DSI4	1	49	23060/704	25.50	25.50	0.202	1.00	0.202	NO
			QPSK	DSI4	50%	25	23130/711	24.50	24.50	0.182	1.00	0.182	NO
		Front Side	QPSK	DSI4	1	49	23060/704	25.50	25.50	0.102	1.00	0.102	NO
			QPSK	DSI4	50%	25	23130/711	24.50	24.50	0.101	1.00	0.101	NO
		Left Edge	QPSK	DSI2	1	49	23060/704	25.50	25.50	0.079	1.00	0.079	NO
			QPSK	DSI2	50%	25	23130/711	24.50	24.50	0.063	1.00	0.063	NO
		Right Edge	QPSK	DSI2	1	49	23060/704	25.50	25.50	0.067	1.00	0.067	NO
			QPSK	DSI2	50%	25	23130/711	24.50	24.50	0.064	1.00	0.064	NO
		Top Edge	QPSK	DSI4	1	49	23060/704	25.50	25.50	0.127	1.00	0.127	NO
			QPSK	DSI4	50%	25	23130/711	24.50	24.50	0.125	1.00	0.125	NO
		Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
LTE 13 (Original)	(Low)	Back Side	QPSK	DSI4	1	49	23230/782	25.50	25.50	0.209	1.00	0.209	NO
			QPSK	DSI4	50%	13	23230/782	24.50	24.50	0.173	1.00	0.173	NO
		Front Side	QPSK	DSI4	1	49	23230/782	25.50	25.50	0.135	1.00	0.135	NO
			QPSK	DSI4	50%	13	23230/782	24.50	24.50	0.118	1.00	0.118	NO
		Left Edge	QPSK	DSI2	1	49	23230/782	25.50	25.50	0.068	1.00	0.068	NO
			QPSK	DSI2	50%	13	23230/782	24.50	24.50	0.055	1.00	0.055	NO
		Right Edge	QPSK	DSI2	1	49	23230/782	25.50	25.50	0.137	1.00	0.137	NO
			QPSK	DSI2	50%	13	23230/782	24.50	24.50	0.062	1.00	0.062	NO

		Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
		Bottom Edge	QPSK	DSI4	1	49	23230/782	25.50	25.50	0.084	1.00	0.084	NO
			QPSK	DSI4	50%	13	23230/782	24.50	24.50	0.090	1.00	0.090	NO
	(Upper)	Back Side	QPSK	DSI4	1	25	23230/782	25.50	25.50	0.177	1.00	0.177	NO
			QPSK	DSI4	50%	13	23230/782	24.50	24.50	0.132	1.00	0.132	NO
		Front Side	QPSK	DSI4	1	25	23230/782	25.50	25.50	0.098	1.00	0.098	NO
			QPSK	DSI4	50%	13	23230/782	24.50	24.50	0.080	1.00	0.080	NO
		Left Edge	QPSK	DSI2	1	25	23230/782	25.50	25.50	0.065	1.00	0.065	NO
			QPSK	DSI2	50%	13	23230/782	24.50	24.50	0.055	1.00	0.055	NO
		Right Edge	QPSK	DSI2	1	25	23230/782	25.50	25.50	0.062	1.00	0.062	NO
			QPSK	DSI2	50%	13	23230/782	24.50	24.50	0.050	1.00	0.050	NO
		Top Edge	QPSK	DSI4	1	25	23230/782	25.50	25.50	0.127	1.00	0.127	NO
			QPSK	DSI4	50%	13	23230/782	24.50	24.50	0.100	1.00	0.100	NO
		Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
LTE 26 (Original)	(Low)	Back Side	QPSK	DSI4	1	38	26765/821.5	25.50	24.00	0.313	1.41	0.442	NO
			QPSK	DSI4	50%	18	26765/821.5	24.50	24.00	0.277	1.12	0.311	NO
		Front Side	QPSK	DSI4	1	38	26765/821.5	25.50	24.00	0.230	1.41	0.325	NO
			QPSK	DSI4	50%	18	26765/821.5	24.50	24.00	0.208	1.12	0.233	NO
		Left Edge	QPSK	DSI2	1	38	26865/831.5	25.50	25.50	0.119	1.00	0.119	NO
			QPSK	DSI2	50%	18	26765/821.5	24.50	24.50	0.096	1.00	0.096	NO
		Right Edge	QPSK	DSI2	1	38	26865/831.5	25.50	25.50	0.142	1.00	0.142	NO
			QPSK	DSI2	50%	18	26765/821.5	24.50	24.50	0.103	1.00	0.103	NO
		Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
		Bottom Edge	QPSK	DSI4	1	38	26765/821.5	25.50	24.00	0.211	1.41	0.298	NO
			QPSK	DSI4	50%	18	26765/821.5	24.50	24.00	0.152	1.12	0.171	NO
	(Upper)	Back Side	QPSK	DSI4	1	38	26765/821.5	25.50	25.00	0.202	1.12	0.227	NO
			QPSK	DSI4	50%	18	26765/821.5	24.50	24.50	0.154	1.00	0.154	NO
		Front Side	QPSK	DSI4	1	38	26765/821.5	25.50	25.00	0.113	1.12	0.127	NO
			QPSK	DSI4	50%	18	26765/821.5	24.50	24.50	0.086	1.00	0.086	NO
		Left Edge	QPSK	DSI2	1	38	26765/821.5	25.50	25.50	0.055	1.00	0.055	NO
			QPSK	DSI2	50%	18	26765/821.5	24.50	24.50	0.045	1.00	0.045	NO
		Right Edge	QPSK	DSI2	1	38	26765/821.5	25.50	25.50	0.060	1.00	0.060	NO
			QPSK	DSI2	50%	18	26765/821.5	24.50	24.50	0.046	1.00	0.046	NO
		Top Edge	QPSK	DSI4	1	38	26765/821.5	25.50	25.00	0.148	1.12	0.166	NO
			QPSK	DSI4	50%	18	26765/821.5	24.50	24.50	0.119	1.00	0.119	NO
		Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
LTE 38 TDD (Original)	(Low)	Back Side	QPSK	DSI4	1	50	38000/2595	25.50	23.50	0.526	1.58	0.834	NO
			QPSK	DSI4	50%	25	38000/2595	24.50	23.50	0.464	1.26	0.584	NO
		Front Side	QPSK	DSI4	1	50	38000/2595	25.50	23.50	0.326	1.58	0.517	NO

SAR Test Report
Report No.: R2309A0988-S1

			QPSK	DSI4	50%	25	38000/2595	24.50	23.50	0.321	1.26	0.404	NO
			QPSK	DSI2	1	50	38150/2610	25.50	25.50	0.192	1.00	0.192	NO
		Left Edge	QPSK	DSI2	50%	25	38150/2610	24.50	24.50	0.166	1.00	0.166	NO
			QPSK	DSI2	1	50	38150/2610	25.50	25.50	0.140	1.00	0.140	NO
		Right Edge	QPSK	DSI2	50%	25	38150/2610	24.50	24.50	0.128	1.00	0.128	NO
			QPSK	DSI2	1	50	38150/2610	25.50	25.50	0.140	1.00	0.140	NO
		Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
		Bottom Edge	QPSK	DSI4	1	50	38000/2595	25.50	23.50	0.549	1.58	0.870	NO
			QPSK	DSI4	50%	25	38000/2595	24.50	23.50	0.573	1.26	0.721	NO
LTE 41 TDD (Original)	(Low)	Back Side	QPSK	DSI4	1	50	39750/2506	25.50	23.00	0.674	1.78	1.199	NO
			QPSK	DSI4	50%	25	39750/2506	24.50	23.00	0.613	1.41	0.866	NO
		Front Side	QPSK	DSI4	1	50	39750/2506	25.50	23.00	0.586	1.78	1.042	NO
			QPSK	DSI4	50%	25	39750/2506	24.50	23.00	0.498	1.41	0.703	NO
		Left Edge	QPSK	DSI2	1	50	41055/2636.5	25.50	25.50	0.274	1.00	0.274	NO
			QPSK	DSI2	50%	25	41055/2636.5	24.50	24.50	0.239	1.00	0.239	NO
		Right Edge	QPSK	DSI2	1	50	41055/2636.5	25.50	25.50	0.195	1.00	0.195	NO
			QPSK	DSI2	50%	25	41055/2636.5	24.50	24.50	0.170	1.00	0.170	NO
		Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
		Bottom Edge	QPSK	DSI4	1	50	39750/2506	25.50	23.00	0.746	1.78	1.327	YES
			QPSK	DSI4	50%	25	39750/2506	24.50	23.00	0.614	1.41	0.867	NO
	(Upper)	Back Side	QPSK	DSI4	1	50	40620/2593	25.50	25.50	0.501	1.00	0.501	NO
			QPSK	DSI4	50%	50	40185/2549.5	24.50	24.50	0.550	1.00	0.550	NO
		Front Side	QPSK	DSI4	1	50	40620/2593	25.50	25.50	0.281	1.00	0.281	NO
			QPSK	DSI4	50%	50	40185/2549.5	24.50	24.50	0.286	1.00	0.286	NO
		Left Edge	QPSK	DSI2	1	50	40620/2593	25.50	25.50	0.173	1.00	0.173	NO
			QPSK	DSI2	50%	50	40185/2549.5	24.50	24.50	0.165	1.00	0.165	NO
		Right Edge	QPSK	DSI2	1	50	40620/2593	25.50	25.50	0.055	1.00	0.055	NO
			QPSK	DSI2	50%	50	40185/2549.5	24.50	24.50	0.059	1.00	0.059	NO
		Top Edge	QPSK	DSI4	1	50	40620/2593	25.50	25.50	0.663	1.00	0.663	NO
			QPSK	DSI4	50%	50	40185/2549.5	24.50	24.50	0.572	1.00	0.572	NO
		Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
LTE 66 (Original)	(Low)	Back Side	QPSK	DSI4	1	50	132072/1720	25.50	19.00	0.520	4.47	2.323	YES
			QPSK	DSI4	50%	25	132072/1720	24.50	19.00	0.528	3.55	1.873	YES
		Front Side	QPSK	DSI4	1	50	132072/1720	25.50	19.00	0.251	4.47	1.121	NO
			QPSK	DSI4	50%	25	132072/1720	24.50	19.00	0.256	3.55	0.908	NO
		Left Edge	QPSK	DSI2	1	50	132072/1720	25.50	25.50	0.254	1.00	0.254	NO
			QPSK	DSI2	50%	25	132072/1720	24.50	24.50	0.206	1.00	0.206	NO
		Right Edge	QPSK	DSI2	1	50	132072/1720	25.50	25.50	0.045	1.00	0.045	NO
			QPSK	DSI2	50%	25	132072/1720	24.50	24.50	0.049	1.00	0.049	NO
		Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO

		Bottom Edge	QPSK	DSI4	1	50	132072/1720	25.50	19.00	0.689	4.47	3.078	YES
			QPSK	DSI4	50%	25	132072/1720	24.50	19.00	0.701	3.55	2.487	YES
	(Upper)	Back Side	QPSK	DSI4	1	50	132072/1720	25.50	21.50	0.956	2.51	2.401	YES
			QPSK	DSI4	50%	25	132072/1720	24.50	21.50	0.980	2.00	1.955	YES
		Front Side	QPSK	DSI4	1	50	132072/1720	25.50	21.50	0.340	2.51	0.854	NO
			QPSK	DSI4	50%	25	132072/1720	24.50	21.50	0.372	2.00	0.742	NO
		Left Edge	QPSK	DSI2	1	0	132072/1720	25.50	24.50	0.231	1.26	0.291	NO
			QPSK	DSI2	50%	0	132072/1720	24.50	24.50	0.190	1.00	0.190	NO
		Right Edge	QPSK	DSI2	1	0	132072/1720	25.50	24.50	0.110	1.26	0.138	NO
			QPSK	DSI2	50%	0	132072/1720	24.50	24.50	0.092	1.00	0.092	NO
		Top Edge	QPSK	DSI4	1	50	132072/1720	25.50	21.50	0.855	2.51	2.148	YES
			QPSK	DSI4	50%	25	132072/1720	24.50	21.50	0.962	2.00	1.919	YES

Product-specific 10g SAR

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	Offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR10g (W/Kg)	Power Drift (dB)	Scaling Factor	Report SAR10g (W/kg)	Plot No.
GSM1900 (Original)	(Upper)	Top Edge	0	GPRS 4TX Slots	DSI4	N/A	N/A	661/1880	20.00	18.39	0.665	0.069	1.45	0.963	69
		Top Edge Battery2 12G+512G	0	GPRS 4TX Slots	DSI4	N/A	N/A	661/1880	20.00	18.39	0.612	0.110	1.45	0.887	/
WCDMA II (Original)	(Low)	Back Side	0	RMC	DSI4	N/A	N/A	9400/1880	19.00	18.60	0.697	-0.069	1.10	0.764	/
		Bottom Edge	0	RMC	DSI4	N/A	N/A	9400/1880	19.00	18.60	0.337	0.012	1.10	0.370	/
	(Upper)	Top Edge	0	RMC	DSI4	N/A	N/A	9400/1880	18.00	17.35	1.990	-0.060	1.16	2.311	70
			0	RMC	DSI4	N/A	N/A	9262/1852.4	18.00	17.73	1.870	0.028	1.06	1.990	/
			0	RMC	DSI4	N/A	N/A	9538/1907.6	18.00	16.78	1.720	0.090	1.32	2.278	/
		Top Edge Battery2 12G+512G	0	RMC	DSI4	N/A	N/A	9400/1880	18.00	17.35	1.620	0.035	1.16	1.882	/
WCDMA IV (Original)	(Low)	Back Side	0	RMC	DSI4	N/A	N/A	1413/1732.6	20.00	19.50	1.900	-0.040	1.12	2.132	71
		Back Side	0	RMC	DSI4	N/A	N/A	1312/1712.4	20.00	19.38	1.500	0.086	1.15	1.730	/
		Back Side	0	RMC	DSI4	N/A	N/A	1513/1752.6	20.00	19.14	1.470	0.096	1.22	1.792	/
		Front Side	0	RMC	DSI4	N/A	N/A	1413/1732.6	20.00	19.50	0.846	-0.024	1.12	0.949	/
		Bottom Edge	0	RMC	DSI4	N/A	N/A	1413/1732.6	20.00	19.50	1.270	-0.057	1.12	1.425	/
	(Upper)	Back Side	0	RMC	DSI4	N/A	N/A	1413/1732.6	21.50	20.10	1.010	-0.070	1.38	1.394	/
		Top Edge	0	RMC	DSI4	N/A	N/A	1413/1732.6	21.50	20.10	1.420	-0.049	1.38	1.960	/
	(Low)	Back Side Battery2 12G+512G	0	RMC	DSI4	N/A	N/A	1413/1732.6	20.00	19.50	1.200	0.036	1.12	1.346	/
LTE 2 (Original)	(Low)	Back Side	0	QPSK	DSI4	1	50	19100/1900	20.00	19.49	0.642	0.039	1.12	0.722	/
		Bottom Edge	0	QPSK	DSI4	1	50	19100/1900	20.00	19.49	0.468	0.023	1.12	0.526	/
			0	QPSK	DSI4	50%	0	19100/1900	20.00	19.69	0.426	0.010	1.07	0.458	/
	(Upper)	Top Edge	0	QPSK	DSI4	1	50	18700/1860	18.00	17.91	1.800	-0.020	1.02	1.838	/
			0	QPSK	DSI4	1	0	18900/1880	18.00	17.63	1.730	0.029	1.09	1.884	/
			0	QPSK	DSI4	1	0	19100/1900	18.00	17.09	1.680	0.010	1.23	2.072	/
			0	QPSK	DSI4	50%	25	18700/1860	18.00	17.98	1.850	0.016	1.00	1.859	/
			0	QPSK	DSI4	50%	25	18900/1880	18.00	17.52	1.840	0.012	1.12	2.055	/
			0	QPSK	DSI4	50%	0	19100/1900	18.00	17.10	1.740	-0.027	1.23	2.141	/
			0	QPSK	DSI4	100%	0	18700/1860	18.00	17.80	1.860	0.040	1.05	1.948	/
			0	QPSK	DSI4	100%	0	18900/1880	18.00	17.38	1.890	0.027	1.15	2.180	/
			0	QPSK	DSI4	100%	0	19100/1900	18.00	16.92	1.990	-0.060	1.28	2.552	72
		Top Edge SIM2	0	QPSK	DSI4	100%	0	19100/1900	18.00	16.92	1.640	0.045	1.28	2.103	/
		Top Edge 12G+256G	0	QPSK	DSI4	100%	0	19100/1900	18.00	16.92	1.720	-0.063	1.28	2.206	/
		Top Edge Battery2	0	QPSK	DSI4	100%	0	19100/1900	18.00	16.92	1.670	0.036	1.28	2.141	/

		12G+512G													
		Top Edge	0	QPSK	DSI4	100%	0	19100/1900	18.00	16.92	0.738	0.067	1.28	0.946	/
		Battery2													
		8G+128G													
		Top Edge	0	QPSK	DSI4	100%	0	19100/1900	18.00	16.92	1.060	0.015	1.28	1.359	/
		2nd supplier screen													
LTE 2 (Variant)	(Upper)	Top Edge	0	QPSK	DSI4	100%	0	19100/1900	18.00	16.92	1.620	0.180	1.28	2.077	/
LTE 7 (Original)	(Low)	Back Side	0	QPSK	DSI4	1	50	21100/2535	22.50	22.11	1.060	0.027	1.09	1.160	/
		Bottom Edge	0	QPSK	DSI4	1	50	21100/2535	22.50	22.11	1.560	-0.045	1.09	1.707	73
			0	QPSK	DSI4	50%	25	21100/2535	22.50	22.27	1.550	0.080	1.05	1.634	/
		Bottom Edge	0	QPSK	DSI4	1	50	21100/2535	22.50	22.11	1.380	0.045	1.09	1.510	/
LTE 41 TDD (Original)	(Low)	Bottom Edge	0	QPSK	DSI4	1	50	39750/2506	23.00	22.64	1.040	-0.050	1.09	1.130	/
		Battery2	0	QPSK	DSI4	1	50	39750/2506	23.00	22.64	1.050	0.069	1.09	1.141	74
LTE 66 (Original)	(Low)	Back Side	0	QPSK	DSI4	1	50	132072/1720	19.00	18.77	1.590	0.067	1.05	1.676	/
			0	QPSK	DSI4	50%	25	132072/1720	19.00	18.74	1.570	0.040	1.06	1.667	/
		Bottom Edge	0	QPSK	DSI4	1	50	132072/1720	19.00	18.77	1.100	0.062	1.05	1.160	/
			0	QPSK	DSI4	50%	25	132072/1720	19.00	18.74	1.230	-0.049	1.06	1.306	/
	(Upper)	Back Side	0	QPSK	DSI4	1	50	132072/1720	21.50	20.93	1.310	-0.022	1.14	1.494	/
			0	QPSK	DSI4	50%	25	132072/1720	21.50	21.03	1.340	0.164	1.11	1.493	/
		Top Edge	0	QPSK	DSI4	1	50	132072/1720	21.50	20.93	1.720	-0.030	1.14	1.961	75
			0	QPSK	DSI4	50%	25	132072/1720	21.50	21.03	1.710	0.030	1.11	1.905	/
	(Upper)	Top Edge	0	QPSK	DSI4	1	50	132072/1720	21.50	20.93	1.510	0.086	1.14	1.722	/
		Battery2	0	QPSK	DSI4	1	50	132072/1720	21.50	20.93	1.510	0.086	1.14	1.722	/

Band	Antenna	Test Position	Dist. (mm)	Mode	Duty Cycle	Power Reduction	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR10g (W/Kg)	Power Drift (dB)	Scaling Factor	Report SAR10g (W/kg)	Plot No.
U-NII-2A (Original)	Wi-Fi	Back Side	0	802.11a	97.4%	Receiver off	56/5280	18.50	17.78	0.280	0.010	1.212	0.339	/
		Front Side	0	802.11a	97.4%	Receiver off	56/5280	18.50	17.78	0.468	0.050	1.212	0.567	/
		Left Edge	0	802.11a	97.4%	Receiver off	56/5280	18.50	17.78	0.126	0.010	1.212	0.153	/
		Right Edge	0	802.11a	97.4%	Receiver off	56/5280	18.50	17.78	0.326	0.070	1.212	0.395	/
		Top Edge	0	802.11a	97.4%	Receiver off	56/5280	18.50	17.78	0.729	0.034	1.212	0.884	/
		Bottom Edge	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Top Edge	0	802.11a	97.4%	Receiver off	56/5280	18.50	17.78	0.762	0.160	1.212	0.924	/
U-NII-2C	Wi-Fi	Back Side	0	802.11a	97.4%	Receiver off	120/5600	18.50	17.55	0.316	0.022	1.277	0.404	/

SAR Test Report
Report No.: R2309A0988-S1

(Original)	Front Side	0	802.11a	97.4%	Receiver off	120/5600	18.50	17.55	0.672	0.099	1.277	0.858	/
	Left Edge	0	802.11a	97.4%	Receiver off	120/5600	18.50	17.55	0.127	-0.030	1.277	0.162	/
	Right Edge	0	802.11a	97.4%	Receiver off	120/5600	18.50	17.55	0.329	0.024	1.277	0.420	/
	Top Edge	0	802.11a	97.4%	Receiver off	120/5600	18.50	17.55	0.927	0.000	1.277	1.184	/
	Bottom Edge	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
	Top Edge Battery2 12G+512G	0	802.11a	97.4%	Receiver off	120/5600	18.50	17.55	0.958	0.048	1.277	1.224	76

NFC SAR

Band	Antenna	Test Position	Dist. (mm)	Mode	Duty Cycle	Power Reduction	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR10g (W/Kg)	Power Drift (dB)	Scaling Factor	Report SAR10g (W/Kg)	Plot No.
NFC (Original)	NFC	Back Side	0	NFC-A	N/A	N/A	13.56	N/A	N/A	0.023	-0.045	N/A	0.023	77
		Front Side	0	NFC-A	N/A	N/A	13.56	N/A	N/A	0.001	-0.048	N/A	0.001	/
		Left Edge	0	NFC-A	N/A	N/A	13.56	N/A	N/A	0.001	-0.128	N/A	0.001	/
		Right Edge	0	NFC-A	N/A	N/A	13.56	N/A	N/A	0.001	-0.130	N/A	0.001	/
		Top Edge	0	NFC-A	N/A	N/A	13.56	N/A	N/A	0.001	-0.053	N/A	0.001	/
		Bottom Edge	0	NFC-A	N/A	N/A	13.56	N/A	N/A	N/A	N/A	N/A	N/A	/

Additional SAR test at a conservative distance (triggering distance minus 1mm)

Band	Antenna	Dist. (mm)	Test Position	Mode	Power Reduction	RB	Offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g (W/Kg)	Power Drift (dB)	Scaling Factor	Report SAR1g (W/kg)	Plot No.
GSM850 (Original)	(Upper)	17	Back Side	GPRS 4TX Slots	DSI2	N/A	N/A	190/836.6	27.50	26.47	0.069	0.020	1.27	0.087	/
		11	Front Side	GPRS 4TX Slots	DSI2	N/A	N/A	190/836.6	27.50	26.47	0.122	0.019	1.27	0.155	/
		17	Top Edge	GPRS 4TX Slots	DSI2	N/A	N/A	190/836.6	27.50	26.47	0.064	0.060	1.27	0.081	/
GSM1900 (Original)	(Low)	17	Back Side	GPRS 4TX Slots	DSI2	N/A	N/A	661/1880	24.50	23.30	0.373	0.010	1.32	0.492	/
		11	Front Side	GPRS 4TX Slots	DSI2	N/A	N/A	661/1880	24.50	23.30	0.399	0.028	1.32	0.526	/
		17	Bottom Edge	GPRS 4TX Slots	DSI2	N/A	N/A	661/1880	24.50	23.30	0.464	-0.024	1.32	0.612	/
	(Upper)	17	Back Side	GPRS 4TX Slots	DSI2	N/A	N/A	661/1880	24.50	22.63	0.414	0.071	1.54	0.637	/
		11	Front Side	GPRS 4TX Slots	DSI2	N/A	N/A	661/1880	24.50	22.63	0.449	0.010	1.54	0.691	/
		17	Top Edge	GPRS 4TX Slots	DSI2	N/A	N/A	661/1880	24.50	22.63	0.583	0.024	1.54	0.897	/
		17	Top Edge	GPRS 4TX Slots	DSI2	N/A	N/A	512/1850.2	24.50	22.67	0.615	0.160	1.52	0.937	/
WCDMA II (Original)	(Low)	17	Back Side	RMC 12.2K	DSI2	N/A	N/A	9400/1880	23.50	22.69	0.704	0.180	1.21	0.848	/
		17	Back Side	RMC 12.2K	DSI2	N/A	N/A	9262/1852.4	23.50	21.91	0.446	0.025	1.44	0.643	/
		17	Back Side	RMC 12.2K	DSI2	N/A	N/A	9538/1907.6	23.50	23.15	0.504	0.069	1.08	0.546	/
		11	Front Side	RMC 12.2K	DSI2	N/A	N/A	9400/1880	23.50	22.43	0.708	0.160	1.28	0.906	/
		17	Bottom Edge	RMC 12.2K	DSI2	N/A	N/A	9400/1880	23.50	22.69	0.905	-0.150	1.21	1.091	78
		17	Bottom Edge	RMC 12.2K	DSI2	N/A	N/A	9262/1852.4	23.50	21.91	0.734	0.160	1.44	1.059	/
		17	Bottom Edge	RMC 12.2K	DSI2	N/A	N/A	9538/1907.6	23.50	23.15	0.718	0.032	1.08	0.778	/
	(Upper)	17	Bottom Edge Repeat	RMC 12.2K	DSI2	N/A	N/A	9400/1880	23.50	22.69	0.886	0.015	1.21	1.068	/
		17	Back Side	RMC 12.2K	DSI2	N/A	N/A	9400/1880	23.50	22.90	0.696	0.053	1.15	0.799	/
		11	Front Side	RMC 12.2K	DSI2	N/A	N/A	9400/1880	23.50	22.90	0.584	0.110	1.15	0.671	/
		17	Top Edge	RMC 12.2K	DSI2	N/A	N/A	9400/1880	23.50	22.90	0.814	0.037	1.15	0.935	/
		17	Top Edge	RMC 12.2K	DSI2	N/A	N/A	9262/1852.4	23.50	22.50	0.770	-0.063	1.26	0.969	/
		17	Top Edge	RMC 12.2K	DSI2	N/A	N/A	9538/1907.6	23.50	23.24	0.882	0.040	1.06	0.936	/
WCDMA IV (Original)	(Low)	17	Back Side	RMC 12.2K	DSI2	N/A	N/A	1413/1732.6	24.00	22.43	0.479	0.085	1.44	0.688	/
		11	Front Side	RMC 12.2K	DSI2	N/A	N/A	1413/1732.6	24.00	22.43	0.434	0.084	1.44	0.623	/
		17	Bottom Edge	RMC 12.2K	DSI2	N/A	N/A	1413/1732.6	24.00	22.43	0.702	0.140	1.44	1.008	/
		17	Bottom Edge	RMC 12.2K	DSI2	N/A	N/A	1312/1712.4	24.00	23.28	0.672	-0.062	1.18	0.793	/
		17	Bottom Edge	RMC 12.2K	DSI2	N/A	N/A	1513/1752.6	24.00	22.49	0.768	0.047	1.42	1.087	/
	(Upper)	17	Back Side	RMC 12.2K	DSI2	N/A	N/A	1413/1732.6	25.50	24.65	0.451	0.085	1.22	0.548	/
		11	Front Side	RMC 12.2K	DSI2	N/A	N/A	1413/1732.6	25.50	24.65	0.607	-0.030	1.22	0.738	/
		17	Top Edge	RMC 12.2K	DSI2	N/A	N/A	1413/1732.6	25.50	24.65	0.751	0.074	1.22	0.913	/

Band	Antenna	Dist. (mm)	Test Position	Mode	Power Reduction	RB	Offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g (W/Kg)	Power Drift (dB)	Scaling Factor	Report SAR1g (W/kg)	Note
LTE 2 (Original)	(Low)	17	Back Side	QPSK	DSI2	1	50	19100/1900	25.00	24.44	0.429	0.052	1.14	0.488	/
		11	Front Side	QPSK	DSI2	1	50	19100/1900	25.00	24.44	0.421	0.060	1.14	0.479	/

	(Upper)	17	Bottom Edge	QPSK	DSI2	1	50	19100/1900	25.00	24.44	0.570	0.041	1.14	0.648	/
		17	Back Side	QPSK	DSI2	1	50	19100/1900	24.00	23.30	0.697	0.130	1.17	0.819	/
		17	Back Side	QPSK	DSI2	1	99	18700/1860	24.00	22.90	0.557	0.062	1.29	0.718	/
		17	Back Side	QPSK	DSI2	1	50	18900/1880	24.00	23.05	0.612	0.150	1.24	0.762	/
		17	Back Side	QPSK	DSI2	50%	25	19100/1900	24.00	23.48	0.698	0.100	1.13	0.787	/
		11	Front Side	QPSK	DSI2	1	50	19100/1900	24.00	23.30	0.813	0.110	1.17	0.955	/
		11	Front Side	QPSK	DSI2	1	99	18700/1860	24.00	22.90	0.657	0.170	1.29	0.846	/
		11	Front Side	QPSK	DSI2	1	50	18900/1880	24.00	23.05	0.712	0.035	1.24	0.886	/
		11	Front Side	QPSK	DSI2	50%	25	19100/1900	24.00	23.48	0.763	0.052	1.13	0.860	/
		11	Front Side	QPSK	DSI2	50%	25	18700/1860	24.00	22.92	0.609	0.041	1.28	0.781	/
		11	Front Side	QPSK	DSI2	50%	50	18900/1880	24.00	23.28	0.701	-0.060	1.18	0.827	/
		17	Top Edge	QPSK	DSI2	1	50	19100/1900	24.00	23.30	0.913	0.025	1.17	1.073	/
		17	Top Edge	QPSK	DSI2	1	99	18700/1860	24.00	22.90	0.831	0.052	1.29	1.071	/
		17	Top Edge	QPSK	DSI2	1	50	18900/1880	24.00	23.05	0.862	0.058	1.24	1.073	/
		17	Top Edge	QPSK	DSI2	50%	25	19100/1900	24.00	23.48	0.959	0.090	1.13	1.081	79
		17	Top Edge	QPSK	DSI2	50%	25	18700/1860	24.00	22.92	0.838	0.086	1.28	1.075	/
		17	Top Edge	QPSK	DSI2	50%	50	18900/1880	24.00	23.28	0.914	0.041	1.18	1.079	/
		17	Top Edge	QPSK	DSI2	100%	0	19100/1900	24.00	23.42	0.944	0.052	1.14	1.079	/
		17	Top Edge	QPSK	DSI2	100%	0	18700/1860	24.00	22.58	0.712	0.050	1.39	0.987	/
		17	Top Edge	QPSK	DSI2	100%	0	18900/1880	24.00	22.98	0.799	0.130	1.26	1.011	/
		17	Top Edge Repeat	QPSK	DSI2	50%	25	19100/1900	24.00	23.48	0.946	0.012	1.13	1.066	/
LTE 5 (Original)	(Upper)	17	Back Side	QPSK	DSI2	1	25	20450/829	25.50	23.88	0.119	0.012	1.45	0.173	/
		11	Front Side	QPSK	DSI2	1	25	20450/829	25.50	23.88	0.086	-0.100	1.45	0.125	/
		17	Top Edge	QPSK	DSI2	1	25	20450/829	25.50	23.88	0.066	0.020	1.45	0.096	/
LTE 7 (Original)	(Low)	17	Back Side	QPSK	DSI2	1	50	20850/2510	25.50	24.82	0.655	0.016	1.17	0.766	/
		11	Front Side	QPSK	DSI2	1	50	20850/2510	25.50	24.82	0.852	0.010	1.17	0.996	/
		11	Front Side	QPSK	DSI2	1	50	21100/2535	25.50	24.72	0.827	0.150	1.20	0.990	/
		11	Front Side	QPSK	DSI2	1	50	21350/2560	25.50	24.77	0.807	0.068	1.18	0.955	/
		11	Front Side	QPSK	DSI2	50%	25	20850/2510	24.50	24.01	0.722	0.052	1.12	0.808	/
		11	Front Side	QPSK	DSI2	50%	25	21100/2535	24.50	23.93	0.753	0.041	1.14	0.859	/
		11	Front Side	QPSK	DSI2	50%	25	21350/2560	24.50	23.89	0.662	0.075	1.15	0.762	/
		11	Front Side	QPSK	DSI2	100%	0	20850/2510	24.50	23.89	0.688	-0.068	1.15	0.792	/
		17	Bottom Edge	QPSK	DSI2	1	50	20850/2510	25.50	24.82	0.589	-0.066	1.17	0.689	/
		11	Front Side Repeat	QPSK	DSI2	1	50	20850/2510	25.50	24.82	0.865	0.024	1.17	1.012	80
	(Upper)	17	Back Side	QPSK	DSI2	1	99	20850/2510	25.50	25.24	0.309	0.085	1.06	0.328	/
		11	Front Side	QPSK	DSI2	1	99	20850/2510	25.50	25.24	0.535	0.043	1.06	0.568	/
		17	Top Edge	QPSK	DSI2	1	99	20850/2510	25.50	25.24	0.371	0.069	1.06	0.394	/
LTE 26 (Original)	(Low)	17	Back Side	QPSK	DSI2	1	38	26865/831.5	25.50	24.08	0.178	0.012	1.39	0.247	/
		11	Front Side	QPSK	DSI2	1	38	26865/831.5	25.50	24.08	0.329	0.038	1.39	0.456	81
		17	Bottom Edge	QPSK	DSI2	1	38	26865/831.5	25.50	24.08	0.093	0.020	1.39	0.129	/
	(Upper)	17	Back Side	QPSK	DSI2	1	38	26765/821.5	25.50	23.88	0.071	0.100	1.45	0.103	/

		11	Front Side	QPSK	DSI2	1	38	26765/821.5	25.50	23.88	0.135	0.024	1.45	0.196	/
		17	Top Edge	QPSK	DSI2	1	38	26765/821.5	25.50	23.88	0.070	0.016	1.45	0.102	/
LTE 41 (Original)	(Low)	17	Back Side	QPSK	DSI2	1	50	41055/2636.5	25.50	24.32	0.572	0.020	1.31	0.751	/
		11	Front Side	QPSK	DSI2	1	50	41055/2636.5	25.50	24.32	0.593	0.019	1.31	0.778	/
		17	Bottom Edge	QPSK	DSI2	1	50	41055/2636.5	25.50	24.32	0.448	0.060	1.31	0.588	/
	(Upper)	17	Back Side	QPSK	DSI2	1	50	40620/2593	25.50	25.01	0.201	0.027	1.12	0.225	/
		11	Front Side	QPSK	DSI2	1	50	40620/2593	25.50	25.01	0.327	0.049	1.12	0.366	/
		17	Top Edge	QPSK	DSI2	1	50	40620/2593	25.50	25.01	0.360	0.021	1.12	0.403	/
LTE 66 (Original)	(Low)	17	Back Side	QPSK	DSI2	1	0	132072/1720	24.50	23.82	0.674	0.180	1.17	0.788	/
		11	Front Side	QPSK	DSI2	1	0	132072/1720	24.50	23.82	0.649	0.110	1.17	0.759	/
		17	Bottom Edge	QPSK	DSI2	1	0	132072/1720	24.50	23.82	0.802	0.090	1.17	0.938	/
		17	Bottom Edge	QPSK	DSI2	1	0	132322/1745	24.50	23.12	0.640	0.053	1.37	0.879	/
		17	Bottom Edge	QPSK	DSI2	1	50	132572/1770	24.50	22.98	0.745	0.053	1.42	1.057	/
		17	Bottom Edge	QPSK	DSI2	50%	0	132072/1720	24.50	24.06	0.791	0.130	1.11	0.875	/
		17	Bottom Edge	QPSK	DSI2	50%	0	132322/1745	24.50	23.11	0.774	0.062	1.38	1.066	/
		17	Bottom Edge	QPSK	DSI2	50%	50	132572/1770	24.50	23.24	0.803	0.056	1.34	1.073	/
		17	Bottom Edge	QPSK	DSI2	100%	0	132072/1720	24.50	23.75	0.789	0.019	1.19	0.938	/
		17	Bottom Edge	QPSK	DSI2	100%	0	132322/1745	24.50	23.00	0.753	0.053	1.41	1.064	/
		17	Bottom Edge	QPSK	DSI2	100%	0	132572/1770	24.50	23.04	0.721	0.068	1.40	1.009	/
		17	Bottom Edge Repeat	QPSK	DSI2	50%	50	132572/1770	24.50	23.24	0.806	-0.050	1.34	1.077	82
	(Upper)	17	Back Side	QPSK	DSI2	1	50	132072/1720	25.50	24.86	0.461	0.039	1.16	0.534	/
		11	Front Side	QPSK	DSI2	1	50	132072/1720	25.50	24.86	0.611	0.010	1.16	0.708	/
		17	Top Edge	QPSK	DSI2	1	50	132072/1720	25.50	24.86	0.653	-0.022	1.16	0.757	/

10.3 Simultaneous Transmission Analysis

Simultaneous Transmission Configurations	Head	Body-worn	Hotspot	Product Specific 10-g SAR
Low Antenna + Bluetooth	Yes	Yes	Yes	Yes
Upper Antenna + Bluetooth	Yes	Yes	Yes	Yes
Low Antenna + Wi-Fi 2.4G	Yes	Yes	Yes	Yes
Upper Antenna + Wi-Fi 2.4G	Yes	Yes	Yes	Yes
Low Antenna + Wi-Fi 5G	Yes	Yes	Yes	Yes
Upper Antenna + Wi-Fi 5G.	Yes	Yes	Yes	Yes
Wi-Fi 2.4G + Bluetooth	N/A	N/A	N/A	N/A
Wi-Fi 5G + Bluetooth	N/A	N/A	N/A	N/A
Low Antenna + Wi-Fi 2.4G + Bluetooth	N/A	N/A	N/A	N/A
Upper Antenna + Wi-Fi 2.4G + Bluetooth.	N/A	N/A	N/A	N/A
Low Antenna + Wi-Fi 5G + Bluetooth	N/A	N/A	N/A	N/A
Upper Antenna + Wi-Fi 5G + Bluetooth	N/A	N/A	N/A	N/A
Wi-Fi 2.4G + Wi-Fi 5G	N/A	N/A	N/A	N/A
Low Antenna + Upper Antennae	N/A	N/A	N/A	N/A

General Note:

1. The Scaled SAR summation is calculated based on the same configuration and test position.
2. Per KDB 447498 D01, simultaneous transmission SAR is compliant if,
 - i) Scalar SAR summation $< 1.6\text{W/kg}$, simultaneously transmission SAR measurement is not necessary.
 - ii) $\text{SPLSR} = (\text{SAR1} + \text{SAR2})^{1.5} / (\text{min. separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where $(x1, y1, z1)$ and $(x2, y2, z2)$ are the coordinates of the extrapolated peak SAR locations in the zoom scan.
 - iii) If $\text{SPLSR} \leq 0.04$, simultaneously transmission SAR measurement is not necessary.

The Maximum SAR_{1g} Value for Low-Antenna

SAR _{1g/10g} (W/kg)		GSM 850	GSM 1900	WCDMA Band II	WCDMA Band IV	WCDMA Band V	LTE 2	LTE 5	LTE 7	LTE 12	LTE 13	LTE 26	LTE 38	LTE 41	LTE 66	MAX. SAR _{1g/10g}
Test Position																
Head	Left Cheek	0.148	0.196	0.445	0.247	0.211	0.259	0.191	0.461	0.178	0.123	0.216	0.096	0.096	0.155	0.461
	Left Tilt	0.094	0.074	0.245	0.114	0.143	0.094	0.152	0.182	0.113	0.097	0.151	0.068	0.068	0.084	0.245
	Right Cheek	0.145	0.086	0.259	0.142	0.254	0.154	0.256	0.352	0.206	0.136	0.244	0.088	0.088	0.085	0.352
	Right Tilt	0.084	0.081	0.270	0.153	0.139	0.100	0.132	0.278	0.123	0.078	0.144	0.079	0.079	0.061	0.278
Body worn	Back Side	0.347	0.383	0.633	0.711	0.481	0.510	0.495	0.764	0.365	0.291	0.431	0.608	0.732	0.561	0.764
	Front Side	0.345	0.264	0.657	0.399	0.328	0.268	0.340	0.554	0.244	0.188	0.209	0.377	0.282	0.560	0.657
Hotspot	Back Side	0.347	0.383	0.633	0.711	0.481	0.510	0.495	0.764	0.365	0.291	0.431	0.608	0.732	0.561	0.764
	Front Side	0.330	0.331	0.266	0.732	0.328	0.189	0.340	0.648	0.244	0.188	0.317	0.377	0.637	0.272	0.732
	Left Edge	0.162	0.308	0.622	0.376	0.147	0.413	0.154	0.368	0.130	0.095	0.165	0.229	0.360	0.272	0.622
	Right Edge	0.264	0.001	0.001	0.001	0.136	0.001	0.144	0.213	0.251	0.191	0.197	0.167	0.256	0.051	0.264
	Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Bottom Edge	0.166	0.519	0.846	0.948	0.270	0.632	0.327	0.864	0.167	0.123	0.291	0.649	0.847	0.744	0.948
Product Specific 10-g SAR	Back Side	N/A	N/A	0.764	2.132	N/A	0.722	N/A	1.160	N/A	N/A	N/A	N/A	N/A	1.676	2.132
	Front Side	N/A	N/A	N/A	0.949	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.949
	Left Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Bottom Edge	N/A	N/A	0.370	1.425	N/A	0.526	N/A	1.707	N/A	N/A	N/A	N/A	1.141	1.306	1.707

The Maximum SAR_{1g} Value for Upper-Antenna

SAR _{1g/10g} (W/kg) Test Position		GSM 850	GSM 1900	WCDMA Band II	WCDMA Band IV	WCDMA Band V	LTE 2	LTE 5	LTE 7	LTE 12	LTE 13	LTE 26	LTE 38	LTE 41	LTE 66	MAX. SAR _{1g/10g}
Head	Left Cheek	0.257	0.341	0.514	0.423	0.680	0.358	0.691	0.357	0.371	0.361	0.448	0.480	0.355	0.363	0.691
	Left Tilt	0.276	0.401	0.538	0.468	0.612	0.500	0.545	0.424	0.297	0.276	0.390	0.639	0.439	0.520	0.639
	Right Cheek	0.475	0.572	0.758	0.688	0.998	0.609	0.967	0.668	0.582	0.517	0.623	0.799	0.745	0.930	0.998
	Right Tilt	0.321	0.832	1.083	1.090	0.742	0.977	0.796	0.877	0.476	0.386	0.453	1.028	0.884	1.071	1.090
Body worn	Back Side	0.137	0.398	0.413	0.813	0.340	0.372	0.357	0.531	0.243	0.226	0.243	0.599	0.599	1.092	1.092
	Front Side	0.176	0.423	0.397	0.423	0.199	0.592	0.148	0.278	0.123	0.125	0.096	0.165	0.165	0.475	0.592
Hotspot	Back Side	0.137	0.398	0.413	0.813	0.340	0.372	0.357	0.531	0.243	0.226	0.243	0.599	0.599	1.092	1.092
	Front Side	0.128	0.426	0.296	0.353	0.199	0.265	0.208	0.268	0.123	0.125	0.136	0.315	0.315	0.415	0.426
	Left Edge	0.057	0.266	0.397	0.230	0.092	0.384	0.107	0.368	0.095	0.083	0.080	0.194	0.194	0.268	0.397
	Right Edge	0.080	0.072	0.126	0.128	0.113	0.099	0.107	0.102	0.081	0.079	0.087	0.064	0.064	0.127	0.128
	Top Edge	0.171	0.846	0.907	1.015	0.259	0.733	0.252	0.586	0.153	0.162	0.178	0.742	0.742	1.072	1.072
	Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Product Specific 10-g SAR	Back Side	N/A	N/A	N/A	1.394	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.494	1.494
	Front Side	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Left Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Top Edge	N/A	0.963	2.311	1.960	N/A	2.552	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.961	2.552
	Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

About Bluetooth, Wi-Fi and Low-Antenna/ Upper-Antenna

Test Position		SAR _{1g/10g} (W/kg)	Low- Antenna	Upper- Antenna	Wi-Fi 2.4G	Wi-Fi 5G			Bluetooth	MAX. ΣSAR _{1g/10g}		
					U-NII-1	U-NII-2A	U-NII-2C	U-NII-3				
		1	2	3	4	5	6	7	8	Max.(1,2)+ Max.(3)	Max.(1,2)+ Max.(4-7)	Max.(1,2)+ Max.(8)
Head	Left, Cheek	0.461	0.691	0.763	0.779	0.748	0.836	0.673	0.104	1.454	1.527	0.795
	Left, Tilt	0.245	0.639	0.663	0.628	0.798	0.769	0.640	0.095	1.302	1.437	0.734
	Right, Cheek	0.352	0.998	0.347	0.310	0.309	0.388	0.354	0.058	1.345	1.386	1.056
	Right, Tilt	0.278	1.090	0.417	0.342	0.334	0.414	0.376	0.060	1.507	1.504	1.150
Body worn	Back Side	0.764	1.092	0.120	0.231	0.279	0.282	0.420	0.002	1.212	1.512	1.094
	Front Side	0.657	0.592	0.219	0.265	0.129	0.222	0.362	0.002	0.876	1.019	0.659
Hotspot	Back Side	0.764	1.092	0.120	0.231	N/A	N/A	0.420	0.002	1.212	1.512	1.094
	Front Side	0.732	0.426	0.219	0.265	N/A	N/A	0.362	0.002	0.951	1.094	0.734
	Left Edge	0.622	0.397	0.001	0.094	N/A	N/A	0.124	0.002	0.623	0.746	0.624
	Right Edge	0.264	0.128	0.129	0.183	N/A	N/A	0.321	0.002	0.393	0.585	0.266
	Top Edge	N/A	1.072	0.297	0.347	N/A	N/A	0.496	0.038	1.369	1.568	1.110
	Bottom Edge	0.948	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.948	0.948	0.948
Product Specific 10-g SAR	Back Side	2.132	1.494	N/A	N/A	0.339	0.404	N/A	N/A	2.132	2.536	2.132
	Front Side	0.949	N/A	N/A	N/A	0.567	0.858	N/A	N/A	0.949	1.807	0.949
	Left Edge	N/A	N/A	N/A	N/A	0.153	0.162	N/A	N/A	N/A	0.162	N/A
	Right Edge	N/A	N/A	N/A	N/A	0.395	0.420	N/A	N/A	N/A	0.42	N/A
	Top Edge	N/A	2.552	N/A	N/A	0.924	1.224	N/A	N/A	2.552	3.776	2.552
	Bottom Edge	1.707	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.707	1.707	1.707

Note:

1. The value with blue color is the maximum ΣSAR_{1g/10g} Value.

2. MAX. ΣSAR_{1g/10g} = Unlicensed SAR_{MAX} + Licensed SAR_{MAX}

3. MAX. ΣSAR_{1g} = 1.568W/kg < 1.6W/kg and MAX. ΣSAR_{10g} = 3.776W/kg < 4 W/kg, so the Simultaneous transmission SAR with volume scan are not required for Bluetooth, Wi-Fi and Low-Antenna/ Upper-Antenna.

11 Measurement Uncertainty

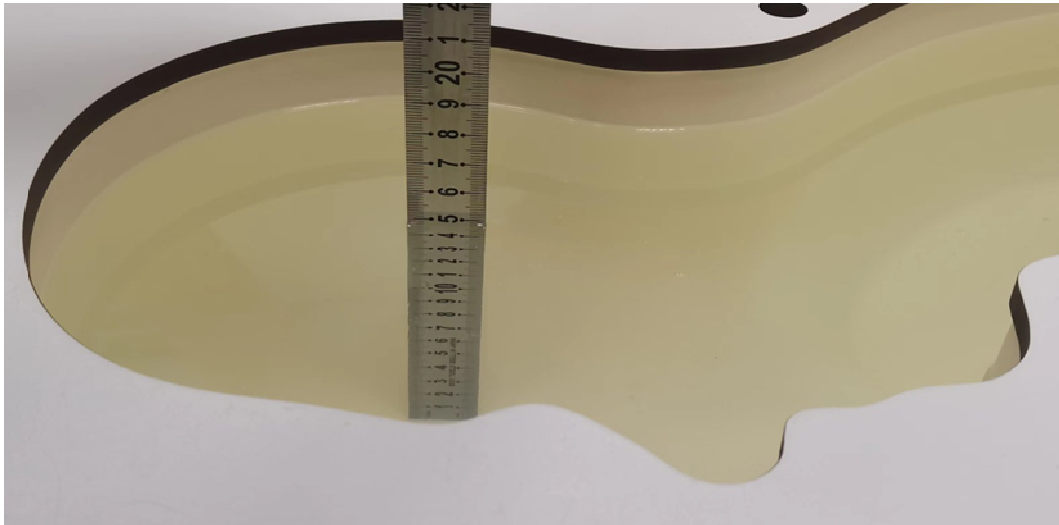
Per KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528- 2013 is not required in SAR reports submitted for equipment approval. This also applies to the 10-g SAR required for phablets in KDB Publication 648474.

ANNEX A: Test Layout

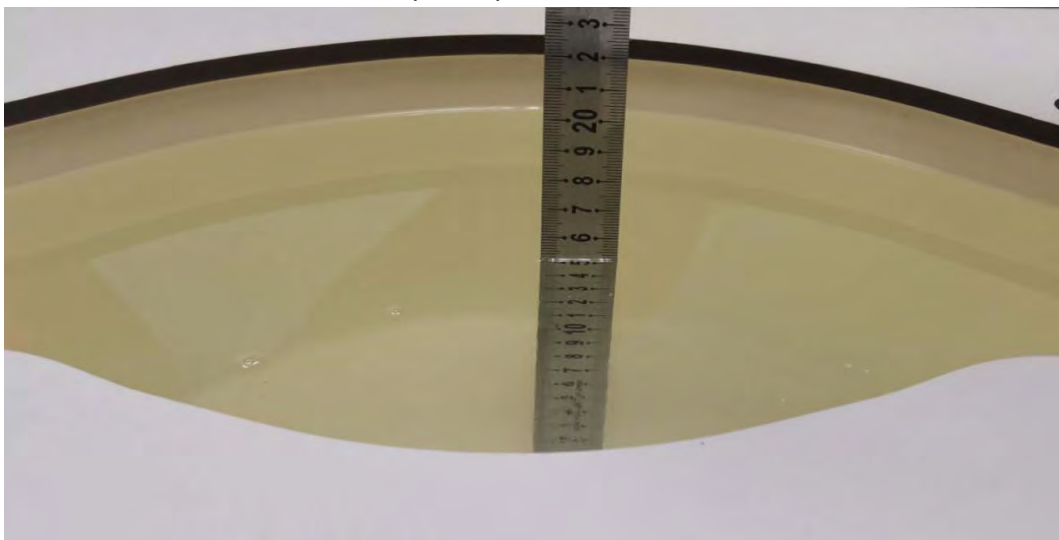


Tissue Simulating Liquids

For the measurement of the field distribution inside the flat phantom with DASY, the phantom must be filled with around 25 liters of homogeneous tissue simulating liquid. For SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is >15 cm, which is shown as below.



Picture 3: liquid depth in the head Phantom



Picture 4: Liquid depth in the flat Phantom

ANNEX B: System Check Results

Plot 1 System Performance Check at 750 MHz TSL

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3

Date: 2023/9/28

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

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.88 \text{ S/m}$; $\epsilon_r = 42.3$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 – SN3883; ConvF(9.70, 9.70, 9.70); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=15mm, Pin=250mW/Area Scan (4x12x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.15 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 50.165V/m; Power Drift = -0.08 dB

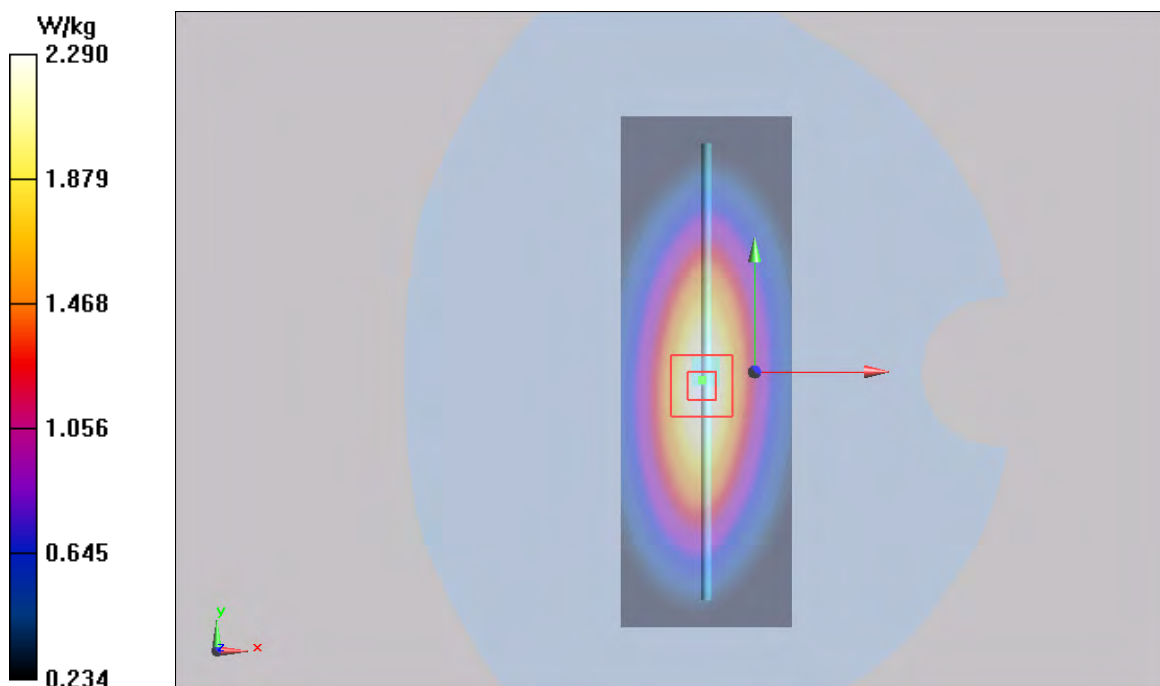
Peak SAR (extrapolated) = 3.16 W/kg

SAR(1 g) = 2.13 W/kg; SAR(10 g) = 1.41 W/kg

Smallest distance from peaks to all points 3 dB below = 8.7 mm

Ratio of SAR at M2 to SAR at M1 = 62.5%

Maximum value of SAR (measured) = 2.29 W/kg



Plot 2 System Performance Check at 750 MHz TSL

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3

Date: 2023/9/30

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

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.87 \text{ S/m}$; $\epsilon_r = 42.0$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 – SN3883; ConvF(9.70, 9.70, 9.70); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=15mm, Pin=250mW/Area Scan (4x12x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 2.11 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 50.515V/m ; Power Drift = 0.11 dB

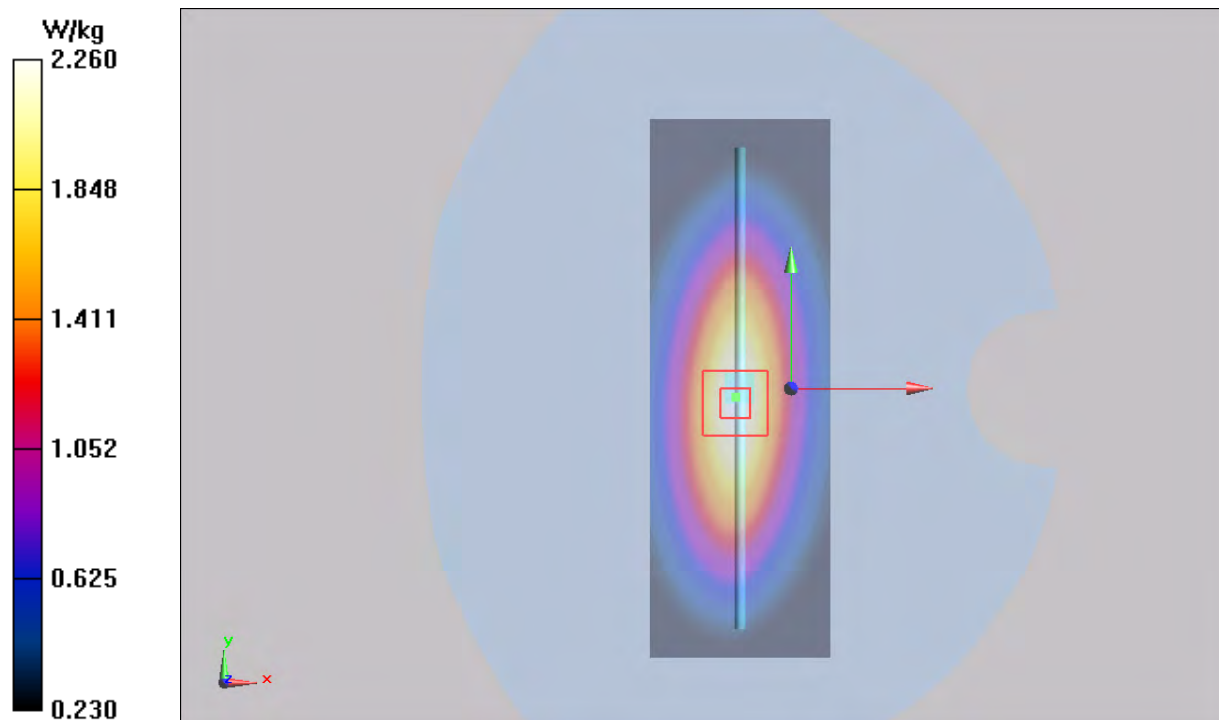
Peak SAR (extrapolated) = 3.02 W/kg

SAR(1 g) = 2.10 W/kg ; SAR(10 g) = 1.37 W/kg

Smallest distance from peaks to all points 3 dB below = 8.3 mm

Ratio of SAR at M2 to SAR at M1 = 69.4%

Maximum value of SAR (measured) = 2.260 W/kg



Plot 3 System Performance Check at 835 MHz TSL

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2

Date: 2023/9/27

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.88 \text{ S/m}$; $\epsilon_r = 41.4$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(9.35, 9.35, 9.35); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=15mm, Pin=250mW/Area Scan (4x12x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.58 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 53.241 V/m ; Power Drift = -0.076 dB

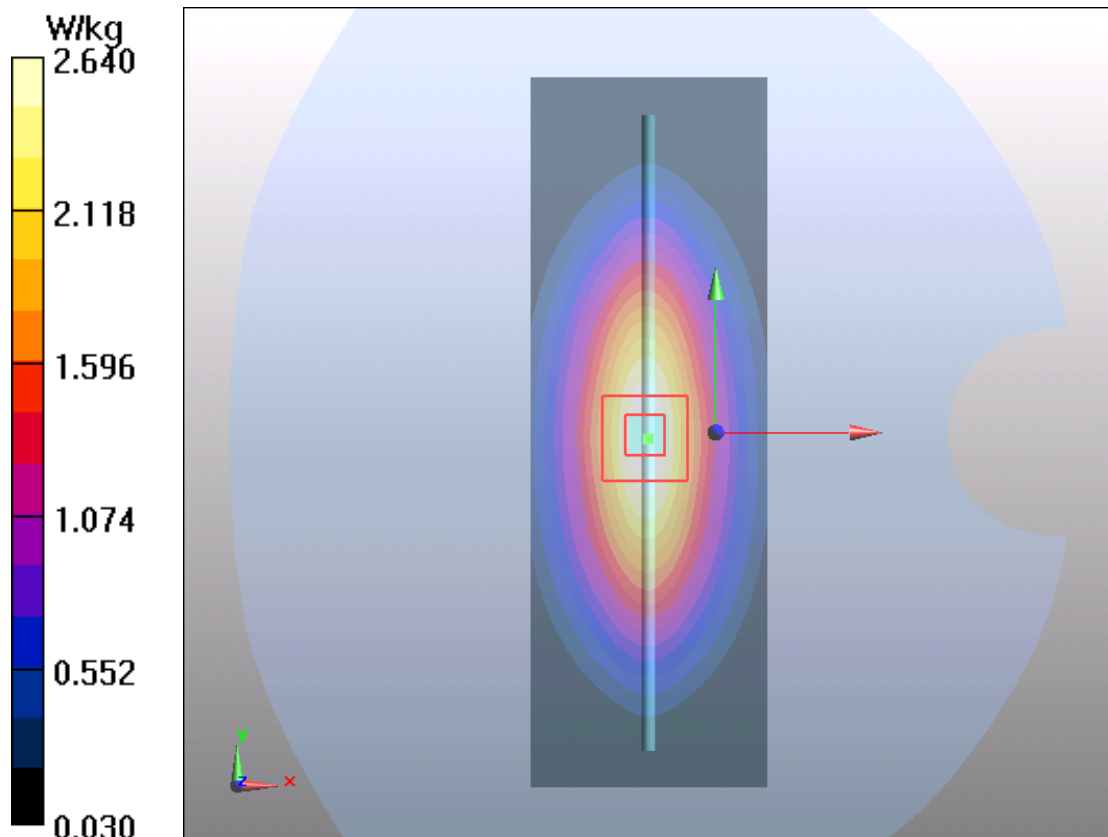
Peak SAR (extrapolated) = 3.67 W/kg

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

Smallest distance from peaks to all points 3 dB below = 16.6 mm

Ratio of SAR at M2 to SAR at M1 = 68.1%

Maximum value of SAR (measured) = 2.64 W/kg



Plot 4 System Performance Check at 835 MHz TSL

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2

Date: 2023/10/4

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.87 \text{ S/m}$; $\epsilon_r = 41.3$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(9.35, 9.35, 9.35); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=15mm, Pin=250mW/Area Scan (4x12x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 2.59 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 52.023 V/m ; Power Drift = -0.06 dB

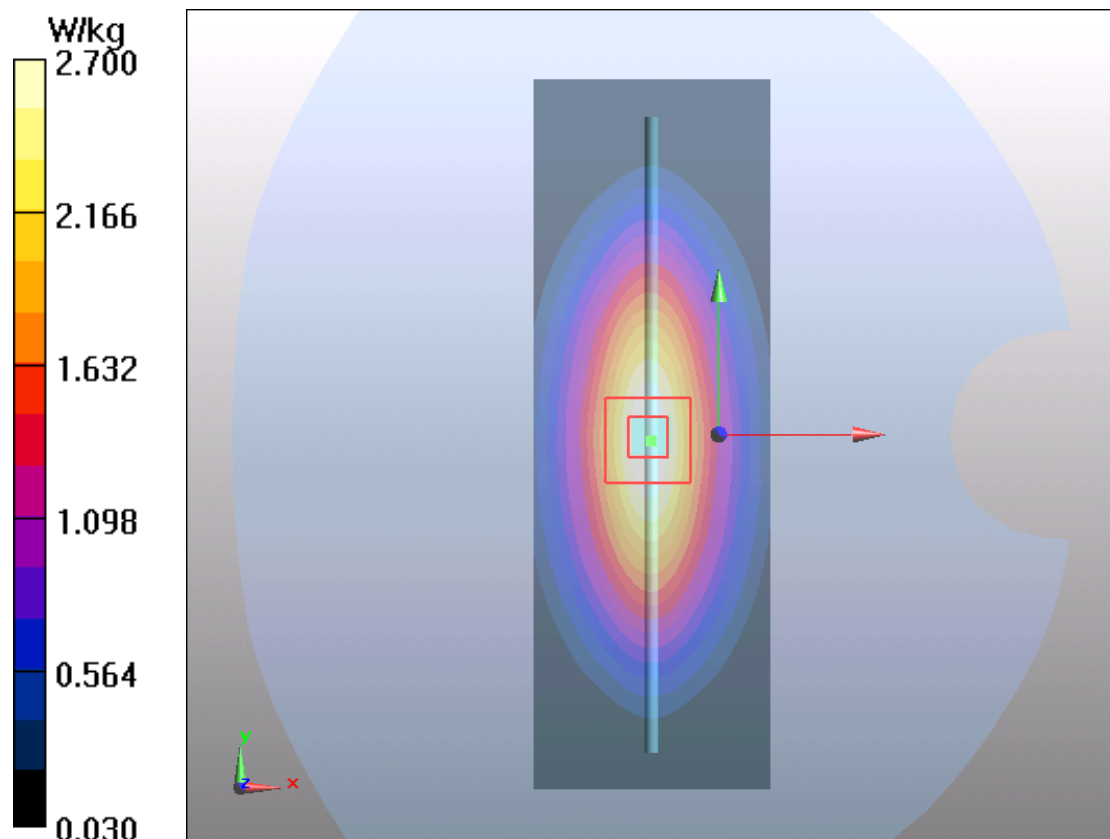
Peak SAR (extrapolated) = 3.25 W/kg

SAR(1 g) = 2.46 W/kg ; SAR(10 g) = 1.65 W/kg

Smallest distance from peaks to all points 3 dB below = 15.7 mm

Ratio of SAR at M2 to SAR at M1 = 65.4%

Maximum value of SAR (measured) = 2.70 W/kg



Plot 5 System Performance Check at 835 MHz TSL

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2

Date: 2023/10/5

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.92 \text{ S/m}$; $\epsilon_r = 41.4$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(9.35, 9.35, 9.35); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=15mm, Pin=250mW/Area Scan (4x12x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 2.52 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 54.435 V/m ; Power Drift = -0.014 dB

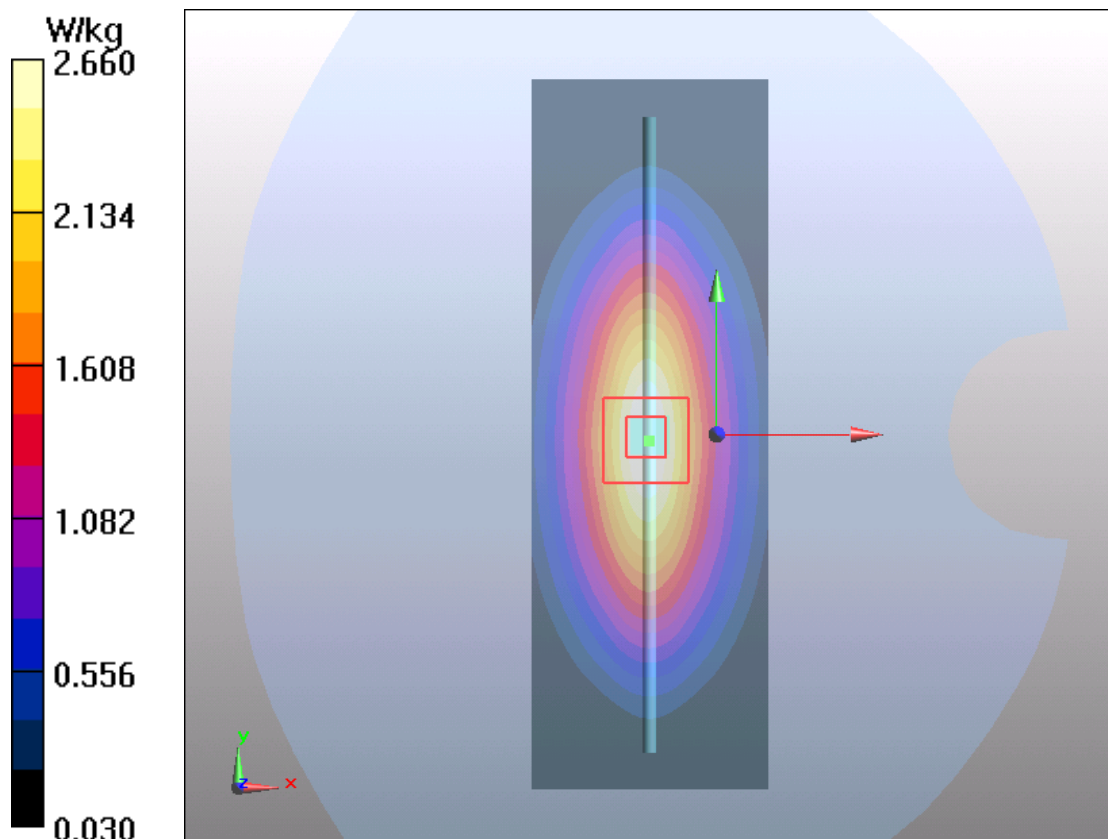
Peak SAR (extrapolated) = 3.18 W/kg

SAR(1 g) = 2.43 W/kg ; SAR(10 g) = 1.61 W/kg

Smallest distance from peaks to all points 3 dB below = 16.4 mm

Ratio of SAR at M2 to SAR at M1 = 63.8%

Maximum value of SAR (measured) = 2.660 W/kg



Plot 6 System Performance Check at 835 MHz TSL

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2

Date: 2023/10/8

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.89 \text{ S/m}$; $\epsilon_r = 41.3$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(9.35, 9.35, 9.35); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=15mm, Pin=250mW/Area Scan (4x12x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 2.61 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 55.249 V/m ; Power Drift = -0.021 dB

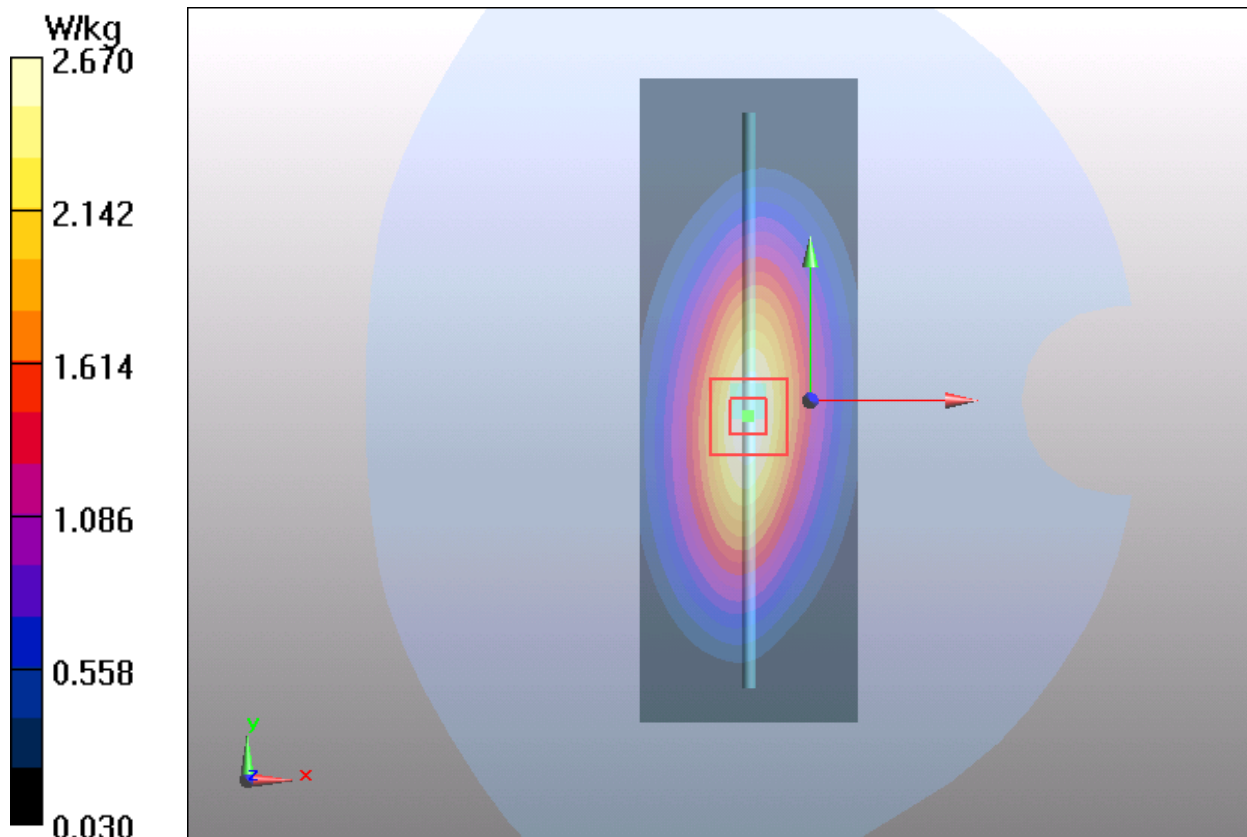
Peak SAR (extrapolated) = 3.94 W/kg

SAR(1 g) = 2.51 W/kg ; SAR(10 g) = 1.54 W/kg

Smallest distance from peaks to all points 3 dB below = 14.7 mm

Ratio of SAR at M2 to SAR at M1 = 69.4%

Maximum value of SAR (measured) = 2.67 W/kg



Plot 7 System Performance Check at 1750 MHz TSL

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2

Date: 2023/10/7

Communication System: CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1750 \text{ MHz}$; $\sigma = 1.34 \text{ S/m}$; $\epsilon_r = 40.2$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(8.10, 8.10, 8.10); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (5x8x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 9.18 W/kg

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 80.385 V/m ; Power Drift = 0.075 dB

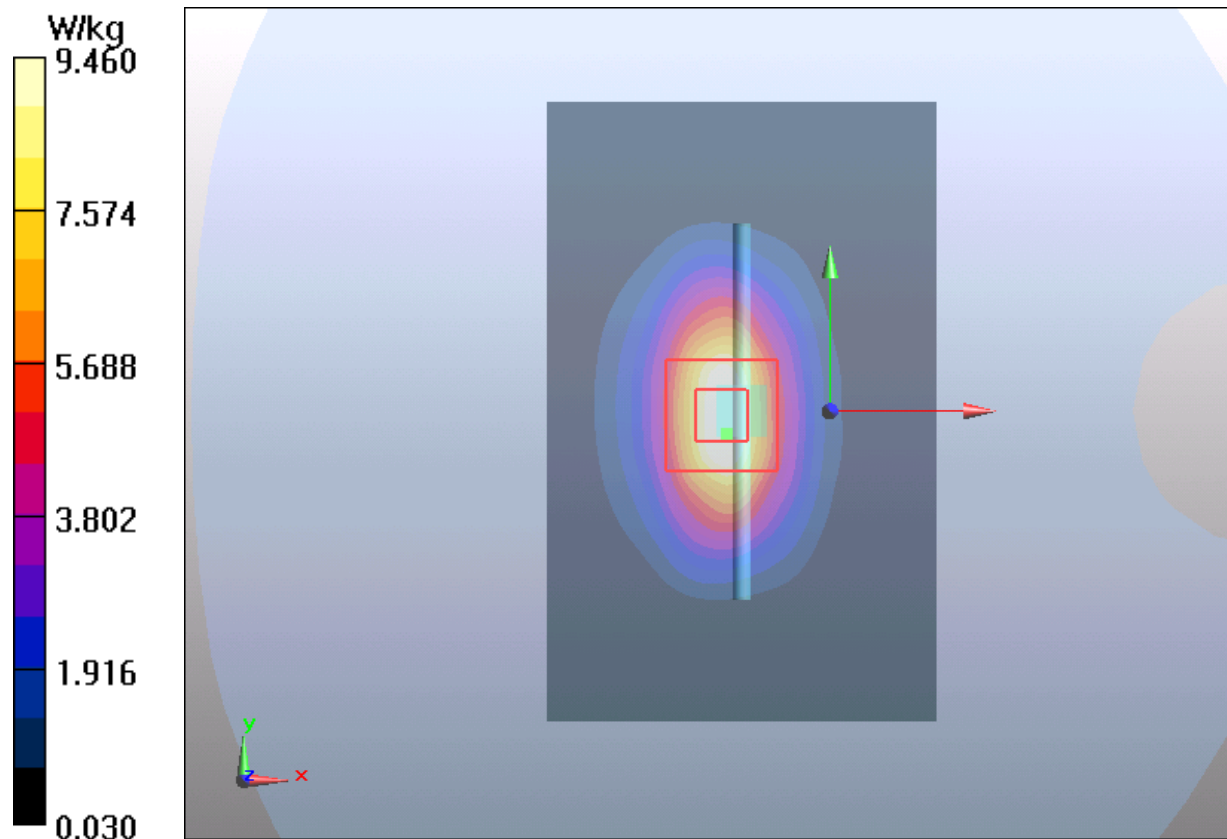
Peak SAR (extrapolated) = 15.5 W/kg

SAR(1 g) = 8.95 W/kg ; SAR(10 g) = 4.8 W/kg

Smallest distance from peaks to all points 3 dB below = 10mm

Ratio of SAR at M2 to SAR at M1 = 53.5%

Maximum value of SAR (measured) = 9.46 W/kg



Plot 8 System Performance Check at 1750 MHz TSL

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2

Date: 2023/10/9

Communication System: CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.34$ S/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C

Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(8.10, 8.10, 8.10); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (5x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 9.77 W/kg

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 80.134 V/m; Power Drift = 0.055 dB

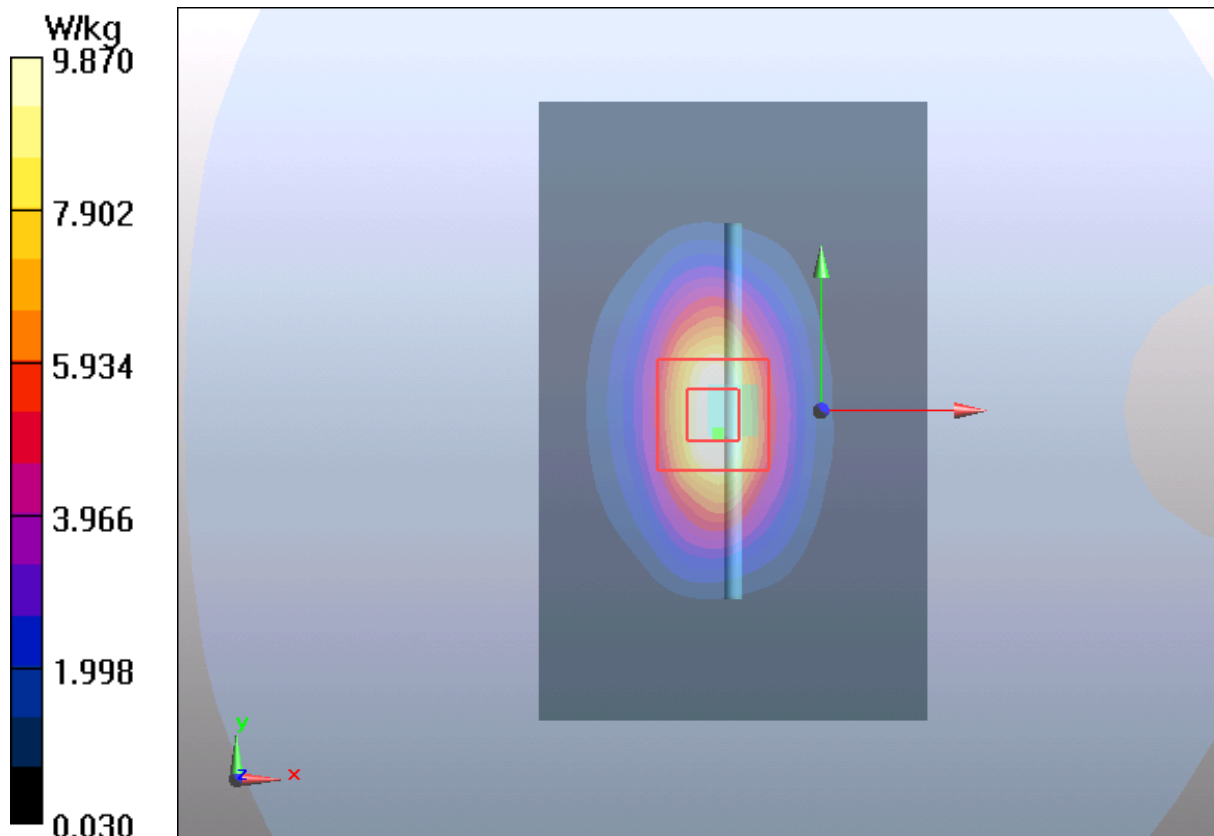
Peak SAR (extrapolated) = 15.81 W/kg

SAR(1 g) = 9.11 W/kg; SAR(10 g) = 4.77 W/kg

Smallest distance from peaks to all points 3 dB below = 8.6mm

Ratio of SAR at M2 to SAR at M1 = 54.6%

Maximum value of SAR (measured) = 9.87 W/kg



Plot 9System Performance Check at 1750 MHz TSL

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2

Date: 2023/10/12

Communication System: CW; Frequency: 1750 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 1750 \text{ MHz}$; $\sigma = 1.36 \text{ S/m}$; $\epsilon_r = 40.2$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(8.10, 8.10, 8.10); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (5x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 9.11 W/kg

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value =78.648 V/m; Power Drift = 0.023 dB

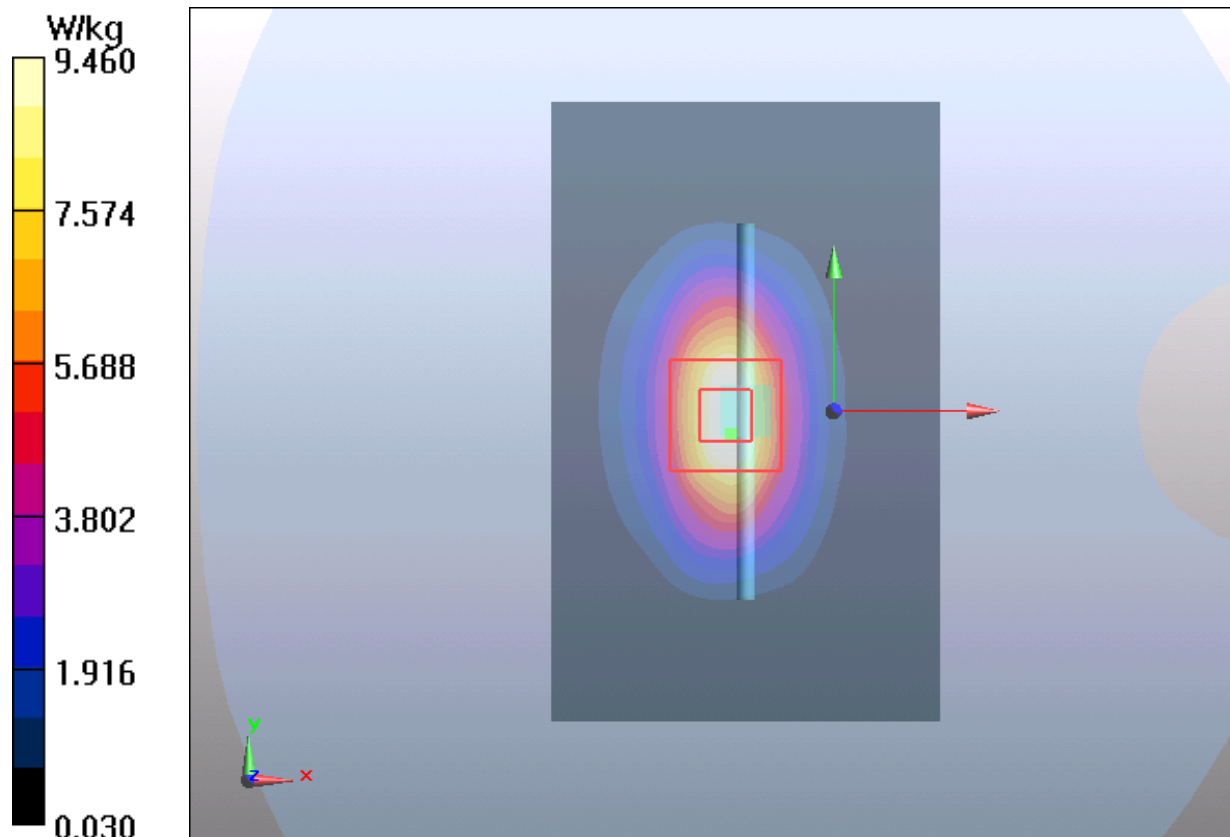
Peak SAR (extrapolated) = 15.74 W/kg

SAR(1 g) = 8.96 W/kg; SAR(10 g) = 4.75 W/kg

Smallest distance from peaks to all points 3 dB below = 10.6mm

Ratio of SAR at M2 to SAR at M1 = 56.2%

Maximum value of SAR (measured) = 9.46 W/kg



Plot 10System Performance Check at 1750 MHz TSL

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2

Date: 2023/10/17

Communication System: CW; Frequency: 1750 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 1750 \text{ MHz}$; $\sigma = 1.37 \text{ S/m}$; $\epsilon_r = 39.3$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(8.10, 8.10, 8.10); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (5x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 9.18 W/kg

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 81.264 V/m; Power Drift = 0.022 dB

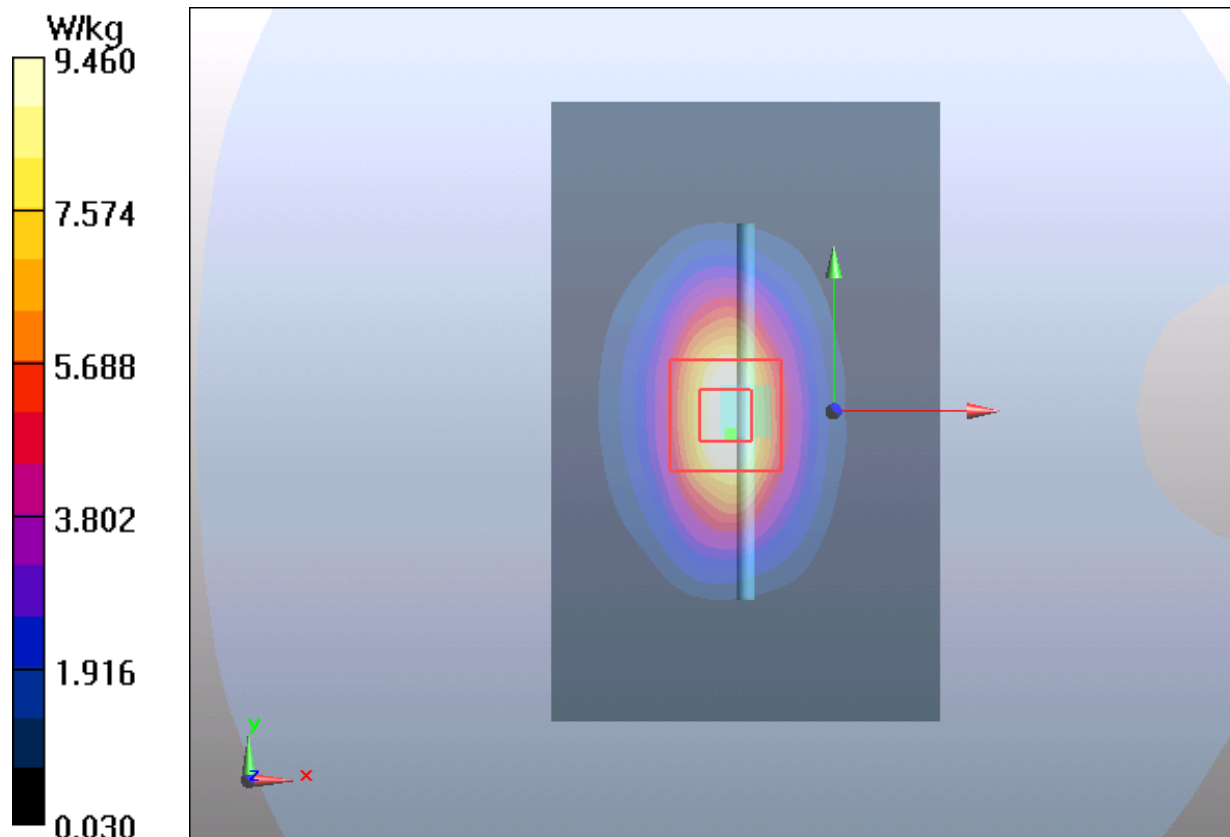
Peak SAR (extrapolated) = 16.28 W/kg

SAR(1 g) = 8.99 W/kg; SAR(10 g) = 4.77 W/kg

Smallest distance from peaks to all points 3 dB below = 8.6mm

Ratio of SAR at M2 to SAR at M1 = 52.3%

Maximum value of SAR (measured) = 9.460 W/kg



Plot 11 System Performance Check at 1900 MHz TSL

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2

Date: 2023/10/6

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.41 \text{ S/m}$; $\epsilon_r = 40.1$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C

Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.85, 7.85, 7.85); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 10.23 W/kg

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 85.857V/m ; Power Drift = 0.026 dB

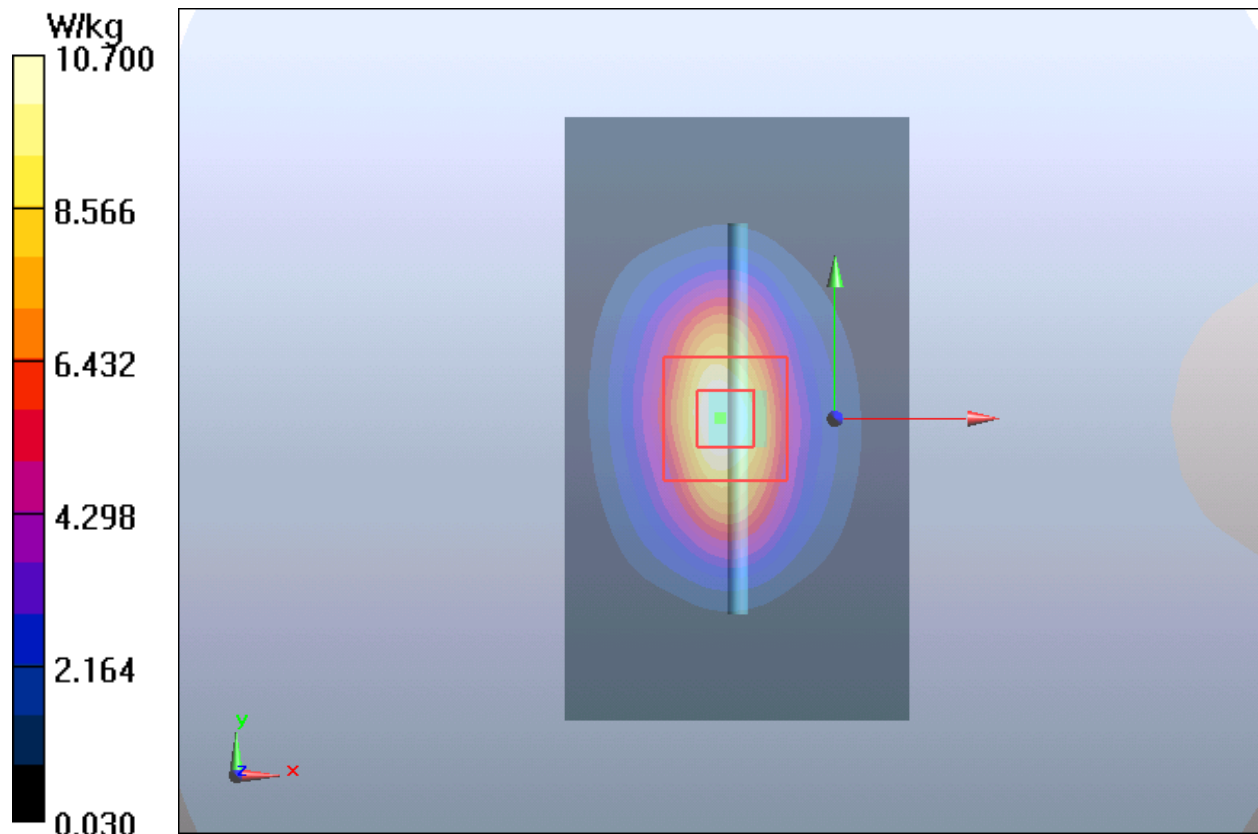
Peak SAR (extrapolated) = 17.84 W/kg

SAR(1 g) = 9.88 W/kg ; SAR(10 g) = 4.9 W/kg

Smallest distance from peaks to all points 3 dB below = 11.4 mm

Ratio of SAR at M2 to SAR at M1 = 52.7%

Maximum value of SAR (measured) = 10.70 W/kg



Plot 12 System Performance Check at 1900 MHz TSL

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2

Date: 2023/10/13

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.43$ S/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.85, 7.85, 7.85); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 10.43 W/kg

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.324 V/m; Power Drift = 0.013 dB

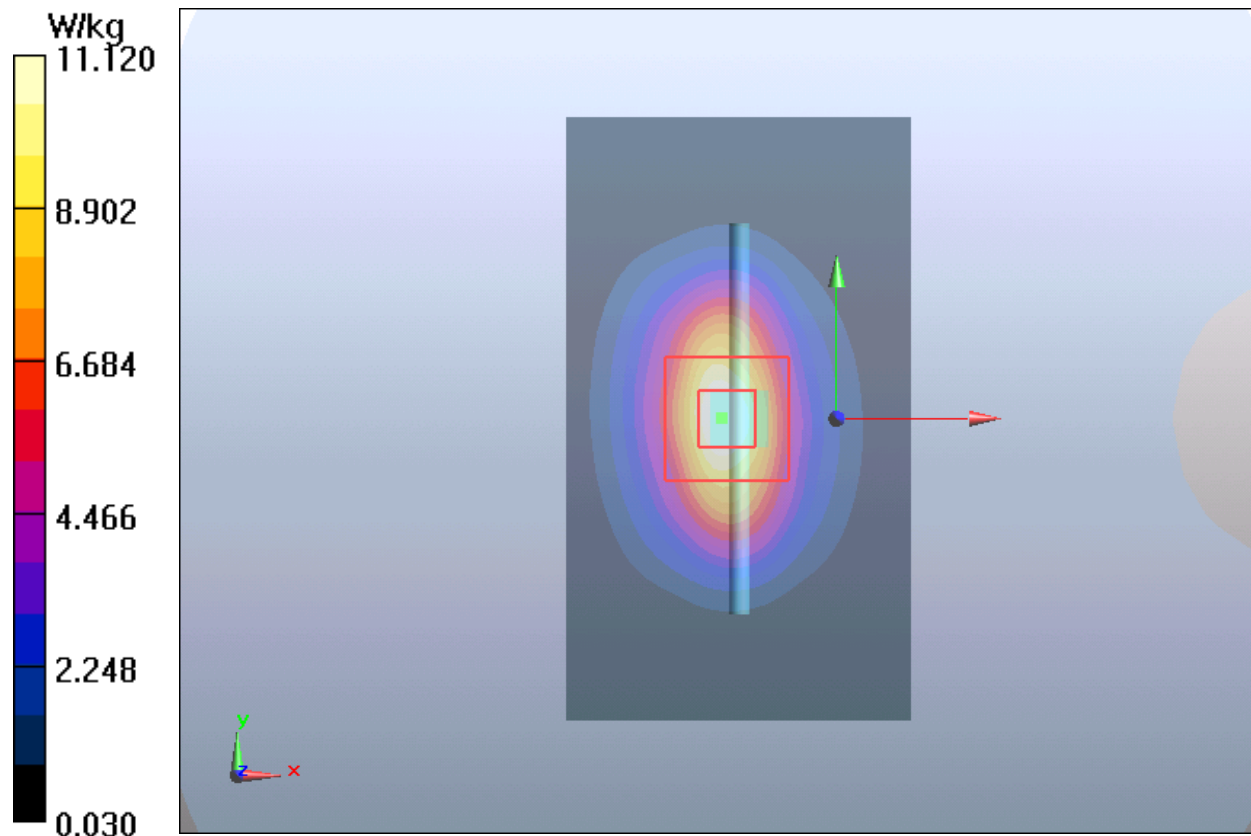
Peak SAR (extrapolated) = 19.2 W/kg

SAR(1 g) = 9.85 W/kg; SAR(10 g) = 4.93 W/kg

Smallest distance from peaks to all points 3 dB below = 9.2mm

Ratio of SAR at M2 to SAR at M1 = 56.3%

Maximum value of SAR (measured) = 11.12 W/kg



Plot 13 System Performance Check at 1900 MHz

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2

Date: 2023/10/14

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.40$ S/m; $\epsilon_r = 40.0$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.85, 7.85, 7.85); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 9.86 W/kg

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.368 V/m; Power Drift = 0.013 dB

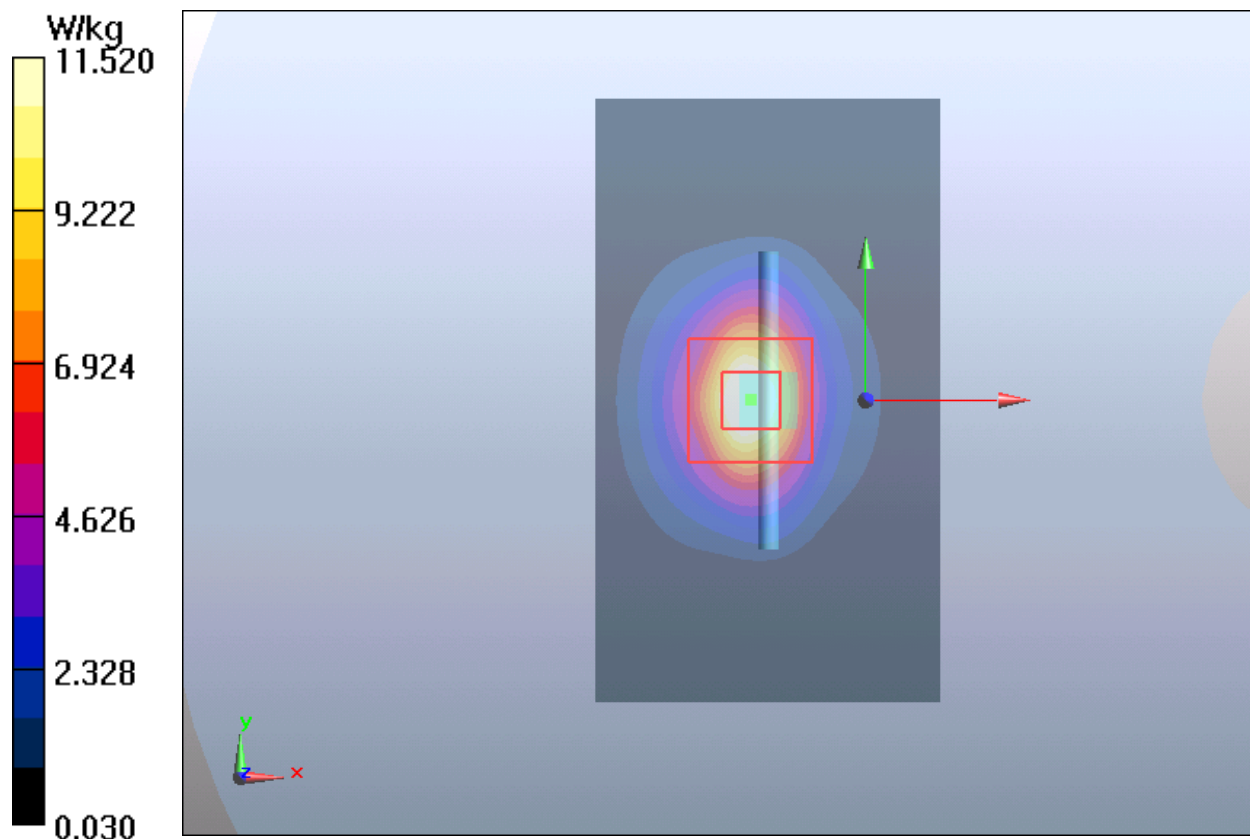
Peak SAR (extrapolated) = 20.12 W/kg

SAR(1 g) = 9.55 W/kg; SAR(10 g) = 4.99 W/kg

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 52.5%

Maximum value of SAR (measured) = 11.52 W/kg



Plot 14 System Performance Check at 1900 MHz

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2

Date: 2023/10/16

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.34$ S/m; $\epsilon_r = 40.5$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.85, 7.85, 7.85); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 11.21 W/kg

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 86.253 V/m; Power Drift = 0.017 dB

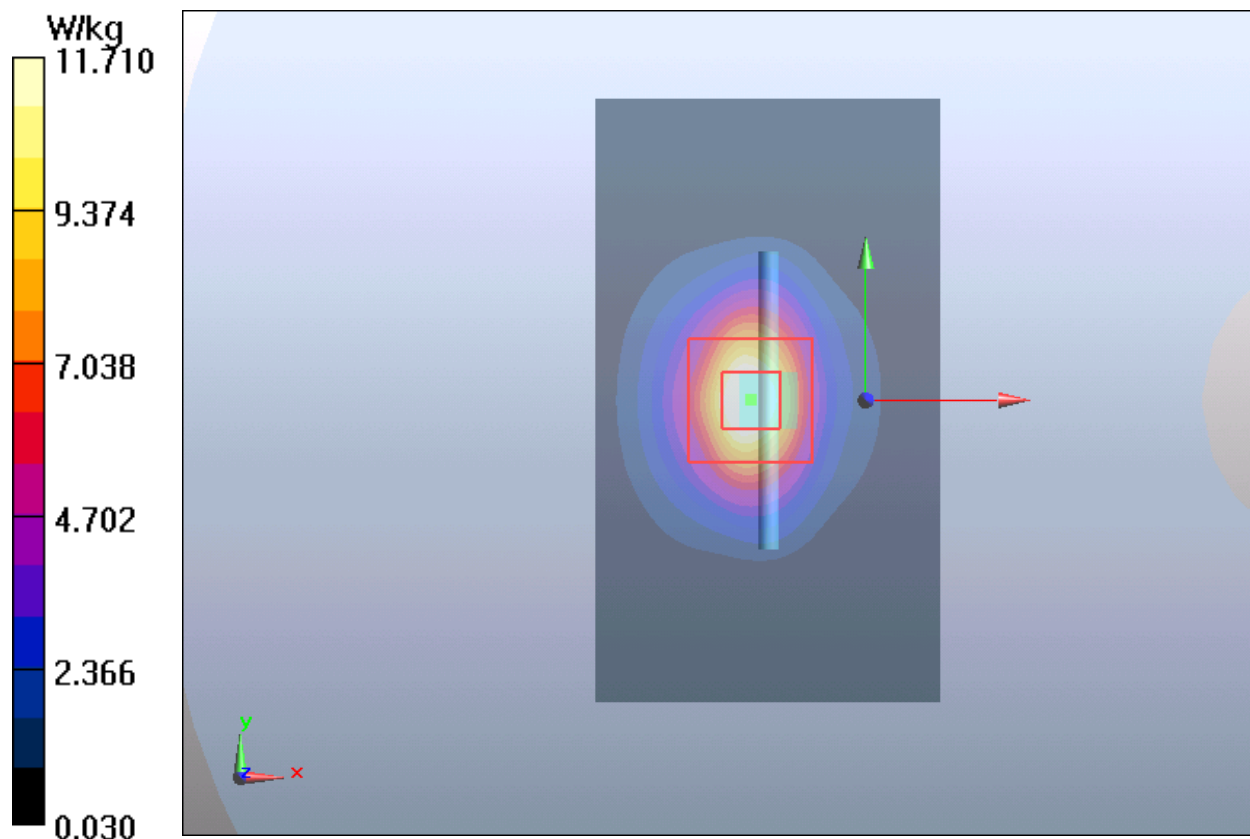
Peak SAR (extrapolated) = 20.05 W/kg

SAR(1 g) = 9.60 W/kg; SAR(10 g) = 4.98 W/kg

Smallest distance from peaks to all points 3 dB below = 9.3mm

Ratio of SAR at M2 to SAR at M1 = 54.5%

Maximum value of SAR (measured) = 11.71 W/kg



Plot 15 System Performance Check at 2450 MHz TSL

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2

Date: 2023/10/18

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.81$ S/m; $\epsilon_r = 38.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.46, 7.46, 7.46); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 14.26 W/kg

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.834 V/m; Power Drift = 0.015 dB

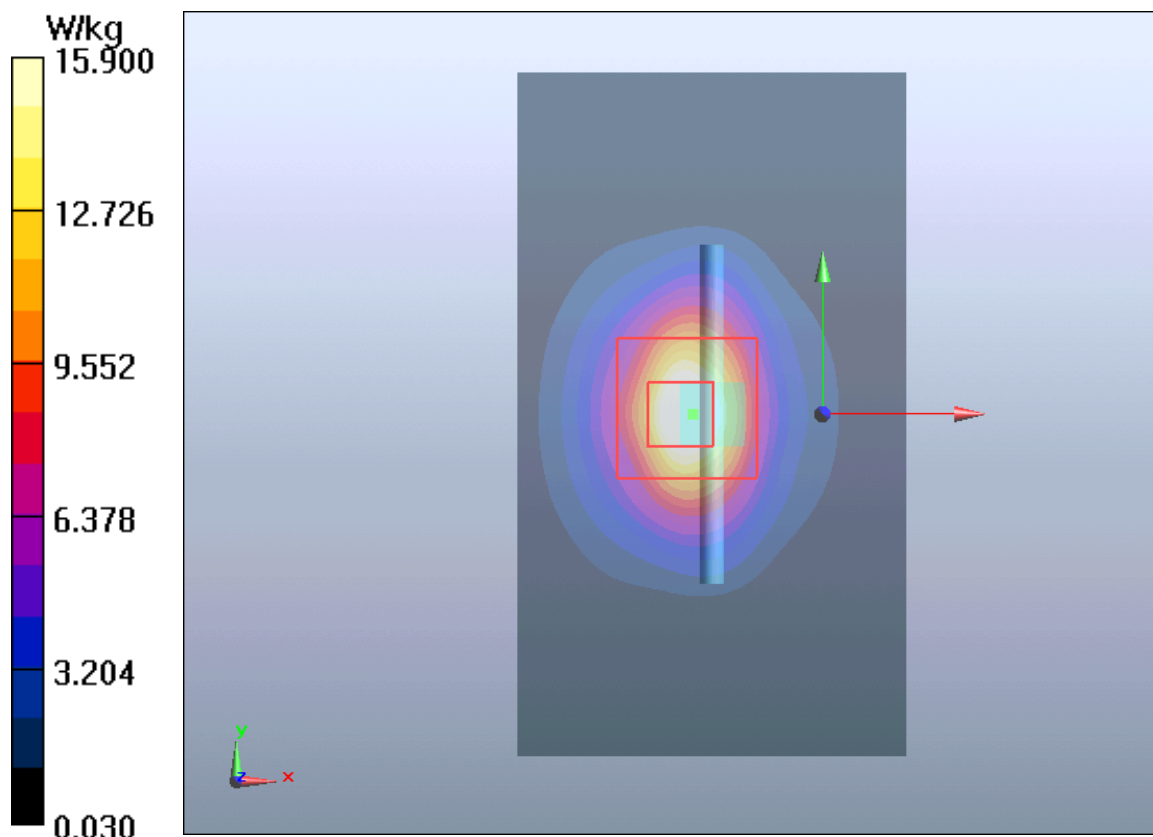
Peak SAR (extrapolated) = 30.10 W/kg

SAR(1 g) = 13.7 W/kg; SAR(10 g) = 6.22 W/kg

Smallest distance from peaks to all points 3 dB below = 8.9 mm

Ratio of SAR at M2 to SAR at M1 = 47%

Maximum value of SAR (measured) = 15.90 W/kg



Plot 16 System Performance Check at 2600 MHz TSL

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2

Date: 2023/9/29

Communication System: CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2600$ MHz; $\sigma = 2.01$ S/m; $\epsilon_r = 38.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.19, 7.19, 7.19); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 14.43 W/kg

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.998 V/m; Power Drift = -0.04 dB

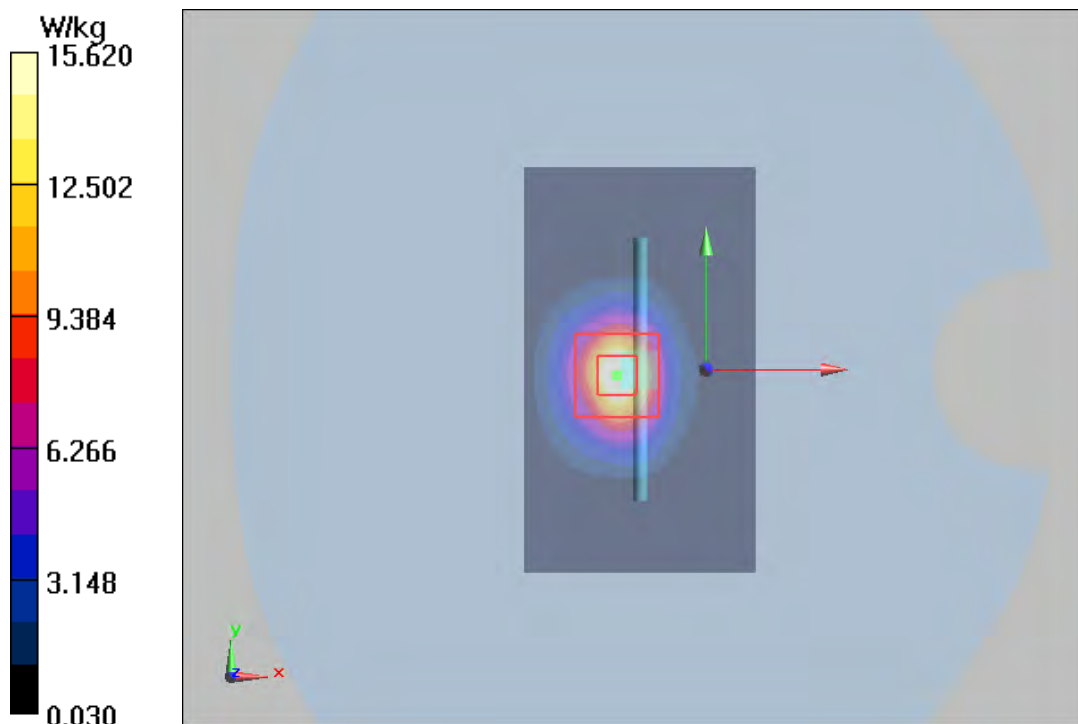
Peak SAR (extrapolated) = 31.85W/kg

SAR(1 g) = 13.9 W/kg; SAR(10 g) = 6.07 W/kg

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 44.2%

Maximum value of SAR (measured) = 15.62 W/kg



Plot 17 System Performance Check at 2600 MHz TSL

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2

Date: 2023/10/1

Communication System: CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.94$ S/m; $\epsilon_r = 38.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.19, 7.19, 7.19); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 15.02 W/kg

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 84.359 V/m; Power Drift = -0.015 dB

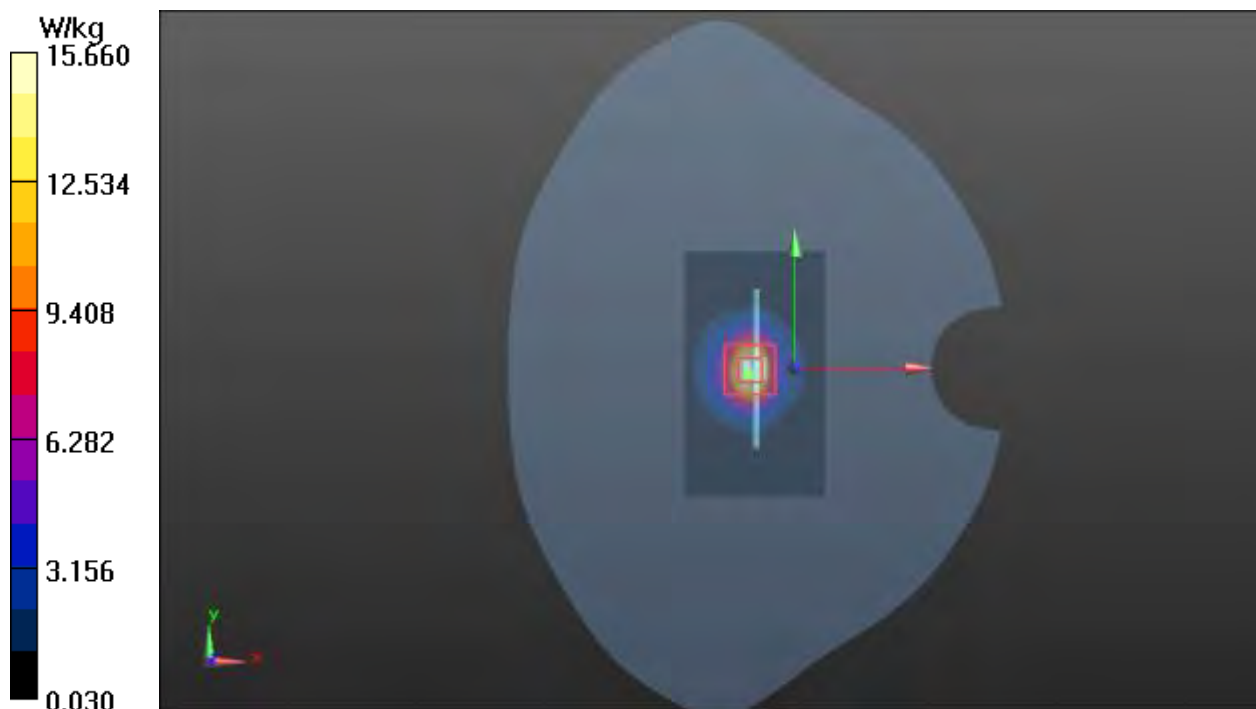
Peak SAR (extrapolated) = 30.62 W/kg

SAR(1 g) = 13.88 W/kg; SAR(10 g) = 6.09 W/kg

Smallest distance from peaks to all points 3 dB below = 10.3 mm

Ratio of SAR at M2 to SAR at M1 = 48.6%

Maximum value of SAR (measured) = 15.66 W/kg



Plot 18 System Performance Check at 2600 MHz TSL

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2

Date: 2023/10/2

Communication System: CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.99$ S/m; $\epsilon_r = 38.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.19, 7.19, 7.19); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 14.20 W/kg

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.465 V/m; Power Drift = 0.146 dB

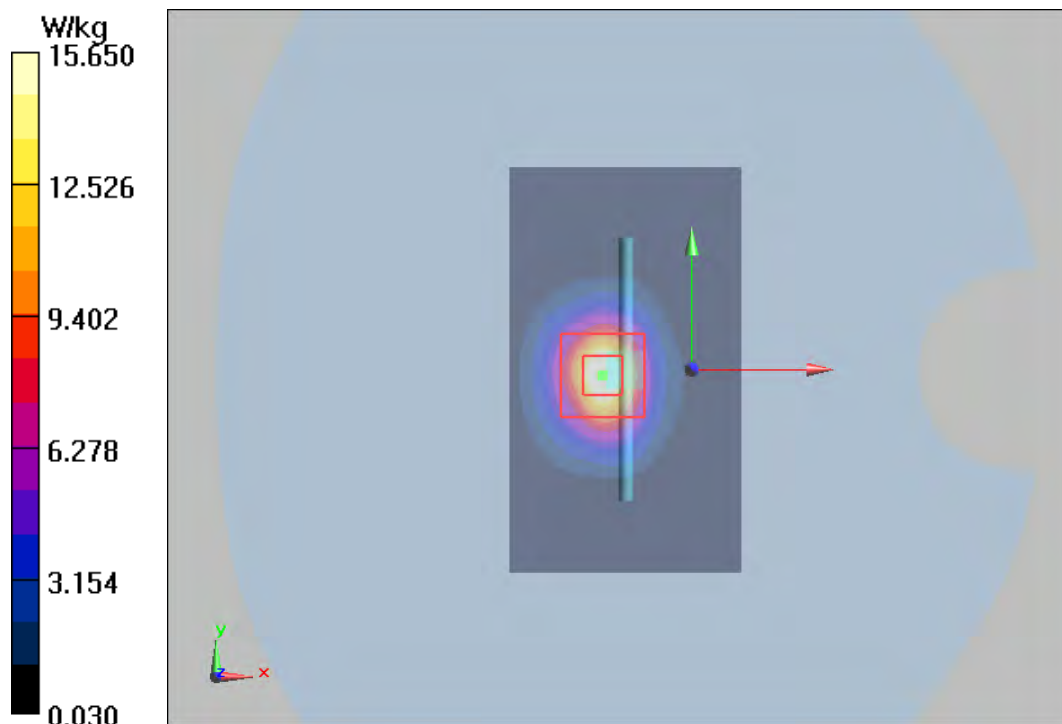
Peak SAR (extrapolated) = 31.85 W/kg

SAR(1 g) = 13.94 W/kg; SAR(10 g) = 6.11 W/kg

Smallest distance from peaks to all points 3 dB below = 10 mm

Ratio of SAR at M2 to SAR at M1 = 47.1%

Maximum value of SAR (measured) = 15.650 W/kg



Plot 19 System Performance Check at 2600 MHz TSL

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2

Date: 2023/10/10

Communication System: CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.95$ S/m; $\epsilon_r = 38.5$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.19, 7.19, 7.19); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (6x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 15.19 W/kg

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 82.192 V/m; Power Drift = -0.012 dB

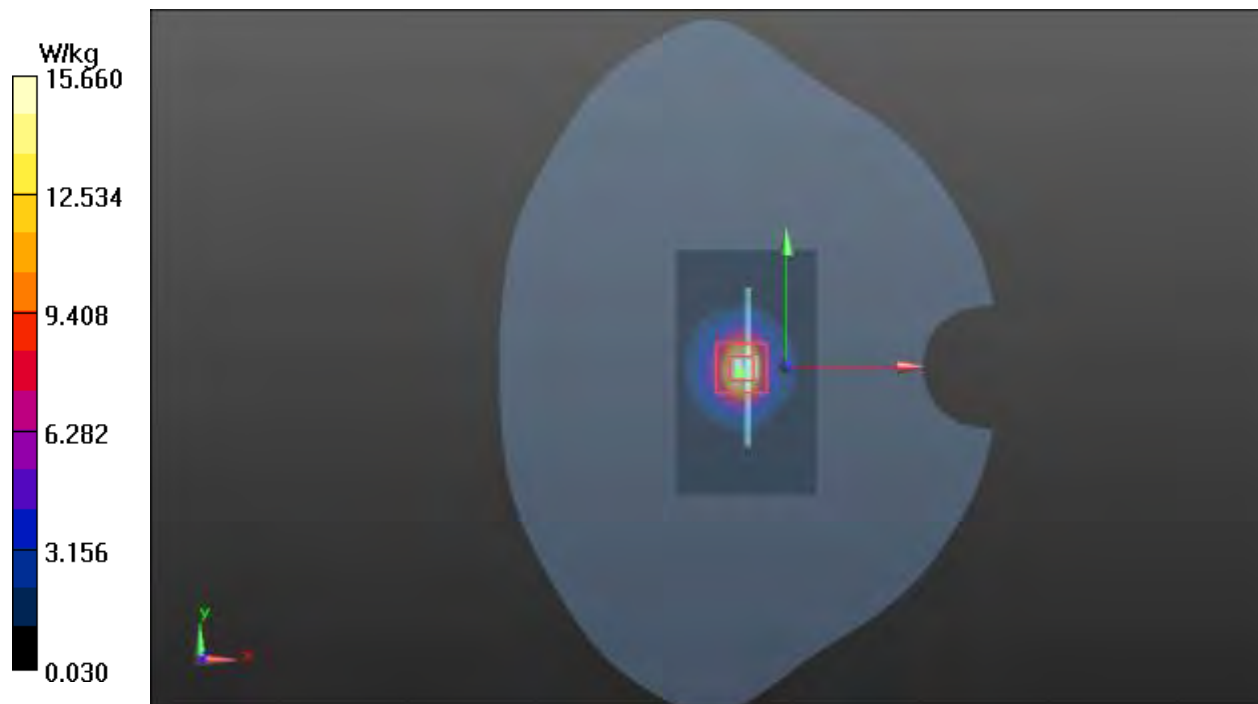
Peak SAR (extrapolated) = 29.65 W/kg

SAR(1 g) = 13.9 W/kg; SAR(10 g) = 6.09 W/kg

Smallest distance from peaks to all points 3 dB below = 8.6 mm

Ratio of SAR at M2 to SAR at M1 = 43.5%

Maximum value of SAR (measured) = 15.66 W/kg



Plot 20 System Performance Check at 5250 MHz TSL

DUT: Dipole 5250 MHz; Type: D5GHzV2; Serial: D5GHzV2

Date: 2023/10/11

Communication System: CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5250$ MHz; $\sigma = 4.80$ S/m; $\epsilon_r = 35.5$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(5.19, 5.19, 5.19); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=100mW/Area Scan (6x10x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 9.14 W/kg

d=10mm, Pin=100mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 33.654 V/m; Power Drift = -0.095 dB

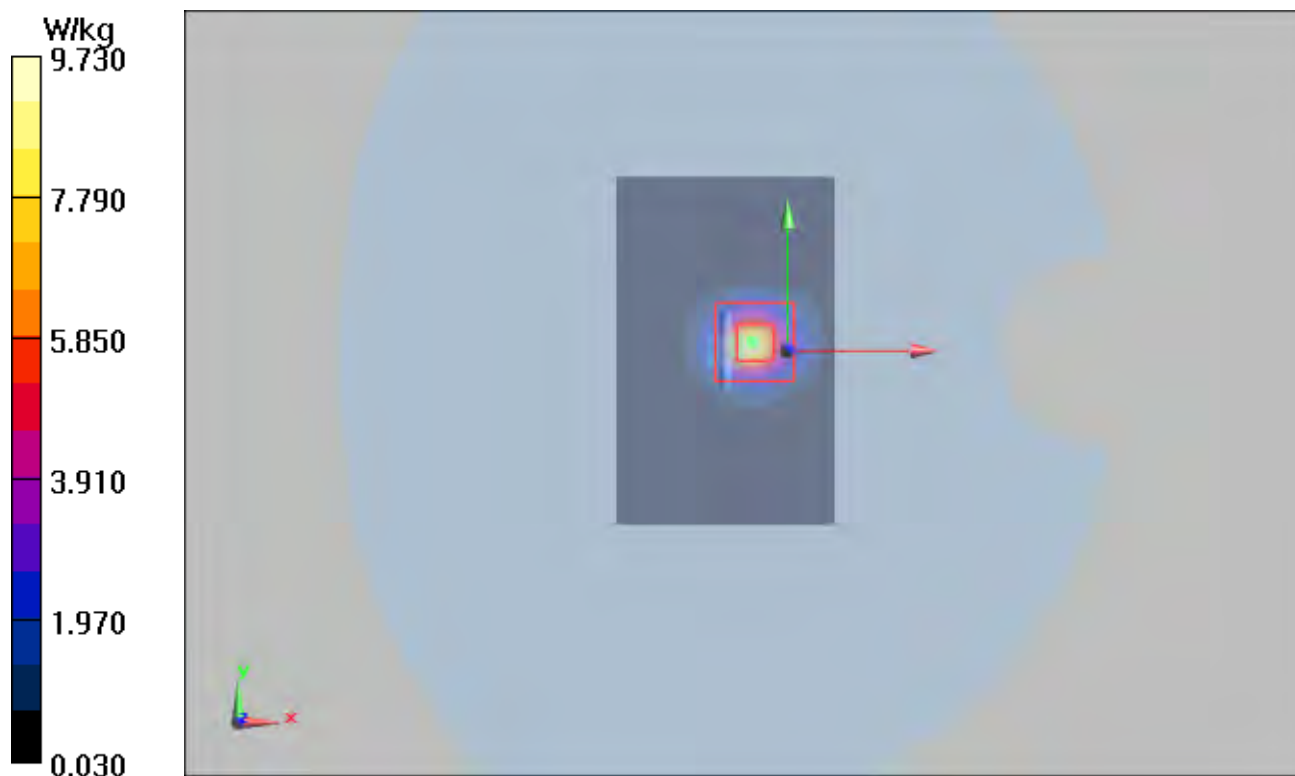
Peak SAR (extrapolated) = 52.20 W/kg

SAR(1 g) = 7.87 W/kg; SAR(10 g) = 2.25 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 63%

Maximum value of SAR (measured) = 9.73 W/kg



Plot 21 System Performance Check at 5600 MHz TSL

DUT: Dipole 5600 MHz; Type: D5GHzV2; Serial: D5GHzV2

Date: 2023/10/15

Communication System: CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.21$ S/m; $\epsilon_r = 34.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(4.60, 4.60, 4.60); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=100mW/Area Scan (6x10x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 8.25 W/kg

d=10mm, Pin=100mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 23.142 V/m; Power Drift = -0.028 dB

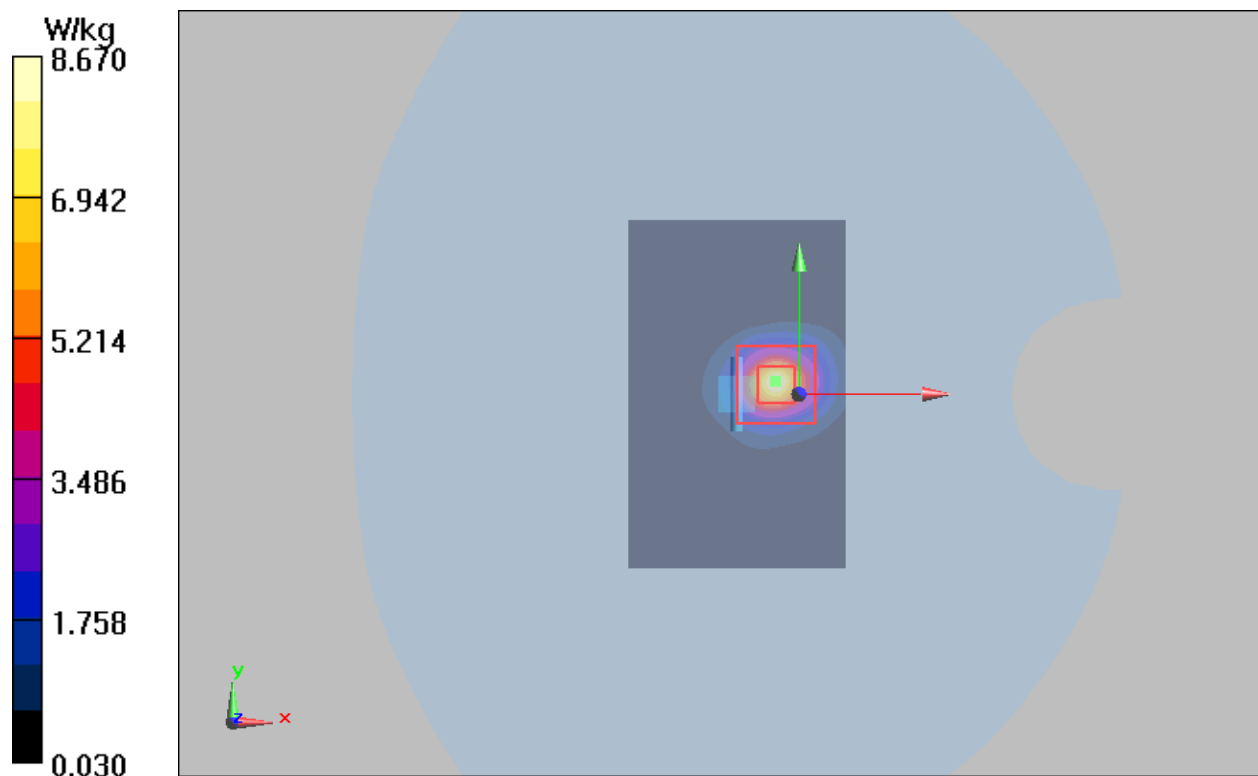
Peak SAR (extrapolated) = 22.9 W/kg

SAR(1 g) = 7.67 W/kg; SAR(10 g) = 2.27 W/kg

Smallest distance from peaks to all points 3 dB below = 8 mm

Ratio of SAR at M2 to SAR at M1 = 61.9%

Maximum value of SAR (measured) = 8.67 W/kg



Plot 22 System Performance Check at 5750 MHz TSL

DUT: Dipole 5750 MHz; Type: D5GHzV2; Serial: D5GHzV2

Date: 2023/10/19

Communication System: CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5750$ MHz; $\sigma = 5.21$ S/m; $\epsilon_r = 34.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7543; ConvF(4.71, 4.71, 4.71); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=100mW/Area Scan (6x10x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 8.31 W/kg

d=10mm, Pin=100mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 25.26 V/m; Power Drift = 0.044 dB

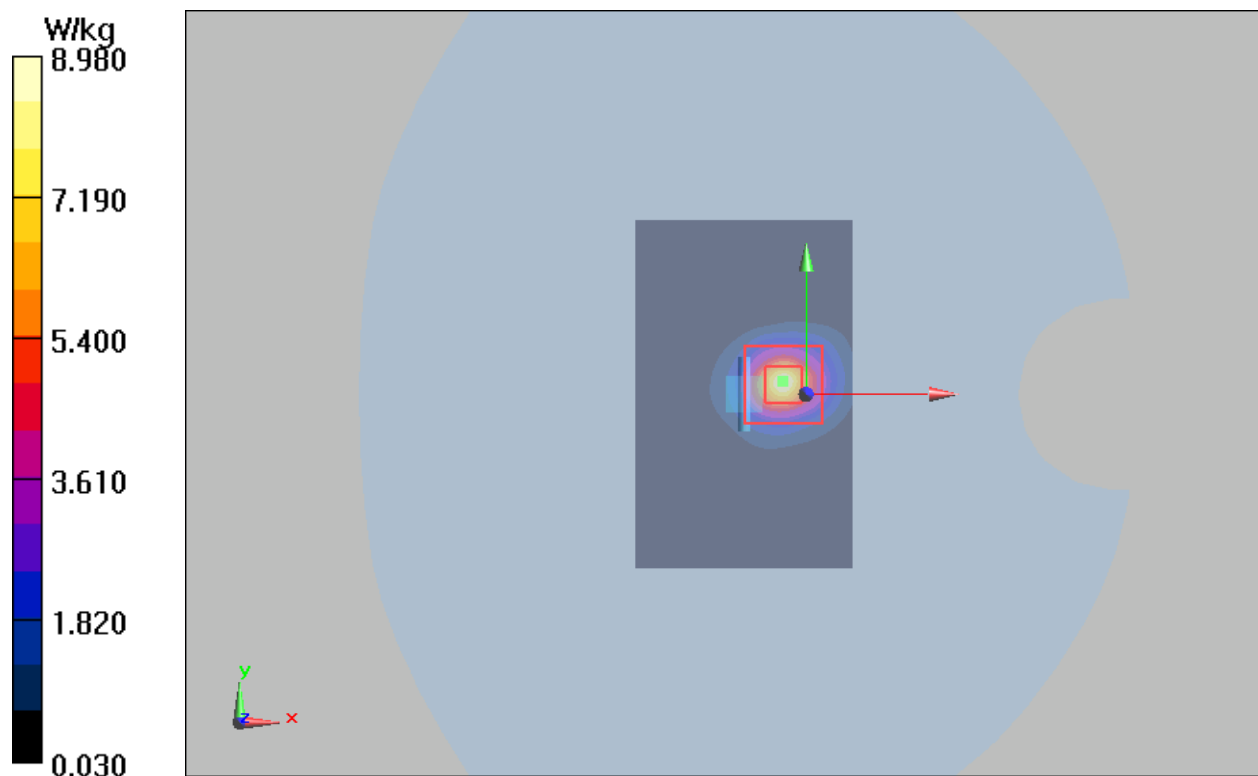
Peak SAR (extrapolated) = 23.4 W/kg

SAR(1 g) = 7.66 W/kg; SAR(10 g) = 2.27 W/kg

Smallest distance from peaks to all points 3 dB below = 7.8 mm

Ratio of SAR at M2 to SAR at M1 = 59.4%

Maximum value of SAR (measured) = 8.98 W/kg



Plot 23 System Performance Check at 13.56 MHz TSL

DUT: Dipole 13.56 MHz; Type: CLA13; Serial: CLA13

Date: 2023/10/19

Communication System: UID 0, CW (0); Frequency: 13 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 13 \text{ MHz}$; $\sigma = 0.76 \text{ S/m}$; $\epsilon_r = 55.1$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(15.21, 15.21, 15.21); Calibrated: 2023/7/20

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=1W, f=13 MHz/Area Scan (17x17x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.588 W/kg

d=10mm, Pin=1W, f=13 MHz/Zoom Scan (4x4x1.4mm, graded), dist=1.4mm (8x8x7)/Cube 0:

Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 7.347 V/m; Power Drift = -0.036 dB

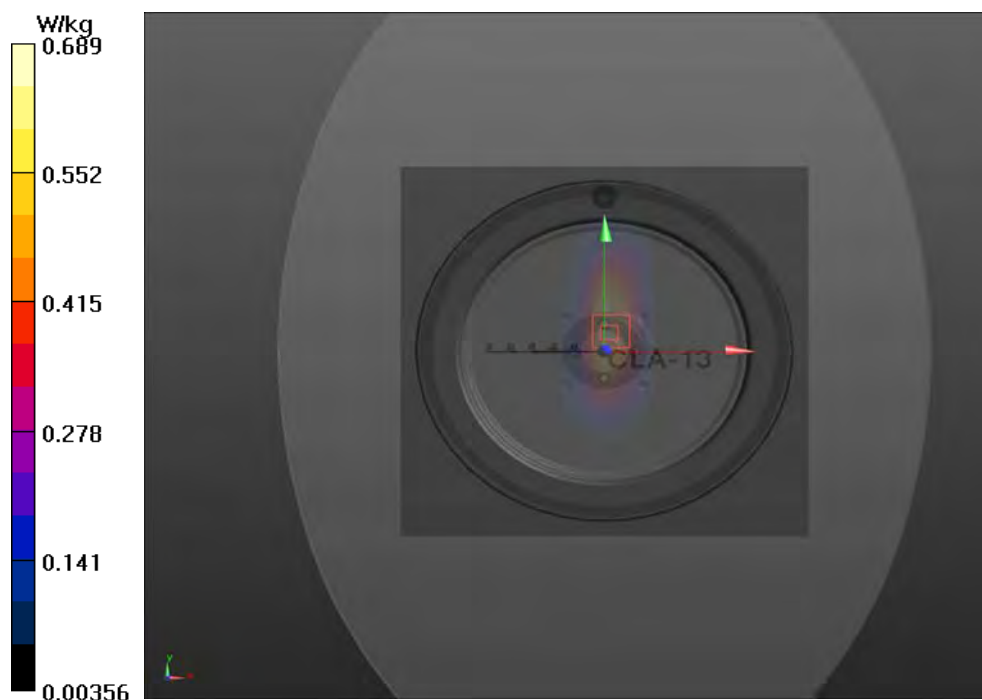
Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.579 W/kg; SAR(10 g) = 0.332 W/kg

Smallest distance from peaks to all points 3 dB below=19.1mm

Ratio of SAR at M2 to SAR at M1 = 73.4%

Maximum value of SAR (measured) = 0.689 W/kg



ANNEX C: Highest Graph Results

Plot 24 GSM 850 Right Cheek Middle

Date: 2023/9/27

Communication System: UID 0, GSM (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 837$ MHz; $\sigma = 0.939$ S/m; $\epsilon_r = 41.856$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(9.35, 9.35, 9.35); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.365 W/kg

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

Reference Value = 14.31 V/m; Power Drift = 0.021dB

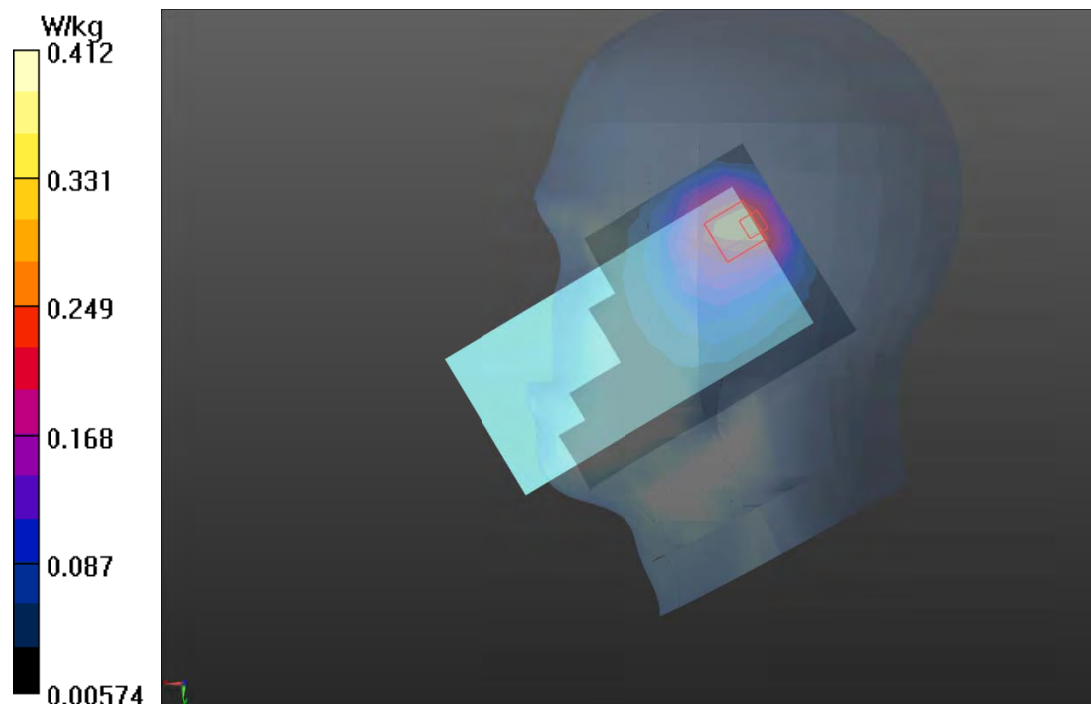
Peak SAR (extrapolated) = 0.499 W/kg

SAR(1 g) = 0.348 W/kg; SAR(10 g) = 0.233 W/kg

Smallest distance from peaks to all points 3 dB below = 18.8 mm

Ratio of SAR at M2 to SAR at M1 = 53.9%

Maximum value of SAR (measured) = 0.412 W/kg



Plot 25 GSM 1900 Right Tilt High

Date: 2023/10/6

Communication System: UID 0, GSM (0); Frequency: 1909.8 MHz; Duty Cycle: 1:8.30042

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.463$ S/m; $\epsilon_r = 37.263$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.85, 7.85, 7.85); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Tilt High/Area Scan (8x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.773 W/kg

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

Reference Value = 12.33 V/m; Power Drift = 0.02 dB

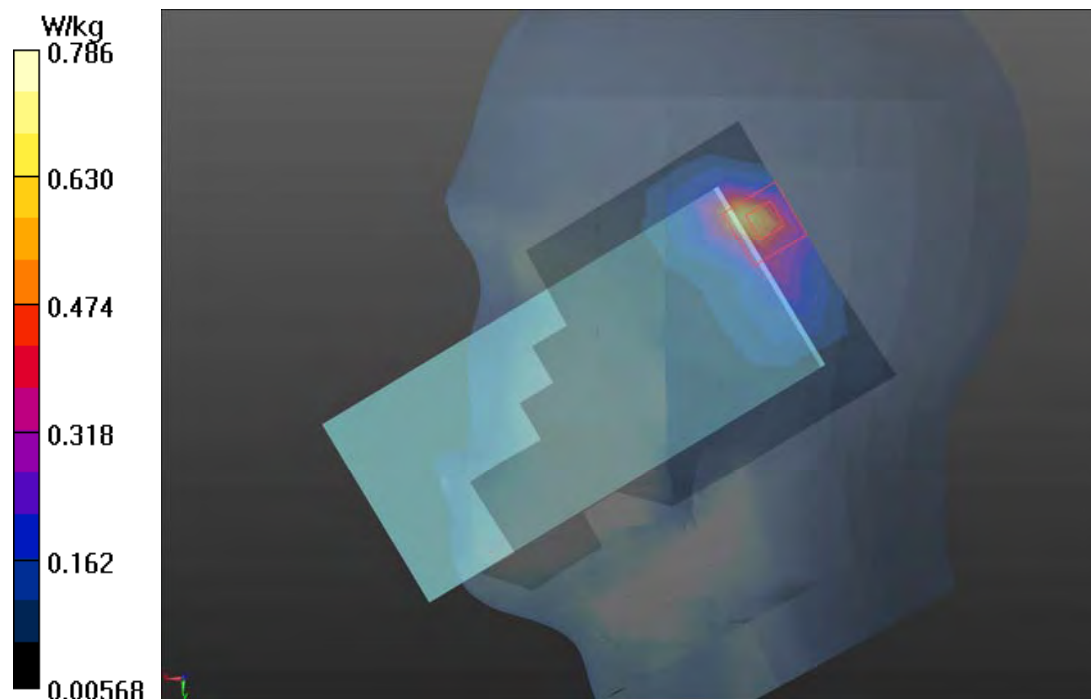
Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 0.653 W/kg; SAR(10 g) = 0.285 W/kg

Smallest distance from peaks to all points 3 dB below = 8 mm

Ratio of SAR at M2 to SAR at M1 = 48.1%

Maximum value of SAR (measured) = 0.786 W/kg



Plot 26 WCDMA Band II Right Tilt High

Date: 2023/10/6

Communication System: UID 0, WCDMA (0); Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1908$ MHz; $\sigma = 1.46$ S/m; $\epsilon_r = 37.234$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.85, 7.85, 7.85); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Tilt High/Area Scan (8x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.919 W/kg

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

Reference Value = 15.98 V/m; Power Drift = -0.024 dB

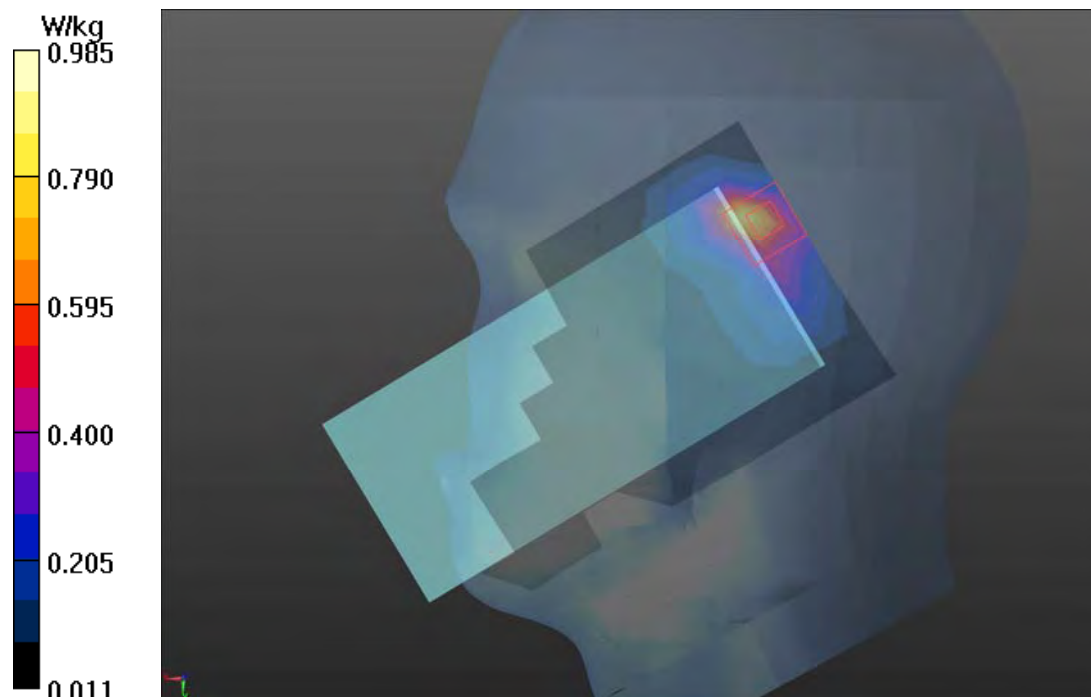
Peak SAR (extrapolated) = 2.34 W/kg

SAR(1 g) = 0.862 W/kg; SAR(10 g) = 0.405 W/kg

Smallest distance from peaks to all points 3 dB below = 8 mm

Ratio of SAR at M2 to SAR at M1 = 49.7%

Maximum value of SAR (measured) = 0.985 W/kg



Plot 27 WCDMA Band IV Right Tilt Low

Date: 2023/10/7

Communication System: UID 0, WCDMA (0); Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1712.4$ MHz; $\sigma = 1.312$ S/m; $\epsilon_r = 37.834$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(8.10, 8.10, 8.10); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Tilt Low/Area Scan (8x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.949 W/kg

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

Reference Value = 16.88 V/m; Power Drift = -0.03 dB

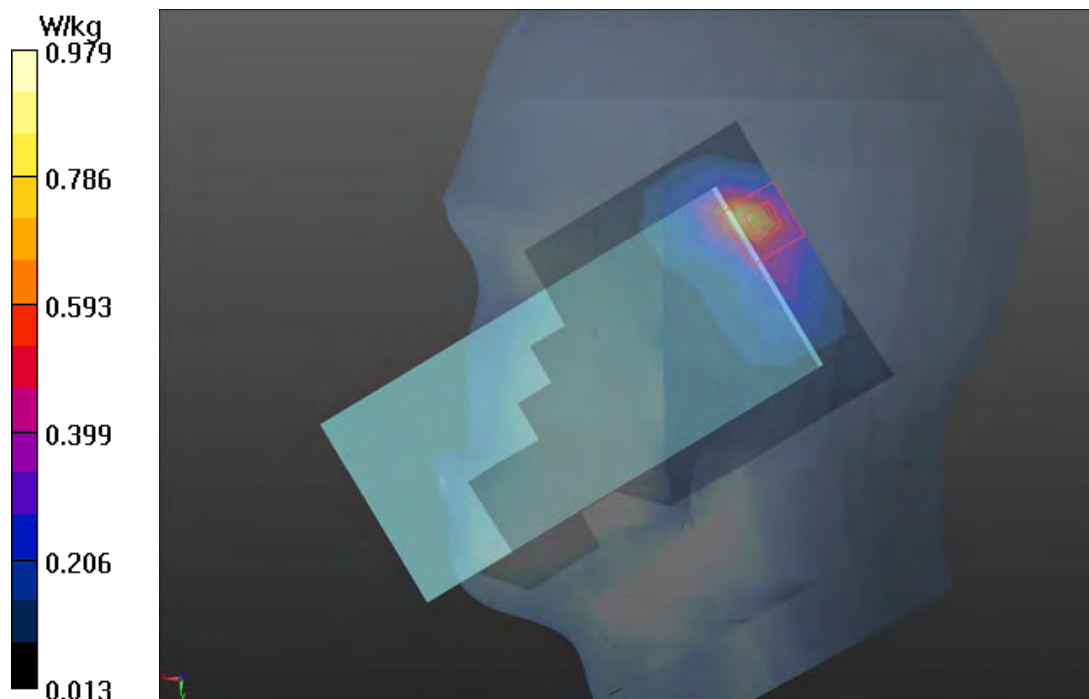
Peak SAR (extrapolated) = 1.75 W/kg

SAR(1 g) = 0.872 W/kg; SAR(10 g) = 0.409 W/kg

Smallest distance from peaks to all points 3 dB below = 9.4 mm

Ratio of SAR at M2 to SAR at M1 = 56.2%

Maximum value of SAR (measured) = 0.979 W/kg



Plot 28 WCDMA Band V Right Cheek Middle

Date: 2023/9/27

Communication System: UID 0, WCDMA (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 0.939$ S/m; $\epsilon_r = 41.856$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(9.35, 9.35, 9.35); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.721 W/kg

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

Reference Value = 21.58 V/m; Power Drift = 0.03 dB

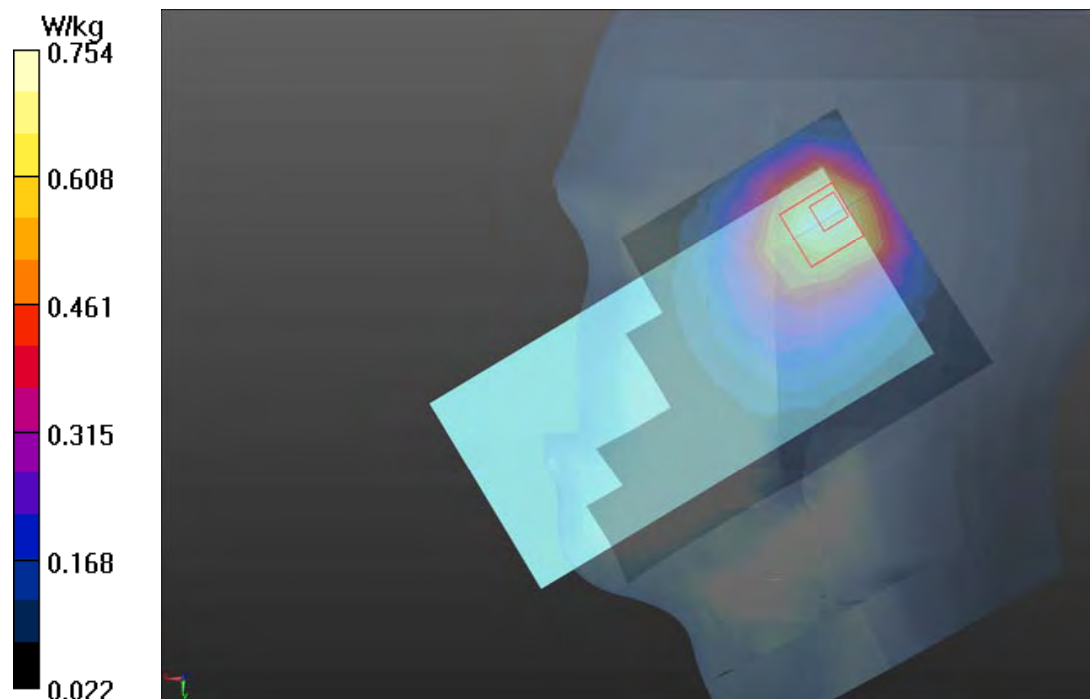
Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.713 W/kg; SAR(10 g) = 0.463 W/kg

Smallest distance from peaks to all points 3 dB below = 15.1 mm

Ratio of SAR at M2 to SAR at M1 = 67.3%

Maximum value of SAR (measured) = 0.754 W/kg



Plot 29 LTE Band 2 1RB Right Tilt Middle

Date: 2023/10/6

Communication System: UID 0, LTE (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.437$ S/m; $\epsilon_r = 37.208$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.85, 7.85, 7.85); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Tilt Middle/Area Scan (8x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.912 W/kg

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

Reference Value = 14.49 V/m; Power Drift = -0.032 dB

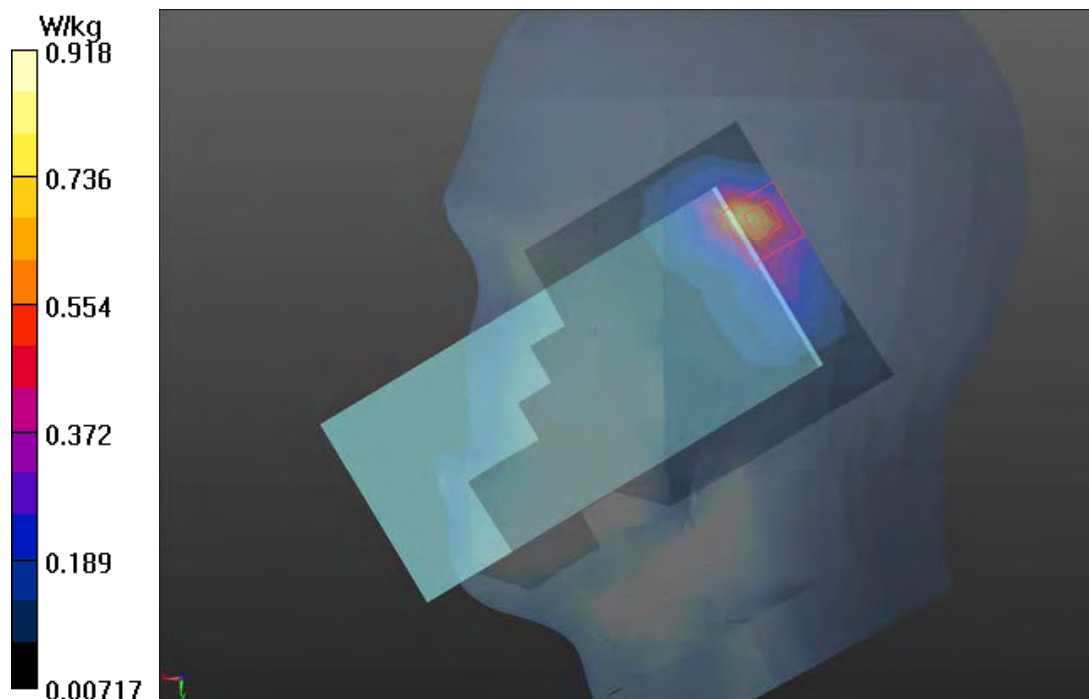
Peak SAR (extrapolated) = 1.66 W/kg

SAR(1 g) = 0.836 W/kg; SAR(10 g) = 0.362 W/kg

Smallest distance from peaks to all points 3 dB below = 8.3 mm

Ratio of SAR at M2 to SAR at M1 = 49.9%

Maximum value of SAR (measured) = 0.918 W/kg



Plot 30 LTE Band 5 1RB Right Cheek Low

Date: 2023/9/27

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

Medium parameters used: $f = 829 \text{ MHz}$; $\sigma = 0.936 \text{ S/m}$; $\epsilon_r = 41.882$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(9.35, 9.35, 9.35); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek Low/Area Scan (8x7x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.684 W/kg

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

Reference Value = 20.81 V/m ; Power Drift = -0.056 dB

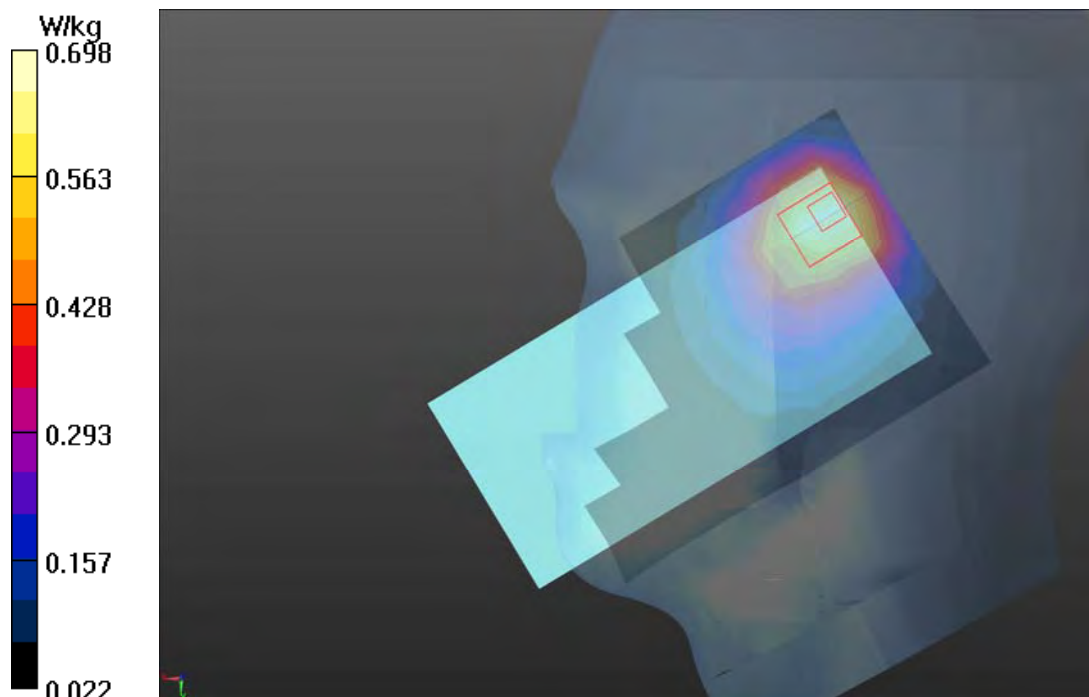
Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.666 W/kg ; SAR(10 g) = 0.422 W/kg

Smallest distance from peaks to all points 3 dB below = 13 mm

Ratio of SAR at M2 to SAR at M1 = 67.3%

Maximum value of SAR (measured) = 0.698 W/kg



Plot 31 LTE Band 7 50%RB Right Tilt Middle

Date: 2023/9/29

Communication System: UID 0, LTE (0); Frequency: 2535 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 2535$ MHz; $\sigma = 1.924$ S/m; $\epsilon_r = 38.136$; $\rho = 1000$ kg/m³

Ambient Temperature:22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.19, 7.19, 7.19); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Tilt Middle/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.902 W/kg

Right Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.09 V/m; Power Drift = 0.12 dB

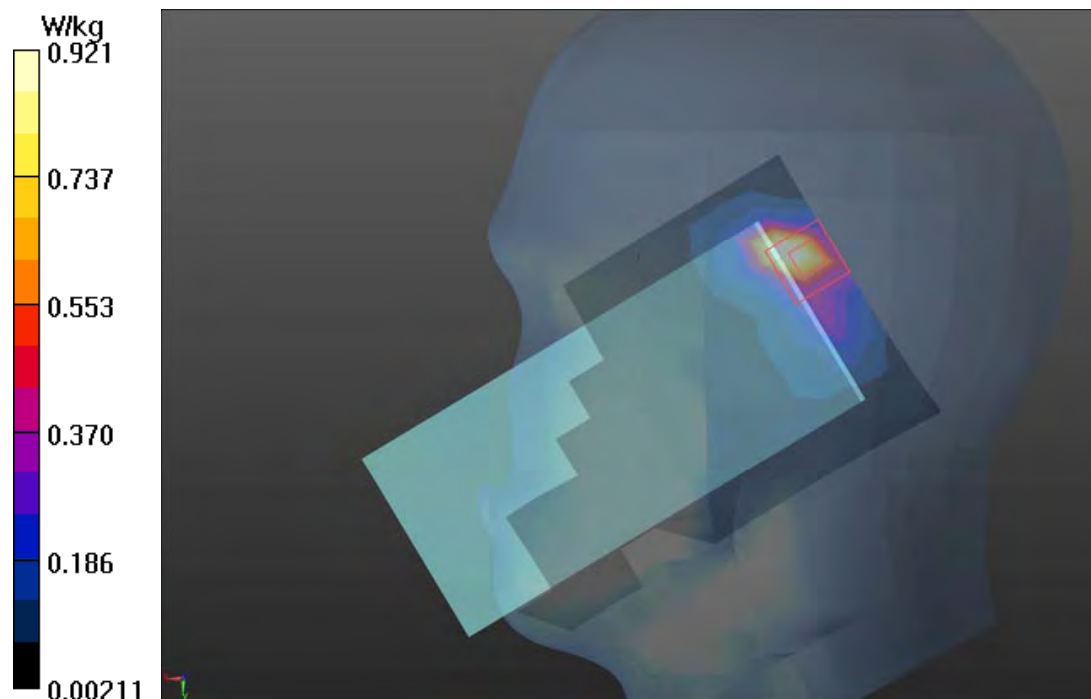
Peak SAR (extrapolated) = 1.64 W/kg

SAR(1 g) = 0.745 W/kg; SAR(10 g) = 0.297 W/kg

Smallest distance from peaks to all points 3 dB below = 9.4 mm

Ratio of SAR at M2 to SAR at M1 = 36.9%

Maximum value of SAR (measured) = 0.921 W/kg



Plot 32 LTE Band 12 1RB Right Cheek Low

Date: 2023/9/28

Communication System: UID 0, LTE (0); Frequency: 704 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 704 \text{ MHz}$; $\sigma = 0.894 \text{ S/m}$; $\epsilon_r = 42.223$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 – SN3883; ConvF(9.70, 9.70, 9.70); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek Low/Area Scan (8x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.492 W/kg

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

Reference Value = 20.00 V/m ; Power Drift = 0.02 dB

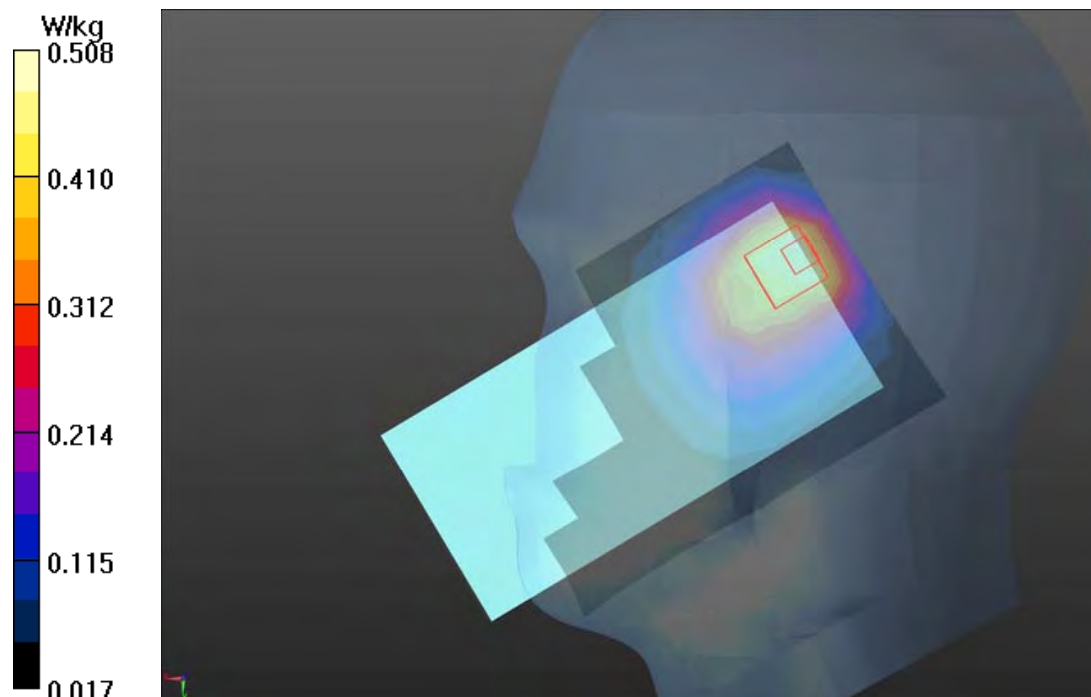
Peak SAR (extrapolated) = 0.826 W/kg

SAR(1 g) = 0.484 W/kg ; SAR(10 g) = 0.316 W/kg

Smallest distance from peaks to all points 3 dB below = 14.9 mm

Ratio of SAR at M2 to SAR at M1 = 58.8%

Maximum value of SAR (measured) = 0.508 W/kg



Plot 33 LTE Band 13 1RB Cheek Middle

Date: 2023/9/28

Communication System: UID 0, LTE (0); Frequency: 782 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.921 \text{ S/m}$; $\epsilon_r = 41.805$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 – SN3883; ConvF(9.70, 9.70, 9.70); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek Middle/Area Scan (8x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.408 W/kg

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

Reference Value = 17.03 V/m ; Power Drift = 0.18 dB

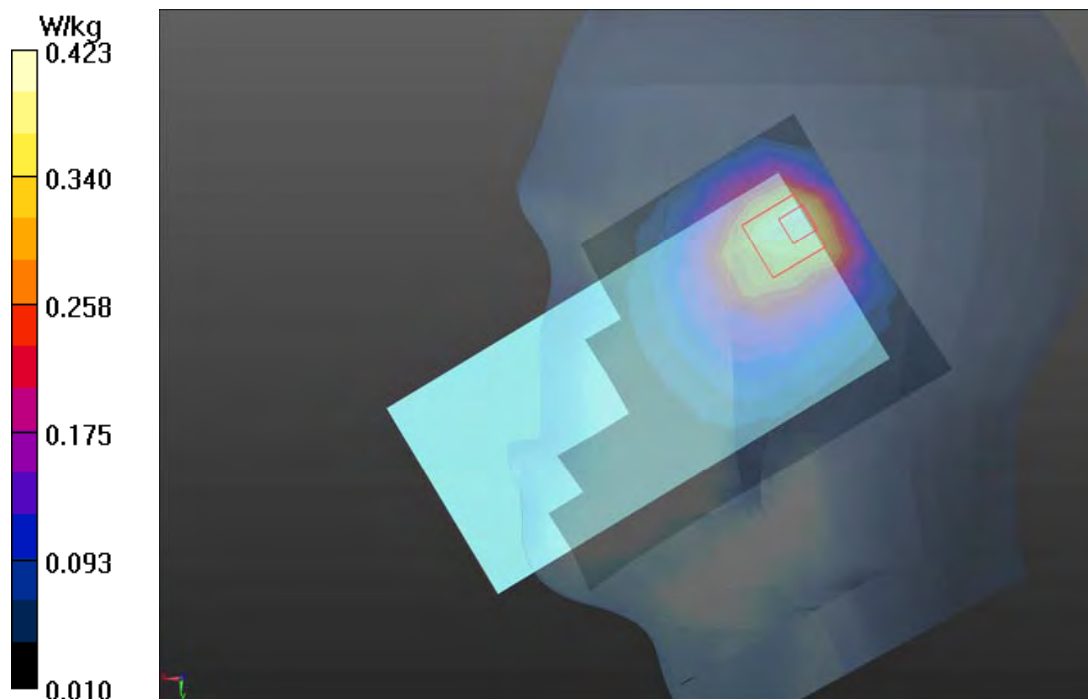
Peak SAR (extrapolated) = 0.725 W/kg

SAR(1 g) = 0.404 W/kg ; SAR(10 g) = 0.256 W/kg

Smallest distance from peaks to all points 3 dB below = 10.1 mm

Ratio of SAR at M2 to SAR at M1 = 65.4%

Maximum value of SAR (measured) = 0.423 W/kg



Plot 34 LTE Band 26 1RB Right Cheek Low

Date: 2023/9/27

Communication System: UID 0, LTE (0); Frequency: 821.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 821.5$ MHz; $\sigma = 0.933$ S/m; $\epsilon_r = 41.904$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(9.35, 9.35, 9.35); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek Low/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.537 W/kg

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

Reference Value = 20.34 V/m; Power Drift = -0.05 dB

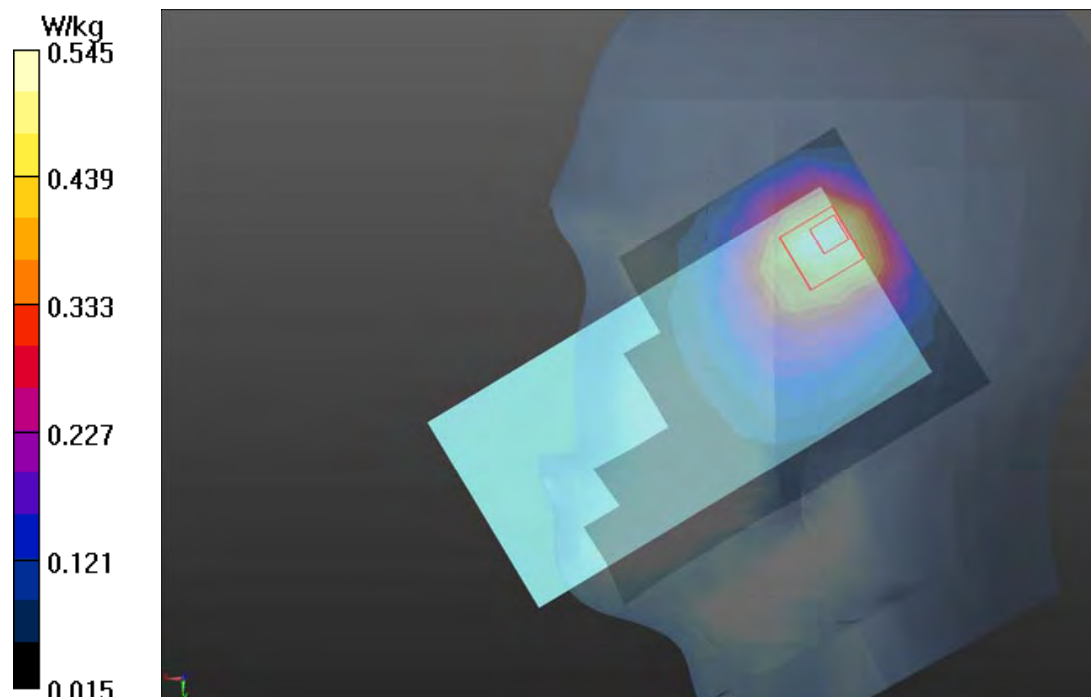
Peak SAR (extrapolated) = 0.846 W/kg

SAR(1 g) = 0.518 W/kg; SAR(10 g) = 0.337 W/kg

Smallest distance from peaks to all points 3 dB below = 15.9 mm

Ratio of SAR at M2 to SAR at M1 = 67.5%

Maximum value of SAR (measured) = 0.545 W/kg



Plot 35 LTE Band 38 1RB Right Tilt Low

Date: 2023/9/29

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

Medium parameters used: $f = 2580$ MHz; $\sigma = 1.977$ S/m; $\epsilon_r = 37.969$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.19, 7.19, 7.19); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Tilt Low/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 1.66 W/kg

Right Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.70 V/m; Power Drift = -0.09 dB

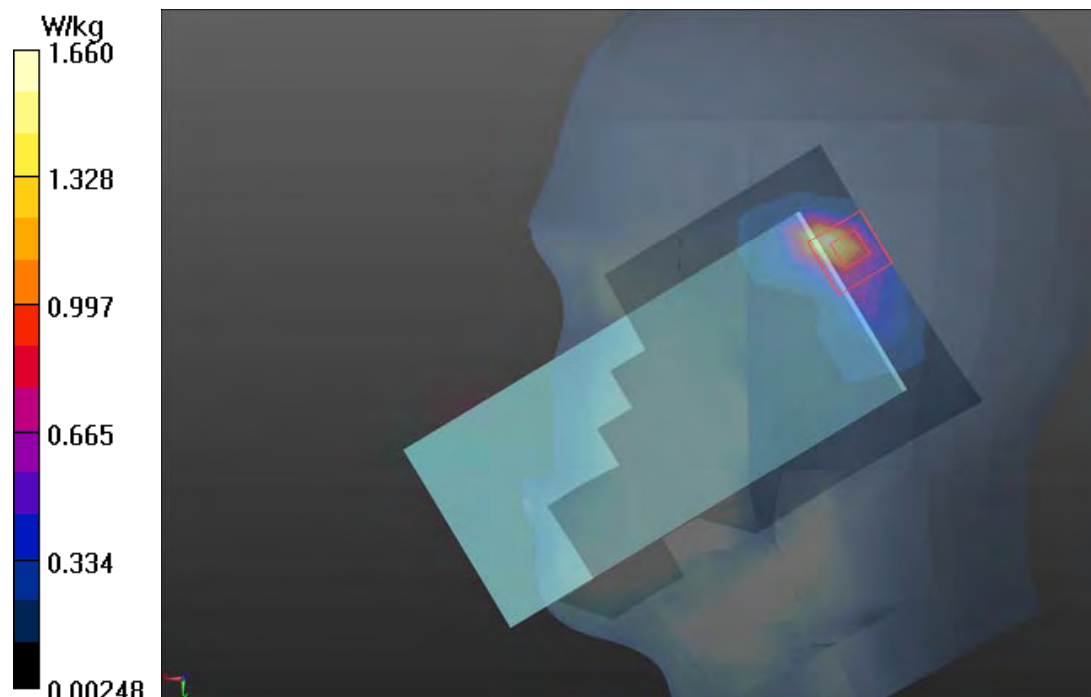
Peak SAR (extrapolated) = 2.28 W/kg

SAR(1 g) = 0.923 W/kg; SAR(10 g) = 0.365 W/kg

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 38%

Maximum value of SAR (measured) = 1.66 W/kg



Plot 36 LTE Band 41 1RB Right Tilt Low

Date: 2023/9/29

Communication System: UID 0, LTE (0); Frequency: 2549.5 MHz; Duty Cycle: 1:1.58

Medium parameters used (interpolated): $f = 2549.5$ MHz; $\sigma = 1.942$ S/m; $\epsilon_r = 38.069$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.19, 7.19, 7.19); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Tilt Low/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 1.10 W/kg

Right Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.29 V/m; Power Drift = -0.04 dB

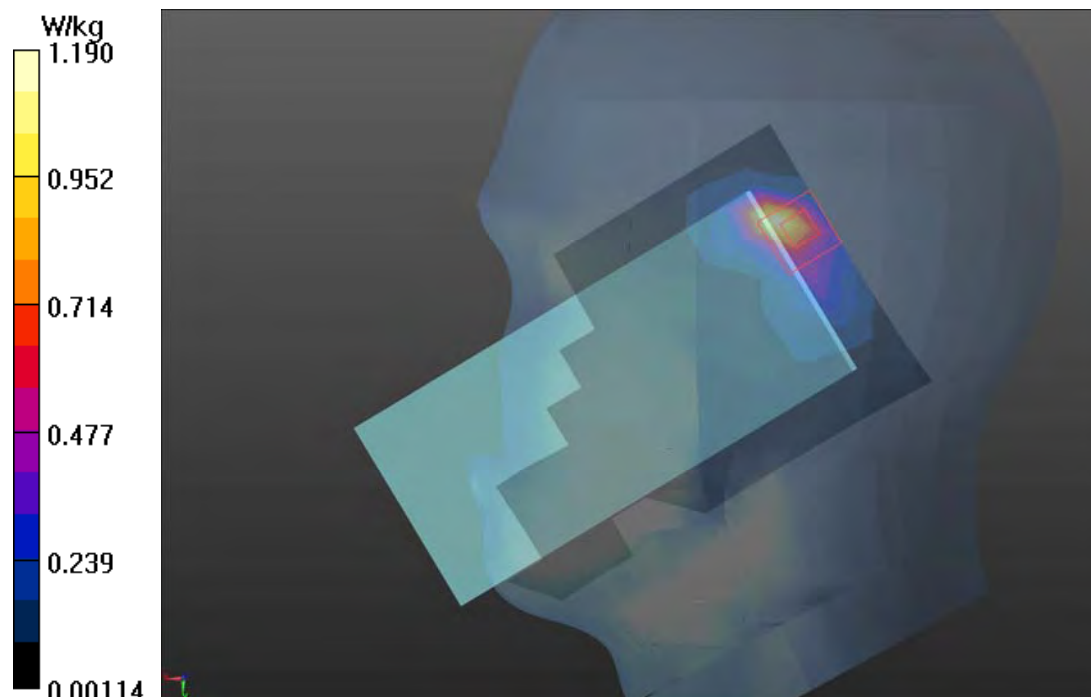
Peak SAR (extrapolated) = 1.62 W/kg

SAR(1 g) = 0.752 W/kg; SAR(10 g) = 0.312 W/kg

Smallest distance from peaks to all points 3 dB below = 8.8 mm

Ratio of SAR at M2 to SAR at M1 = 38.2%

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



Plot 37 LTE Band 66 50%RB Right Tilt Low

Date: 2023/10/7

Communication System: UID 0, LTE (0); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1720$ MHz; $\sigma = 1.294$ S/m; $\epsilon_r = 39.556$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(8.10, 8.10, 8.10); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Tilt Low/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 20.56 V/m; Power Drift = 0.03 dB

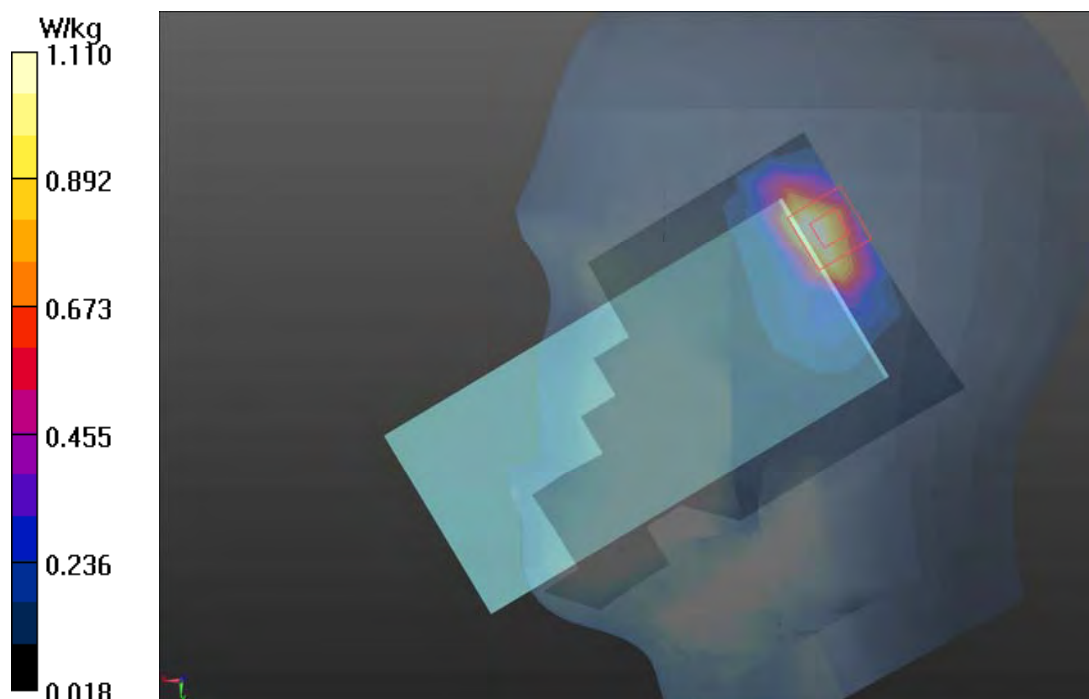
Peak SAR (extrapolated) = 1.96 W/kg

SAR(1 g) = 0.970 W/kg; SAR(10 g) = 0.450 W/kg

Smallest distance from peaks to all points 3 dB below = 8.4 mm

Ratio of SAR at M2 to SAR at M1 = 49.6%

Maximum value of SAR (measured) = 1.11 W/kg



Plot 38 802.11b Left Cheek Middle

Date: 2023/10/18

Communication System: UID 0, 802.11b (0); Frequency: 2437 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.819$ S/m; $\epsilon_r = 38.476$; $\rho = 1000$ kg/m³

Ambient Temperature:22.3 °C Liquid Temperature: 21.5°C

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.46, 7.46, 7.46); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Cheek Middle/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.806 W/kg

Left Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.72 V/m; Power Drift = 0.042 dB

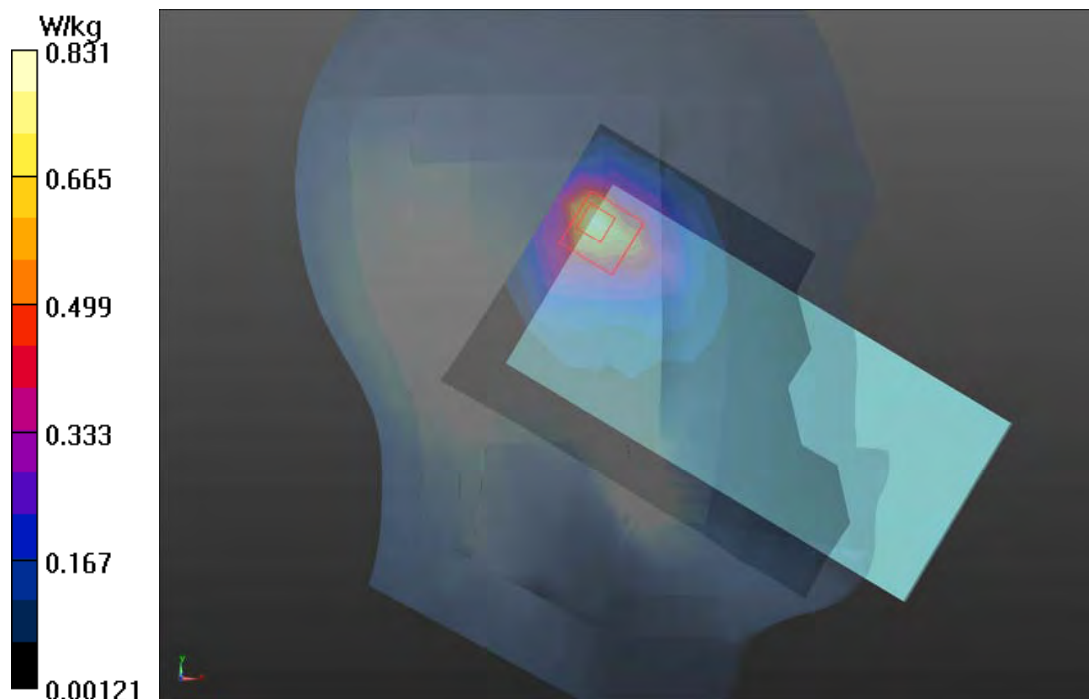
Peak SAR (extrapolated) = 1.08 W/kg

SAR(1 g) = 0.534 W/kg; SAR(10 g) = 0.268 W/kg

Smallest distance from peaks to all points 3 dB below = 8.6 mm

Ratio of SAR at M2 to SAR at M1 = 47.1%

Maximum value of SAR (measured) = 0.831 W/kg



Plot 39 802.11a U-NII-1 Left Tilt Middle

Date: 2023/10/11

Communication System: UID 0, 802.11a (0); Frequency: 5260 MHz;Duty Cycle: 1:1.027

Medium parameters used: $f = 5260$ MHz; $\sigma = 4.808$ S/m; $\epsilon_r = 36.877$; $\rho = 1000$ kg/m³

Ambient Temperature:22.3 °C Liquid Temperature: 21.5°C

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(5.19, 5.19, 5.19); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Tilt Middle/Area Scan (12x21x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.00 W/kg

Left Tilt Middle/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 6.451 V/m; Power Drift = -0.01 dB

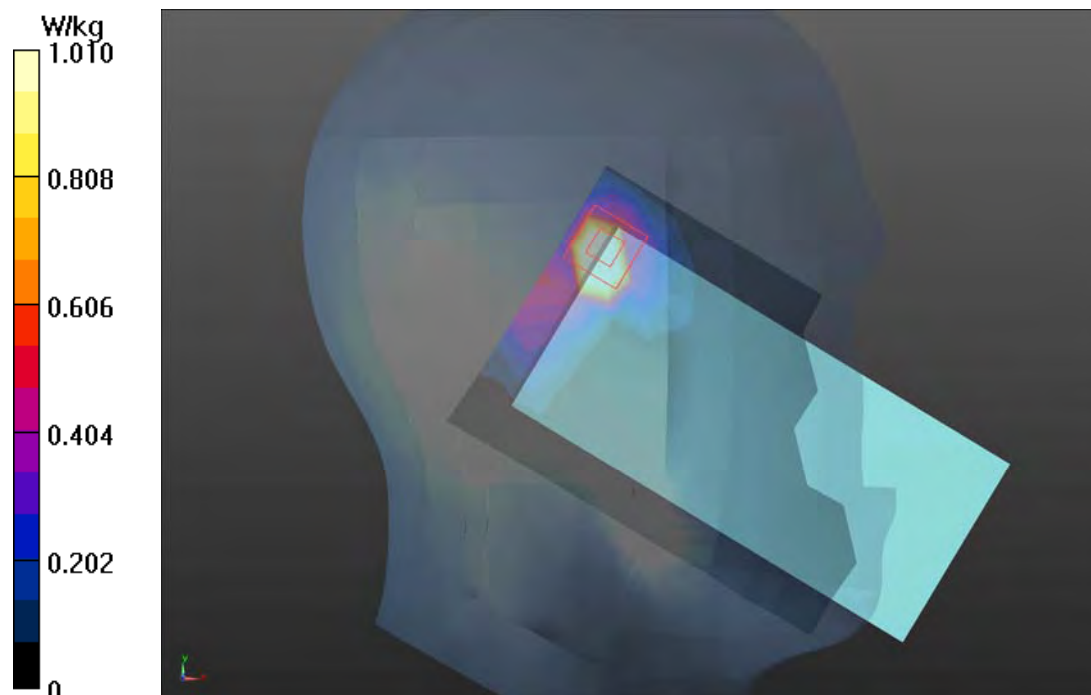
Peak SAR (extrapolated) = 3.30 W/kg

SAR(1 g) = 0.702 W/kg; SAR(10 g) = 0.218 W/kg

Smallest distance from peaks to all points 3 dB below = 9.8 mm

Ratio of SAR at M2 to SAR at M1 = 42.2%

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



Plot 40 Bluetooth Left Cheek Low

Date: 2023/10/18

Communication System: UID 0, BT (0); Frequency: 2402 MHz; Duty Cycle: 1:1.302

Medium parameters used: $f = 2402$ MHz; $\sigma = 1.777$ S/m; $\epsilon_r = 38.615$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.46, 7.46, 7.46); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Cheek Low/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.057 W/kg

Left Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.056 V/m; Power Drift = 0.050 dB

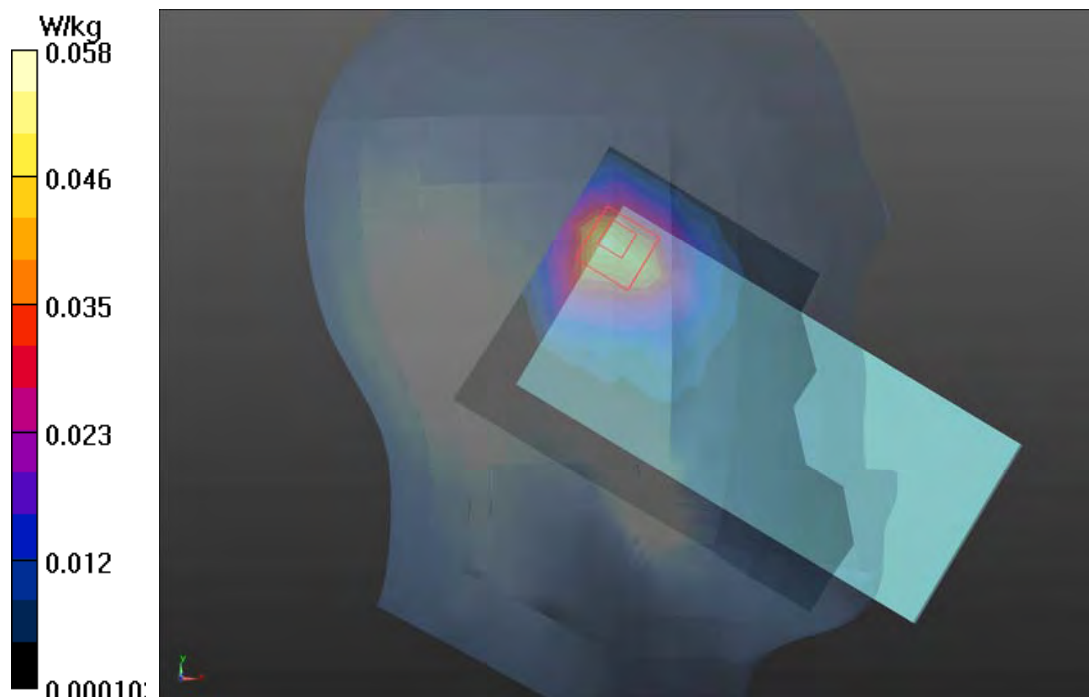
Peak SAR (extrapolated) = 0.118 W/kg

SAR(1 g) = 0.055 W/kg; SAR(10 g) = 0.028 W/kg

Smallest distance from peaks to all points 3 dB below=8.6mm

Ratio of SAR at M2 to SAR at M1 = 49.3%

Maximum value of SAR (measured) = 0.058 W/kg



Plot 41 GSM 850 Front Side Middle (Distance 15mm)

Date: 2023/10/4

Communication System: UID 0, GSM (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Medium parameters used: $f = 837$ MHz; $\sigma = 0.939$ S/m; $\epsilon_r = 41.856$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(9.35, 9.35, 9.35); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Middle/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.342 W/kg

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

Reference Value = 12.95 V/m; Power Drift = 0.050 dB

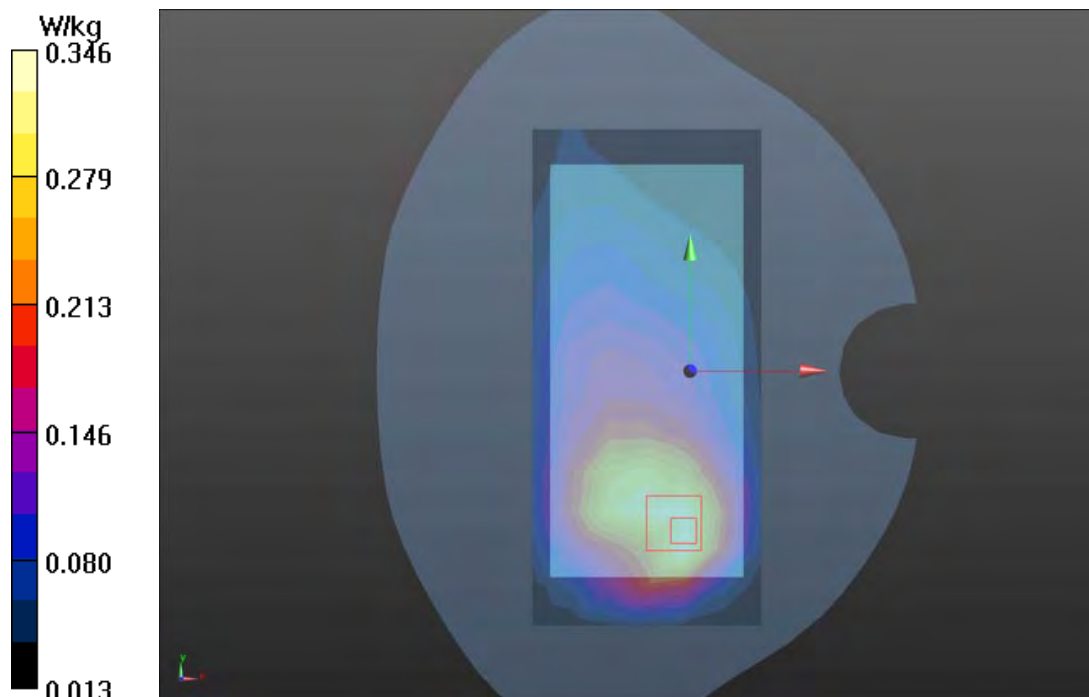
Peak SAR (extrapolated) = 0.538 W/kg

SAR(1 g) = 0.287 W/kg; SAR(10 g) = 0.182 W/kg

Smallest distance from peaks to all points 3 dB below = 19.5 mm

Ratio of SAR at M2 to SAR at M1 = 61.9%

Maximum value of SAR (measured) = 0.346 W/kg



Plot 42 GSM 1900 Front Side Middle (Distance 15mm)

Date: 2023/10/13

Communication System: UID 0, GSM (0); Frequency: 1880 MHz;Duty Cycle: 1:8.30042

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.437 \text{ S/m}$; $\epsilon_r = 37.208$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.85, 7.85, 7.85); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Middle/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.304 W/kg

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

Reference Value = 3.397 V/m; Power Drift = 0.13 dB

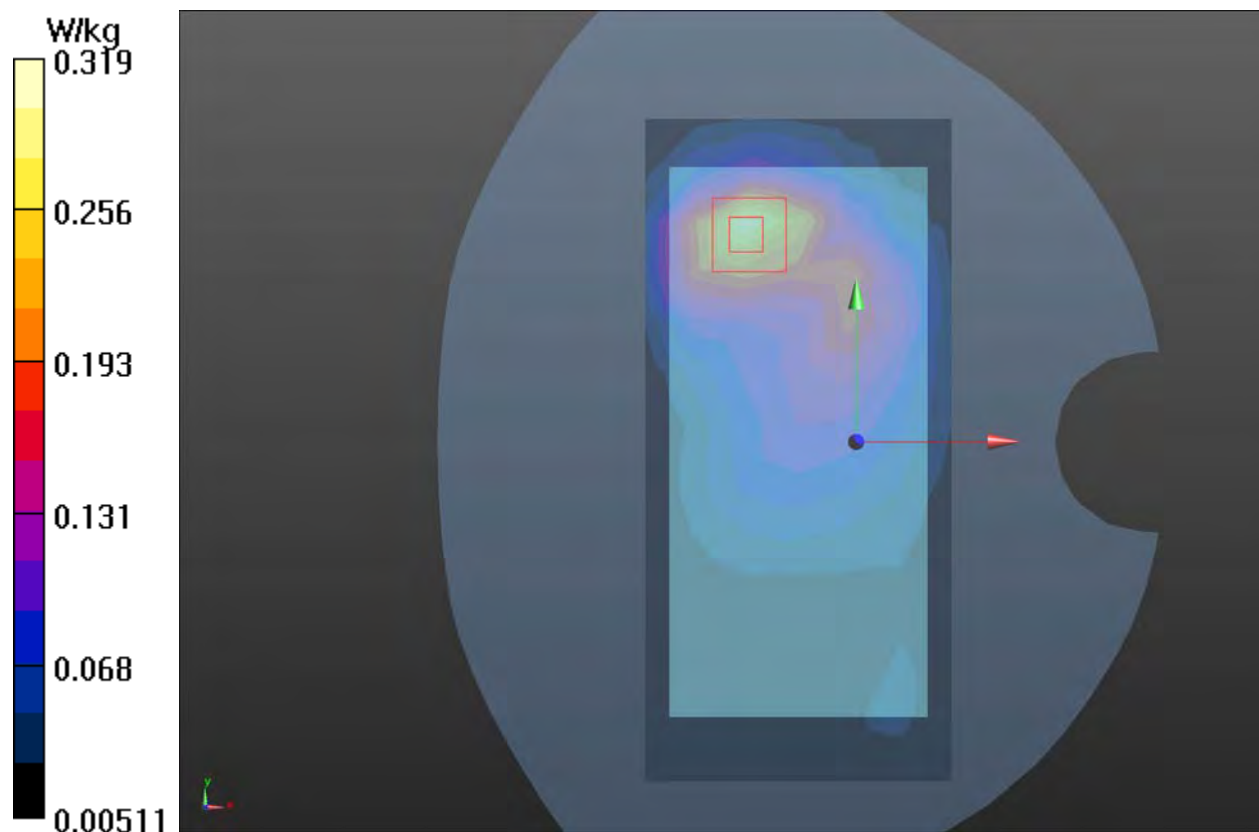
Peak SAR (extrapolated) = 0.512 W/kg

SAR(1 g) = 0.285 W/kg; SAR(10 g) = 0.157 W/kg

Smallest distance from peaks to all points 3 dB below = 11.3 mm

Ratio of SAR at M2 to SAR at M1 = 58.1%

Maximum value of SAR (measured) = 0.319 W/kg



Plot 43 WCDMA Band II Front Side Middle (Distance 15mm)

Date: 2023/10/13

Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.437 \text{ S/m}$; $\epsilon_r = 37.208$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.85, 7.85, 7.85); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Middle/Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.55 W/kg

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

Reference Value = 12.75 V/m ; Power Drift = 0.13 dB

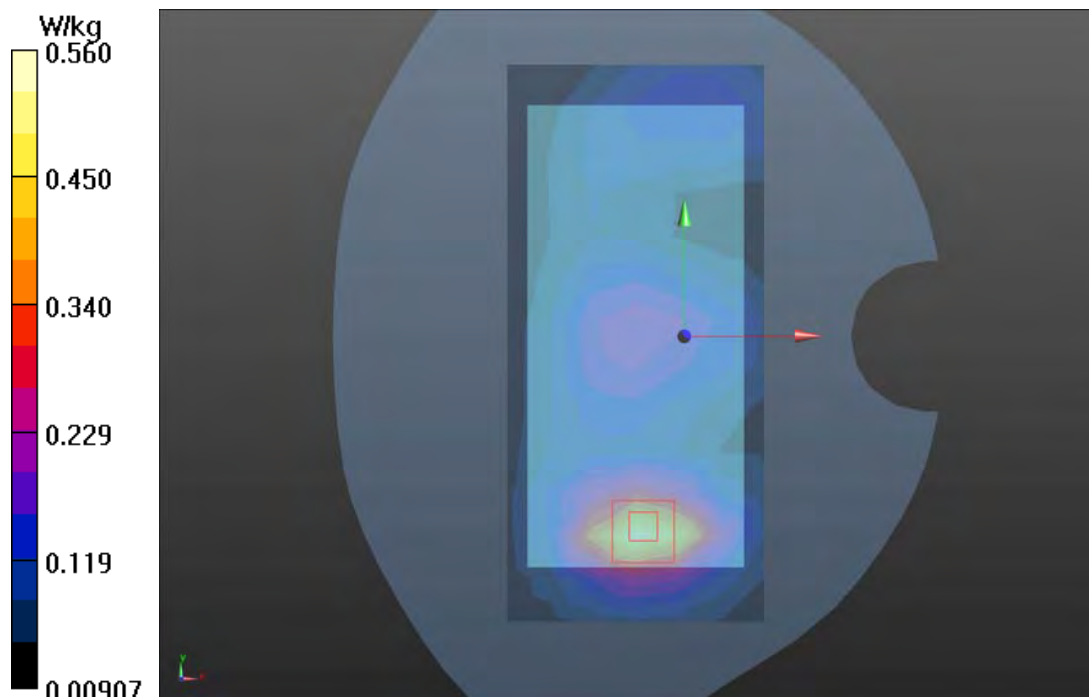
Peak SAR (extrapolated) = 0.837 W/kg

SAR(1 g) = 0.545 W/kg ; SAR(10 g) = 0.297 W/kg

Smallest distance from peaks to all points 3 dB below = 12.8 mm

Ratio of SAR at M2 to SAR at M1 = 61.6%

Maximum value of SAR (measured) = 0.56 W/kg



Plot 44 WCDMA Band IV Front Side Middle (Distance 15mm)

Date: 2023/10/9

Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1733 \text{ MHz}$; $\sigma = 1.329 \text{ S/m}$; $\epsilon_r = 37.759$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(8.10, 8.10, 8.10); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Middle/Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.365 W/kg

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

Reference Value = 10.12 V/m ; Power Drift = 0.016 dB

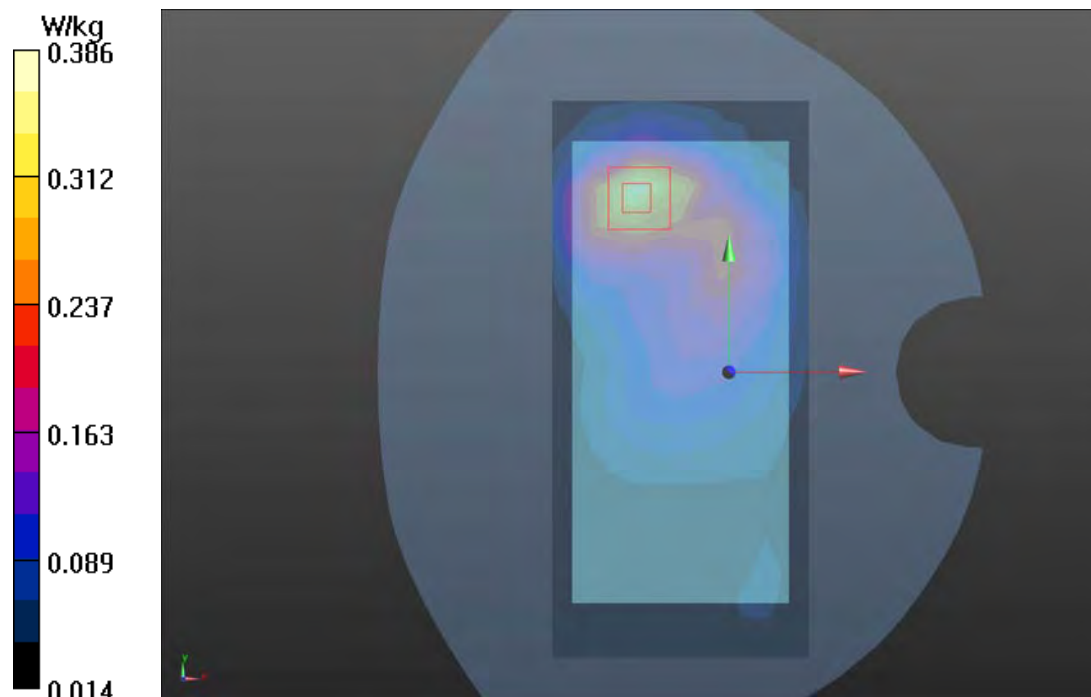
Peak SAR (extrapolated) = 0.552 W/kg

SAR(1 g) = 0.348 W/kg ; SAR(10 g) = 0.205 W/kg

Smallest distance from peaks to all points 3 dB below = 14.4 mm

Ratio of SAR at M2 to SAR at M1 = 63.3%

Maximum value of SAR (measured) = 0.386 W/kg



Plot 45 LTE Band 2 1RB Front Side High (Distance 15mm)

Date: 2023/10/13

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.422$ S/m; $\epsilon_r = 38.97$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.85, 7.85, 7.85); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side High/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.767 W/kg

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

Reference Value = 5.401 V/m; Power Drift = -0.026 dB

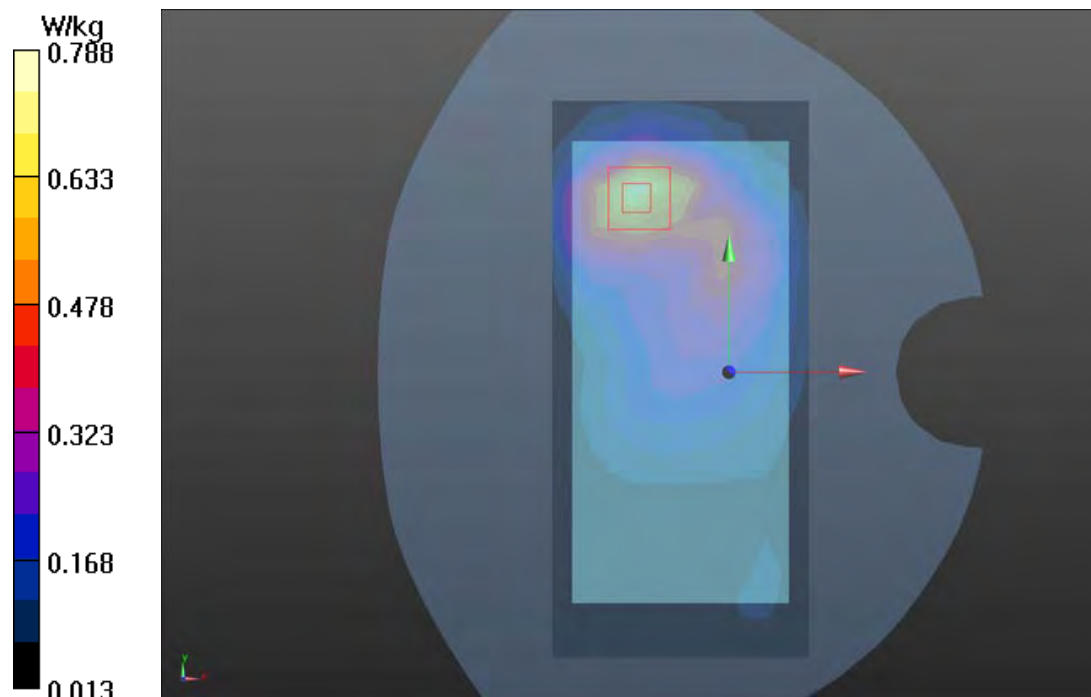
Peak SAR (extrapolated) = 0.910 W/kg

SAR(1 g) = 0.504 W/kg; SAR(10 g) = 0.291 W/kg

Smallest distance from peaks to all points 3 dB below = 11.6 mm

Ratio of SAR at M2 to SAR at M1 = 60.2%

Maximum value of SAR (measured) = 0.788 W/kg



Plot 46 LTE Band 5 1RB Front Side Low (Distance 15mm)

Date: 2023/10/4

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

Medium parameters used: $f = 829 \text{ MHz}$; $\sigma = 0.936 \text{ S/m}$; $\epsilon_r = 41.882$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(9.35, 9.35, 9.35); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Low/Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.104 W/kg

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

Reference Value = 10.85 V/m ; Power Drift = -0.04 dB

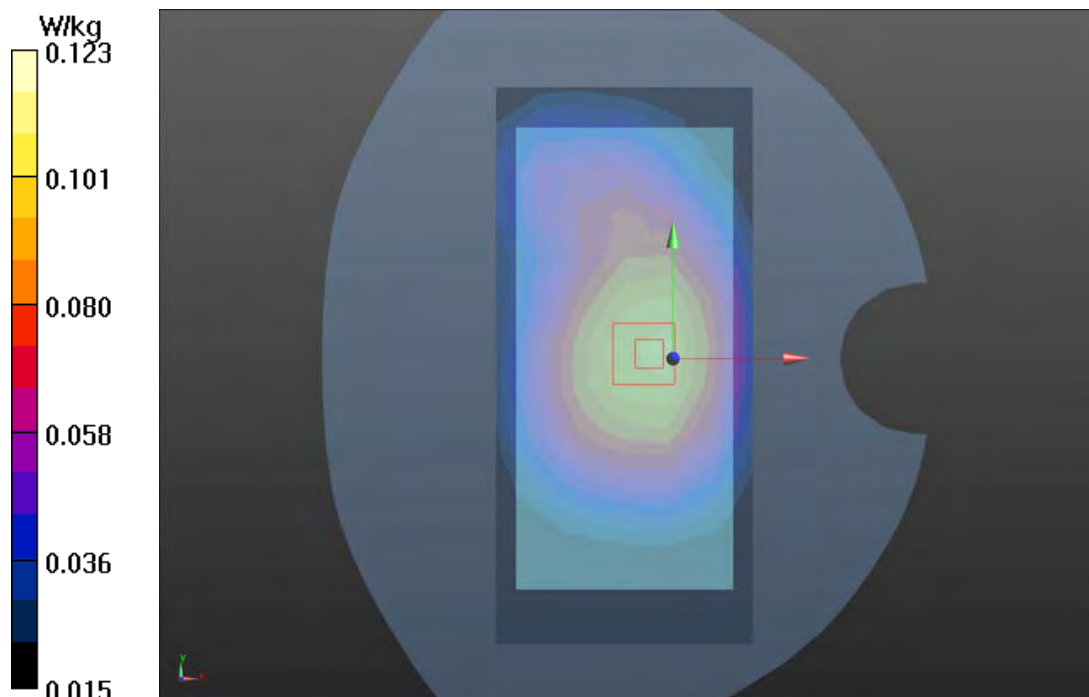
Peak SAR (extrapolated) = 0.220 W/kg

SAR(1 g) = 0.102 W/kg ; SAR(10 g) = 0.075 W/kg

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 77.7%

Maximum value of SAR (measured) = 0.123 W/kg



Plot 47 LTE Band 7 1RB Front Side Low (Distance 15mm)

Date: 2023/10/1

Communication System: UID 0, LTE (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2510$ MHz; $\sigma = 1.9$ S/m; $\epsilon_r = 38.262$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.19, 7.19, 7.19); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Low/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.495 W/kg

Front Side Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.198 V/m; Power Drift = 0.039 dB

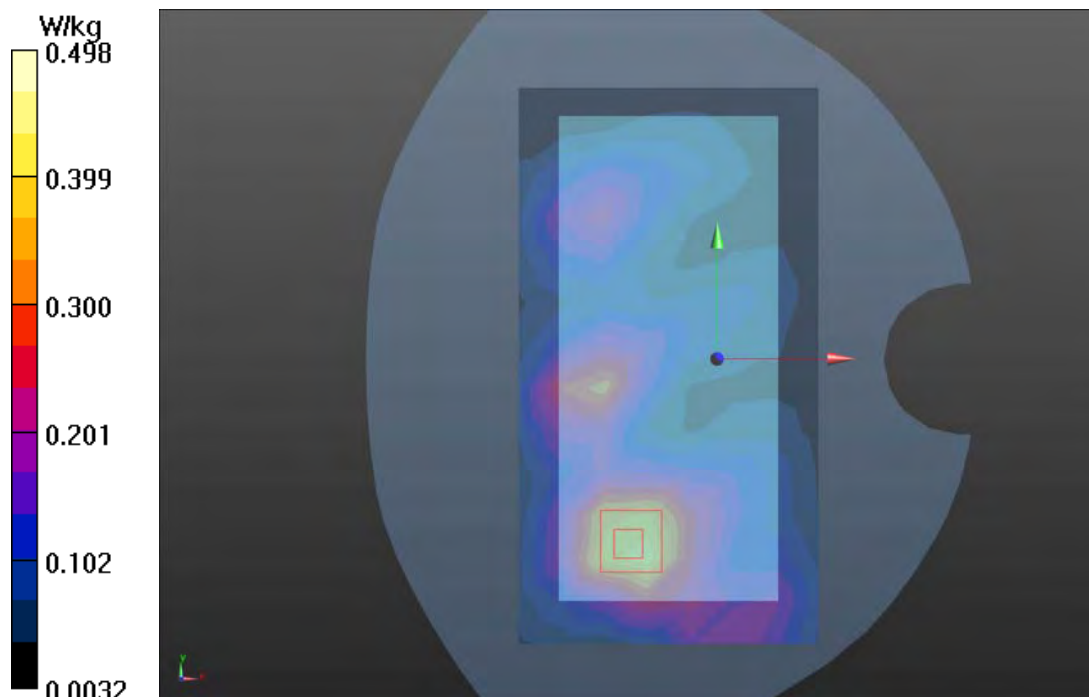
Peak SAR (extrapolated) = 0.780 W/kg

SAR(1 g) = 0.474 W/kg; SAR(10 g) = 0.256 W/kg

Smallest distance from peaks to all points 3 dB below = 18.2 mm

Ratio of SAR at M2 to SAR at M1 = 54.1%

Maximum value of SAR (measured) = 0.498 W/kg



Plot 48 LTE Band 26 1RB Front Side Middle (Distance 15mm)

Date: 2023/10/4

Communication System: UID 0, LTE (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 831.5$ MHz; $\sigma = 0.937$ S/m; $\epsilon_r = 41.874$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(9.35, 9.35, 9.35); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Middle/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.163 W/kg

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

Reference Value = 13.49 V/m; Power Drift = 0.041 dB

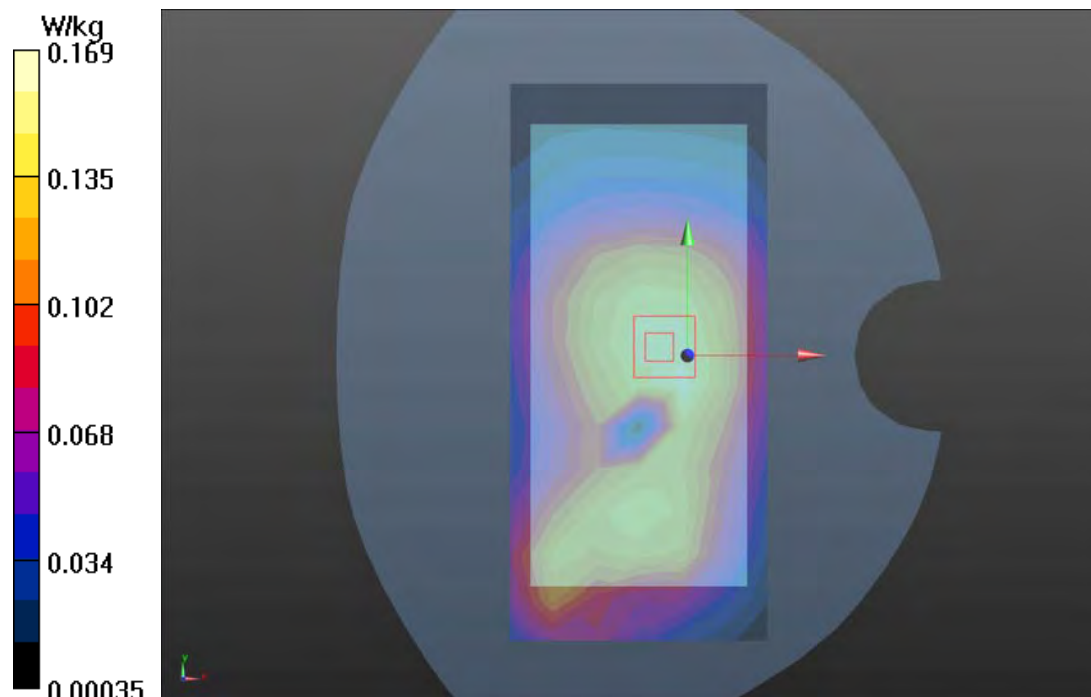
Peak SAR (extrapolated) = 0.208 W/kg

SAR(1 g) = 0.151 W/kg; SAR(10 g) = 0.108 W/kg

Smallest distance from peaks to all points 3 dB below = 8 mm

Ratio of SAR at M2 to SAR at M1 = 77.6%

Maximum value of SAR (measured) = 0.169 W/kg



Plot 49 LTE Band 41 1RB Front Side High (Distance 15mm)

Date: 2023/10/1

Communication System: UID 0, LTE (0); Frequency: 2636.5 MHz; Duty Cycle: 1:1.58

Medium parameters used (interpolated): $f = 2636.5$ MHz; $\sigma = 2.042$ S/m; $\epsilon_r = 37.775$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.19, 7.19, 7.19); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side High/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.226 W/kg

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

Reference Value = 3.859 V/m; Power Drift = 0.048 dB

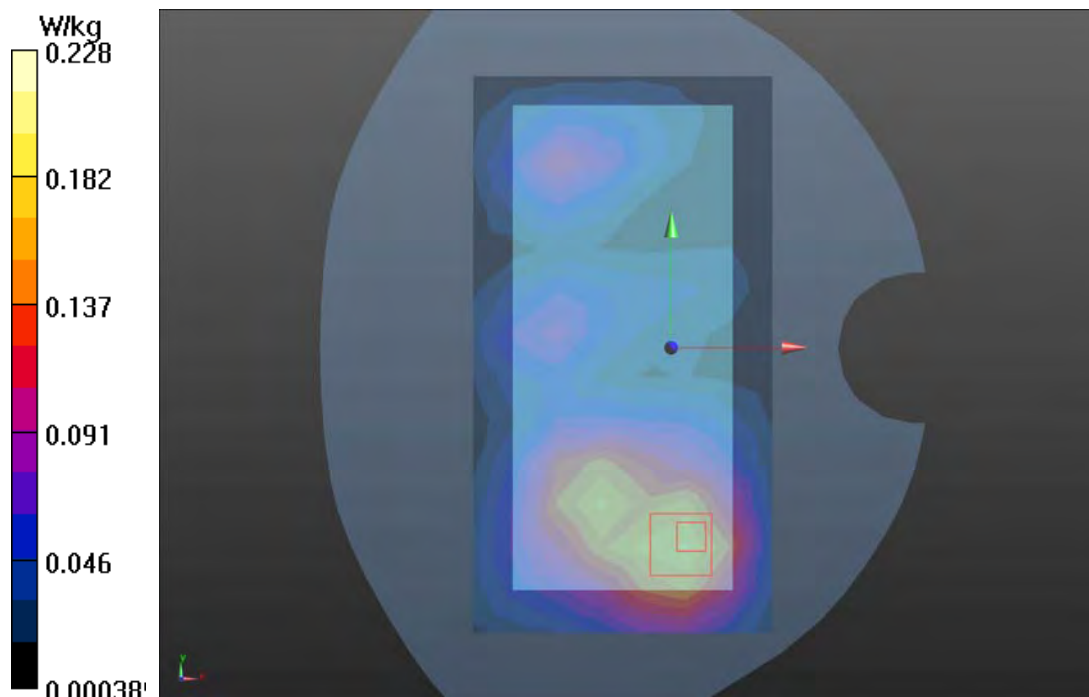
Peak SAR (extrapolated) = 0.378 W/kg

SAR(1 g) = 0.215 W/kg; SAR(10 g) = 0.112 W/kg

Smallest distance from peaks to all points 3 dB below=10.2mm

Ratio of SAR at M2 to SAR at M1 = 46.9%

Maximum value of SAR (measured) = 0.228 W/kg



Plot 50 LTE Band 66 1RB Front Side Low (Distance 15mm)

Date: 2023/10/9

Communication System: UID 0, LTE (0); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1720$ MHz; $\sigma = 1.294$ S/m; $\epsilon_r = 39.556$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(8.10, 8.10, 8.10); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Low/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.483 W/kg

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

Reference Value = 9.371 V/m; Power Drift = 0.025 dB

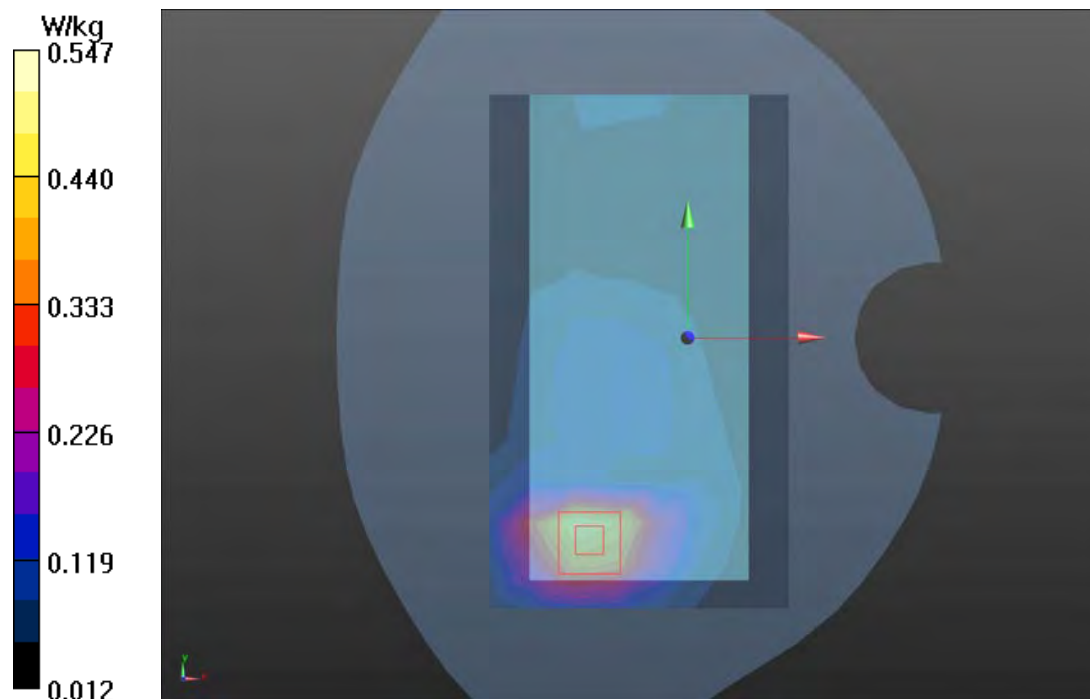
Peak SAR (extrapolated) = 0.626 W/kg

SAR(1 g) = 0.479 W/kg; SAR(10 g) = 0.258 W/kg

Smallest distance from peaks to all points 3 dB below = 12.9 mm

Ratio of SAR at M2 to SAR at M1 = 63.9%

Maximum value of SAR (measured) = 0.547 W/kg



Plot 51 802.11a U-NII-1 Back Side Middle (Distance 15mm)

Date: 2023/10/11

Communication System: UID 0, 802.11a (0); Frequency: 5280 MHz; Duty Cycle: 1:1.027

Medium parameters used: $f = 5280$ MHz; $\sigma = 4.805$ S/m; $\epsilon_r = 36.71$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(5.19, 5.19, 5.19); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (12x11x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.250 W/kg

Back Side Middle/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.504 V/m; Power Drift = 0.085 dB

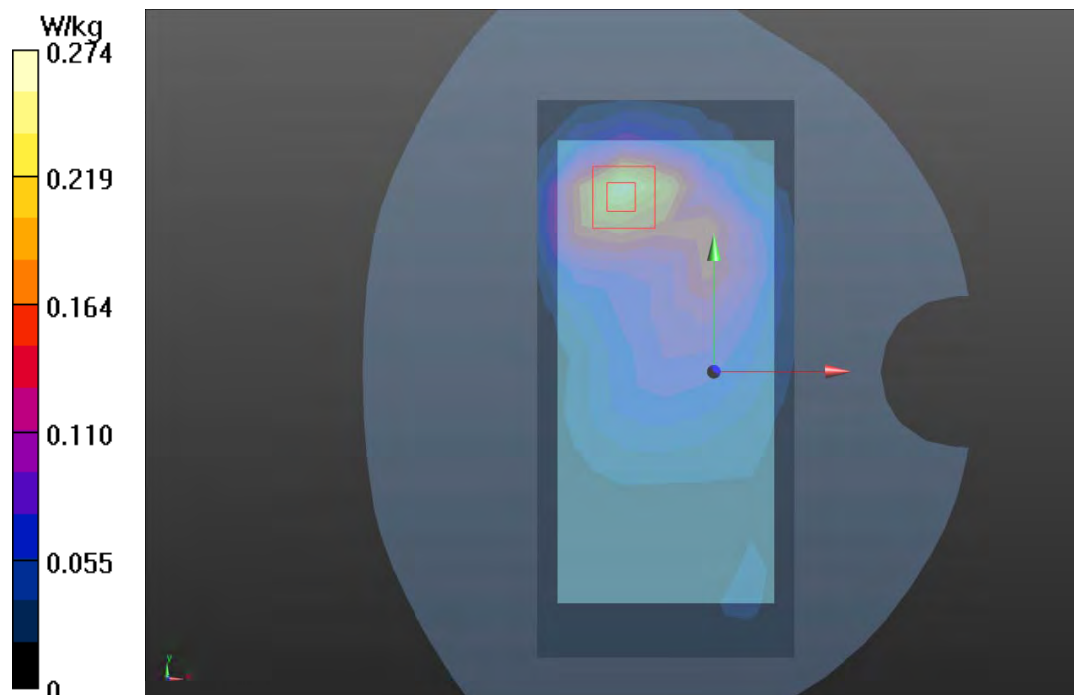
Peak SAR (extrapolated) = 0.456 W/kg

SAR(1 g) = 0.230 W/kg; SAR(10 g) = 0.08 W/kg

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 40.2%

Maximum value of SAR (measured) = 0.274 W/kg





Plot 52 GSM 850 GPRS (4Txslots) Back Side Middle (Distance 10mm)

Date: 2023/10/5

Communication System: UID 0, GPRS 4TX (0); Frequency: 836.6 MHz; Duty Cycle: 1:2.07491

Medium parameters used: $f = 837$ MHz; $\sigma = 0.939$ S/m; $\epsilon_r = 41.856$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(9.35, 9.35, 9.35); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.324 W/kg

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

Reference Value = 12.80 V/m; Power Drift = -0.16 dB

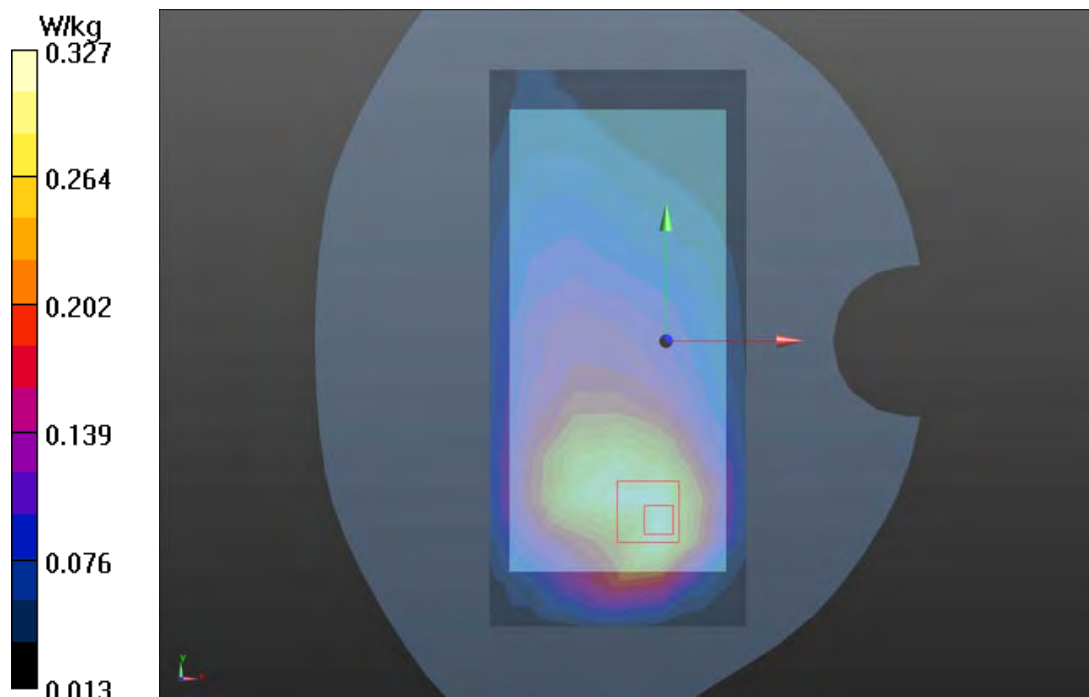
Peak SAR (extrapolated) = 0.495 W/kg

SAR(1 g) = 0.307 W/kg; SAR(10 g) = 0.199 W/kg

Smallest distance from peaks to all points 3 dB below = 20.4 mm

Ratio of SAR at M2 to SAR at M1 = 64.8%

Maximum value of SAR (measured) = 0.327 W/kg



Plot 53 GSM 1900 GPRS (4Txslots) Top Edge Middle (Distance 10mm)

Date: 2023/10/14

Communication System: UID 0, GPRS 4TX (0); Frequency: 1880 MHz; Duty Cycle: 1:2.07491

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.437$ S/m; $\epsilon_r = 37.208$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.85, 7.85, 7.85); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Top Edge Middle/Area Scan (4x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.590 W/kg

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

Reference Value = 14.16 V/m; Power Drift = 0.13 dB

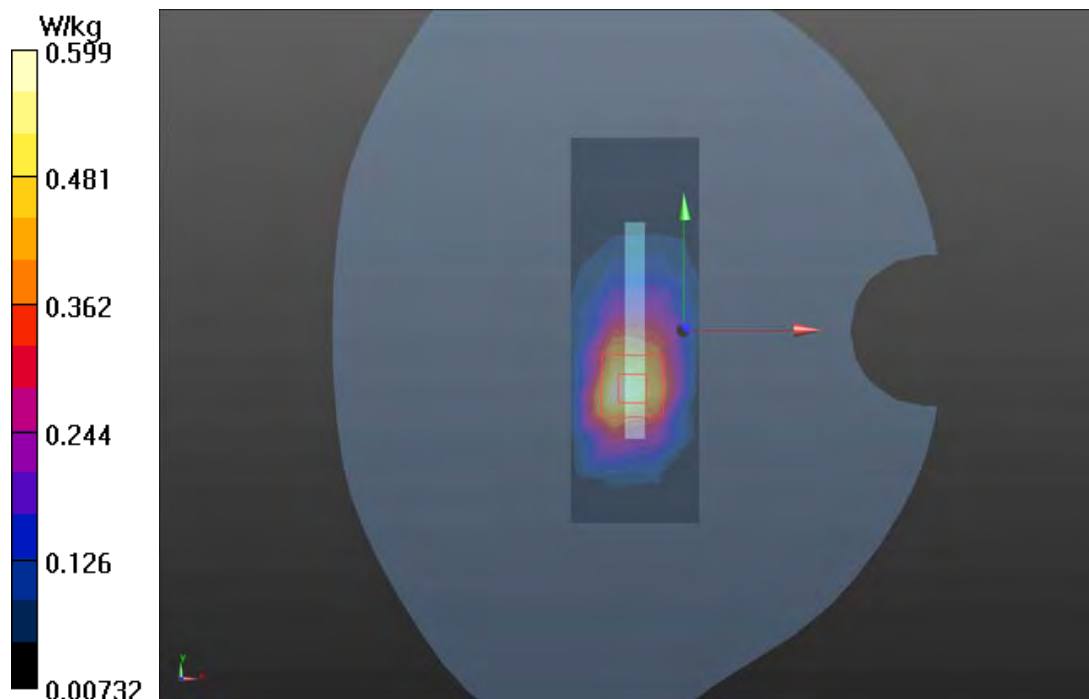
Peak SAR (extrapolated) = 0.938 W/kg

SAR(1 g) = 0.584 W/kg; SAR(10 g) = 0.277 W/kg

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 55.5%

Maximum value of SAR (measured) = 0.599 W/kg



Plot 54 WCDMA Band II Bottom Edge Middle (Distance 10mm)

Date: 2023/10/14

Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.437$ S/m; $\epsilon_r = 37.208$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.85, 7.85, 7.85); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Middle/Area Scan (4x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.892 W/kg

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

Reference Value = 22.01 V/m; Power Drift = -0.11 dB

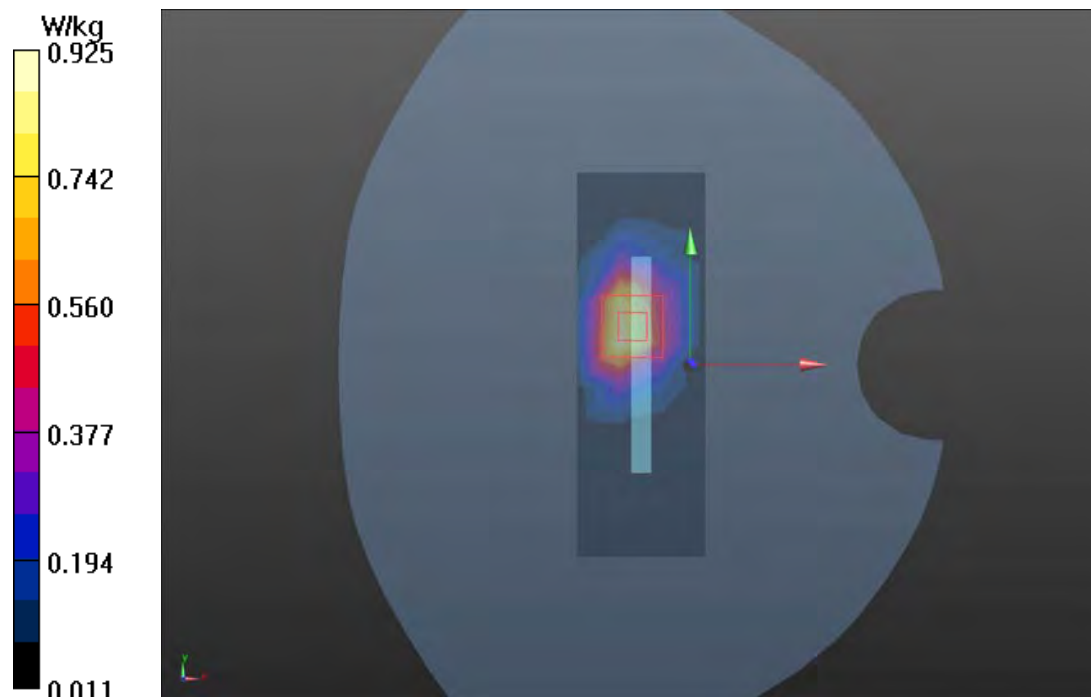
Peak SAR (extrapolated) = 1.83 W/kg

SAR(1 g) = 0.772 W/kg; SAR(10 g) = 0.382 W/kg

Smallest distance from peaks to all points 3 dB below = 10.7 mm

Ratio of SAR at M2 to SAR at M1 = 57.4%

Maximum value of SAR (measured) = 0.925 W/kg



Plot 55 WCDMA Band IV Top Edge Low (Distance 10mm)

Date: 2023/10/12

Communication System: UID 0, WCDMA (0); Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1712.4$ MHz; $\sigma = 1.286$ S/m; $\epsilon_r = 39.529$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(8.10, 8.10, 8.10); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Top Edge Low/Area Scan (4x9x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 27.14 V/m; Power Drift = -0.12 dB

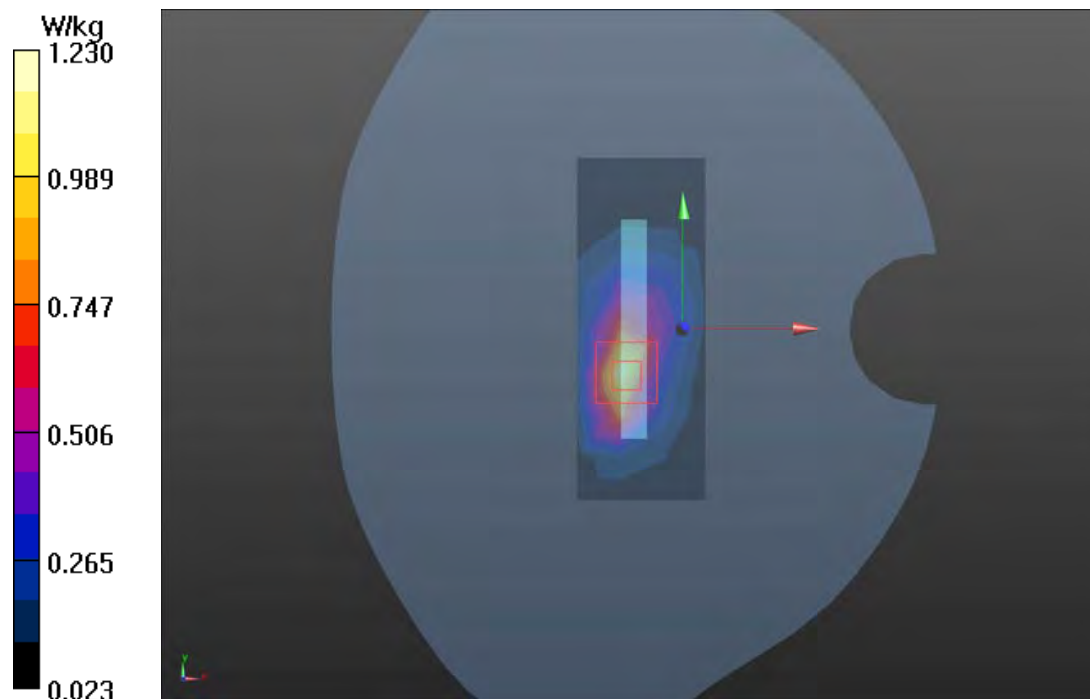
Peak SAR (extrapolated) = 1.50 W/kg

SAR(1 g) = 0.844 W/kg; SAR(10 g) = 0.435 W/kg

Smallest distance from peaks to all points 3 dB below = 8 mm

Ratio of SAR at M2 to SAR at M1 = 57.2%

Maximum value of SAR (measured) = 1.23 W/kg



Plot 56 WCDMA Band V Back Side Middle (Distance 10mm)

Date: 2023/10/5

Communication System: UID 0, WCDMA (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 0.939$ S/m; $\epsilon_r = 41.856$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(9.35, 9.35, 9.35); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.371 W/kg

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

Reference Value = 14.01 V/m; Power Drift = 0.12 dB

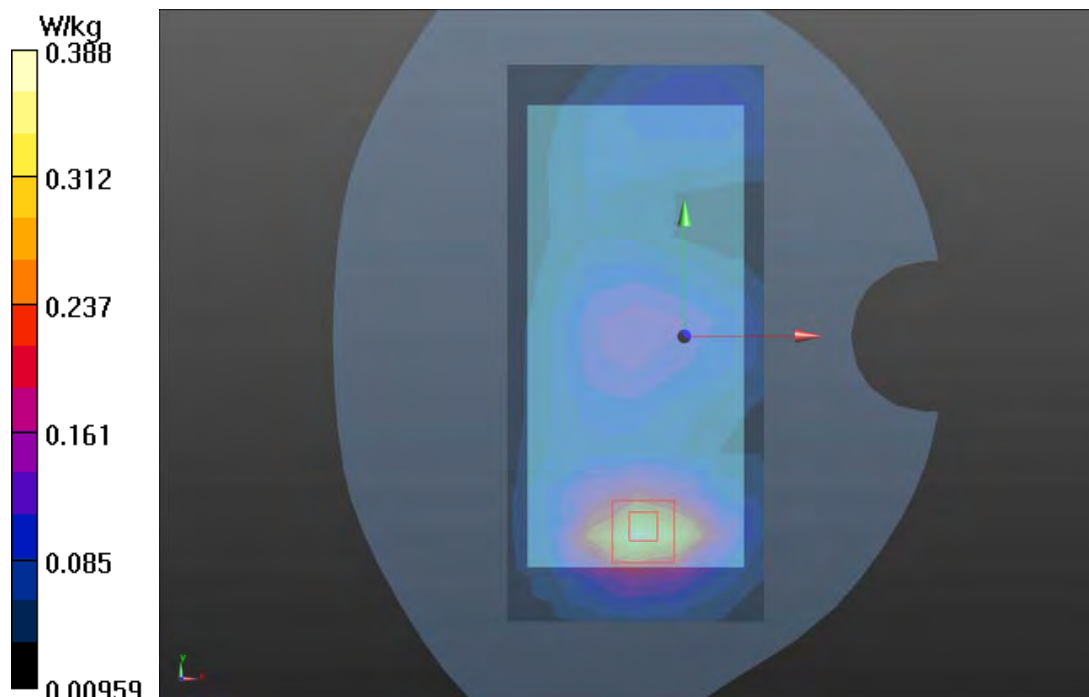
Peak SAR (extrapolated) = 0.459 W/kg

SAR(1 g) = 0.364 W/kg; SAR(10 g) = 0.247 W/kg

Smallest distance from peaks to all points 3 dB below = 16 mm

Ratio of SAR at M2 to SAR at M1 = 69.8%

Maximum value of SAR (measured) = 0.388 W/kg



Plot 57 LTE Band 2 1RB Top Edge Low (Distance 10mm)

Date: 2023/10/14

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

Medium parameters used: $f = 1860$ MHz; $\sigma = 1.422$ S/m; $\epsilon_r = 37.402$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.85, 7.85, 7.85); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Top Edge Low/Area Scan (4x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.697 W/kg

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

Reference Value = 1.178 V/m; Power Drift = 0.02 dB

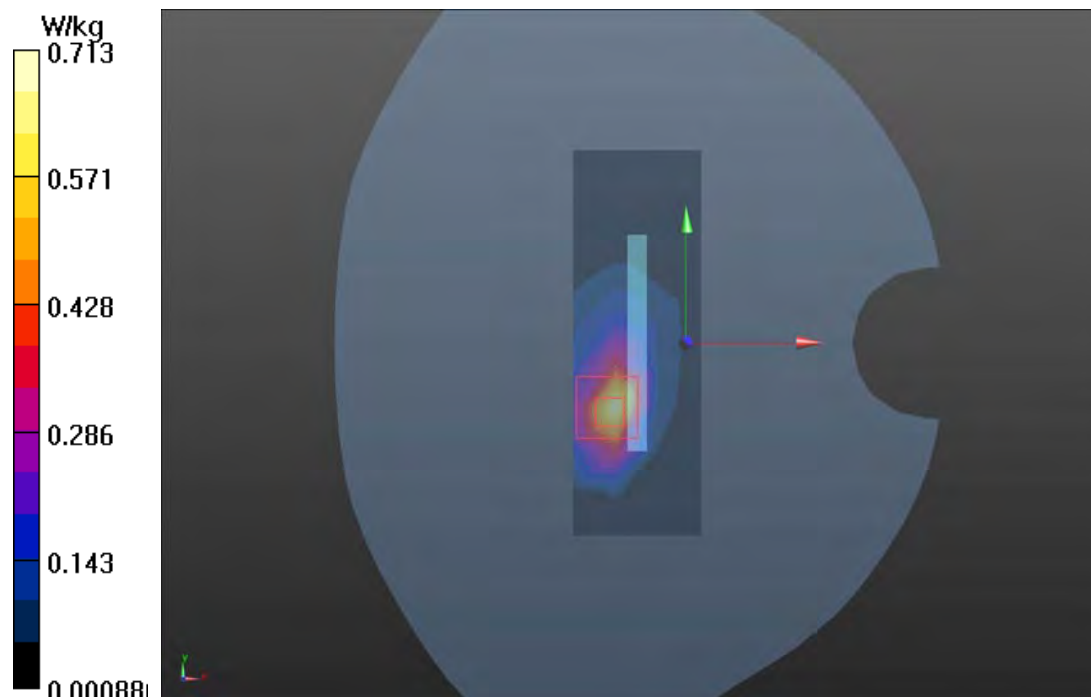
Peak SAR (extrapolated) = 1.21 W/kg

SAR(1 g) = 0.640 W/kg; SAR(10 g) = 0.306 W/kg

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 54.8%

Maximum value of SAR (measured) = 0.713 W/kg



Plot 58 LTE Band 5 1RB Back Side Low (Distance 10mm)

Date: 2023/10/5

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

Medium parameters used: $f = 829 \text{ MHz}$; $\sigma = 0.936 \text{ S/m}$; $\epsilon_r = 41.882$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(9.35, 9.35, 9.35); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Low/Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.360 W/kg

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

Reference Value = 15.86 V/m ; Power Drift = 0.06 dB

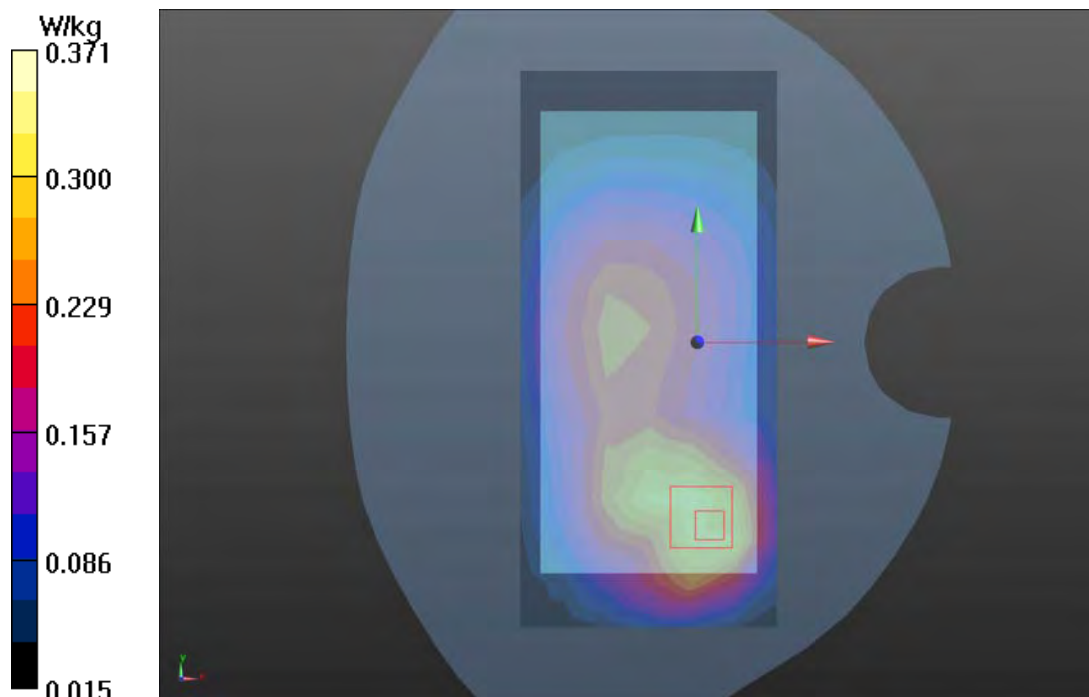
Peak SAR (extrapolated) = 0.492 W/kg

SAR(1 g) = 0.358 W/kg ; SAR(10 g) = 0.243 W/kg

Smallest distance from peaks to all points 3 dB below = 18.7 mm

Ratio of SAR at M2 to SAR at M1 = 64.4%

Maximum value of SAR (measured) = 0.371 W/kg



Plot 59 LTE Band 7 50%RB Back Side Middle (Distance 10mm)

Date: 2023/10/2

Communication System: UID 0, LTE (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2510$ MHz; $\sigma = 1.91$ S/m; $\epsilon_r = 37.398$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.19, 7.19, 7.19); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Low/Area Scan (5x12x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.900 W/kg

Bottom Edge Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.20 V/m; Power Drift = -0.02 dB

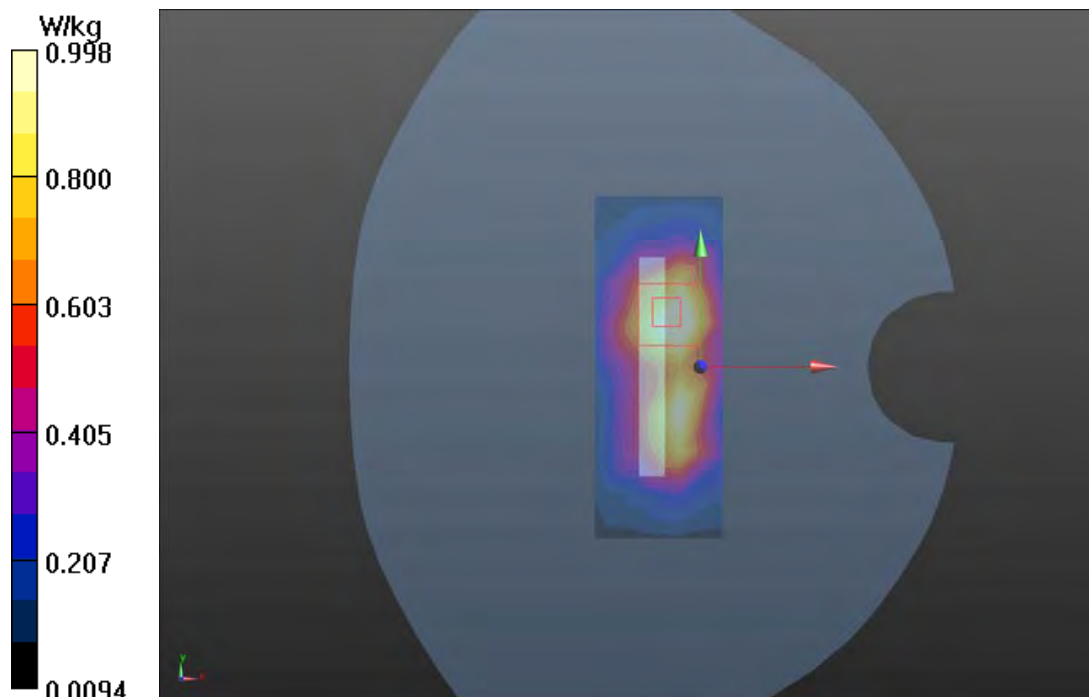
Peak SAR (extrapolated) = 2.37 W/kg

SAR(1 g) = 0.812 W/kg; SAR(10 g) = 0.372 W/kg

Smallest distance from peaks to all points 3 dB below = 12.2 mm

Ratio of SAR at M2 to SAR at M1 = 51.4%

Maximum value of SAR (measured) = 0.998 W/kg



Plot 60 LTE Band 12 1RB Back Side Low (Distance 10mm)

Date: 2023/9/30

Communication System: UID 0, LTE (0); Frequency: 704 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 704 \text{ MHz}$; $\sigma = 0.894 \text{ S/m}$; $\epsilon_r = 42.223$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 – SN3883; ConvF(9.70, 9.70, 9.70); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Low/Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.272 W/kg

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

Reference Value = 17.81 V/m ; Power Drift = -0.04 dB

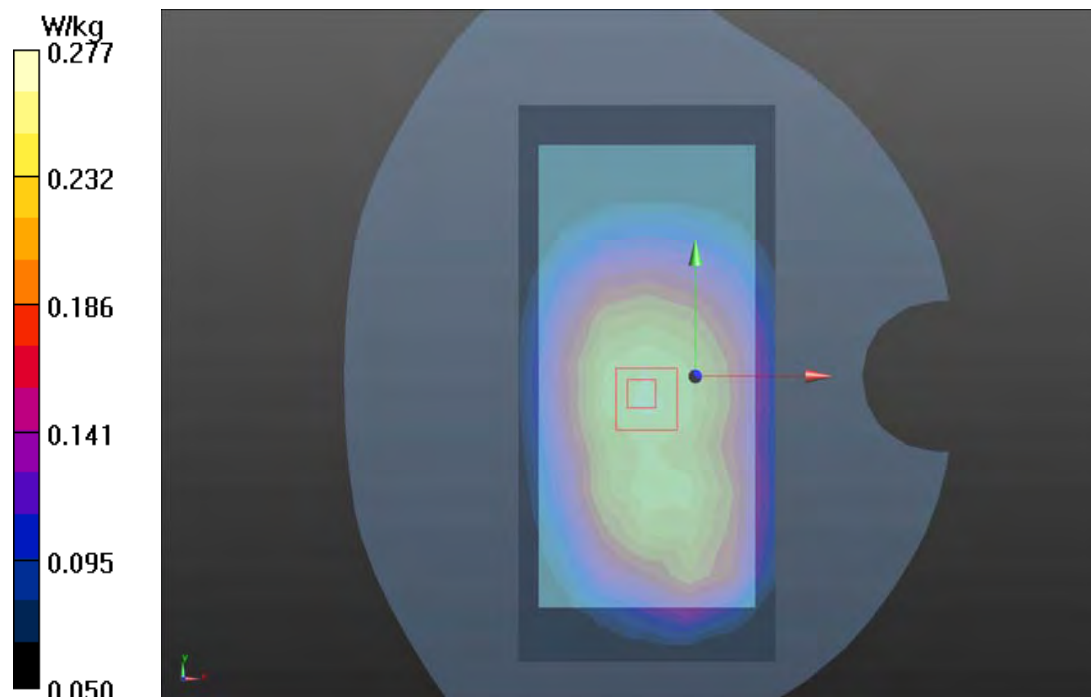
Peak SAR (extrapolated) = 0.287 W/kg

SAR(1 g) = 0.261 W/kg ; SAR(10 g) = 0.183 W/kg

Smallest distance from peaks to all points 3 dB below = 9.5mm

Ratio of SAR at M2 to SAR at M1 = 82%

Maximum value of SAR (measured) = 0.277 W/kg



Plot 61 LTE Band 13 1RB Back Side Middle (Distance 10mm)

Date: 2023/9/30

Communication System: UID 0, LTE (0); Frequency: 782 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.921 \text{ S/m}$; $\epsilon_r = 41.805$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 – SN3883; ConvF(9.70, 9.70, 9.70); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.211 W/kg

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

Reference Value = 15.90 V/m ; Power Drift = -0.030 dB

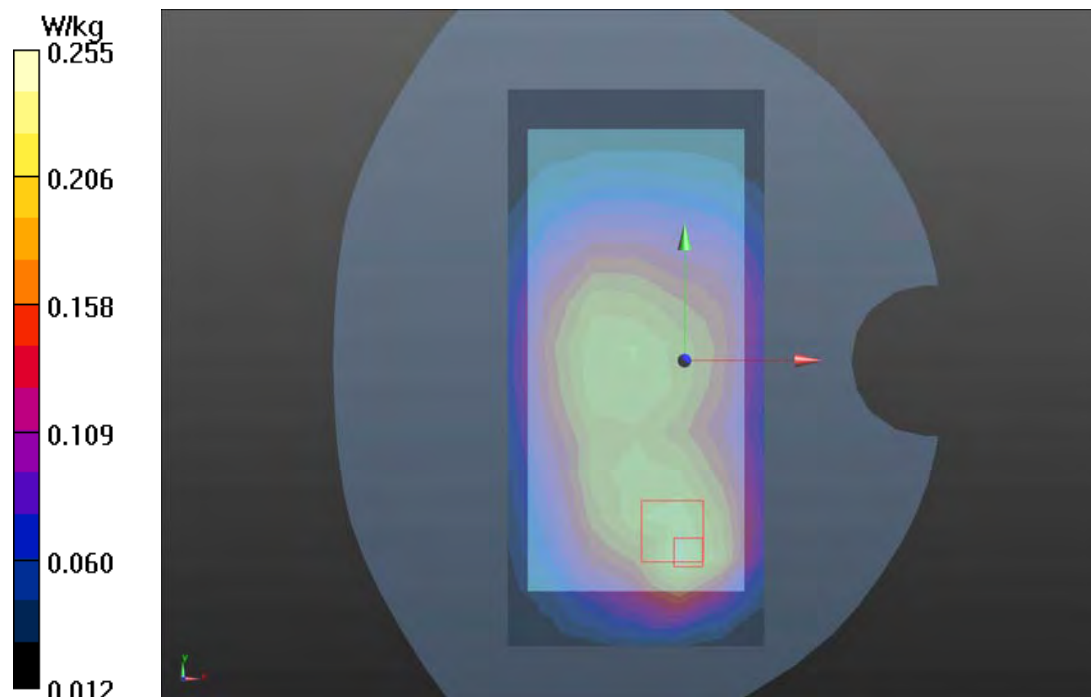
Peak SAR (extrapolated) = 0.325 W/kg

SAR(1 g) = 0.209 W/kg ; SAR(10 g) = 0.138 W/kg

Smallest distance from peaks to all points 3 dB below = 17 mm

Ratio of SAR at M2 to SAR at M1 = 65.7%

Maximum value of SAR (measured) = 0.255 W/kg



Plot 62 LTE Band 26 1RB Back Side Low (Distance 10mm)

Date: 2023/10/5

Communication System: UID 0, LTE (0); Frequency: 821.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 821.5$ MHz; $\sigma = 0.933$ S/m; $\epsilon_r = 41.904$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(9.35, 9.35, 9.35); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Low/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.331 W/kg

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

Reference Value = 13.10 V/m; Power Drift = 0.11 dB

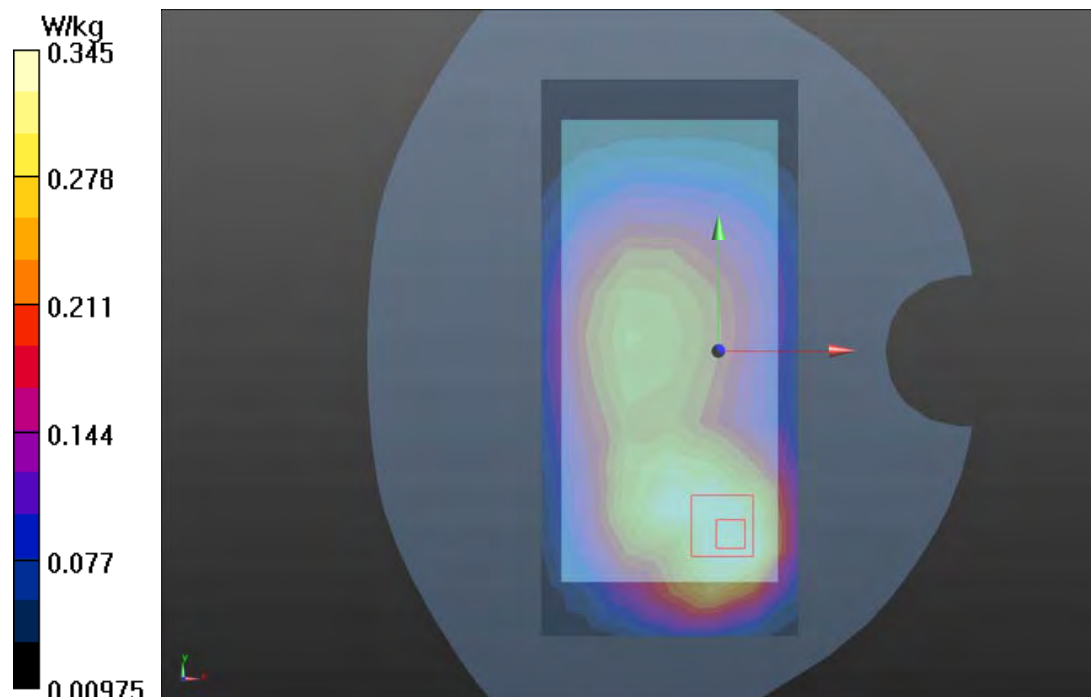
Peak SAR (extrapolated) = 0.616 W/kg

SAR(1 g) = 0.313 W/kg; SAR(10 g) = 0.209 W/kg

Smallest distance from peaks to all points 3 dB below = 19.3 mm

Ratio of SAR at M2 to SAR at M1 = 64.4%

Maximum value of SAR (measured) = 0.345 W/kg



Plot 63 LTE Band 38 50%RB Back Side High (Distance 10mm)

Date: 2023/10/2

Communication System: UID 0, LTE (0); Frequency: 2595 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2595$ MHz; $\sigma = 1.997$ S/m; $\epsilon_r = 37.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.19, 7.19, 7.19); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Middle/Area Scan (5x12x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.621 W/kg

Bottom Edge Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.25 V/m; Power Drift = -0.08 dB

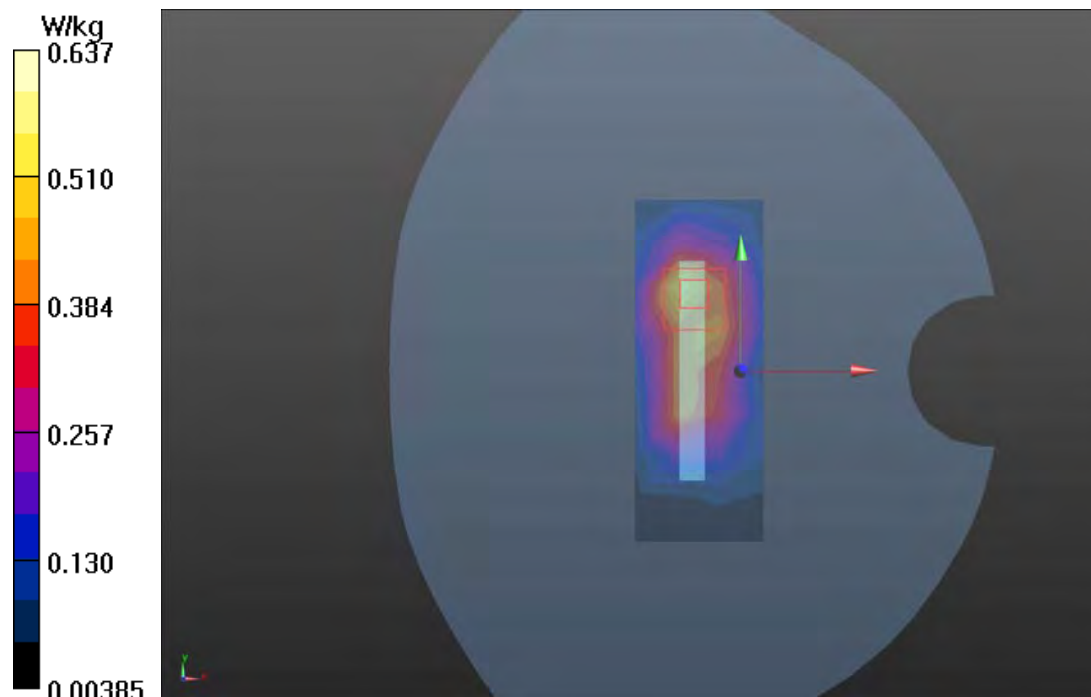
Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.573 W/kg; SAR(10 g) = 0.289 W/kg

Smallest distance from peaks to all points 3 dB below = 12.8 mm

Ratio of SAR at M2 to SAR at M1 = 52.2%

Maximum value of SAR (measured) = 0.637 W/kg



Plot 64 LTE Band 41 1RB Front Side Middle (Distance 10mm)

Date: 2023/10/2

Communication System: UID 0, LTE (0); Frequency: 2549.5 MHz; Duty Cycle: 1:1.58

Medium parameters used (interpolated): $f = 2549.5$ MHz; $\sigma = 1.958$ S/m; $\epsilon_r = 37.264$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.19, 7.19, 7.19); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Middle/Area Scan (5x12x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.769 W/kg

Bottom Edge Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.67 V/m; Power Drift = -0.18 dB

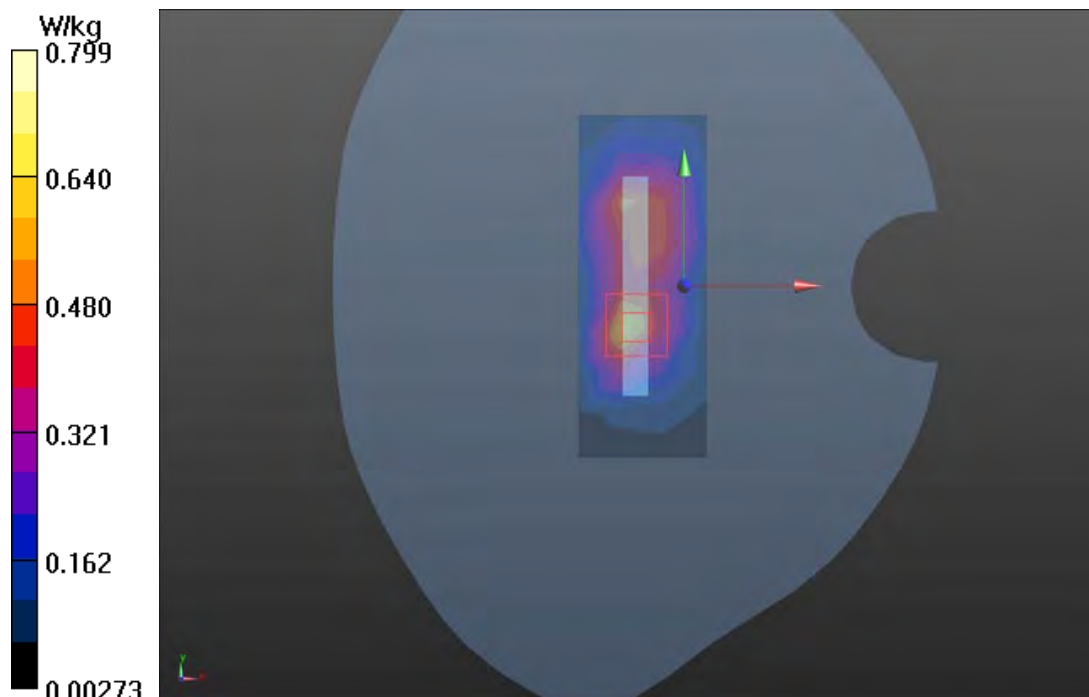
Peak SAR (extrapolated) = 0.943 W/kg

SAR(1 g) = 0.757 W/kg; SAR(10 g) = 0.372 W/kg

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 48.3%

Maximum value of SAR (measured) = 0.799 W/kg



Plot 65 LTE Band 66 50%RB Back Side Low (Distance 10mm)

Date: 2023/10/12

Communication System: UID 0, LTE (0); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1720$ MHz; $\sigma = 1.294$ S/m; $\epsilon_r = 39.556$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(8.10, 8.10, 8.10); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Low/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.990 W/kg

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

Reference Value = 6.825 V/m; Power Drift = -0.01 dB

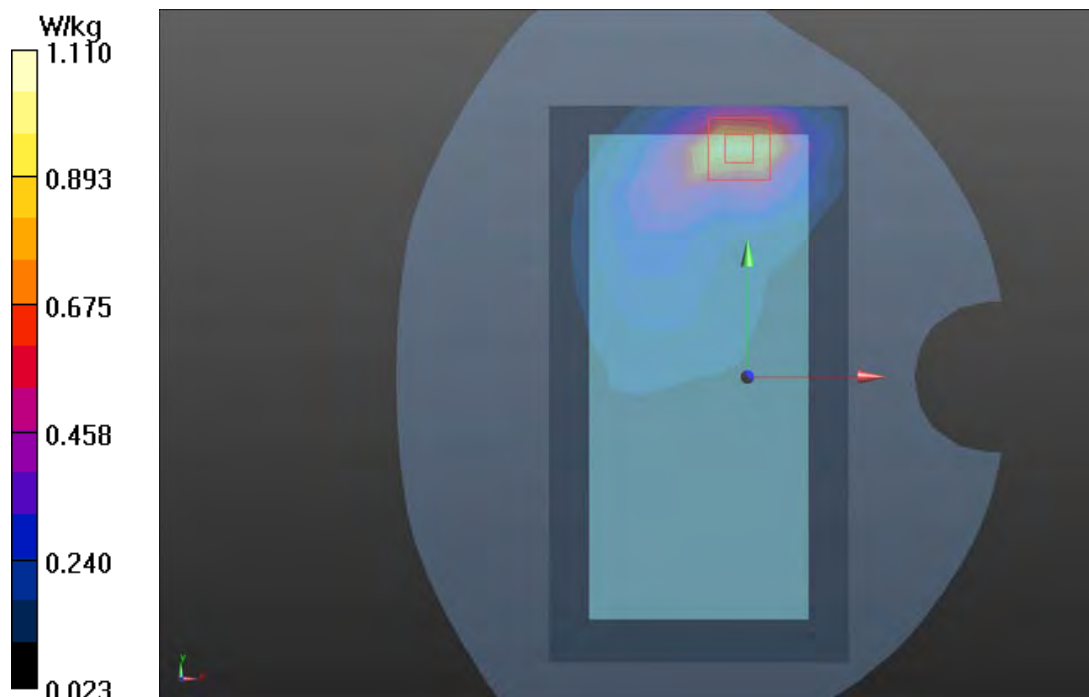
Peak SAR (extrapolated) = 1.71 W/kg

SAR(1 g) = 0.980 W/kg; SAR(10 g) = 0.518 W/kg

Smallest distance from peaks to all points 3 dB below = 11.2 mm

Ratio of SAR at M2 to SAR at M1 = 59.4%

Maximum value of SAR (measured) = 1.11 W/kg



Plot 66 802.11b Top Edge Middle (Distance 10mm)

Date: 2023/10/18

Communication System: UID 0, 802.11b (0); Frequency: 2437 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.819$ S/m; $\epsilon_r = 38.476$; $\rho = 1000$ kg/m³

Ambient Temperature:22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.46, 7.46, 7.46); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Top Edge Middle/Area Scan (5x12x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.234 W/kg

Top Edge Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.46 V/m; Power Drift = 0.04 dB

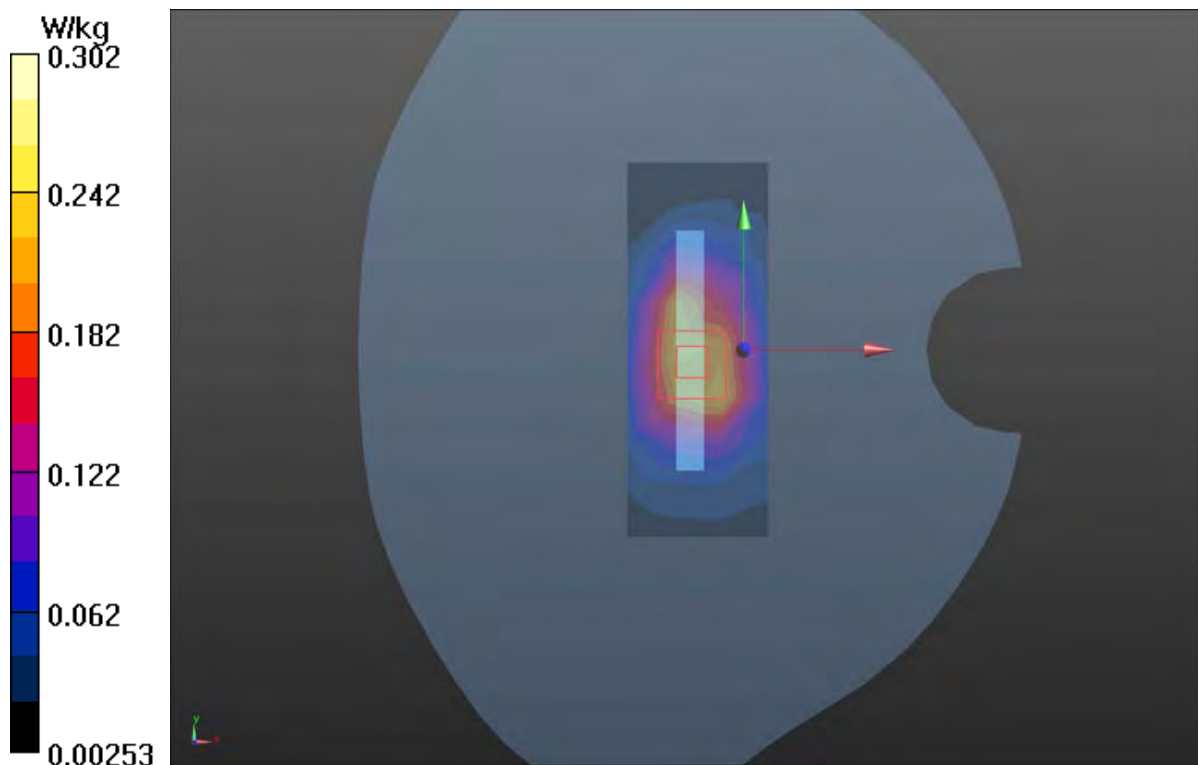
Peak SAR (extrapolated) = 0.371 W/kg

SAR(1 g) = 0.202 W/kg; SAR(10 g) = 0.107 W/kg

Smallest distance from peaks to all points 3 dB below = 12.2 mm

Ratio of SAR at M2 to SAR at M1 = 50.2%

Maximum value of SAR (measured) = 0.302 W/kg



Plot 67 802.11a U-NII-3 Top Edge High (Distance 10mm)

Date: 2023/10/19

Communication System: UID 0, 802.11a (0); Frequency: 5825 MHz; Duty Cycle: 1:1.027

Medium parameters used: $f = 5825 \text{ MHz}$; $\sigma = 5.4 \text{ S/m}$; $\epsilon_r = 37$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7543; ConvF(4.71, 4.71, 4.71); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Top Edge High/Area Scan (6x14x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.484 W/kg

Top Edge High/Zoom Scan (7x7x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 11.04 V/m ; Power Drift = 0.104 dB

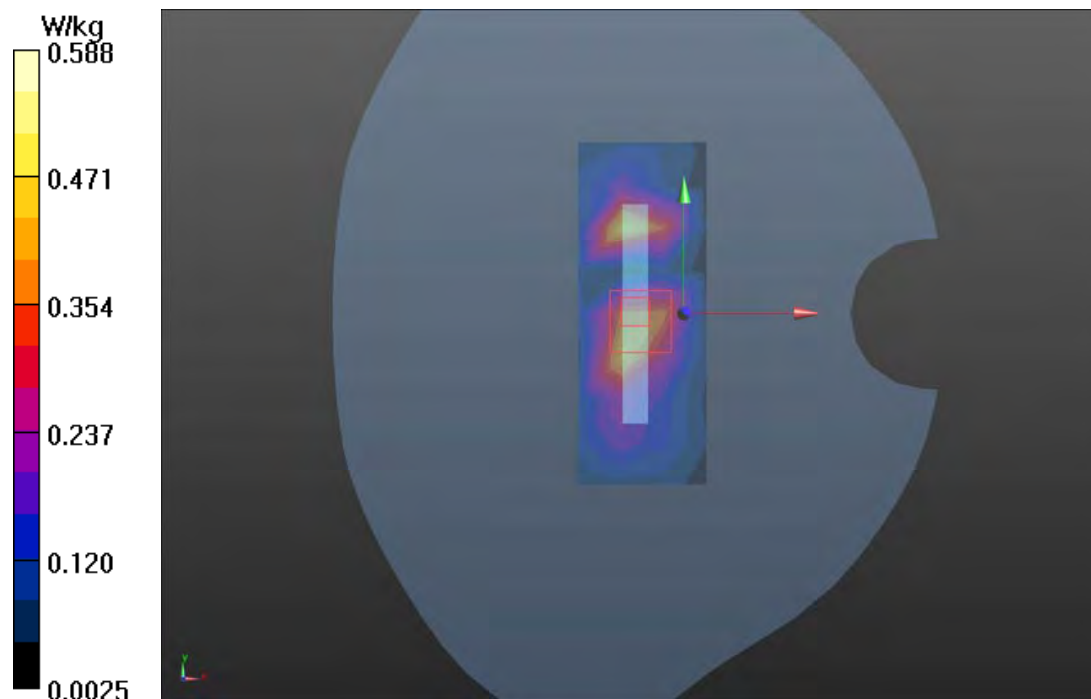
Peak SAR (extrapolated) = 1.77 W/kg

SAR(1 g) = 0.411 W/kg ; SAR(10 g) = 0.142 W/kg

Smallest distance from peaks to all points 3 dB below = 8.8 mm

Ratio of SAR at M2 to SAR at M1 = 37.6%

Maximum value of SAR (measured) = 0.588 W/kg



Plot 68 Bluetooth Top Edge Low (Distance 10mm)

Date: 2023/10/18

Communication System: UID 0, BT (0); Frequency: 2402 MHz; Duty Cycle: 1:1.302

Medium parameters used: $f = 2402$ MHz; $\sigma = 1.777$ S/m; $\epsilon_r = 38.615$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.46, 7.46, 7.46); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Top Edge Low/Area Scan (5x12x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.024 W/kg

Top Edge Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.8240 V/m; Power Drift = 0.06 dB

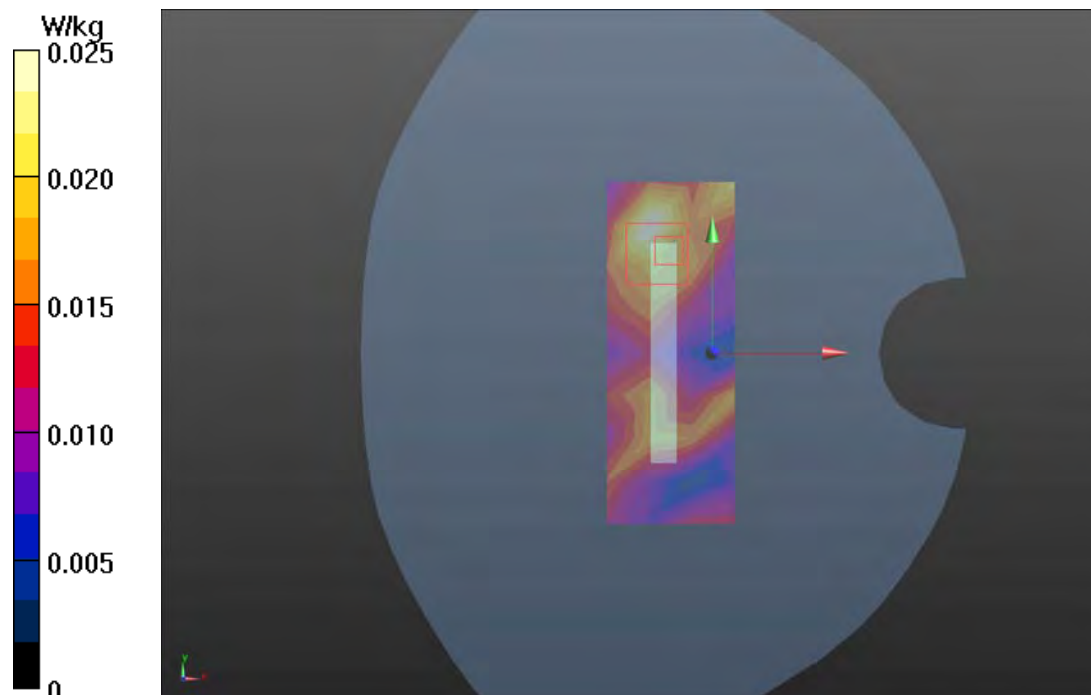
Peak SAR (extrapolated) = 0.069 W/kg

SAR(1 g) = 0.02 W/kg; SAR(10 g) = 0.01 W/kg

Smallest distance from peaks to all points 3 dB below = 9.1mm

Ratio of SAR at M2 to SAR at M1 = 88.6%

Maximum value of SAR (measured) = 0.025 W/kg



Plot 69 GSM 1900 GPRS (4Txslots) Top Edge Middle (Distance 0mm)

Date: 2023/10/16

Communication System: UID 0, GPRS 4TX (0); Frequency: 1880 MHz; Duty Cycle: 1:2.07

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.406 \text{ S/m}$; $\epsilon_r = 39.087$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.85, 7.85, 7.85); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Top Edge Middle/Area Scan (4x9x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 1.76 W/kg

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

Reference Value = 24.36 V/m ; Power Drift = 0.069 dB

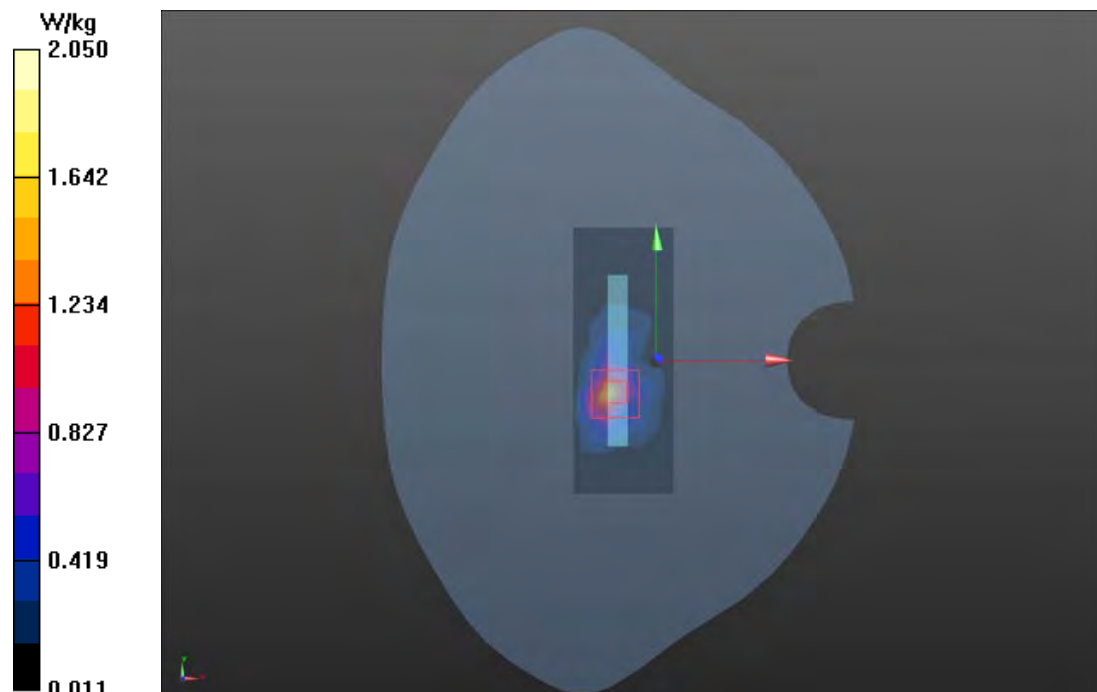
Peak SAR (extrapolated) = 3.98 W/kg

SAR(1 g) = 1.67 W/kg ; SAR(10 g) = 0.665 W/kg

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 45%

Maximum value of SAR (measured) = 2.05 W/kg



Plot 70 WCDMA Band II Top Edge Middle (Distance 0mm)

Date: 2023/10/16

Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.406 \text{ S/m}$; $\epsilon_r = 39.087$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.85, 7.85, 7.85); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Top Edge Middle/Area Scan (4x9x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 7.61 W/kg

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

Reference Value = 64.12 V/m ; Power Drift = -0.06 dB

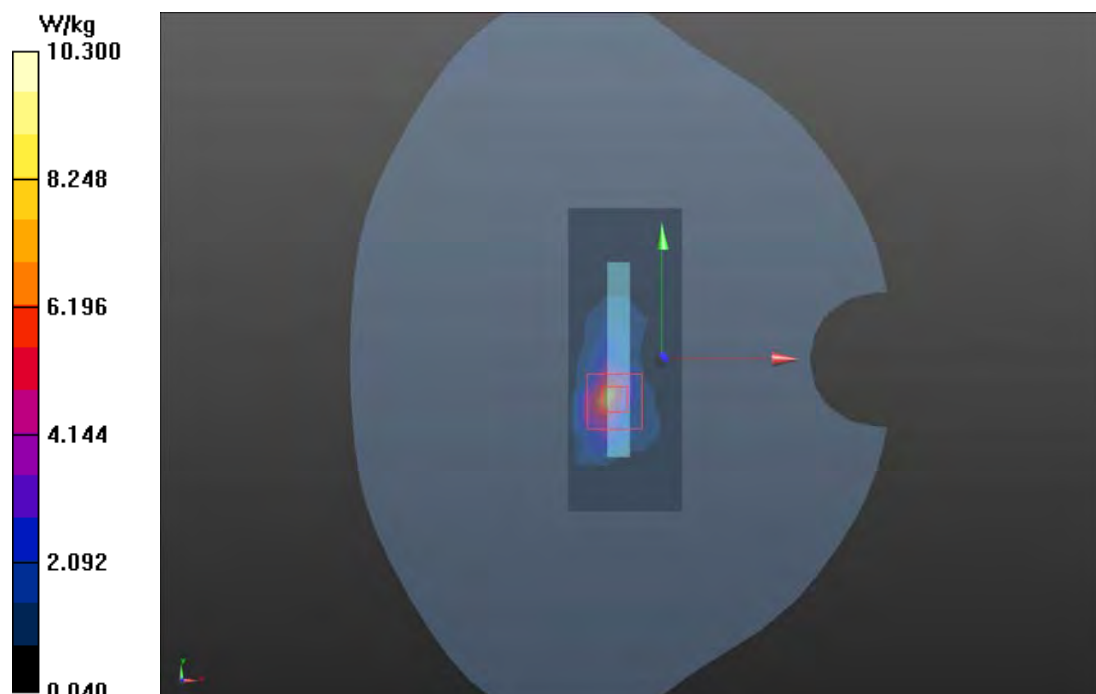
Peak SAR (extrapolated) = 13.4 W/kg

SAR(1 g) = 5.14 W/kg ; SAR(10 g) = 1.99 W/kg

Smallest distance from peaks to all points 3 dB below = 9.8 mm

Ratio of SAR at M2 to SAR at M1 = 43.1%

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



Plot 71 WCDMA Band IV Back Side Middle (Distance 0mm)

Date: 2023/10/17

Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1733 \text{ MHz}$; $\sigma = 1.301 \text{ S/m}$; $\epsilon_r = 39.491$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(8.10, 8.10, 8.10); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (8x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 5.71 W/kg

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

Reference Value = 4.981 V/m ; Power Drift = -0.40 dB

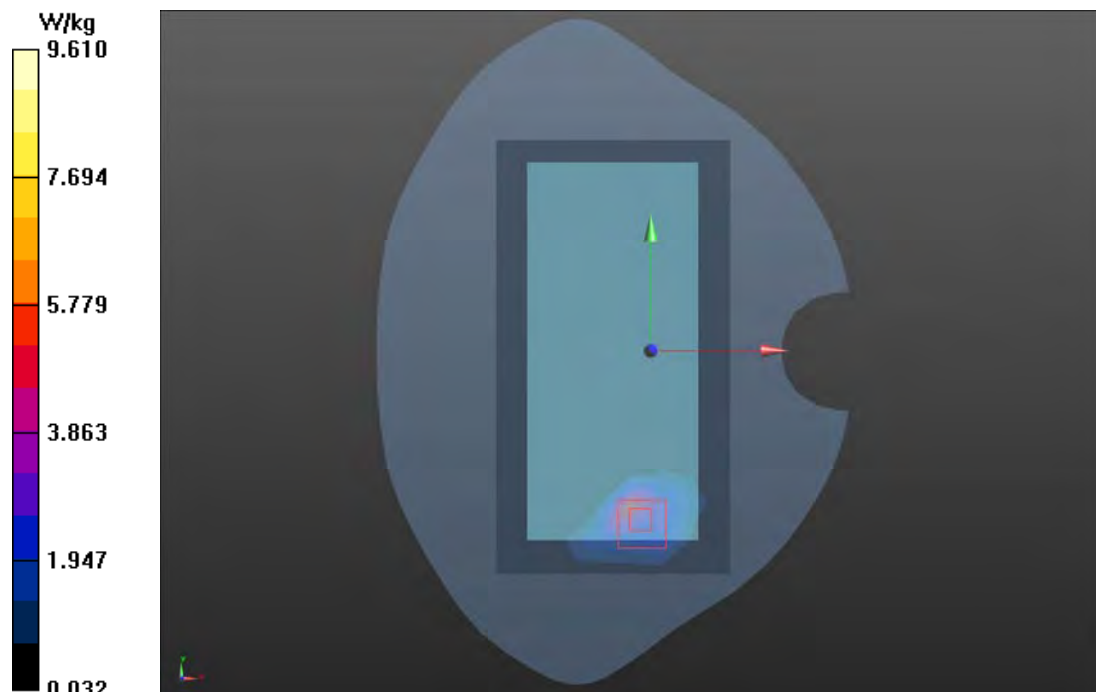
Peak SAR (extrapolated) = 12.7 W/kg

SAR(1 g) = 4.65 W/kg ; SAR(10 g) = 1.9 W/kg

Smallest distance from peaks to all points 3 dB below = 9.8 mm

Ratio of SAR at M2 to SAR at M1 = 46.7%

Maximum value of SAR (measured) = 9.61 W/kg



Plot 72 LTE Band 2 50%RB Top Edge High (Distance 0mm)

Date: 2023/10/16

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.422$ S/m; $\epsilon_r = 38.97$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.85, 7.85, 7.85); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Top Edge High/Area Scan (4x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 5.88 W/kg

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

Reference Value = 46.30 V/m; Power Drift = -0.06 dB

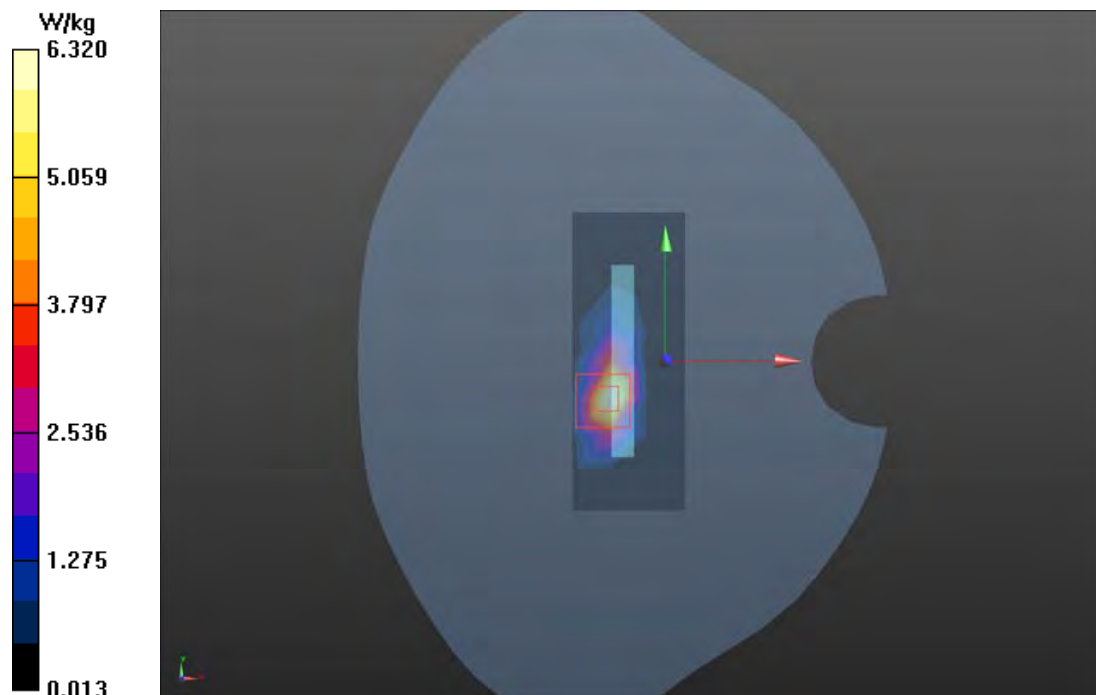
Peak SAR (extrapolated) = 5.49 W/kg

SAR(1 g) = 5.14 W/kg; SAR(10 g) = 1.99 W/kg

Smallest distance from peaks to all points 3 dB below = 10.8 mm

Ratio of SAR at M2 to SAR at M1 = 47%

Maximum value of SAR (measured) = 6.32 W/kg



Plot 73 LTE Band 7 1RB Bottom Edge Middle (Distance 0mm)

Date: 2023/10/10

Communication System: UID 0, LTE (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535$ MHz; $\sigma = 1.924$ S/m; $\epsilon_r = 38.136$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.19, 7.19, 7.19); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Middle/Area Scan (5x12x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 4.58 W/kg

Bottom Edge Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 36.08 V/m; Power Drift = -0.045 dB

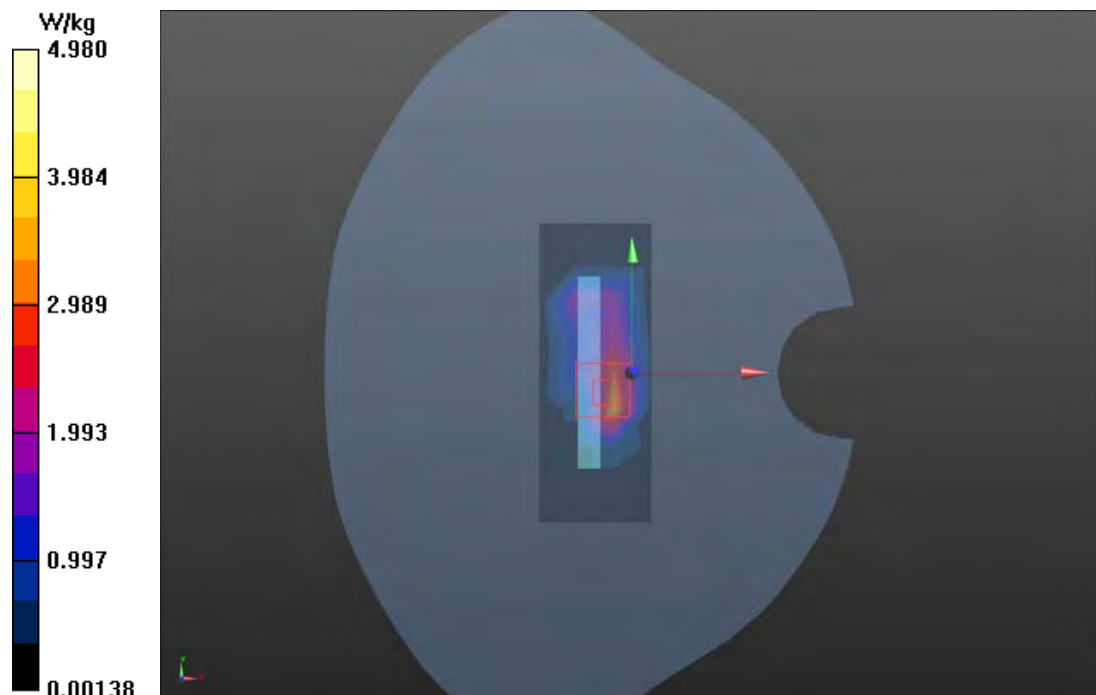
Peak SAR (extrapolated) = 12.4 W/kg

SAR(1 g) = 4.28 W/kg; SAR(10 g) = 1.56 W/kg

Smallest distance from peaks to all points 3 dB below = 9.4 mm

Ratio of SAR at M2 to SAR at M1 = 57%

Maximum value of SAR (measured) = 4.98 W/kg



Plot 74 LTE Band 41 1RB Bottom Edge Low (Distance 0mm)

Date: 2023/10/10

Communication System: UID 0, LTE (0); Frequency: 2506 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2506$ MHz; $\sigma = 1.895$ S/m; $\epsilon_r = 38.277$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.19, 7.19, 7.19); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Low/Area Scan (5x12x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 2.96 W/kg

Bottom Edge Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 30.22 V/m; Power Drift = 0.069 dB

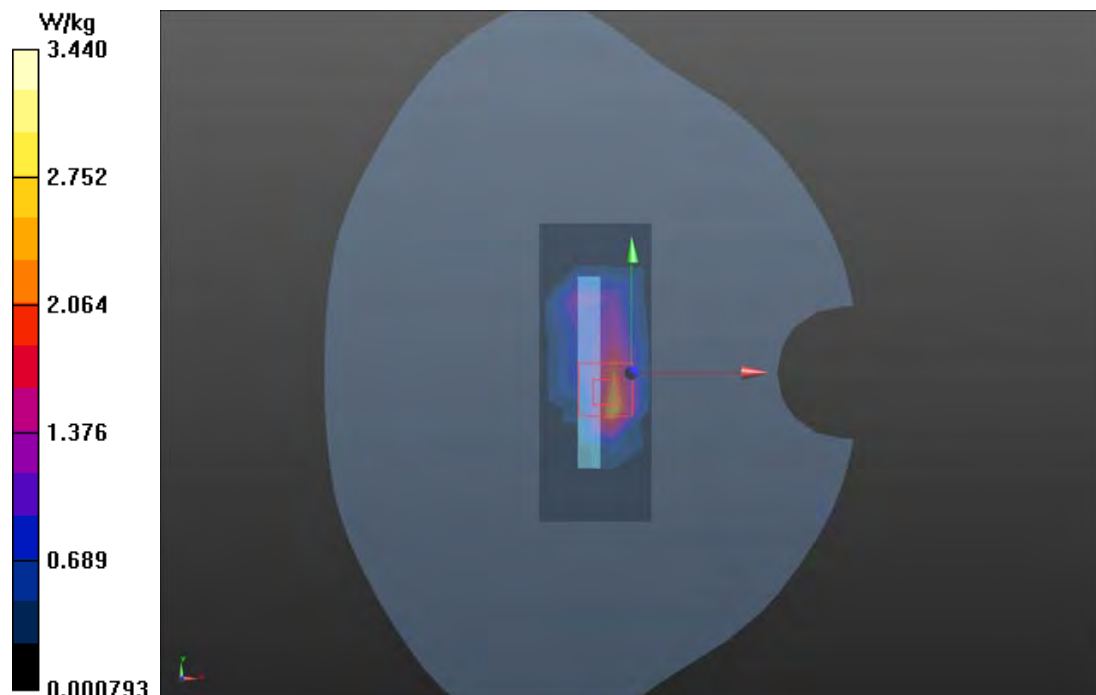
Peak SAR (extrapolated) = 8.18 W/kg

SAR(1 g) = 2.71 W/kg; SAR(10 g) = 1.05 W/kg

Smallest distance from peaks to all points 3 dB below = 9.4 mm

Ratio of SAR at M2 to SAR at M1 = 88.1%

Maximum value of SAR (measured) = 3.44 W/kg



Plot 75 LTE Band 66 1RB Top Edge Low (Distance 0mm)

Date: 2023/10/17

Communication System: UID 0, LTE (0); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1720$ MHz; $\sigma = 1.294$ S/m; $\epsilon_r = 39.556$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(8.10, 8.10, 8.10); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Top Edge Low/Area Scan (4x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 5.73 W/kg

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

Reference Value = 86.39 V/m; Power Drift = -0.030 dB

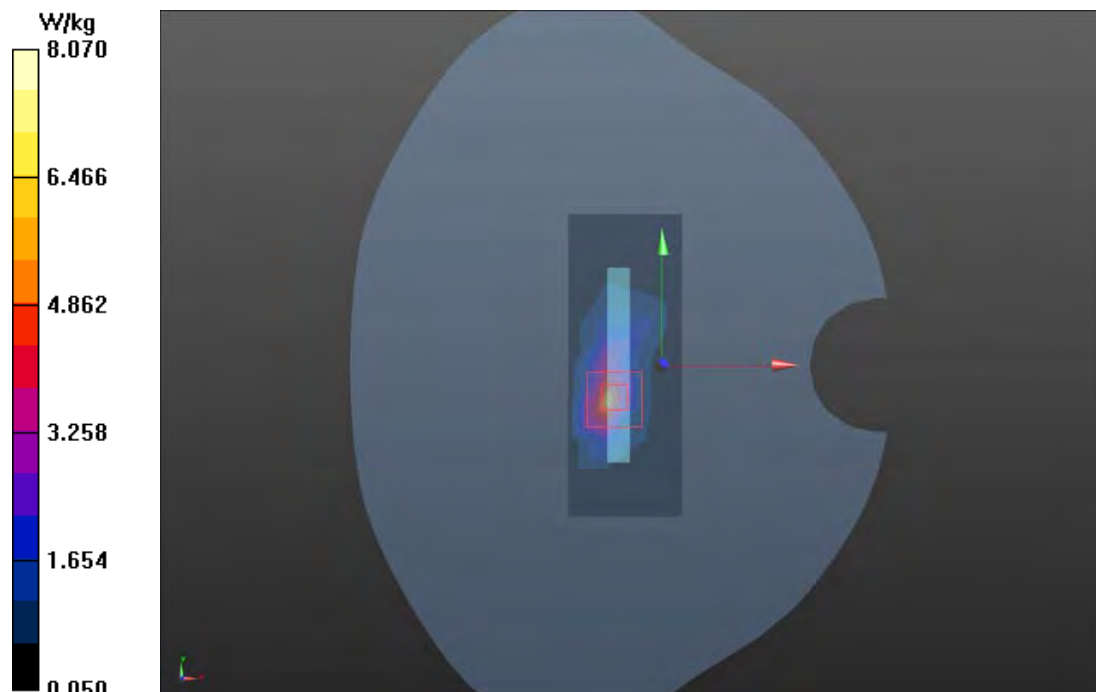
Peak SAR (extrapolated) = 10.9 W/kg

SAR(1 g) = 4.39 W/kg; SAR(10 g) = 1.72 W/kg

Smallest distance from peaks to all points 3 dB below = 11.8 mm

Ratio of SAR at M2 to SAR at M1 = 43.8%

Maximum value of SAR (measured) = 8.07 W/kg



Plot 76 802.11a U-NII-2C Top Edge High (Distance 0mm)

Date: 2023/10/15

Communication System: UID 0, 802.11a (0); Frequency: 5600 MHz;Duty Cycle: 1:1.027

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.32$ S/m; $\epsilon_r = 37.01$; $\rho = 1000$ kg/m³

Ambient Temperature:22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(4.60, 4.60, 4.60); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Top Edge High/Area Scan (6x14x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 5.11 W/kg

Top Edge High/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 24.74 V/m; Power Drift = 0.048 dB

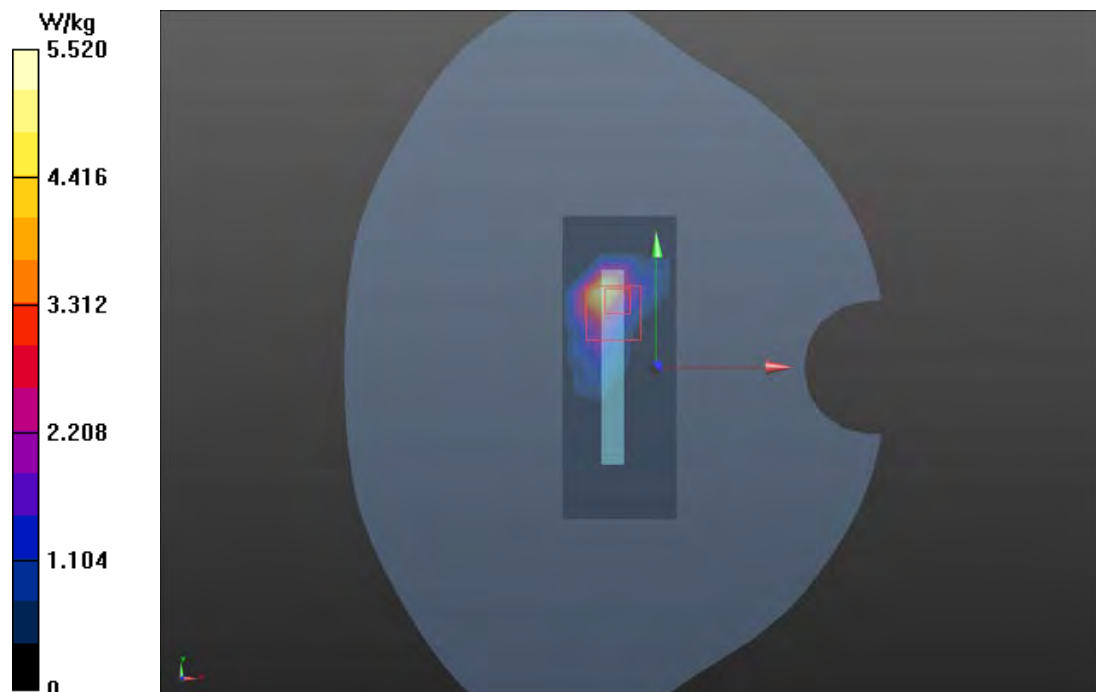
Peak SAR (extrapolated) = 18.1 W/kg

SAR(1 g) = 3.74 W/kg; SAR(10 g) = 0.958 W/kg

Smallest distance from peaks to all points 3 dB below = 9.2 mm

Ratio of SAR at M2 to SAR at M1 = 48.3%

Maximum value of SAR (measured) = 5.52W/kg



Plot 77 NFC Back Side Low (Distance 0mm)

Date: 2023/10/19

Communication System: UID 0, CW (0); Frequency: 13.56 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 13.56$ MHz; $\sigma = 0.758$ S/m; $\epsilon_r = 56.667$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(15.21, 15.21, 15.21); Calibrated: 2023/7/20

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Low/Area Scan (8x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.130 W/kg

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

Reference Value = 0.9200 V/m; Power Drift = -0.045 dB

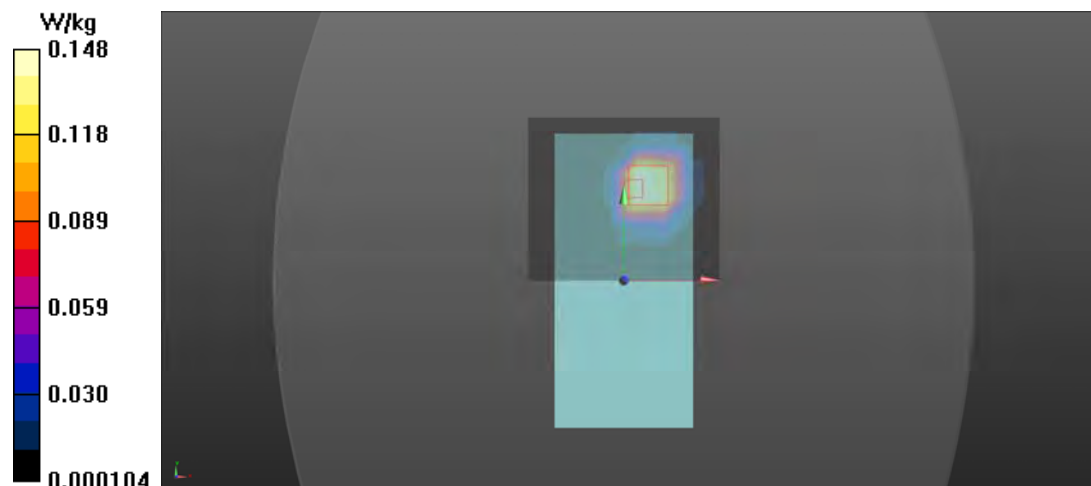
Peak SAR (extrapolated) = 0.263 W/kg

SAR(1 g) = 0.057 W/kg; SAR(10 g) = 0.023 W/kg

Smallest distance from peaks to all points 3 dB below = 8.5 mm

Ratio of SAR at M2 to SAR at M1 = 39.8%

Maximum value of SAR (measured) = 0.148 W/kg



Plot 78 WCDMA Band II Bottom Edge Middle (Distance 17mm)

Date: 2023/10/16

Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.406 \text{ S/m}$; $\epsilon_r = 39.087$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.85, 7.85, 7.85); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Middle/Area Scan (4x9x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.982 W/kg

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

Reference Value = 37.21 V/m ; Power Drift = -0.150 dB

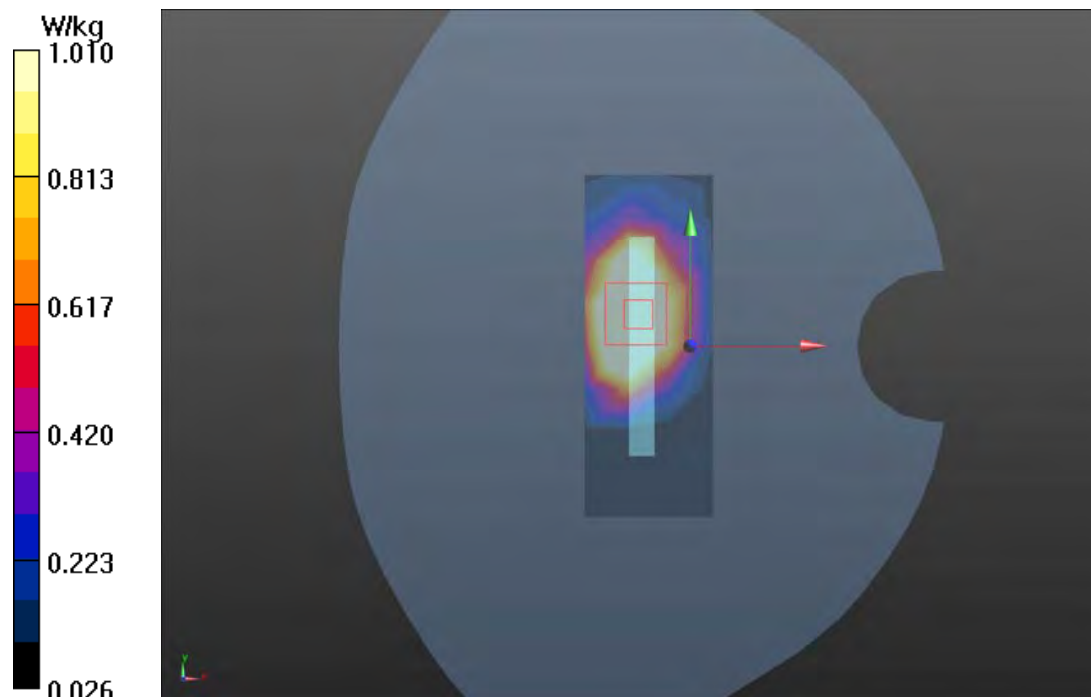
Peak SAR (extrapolated) = 2.03 W/kg

SAR(1 g) = 0.905 W/kg ; SAR(10 g) = 0.521 W/kg

Smallest distance from peaks to all points 3 dB below = 11.3 mm

Ratio of SAR at M2 to SAR at M1 = 59.6%

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



Plot 79 LTE Band 2 50%RB Top Edge High (Distance 17mm)

Date: 2023/10/16

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.422$ S/m; $\epsilon_r = 38.97$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.85, 7.85, 7.85); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Top Edge High/Area Scan (4x9x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 24.75 V/m; Power Drift = 0.09 dB

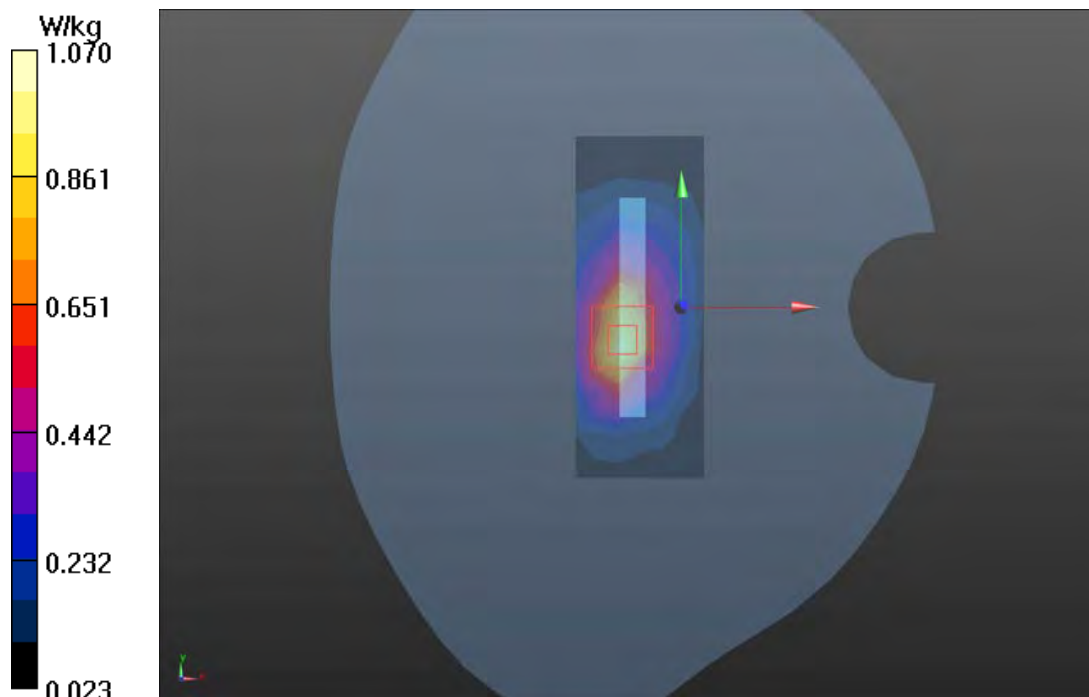
Peak SAR (extrapolated) = 1.61 W/kg

SAR(1 g) = 0.959 W/kg; SAR(10 g) = 0.532 W/kg

Smallest distance from peaks to all points 3 dB below = 12.8 mm

Ratio of SAR at M2 to SAR at M1 = 60.5%

Maximum value of SAR (measured) = 1.07 W/kg



Plot 80 LTE Band 7 1RB Front Side Low (Distance 11mm)

Date: 2023/10/10

Communication System: UID 0, LTE (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2510$ MHz; $\sigma = 1.9$ S/m; $\epsilon_r = 38.262$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(7.19, 7.19, 7.19); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Low/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.888 W/kg

Front Side Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.85 V/m; Power Drift = 0.024 dB

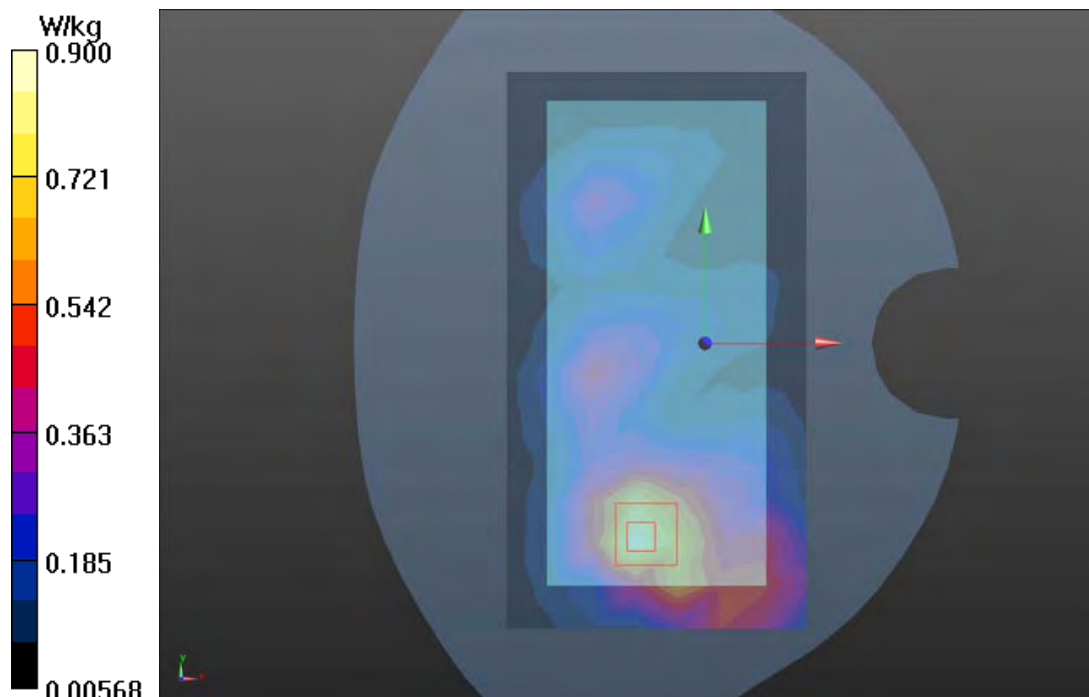
Peak SAR (extrapolated) = 1.54 W/kg

SAR(1 g) = 0.865 W/kg; SAR(10 g) = 0.460 W/kg

Smallest distance from peaks to all points 3 dB below = 15.1 mm

Ratio of SAR at M2 to SAR at M1 = 54.9%

Maximum value of SAR (measured) = 0.900 W/kg



Plot 81 LTE Band 26 1RB Front Side Middle (Distance 11mm)

Date: 2023/10/8

Communication System: UID 0, LTE (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 831.5$ MHz; $\sigma = 0.937$ S/m; $\epsilon_r = 41.874$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3883; ConvF(9.35, 9.35, 9.35); Calibrated: 2022/12/10

Electronics: DAE4 SN1291; Calibrated: 2023/5/17

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Middle/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.335 W/kg

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

Reference Value = 13.12 V/m; Power Drift = 0.038 dB

Peak SAR (extrapolated) = 0.619 W/kg

SAR(1 g) = 0.329 W/kg; SAR(10 g) = 0.207 W/kg

Smallest distance from peaks to all points 3 dB below = 19.3 mm

Ratio of SAR at M2 to SAR at M1 = 64.4%

Maximum value of SAR (measured) = 0.352 W/kg

