SAR TEST REPORT

Applicant	Xiaomi Communications Co., Ltd.
FCC ID	2AFZZRN54G
Product	Mobile Phone
Brand	Redmi
Model	23026RN54G
Report No.	R2211A1048-S1V1
Issue Date	January 17, 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.

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Table of Contents

Version	Revision description	Issue Date
Rev.0	Initial issue of report.	January 6, 2023
Rev.1	Update description.	January 17, 2023
Note: This revised report (Report No.: R2211A1048-S1V1) supersedes and replaces the previously issued report (Report No.: R2211A1048-S1). Please discard or destroy the previously issued report and dispose of it accordingly.		

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
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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 (Separation 15mm)	1g SAR Hotspot (Separation 10mm)	Product Specific 10-g SAR (Separation 0mm)
GSM 850	0.59	0.32	0.66	NA
GSM 1900	0.34	0.31	0.61	NA
WCDMA Band II	0.36	0.63	1.00	2.48
WCDMA Band IV	0.66	0.70	**1.04**	**2.60**
WCDMA Band V	1.01	0.39	0.59	NA
LTE FDD 2	0.61	0.68	1.00	2.49
LTE FDD 4	0.57	0.76	1.03	2.17
LTE FDD 5	0.89	0.65	0.68	NA
LTE FDD 7	1.06	**1.01**	1.02	1.68
LTE FDD 13	1.01	0.38	0.30	NA
LTE FDD 26	0.80	0.37	0.54	NA
LTE TDD 38	0.95	0.68	0.87	1.28
LTE TDD 41	**1.10**	0.58	1.03	1.45
LTE FDD 66	0.48	0.68	1.00	NA
Wi-Fi (2.4G)	0.79	0.25	0.36	NA
Bluetooth	0.11	＜0.1	＜0.1	NA

Date of Testing: (Original) June 21, 2022 ~ July 5, 2022
(Variant 1 & Variant 2) December 1, 2022 ~ December 5, 2022
Date of Sample Received: (Original)June 16, 2022
(Variant 1 & Variant 2) November 12, 2022

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.

Table 2: Highest Simultaneous Transmission SAR

Exposure Configuration	1g SAR Head	1g SAR Body-worn (Separation 15mm)	1g SAR Hotspot (Separation 10mm)	Product Specific 10-g SAR (Separation 0mm)
Highest Simultaneous Transmission SAR (W/kg)	1.59	1.30	1.28	2.60
Note: The detail for simultaneous transmission consideration is described in chapter 10.3.				

23026RN54G (Variant 2) is a variant model of 23026RN54G (Variant 1), Variant 2 Add 2nd supplier RF PA;
23026RN54G (Variant 1) is a variant model of 220733SL (Original), Variant 1 replace adapter and add one memory, and new frequency bands are added (LTE Band 13/26/66).

Tested band refer to the following table.

Band	Original 220733SL FCC ID: 2AFZZ33SL (R2206A0532-S1V1)	Variant 1 23026RN54G (R2211A1048-S1V1)	Variant 2 23026RN54G (R2211A1048-S1V1)
GSM 850	Pass	Only tested with each antenna worst case of original	Only tested with worst case of variant 1
GSM 1900	Pass	Head and Hotspot and Product Specific 10-g SAR Only tested with each antenna worst case of original. Body-worn new test	
WCDMA Band II	Pass	Head and Hotspot and Product Specific 10-g SAR Only tested with each antenna worst case of original. Body-worn new test	
WCDMA Band IV	Pass	Head and Hotspot and Product Specific 10-g SAR Only tested with each antenna worst case of original. Body-worn new test	
WCDMA Band V	Pass	Head and Hotspot and Product Specific 10-g SAR Only tested with each antenna worst case of original, Body-worn new test	
LTE FDD 2	Pass	Head and Hotspot and Product Specific 10-g SAR Only tested with each antenna worst case of original. Body-worn Upper Antenna new test, Low Antenna Only tested worst case of original.	
LTE FDD 4	Pass	Only tested with each antenna worst case of original	
LTE FDD 5	Pass	Only tested with each antenna worst case of original	
LTE FDD 7	Pass	Head and Hotspot and Product Specific 10-g SAR Only tested with each antenna worst case of original. Body-worn Upper Antenna new test, Low Antenna Only tested worst case of original.	

LTE FDD 13	/	Pass	
LTE FDD 26	/	Pass	
LTE TDD 38	Pass	Head and Hotspot and Product Specific 10-g SAR Only tested with each antenna worst case of original, Body-worn new test	
LTE TDD 41	Pass	Only tested with each antenna worst case of original	
LTE FDD 66	/	Pass	
Wi-Fi (2.4G)	Pass	Only tested with each antenna worst case of original	
Bluetooth	Pass	Only tested with each antenna worst case of original	

The detailed product change description please refers to the *Difference Declaration Letter (Variant 2) & Difference Declaration Letter (Variant 1).*

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

Application Purpose	Class II Permissive Change	
EUT Stage	Identical Prototype	
Model	23026RN54G	
IMEI	Original 220733SL	IMEI 1: 869674060130889 IMEI 2: 869674060130897
	Variant 1 23026RN54G	IMEI 1: 863698060056402 IMEI 2: 863698060056410
	Variant 2 23026RN54G	IMEI 1: 863698060079768 IMEI 2: 863698060079776
Hardware Version	P1.1	
Software Version	Android 13	
Antenna Type	PIFA Antenna	
Device Class	B	
Power Class	GSM 850: 4 GSM 1900: 1 WCDMA Band II/IV/V: 3 LTE FDD 2/4/5/7/13/26/66: 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 2/4/5/7/13/26/66: 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.		

Item	**Configure 1**	**Configure 2**
WIFI test socket	support	remove
PL sensor	support	remove
Note: Configuration 2 only verifies the worst case		

Wireless Technology and Frequency Range

Wireless Technology		Modulation	Operating mode	Tx (MHz)
GSM	850	Voice(GMSK) GPRS(GMSK) EGPRS(GMSK,8PSK)	☐Multi-slot Class:8-1UP ☐Multi-slot Class:10-2UP ☒Multi-slot Class:12-4UP ☐Multi-slot Class:33-4UP	824 ~ 849
	1900			1850 ~ 1910
	Does This Device Support DTM (Dual Transfer Mode)? ☐Yes ☒No			
WCDMA	Band II	QPSK	HSDPA UE Category:24 HSUPA UE Category:7	1850 ~ 1910
	Band IV			1710 ~ 1755
	Band V			824 ~ 849
LTE	FDD 2	QPSK, 16QAM	Rel.9 /Category 4	1850 ~ 1910
	FDD 4			1710 ~ 1755
	FDD 5			824 ~ 849
	FDD 7			2500 ~ 2570
	FDD 13			777 ~ 787
	FDD 26			814 ~ 849
	TDD 38			2570 ~ 2620
	TDD 41			2496 ~ 2690
	FDD 66			1710 ~ 1780
	Does this device support Carrier Aggregation (CA) ☐Yes ☒No			
	Does this device support SV-LTE (1xRTT-LTE)? ☐Yes ☒No			
BT	2.4G	Version 5.0 BR/EDR + LE		2402 ~2480
Wi-Fi	2.4G	DSSS, OFDM	802.11b/g/n HT20	2412 ~ 2462

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 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 preformed 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 (~ 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 (βc, βd), and HS-DPCCH power offset parameters (ΔACK, ΔNACK, ΔCQI) 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 Δ_{CQI}= 8⇔A_{hs} = β_{hs}/β_c=30/15⇔β_{hs}=30/15*β_c

Note 2: CM=1 for β_c/β_d =12/15, β_{hs}/β_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 β_c=11/15 and β_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	β_{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}, ΔNACK and Δ_{CQI} = 8 ⇔ $A_{hs} = \beta_{hs}/\beta_c$ = 30/15 ⇔β_{hs}= 30/15 *β_c.
Note 2: CM = 1 for β_c/β_d =12/15, β_{hs}/β_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 β_c = 10/15 and β_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 β_c = 14/15 and β_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 SF4	11484	5.76
	4	4	10		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 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 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. 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.

3) Regardless of whether a PBA is required, the following information must be verified and included in the SAR report for devices supporting 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 channel conditions (active and stable) for the entire duration of the measurement according to the required E-TFCI and AG index values.

4) 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			
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			
Category 21	15	1	23370	345600	-	-	QPSK, 16QAM
Category 22	15	1	27952	345600			
Category 23	15	1	35280	518400			QPSK, 16QAM, 64QAM
Category 24	15	1	42192	518400			

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 > ½ 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 > ½ 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.

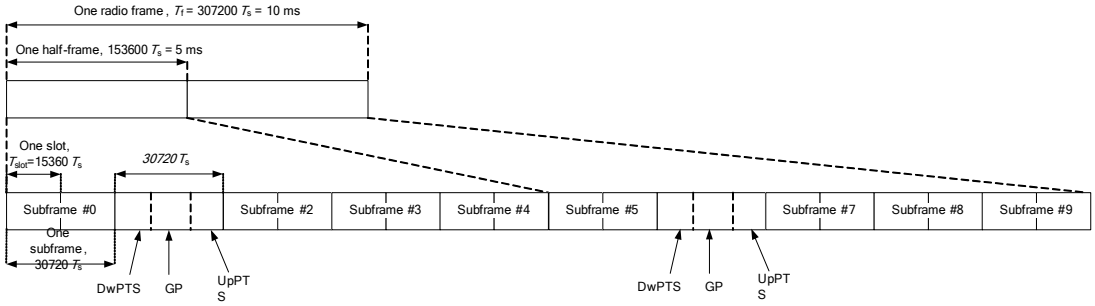


Figure 1: Frame structure type 2

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	$26336 \cdot T_s$			$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-	-	-
9	$13168 \cdot T_s$			-	-	-

Table 9: 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:

Duty cycle = (30720Ts*Ups + Uplink Component*Specials)/(307200Ts)

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

Uplink Component = UpPTS

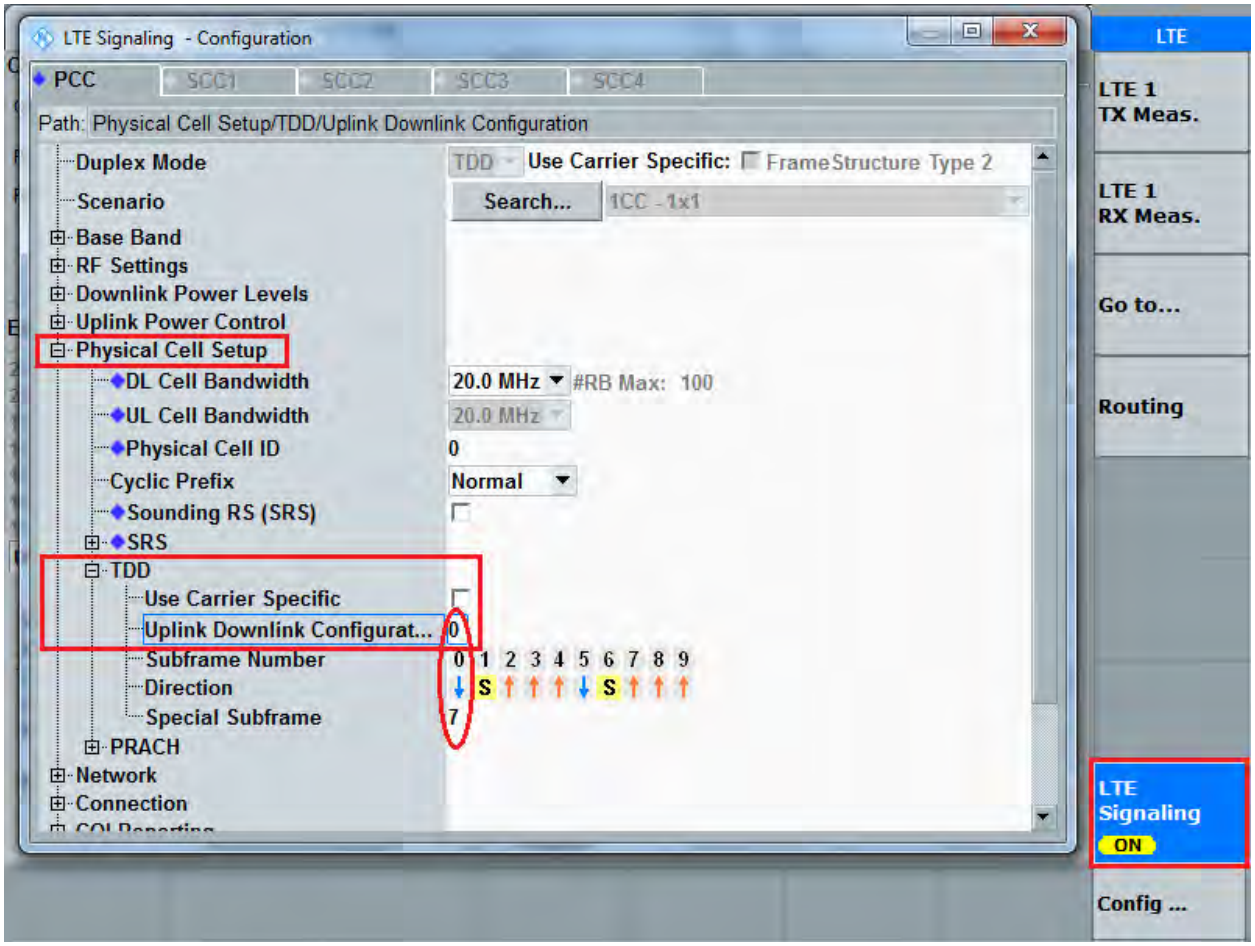
In conclusion, for the TDD LTE Band, Duty Cycle can be calculated with formula as below. All these sets are ok when we test, or we can set as below.

Duty cycle = [(30720Ts*Ups) + UpPTS *Specials]/(307200Ts)

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.

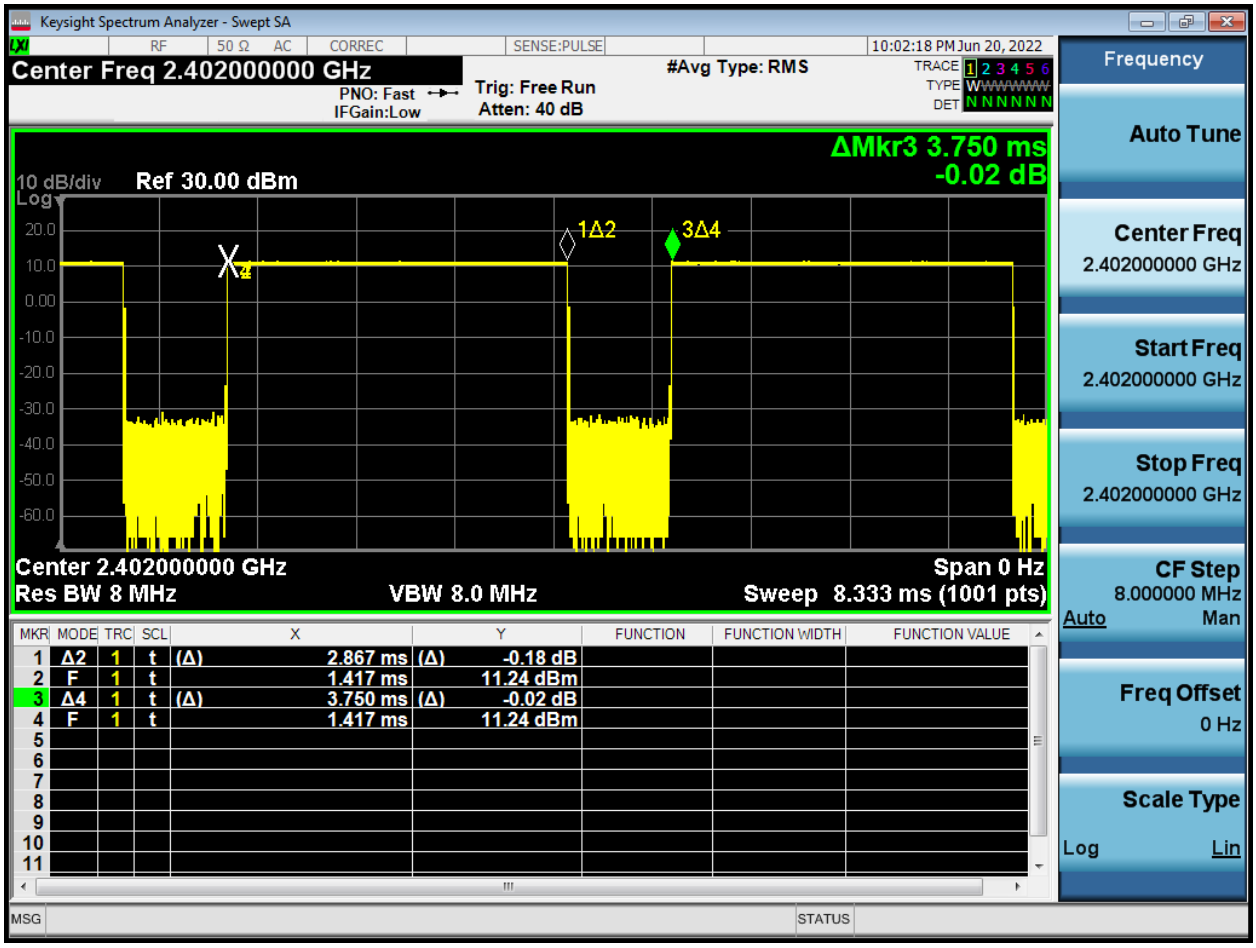
To determine the initial test position, Area Scans were performed to determine the position with the Maximum Value of SAR (measured). The position that produced the highest Maximum Value of SAR is considered the worst case position; thus used as the initial test position.

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 BT Test Configuration

For BT SAR testing, BT 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 BT 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)=2.867/3.750*100%=76%

5.3.7 Proximity Sensor Power Reduction Description

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 Main 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 850	Back Side	0mm≤Distance≤17mm	2	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	2	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	/	0	DSI-2
	Bottom Edge	0mm≤Distance≤17mm	2	DSI-4
		17mm<Distance	0	DSI-2
GSM 1900	Back Side	0mm≤Distance≤17mm	3	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	3	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	/	0	DSI-2
	Bottom Edge	0mm≤Distance≤17mm	3	DSI-4
		17mm<Distance	0	DSI-2
WCDMA B2	Back Side	0mm≤Distance≤17mm	2.5	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	2.5	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	/	0	DSI-2

	Bottom Edge	0mm≤Distance≤17mm	2.5	DSI-4
		17mm<Distance	0	DSI-2
WCDMA B4	Back Side	0mm≤Distance≤17mm	3.5	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	3.5	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	/	0	DSI-2
	Bottom Edge	0mm≤Distance≤17mm	3.5	DSI-4
		17mm<Distance	0	DSI-2
WCDMA B5	Back Side	0mm≤Distance≤17mm	1	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	1	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	/	0	DSI-2
	Bottom Edge	0mm≤Distance≤17mm	1	DSI-4
		17mm<Distance	0	DSI-2
LTE B2	Back Side	0mm≤Distance≤17mm	2.5	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	2.5	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	/	0	DSI-2
	Bottom Edge	0mm≤Distance≤17mm	2.5	DSI-4
		17mm<Distance	0	DSI-2
LTE B4	Back Side	0mm≤Distance≤17mm	4	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	4	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	/	0	DSI-2
	Bottom Edge	0mm≤Distance≤17mm	4	DSI-4
		17mm<Distance	0	DSI-2
LTE B5	Back Side	0mm≤Distance≤17mm	1	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	1	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2

	Right Edge	/	0	DSI-2
	Top Edge	/	0	DSI-2
	Bottom Edge	0mm≤Distance≤17mm	1	DSI-4
		17mm<Distance	0	DSI-2
LTE B7	Back Side	0mm≤Distance≤17mm	5	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	5	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	/	0	DSI-2
	Bottom Edge	0mm≤Distance≤17mm	5	DSI-4
		17mm<Distance	0	DSI-2
LTE B38	Back Side	0mm≤Distance≤17mm	2.5	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	2.5	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	/	0	DSI-2
	Bottom Edge	0mm≤Distance≤17mm	2.5	DSI-4
		17mm<Distance	0	DSI-2
LTE B41	Back Side	0mm≤Distance≤17mm	3.5	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	3.5	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	/	0	DSI-2
	Bottom Edge	0mm≤Distance≤17mm	3.5	DSI-4
		17mm<Distance	0	DSI-2
LTE B66	Back Side	0mm≤Distance≤17mm	4	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	4	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	/	0	DSI-2
	Bottom Edge	0mm≤Distance≤17mm	4	DSI-4
		17mm<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≤17mm	3	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	3	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤17mm	3	DSI-4
		17mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2
GSM 1900	Back Side	0mm≤Distance≤17mm	2.5	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	2.5	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤17mm	2.5	DSI-4
		17mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2
WCDMA B2	Back Side	0mm≤Distance≤17mm	3	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	3	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤17mm	3	DSI-4
		17mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2
WCDMA B4	Back Side	0mm≤Distance≤17mm	1.5	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	1.5	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤17mm	1.5	DSI-4
		17mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2
WCDMA B5	Back Side	0mm≤Distance≤17mm	1	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	1	DSI-4
		11mm<Distance	0	DSI-2

	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤17mm	1	DSI-4
		17mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2
LTE B2	Back Side	0mm≤Distance≤17mm	6	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	6	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤17mm	6	DSI-4
		17mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2
LTE B4	Back Side	0mm≤Distance≤17mm	2	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	2	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤17mm	2	DSI-4
		17mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2
LTE B5	Back Side	0mm≤Distance≤17mm	1	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	1	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤17mm	1	DSI-4
		17mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2
LTE B7	Back Side	0mm≤Distance≤17mm	7.5	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	7.5	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤17mm	7.5	DSI-4
		17mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2
LTE B13	Back Side	0mm≤Distance≤17mm	2	DSI-4
		17mm<Distance	0	DSI-2

	Front Side	0mm≤Distance≤11mm	2	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤17mm	2	DSI-4
		17mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2
LTE B38	Back Side	0mm≤Distance≤17mm	5.5	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	5.5	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤17mm	5.5	DSI-4
		17mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2
LTE B41	Back Side	0mm≤Distance≤17mm	5	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	5	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤17mm	5	DSI-4
		17mm<Distance	0	DSI-2
	Bottom Edge	/	0	DSI-2
LTE B66	Back Side	0mm≤Distance≤17mm	2	DSI-4
		17mm<Distance	0	DSI-2
	Front Side	0mm≤Distance≤11mm	2	DSI-4
		11mm<Distance	0	DSI-2
	Left Edge	/	0	DSI-2
	Right Edge	/	0	DSI-2
	Top Edge	0mm≤Distance≤17mm	2	DSI-4
		17mm<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 tit 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.

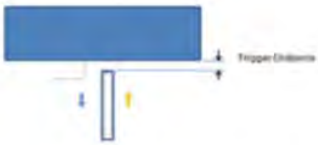
For the other sides or other frequency bands of the device, SAR is still tested at the maximum full power level with sensor off.

Procedures for Determining Proximity Sensor Triggering Distances

The device was tested by the test lab to determine the proximity sensor triggering distances for the backside, top side 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:

Picture : Proximity sensor triggering distances assessmect(Back/front side)



Picture : Proximity sensor triggering distances assessmect(Top/Bottom edge)

Table: Summary of Trigger Distances for Low Antenna

Band	Trigger Distance-Back Side		Trigger Distance-Front Side		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
GSM 850	17	17	11	11	17	17
GSM 1900	17	17	11	11	17	17
WCDMA B2	17	17	11	11	17	17
WCDMA B4	17	17	11	11	17	17
WCDMA B5	17	17	11	11	17	17
LTE B2	17	17	11	11	17	17
LTE B4	17	17	11	11	17	17
LTE B5	17	17	11	11	17	17
LTE B7	17	17	11	11	17	17
LTE B38	17	17	11	11	17	17
LTE B41	17	17	11	11	17	17
LTE B66	17	17	11	11	17	17

Table: Summary of Trigger Distances for Upper Antenna

Band	Trigger Distance-Back Side		Trigger Distance-Front Side		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
GSM 850	17	17	11	11	17	17
GSM 1900	17	17	11	11	17	17
WCDMA B2	17	17	11	11	17	17
WCDMA B4	17	17	11	11	17	17
WCDMA B5	17	17	11	11	17	17
LTE B2	17	17	11	11	17	17
LTE B4	17	17	11	11	17	17
LTE B5	17	17	11	11	17	17
LTE B7	17	17	11	11	17	17
LTE B13	17	17	11	11	17	17
LTE B38	17	17	11	11	17	17
LTE B41	17	17	11	11	17	17
LTE B66	17	17	11	11	17	17

Conclusion: It can be ensured that the proximity sensor can be valid triggered for the body exposure condition (GSM 850/1900, WCDMA Band 2/4/5, LTE Band 2/4/5/7/38/41/66 with Low Antenna; GSM 850/1900, WCDMA Band 2/4/5, LTE Band 2/4/5/7/13/38/41/66 with Upper Antenna)

The Detailed Conducted Power Measurement Data To Determine The Triggering Distances Is As Below:

Table: Power Reduction 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	6	4	1
Back Side	Low Antenna	GSM 850	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95
Back Side	Low Antenna	GSM 1900	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59
Back Side	Low Antenna	WCDMA B2	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24
Back Side	Low Antenna	WCDMA B4	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41
Back Side	Low Antenna	WCDMA B5	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63
Back Side	Low Antenna	LTE B2	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16
Back Side	Low Antenna	LTE B4	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16
Back Side	Low Antenna	LTE B5	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22
Back Side	Low Antenna	LTE B7	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16
Back Side	Low Antenna	LTE B38	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25
Back Side	Low Antenna	LTE B41	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18
Back Side	Low Antenna	LTE B66	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15

Position	Ant	Band	Power Reduction Status(dBm)																														
			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
Front Side	Low Antenna	GSM 850	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95
Front Side	Low Antenna	GSM 1900	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59
Front Side	Low Antenna	WCDMA B2	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24
Front Side	Low Antenna	WCDMA B4	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41
Front Side	Low Antenna	WCDMA B5	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63
Front Side	Low Antenna	LTE B2	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16
Front Side	Low Antenna	LTE B4	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16
Front Side	Low Antenna	LTE B5	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22
Front Side	Low Antenna	LTE B7	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16
Front Side	Low Antenna	LTE B38	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25
Front Side	Low Antenna	LTE B41	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18
Front Side	Low Antenna	LTE B66	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15

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	6	4	1
Bottom Edge	Low Antenna	GSM 850	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95
Bottom Edge	Low Antenna	GSM 1900	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59
Bottom Edge	Low Antenna	WCDMA B2	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24
Bottom Edge	Low Antenna	WCDMA B4	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41
Bottom Edge	Low Antenna	WCDMA B5	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63
Bottom Edge	Low Antenna	LTE B2	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16
Bottom Edge	Low Antenna	LTE B4	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16
Bottom Edge	Low Antenna	LTE B5	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22
Bottom Edge	Low Antenna	LTE B7	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16
Bottom Edge	Low Antenna	LTE B38	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25
Bottom Edge	Low Antenna	LTE B41	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18
Bottom Edge	Low Antenna	LTE B66	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15

Position	Ant	Band	Power Reduction Status(dBm)																														
			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	3	1
Back Side	Upper Antenna	GSM 850	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45
Back Side	Upper Antenna	GSM 1900	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09
Back Side	Upper Antenna	WCDMA B2	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55
Back Side	Upper Antenna	WCDMA B4	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42
Back Side	Upper Antenna	WCDMA B5	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11
Back Side	Upper Antenna	LTE B2	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52
Back Side	Upper Antenna	LTE B4	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62
Back Side	Upper Antenna	LTE B5	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99
Back Side	Upper Antenna	LTE B7	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24
Back Side	Upper Antenna	LTE B13	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99
Back Side	Upper Antenna	LTE B38	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66
Back Side	Upper Antenna	LTE B41	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	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96
Back Side	Upper Antenna	LTE B66	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26

Position	Ant	Band	Power Reduction Status(dBm)																														
			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	3	1
Front Side	Upper Antenna	GSM 850	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45
Front Side	Upper Antenna	GSM 1900	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09
Front Side	Upper Antenna	WCDMA B2	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55
Front Side	Upper Antenna	WCDMA B4	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42
Front Side	Upper Antenna	WCDMA B5	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11
Front Side	Upper Antenna	LTE B2	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52
Front Side	Upper Antenna	LTE B4	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62
Front Side	Upper Antenna	LTE B5	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99
Front Side	Upper Antenna	LTE B7	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24
Front Side	Upper Antenna	LTE B13	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99
Front Side	Upper Antenna	LTE B38	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66
Front Side	Upper Antenna	LTE B41	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	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96
Front Side	Upper Antenna	LTE B66	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26

Position	Ant	Band	Power Reduction Status(dBm)																														
			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	3	1
Top Edge	Upper Antenna	GSM 850	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45
Top Edge	Upper Antenna	GSM 1900	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09
Top Edge	Upper Antenna	WCDMA B2	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55
Top Edge	Upper Antenna	WCDMA B4	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42
Top Edge	Upper Antenna	WCDMA B5	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11
Top Edge	Upper Antenna	LTE B2	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52
Top Edge	Upper Antenna	LTE B4	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62
Top Edge	Upper Antenna	LTE B5	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99
Top Edge	Upper Antenna	LTE B7	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24
Top Edge	Upper Antenna	LTE B13	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99
Top Edge	Upper Antenna	LTE B38	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66
Top Edge	Upper Antenna	LTE B41	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	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	19.96	18.96	18.96
Top Edge	Upper Antenna	LTE B66	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26

Table: Full Power and Reduced Power (Moving Away From Phantom)

Position	Ant	Band	Power Reduction Status(dBm)																														
			1	4	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
Back Side	Low Antenna	GSM 850	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88
Back Side	Low Antenna	GSM 1900	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56
Back Side	Low Antenna	WCDMA B2	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78
Back Side	Low Antenna	WCDMA B4	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96
Back Side	Low Antenna	WCDMA B5	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58
Back Side	Low Antenna	LTE B2	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71
Back Side	Low Antenna	LTE B4	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18
Back Side	Low Antenna	LTE B5	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56
Back Side	Low Antenna	LTE B7	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23
Back Side	Low Antenna	LTE B38	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12
Back Side	Low Antenna	LTE B41	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05
Back Side	Low Antenna	LTE B66	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11

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
Front Side	Low Antenna	GSM 850	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88
Front Side	Low Antenna	GSM 1900	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56
Front Side	Low Antenna	WCDMA B2	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78
Front Side	Low Antenna	WCDMA B4	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96
Front Side	Low Antenna	WCDMA B5	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58
Front Side	Low Antenna	LTE B2	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71
Front Side	Low Antenna	LTE B4	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18
Front Side	Low Antenna	LTE B5	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56
Front Side	Low Antenna	LTE B7	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23
Front Side	Low Antenna	LTE B38	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12
Front Side	Low Antenna	LTE B41	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05
Front Side	Low Antenna	LTE B66	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11

Position	Ant	Band	Power Reduction Status(dBm)																														
			1	5	9	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Bottom Edge	Low Antenna	GSM 850	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.95	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88
Bottom Edge	Low Antenna	GSM 1900	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56
Bottom Edge	Low Antenna	WCDMA B2	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24	20.24	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78
Bottom Edge	Low Antenna	WCDMA B4	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	19.41	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96	22.96
Bottom Edge	Low Antenna	WCDMA B5	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.58
Bottom Edge	Low Antenna	LTE B2	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71	22.71
Bottom Edge	Low Antenna	LTE B4	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18	23.18
Bottom Edge	Low Antenna	LTE B5	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56	24.56
Bottom Edge	Low Antenna	LTE B7	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16	18.16	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23
Bottom Edge	Low Antenna	LTE B38	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12
Bottom Edge	Low Antenna	LTE B41	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05	23.05
Bottom Edge	Low Antenna	LTE B66	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11

Position	Ant	Band	Power Reduction Status(dBm)																												
			1	3	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	33
Back Side	Upper Antenna	GSM 850	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42
Back Side	Upper Antenna	GSM 1900	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11
Back Side	Upper Antenna	WCDMA B2	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56
Back Side	Upper Antenna	WCDMA B4	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93
Back Side	Upper Antenna	WCDMA B5	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14
Back Side	Upper Antenna	LTE B2	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62
Back Side	Upper Antenna	LTE B4	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87
Back Side	Upper Antenna	LTE B5	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98
Back Side	Upper Antenna	LTE B7	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86
Back Side	Upper Antenna	LTE B13	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92
Back Side	Upper Antenna	LTE B38	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82
Back Side	Upper Antenna	LTE B41	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	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
Back Side	Upper Antenna	LTE B66	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26

Position	Ant	Band	Power Reduction Status(dBm)																												
			1	3	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	33
Front Side	Upper Antenna	GSM 850	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42
Front Side	Upper Antenna	GSM 1900	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11
Front Side	Upper Antenna	WCDMA B2	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56
Front Side	Upper Antenna	WCDMA B4	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93
Front Side	Upper Antenna	WCDMA B5	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14
Front Side	Upper Antenna	LTE B2	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62
Front Side	Upper Antenna	LTE B4	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87
Front Side	Upper Antenna	LTE B5	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98
Front Side	Upper Antenna	LTE B7	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86
Front Side	Upper Antenna	LTE B13	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92
Front Side	Upper Antenna	LTE B38	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82
Front Side	Upper Antenna	LTE B41	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	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
Front Side	Upper Antenna	LTE B66	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26

Position	Ant	Band	Power Reduction Status(dBm)																												
			1	3	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	33
Top Edge	Upper Antenna	GSM 850	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42
Top Edge	Upper Antenna	GSM 1900	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.09	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11
Top Edge	Upper Antenna	WCDMA B2	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	20.55	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56
Top Edge	Upper Antenna	WCDMA B4	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93	23.93
Top Edge	Upper Antenna	WCDMA B5	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14	24.14
Top Edge	Upper Antenna	LTE B2	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62	23.62
Top Edge	Upper Antenna	LTE B4	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87	23.87
Top Edge	Upper Antenna	LTE B5	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98	23.98
Top Edge	Upper Antenna	LTE B7	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.24	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86	23.86
Top Edge	Upper Antenna	LTE B13	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92
Top Edge	Upper Antenna	LTE B38	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82
Top Edge	Upper Antenna	LTE B41	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	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
Top Edge	Upper Antenna	LTE B66	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	21.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26

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 Bottom Edge and Top Edge for angles up to +/- 45°. 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 repeated reduced for all angles up to +/- 45°.

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

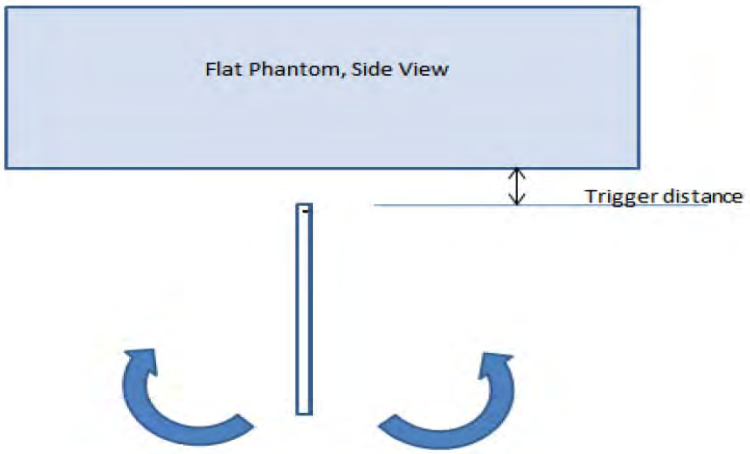


Table: Summary of Tablet Tilt Angle Influence To Proximity Sensor Triggering (Bottom/Top Edge)

Band(MHz)	Position	Minimum Trigger Distance at which Power Reduction was Maintained over ±45°	Power Reduction Status										
			-45°	-35°	-25°	-15°	-5°	0°	5°	15°	25°	35°	45°
GSM 850	Bottom Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
GSM 1900	Bottom Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
WCDMA B2	Bottom Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
WCDMA B4	Bottom Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
WCDMA B5	Bottom Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
LTE B2	Bottom Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
LTE B4	Bottom Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
LTE B5	Bottom Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
LTE B7	Bottom Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
LTE B38	Bottom Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
LTE B41	Bottom Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
LTE B66	Bottom Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
GSM 850	Top Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
GSM 1900	Top Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
WCDMA B2	Top Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
WCDMA B4	Top Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
WCDMA B5	Top Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
LTE B2	Top Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
LTE B4	Top Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
LTE B5	Top Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
LTE B7	Top Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
LTE B13	Top Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
LTE B38	Top Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
LTE B41	Top Edge	17mm	on	on	on	on	on	on	on	on	on	on	on
LTE B66	Top Edge	17mm	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.

5.3.8 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 by receiver and sensor detection mechanisms and provide enhanced user experience.

More details information followings:

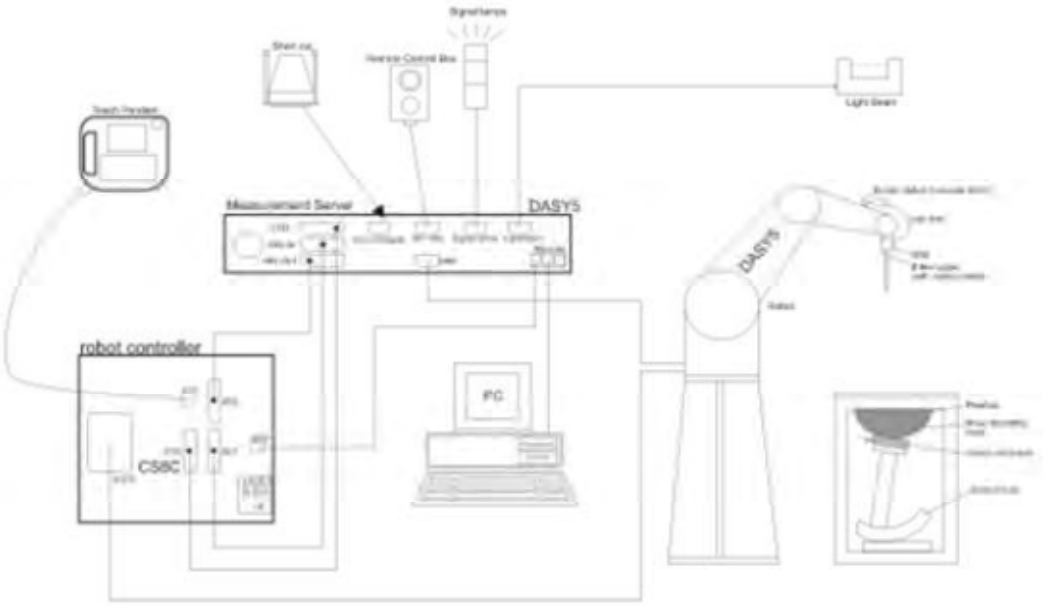
Main Antenna			Power Reduction Level Amount (dB)													
Power Reduction Scenario		Power Level	Receiver/Sensor Mode	GSM850	GSM1900	WCDMA B2	WCDMA B4	WCDMA B5	LTE B2	LTE B4	LTE B5	LTE B7	LTE B13	LTE B26	LTE B38	LTE B41	LTE B66
Full power		Full power	Receiver off+Sensor off	34.50	30.50	24.00	24.00	25.50	24.00	24.00	25.50	24.50	24.50	24.50	24.50	24.50	24.00
Standalone		DSI1	Receiver on	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.50	0.00	0.00	0.00	0.50	0.00
		DSI2	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
		DSI4	Receiver off+Sensor on	2.00	3.00	2.50	3.50	1.00	2.50	4.00	1.00	5.00	0.00	0.00	2.50	3.50	4.00
Simultaneous	Wi-Fi on	DSI1	Receiver on	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.50	0.00	0.00	0.00	0.50	0.00
		DSI2	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
		DSI4	Receiver off+Sensor on	2.00	3.00	2.50	3.50	1.00	2.50	4.00	1.00	5.00	0.00	0.00	2.50	3.50	4.00

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 B13	LTE B26	LTE B38	LTE B41	LTE B66
Full power		Full power	Receiver off+Sensor off	34.50	30.50	24.00	24.00	25.50	24.00	24.00	25.50	24.50	24.50	24.50	24.50	24.50	24.00
Standalone		DSI1	Receiver on	3.50	5.00	7.00	7.00	2.50	7.50	7.50	3.50	8.00	0.00	2.50	6.00	5.00	7.50
		DSI2	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
		DSI4	Receiver off+Sensor on	3.00	2.50	3.00	1.50	1.00	6.00	2.00	1.00	7.50	2.00	0.00	5.50	5.00	2.00
Simultaneous	Wi-Fi on	DSI1	Receiver on	3.50	5.00	7.00	7.00	2.50	7.50	7.50	3.50	8.00	0.00	2.50	6.00	5.00	7.50
		DSI2	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
		DSI4	Receiver off+Sensor on	3.00	2.50	3.00	1.50	1.00	6.00	2.00	1.00	7.50	2.00	0.00	5.50	5.00	2.00

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 μW/g to > 100 mW/g Linearity: ± 0.2dB (noise: typically < 1 μW/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 ± 10%. The spherical isotropy was evaluated and found to be better than ± 0.25dB. 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 bellow 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∆T/∆t

Where: ∆t = Exposure time (30 seconds),

C = Heat capacity of tissue (brain or muscle),

∆T = Temperature increase due to RF exposure.

Or

SAR=|E|^{2}σ/ρ

Where: σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m^3).

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	½·δ·ln(2) ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: ΔxArea, ΔyArea	≤ 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 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 shoes 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: $\triangle x_{zoom} \triangle y_{zoom}$			≤2GHz: ≤8mm 2 – 3GHz: ≤5mm*	3 – 4GHz: ≤5mm* 4 – 6GHz: ≤4mm*
Maximum zoom scan spatial resolution, normal to phantom surface	Uniform grid: $\triangle z_{zoom}(n)$		≤5mm	3 – 4GHz: ≤4mm 4 – 5GHz: ≤3mm 5 – 6GHz: ≤2mm
	Graded grid	$\triangle z_{zoom}(1)$: between 1st two points closest to phantom surface	≤4mm	3 – 4GHz: ≤3mm 4 – 5GHz: ≤2.5mm 5 – 6GHz: ≤2mm
		$\triangle z_{zoom}(n>1)$: between subsequent points	≤1.5•$\triangle z_{zoom}(n-1)$	
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 *reported* SAR from the *area scan based 1-g SAR estimation* 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 for assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the 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

Date of Testing: (Original) June 21, 2022 ~ July 5, 2022

Name of Equipment	Manufacturer	Type/Model	Serial Number	Last Cal.	Cal. Due Date
Network Analyzer	Agilent	E5071B	MY42404014	2022-05-14	2023-05-13
Dielectric Probe Kit	Agilent	85070E	US44020115	/	/
Power Meter	Agilent	E4417A	GB41291714	2022-05-14	2023-05-13
Power Sensor	Agilent	N8481H	MY50350004	2022-05-14	2023-05-13
Power Sensor	Agilent	E9327A	US40441622	2022-05-14	2023-05-13
Power Sensor	Agilent	NRP18S	101955	2022-05-14	2023-05-13
Signal Generator	Agilent	N5181A	MY50140143	2022-05-14	2023-05-13
Dual Directional Coupler	UCL	UCL-DDC0 56G-S	20010600118	/	/
Amplifier	INDEXSAR	TPA-005060 G01	13030502	2022-05-14	2023-05-13
Wireless Communication Tester	Anritsu	MT8820C	6201342015	2021-12-12	2022-12-11
Wireless Communication Tester	Key sight	E5515C	MY48360988	2021-12-12	2022-12-11
Wireless Communication Tester	R&S	CMW 500	146734	2022-05-14	2023-05-13
E-Field Probe	SPEAG	EX3DV4	3677	2021-08-12	2022-08-11
DAE	SPEAG	DAE4	1692	2021-10-04	2022-10-03
E-field Probe	SPEAG	EX3DV4	7543	2021-12-28	2022-12-27
DAE	SPEAG	DAE4	1291	2022-03-24	2023-03-23
Validation Kit 835mhz	SPEAG	D835V2	4d020	2020-08-28	2023-08-27
Validation Kit 1750mhz	SPEAG	D1750V2	1033	2020-02-25	2023-02-24
Validation Kit 1900mhz	SPEAG	D1900V2	5d060	2020-08-27	2023-08-26
Validation Kit 2450mhz	SPEAG	D2450V2	786	2020-08-27	2023-08-26
Validation Kit 2600mhz	SPEAG	D2600V2	1025	2021-04-23	2024-04-22
Software For Tissue	Agilent	85070	/	/	/
Temperature Probe	Tianjin jinming	JM222	381	2022-05-14	2023-05-13
SAR Lab 2					
Twin Sam Phantom	SPEAG	SAM1	1667	/	/
Twin Sam Phantom	SPEAG	SAM2	1666	/	/
Hygrothermograph	Anymetr	HTC - 1	TY2020A003	2022-05-14	2023-05-13

Tx90 Xl	SPEAG	Staubli TX90 XL	/	/	/
Software for Test	SPEAG	DASY52	52.10.4.1527	/	/
SAR Lab 2					
Twin SAM Phantom	SPEAG	SAM1	1534	/	/
Twin SAM Phantom	SPEAG	SAM2	1524	/	/
Hygrothermograph	Anymetr	HTC - 1	TY2020A001	2022-05-14	2023-05-13
TX90 XL	SPEAG	Staubli TX90 XL	/	/	/
Software for Test	SPEAG	DASY52	52.10.4.1527	/	/

Date of Testing: (Variant 1 & Variant 2) December 1, 2022 ~ December 5, 2022

Name of Equipment	Manufacturer	Type/Model	Serial Number	Last Cal.	Cal. Due Date
Network Analyzer	Agilent	E5071B	MY42404014	2022-05-14	2023-05-13
Dielectric Probe Kit	SPEAG	DAK-12	1171	2022-10-29	2023-10-28
Power Meter	Agilent	E4417A	GB41291714	2022-05-14	2023-05-13
Power Sensor	Agilent	N8481H	MY50350004	2022-05-14	2023-05-13
Power Sensor	Agilent	E9327A	US40441622	2022-05-14	2023-05-13
Power Sensor	Agilent	NRP18S	101955	2022-05-14	2023-05-13
Signal Generator	Agilent	N5181A	MY50140143	2022-05-14	2023-05-13
Dual Directional Coupler	UCL	UCL-DDC0 56G-S	20010600118	/	/
Amplifier	INDEXSAR	TPA-005060 G01	13030502	2022-05-14	2023-05-13
Wireless Communication Tester	Anritsu	MT8820C	6201342015	2021-12-12	2022-12-11
Wireless Communication Tester	Agilent	E5515C	MY48360988	2021-12-12	2022-12-11
Wireless Communication Tester	R&S	CMW 500	146734	2022-05-14	2023-05-13
E-field Probe	SPEAG	EX3DV4	3677	2022-07-08	2023-07-07
DAE	SPEAG	DAE4	1291	2022-03-24	2023-03-23
Validation Kit 750MHz	SPEAG	D750V3	1045	2020-08-28	2023-08-27
Validation Kit 835MHz	SPEAG	D835V2	4d020	2020-08-28	2023-08-27
Validation Kit 1750MHz	SPEAG	D1750V2	1033	2020-02-25	2023-02-24
Validation Kit 1900MHz	SPEAG	D1900V2	5d060	2020-08-27	2023-08-26
Validation Kit 2450MHz	SPEAG	D2450V2	786	2020-08-27	2023-08-26
Validation Kit 2600MHz	SPEAG	D2600V2	1025	2021-04-23	2024-04-22
Software for Tissue	Agilent	85070	/	/	/
Temperature Probe	Tianjin jinming	JM222	381	2022-05-14	2023-05-13
Twin SAM Phantom	SPEAG	SAM1	1667	/	/
Twin SAM Phantom	SPEAG	SAM2	1666	/	/
Hygrothermograph	Anymetr	HTC - 1	TY2020A003	2022-05-14	2023-05-13
TX90 XL	SPEAG	Staubli TX90 XL	/	/	/
Software for Test	SPEAG	DASY52	52.10.4.1527	/	/

8 Tissue Dielectric Parameter Measurements & System Verification

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 ± 2°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	σ(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

Measurements results

Original

Frequency (MHz)	Test Date	Temp ℃	Measured Dielectric Parameters		Target Dielectric Parameters		Limit (Within ±5%)	
			ε_r	σ(s/m)	ε_r	σ(s/m)	Dev ε_r(%)	Dev σ(%)
835	2022/6/25	21.5	41.3	0.87	41.5	0.90	-0.48	-3.33
	2022/6/26	21.5	41.4	0.92	41.5	0.90	-0.24	2.22
1750	2022/6/24	21.5	39.3	1.37	40.1	1.37	-2.00	0.00
	2022/6/27	21.5	40.2	1.36	40.1	1.37	0.25	-0.73
	2022/6/29	21.5	40.0	1.33	40.1	1.37	-0.25	-2.92
1900	2022/6/21	21.5	40.1	1.41	40.0	1.40	0.25	0.71
	2022/6/22	21.5	40.2	1.43	40.0	1.40	0.50	2.14
	2022/6/23	21.5	40.0	1.40	40.0	1.40	0.00	0.00
	2022/6/30	21.5	40.5	1.34	40.0	1.40	1.25	-4.29
2450	2022/6/28	21.5	38.7	1.82	39.2	1.80	-1.28	1.11
	2022/7/2	21.5	38.6	1.81	39.2	1.80	-1.53	0.56
2600	2022/6/30	21.5	38.2	2.01	39.0	1.96	-2.05	2.55
	2022/7/1	21.5	38.4	1.94	39.0	1.96	-1.54	-1.02
	2022/7/2	21.5	38.3	1.99	39.0	1.96	-1.79	1.53
	2022/7/3	21.5	38.5	1.95	39.0	1.96	-1.28	-0.51
	2022/7/4	21.5	38.2	1.96	39.0	1.96	-2.05	0.00
	2022/7/5	21.5	39.0	1.98	39.0	1.96	0.00	1.02
Note: The depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm for SAR measurements ≤ 3 GHz and ≥ 10.0 cm for measurements > 3 GHz.								

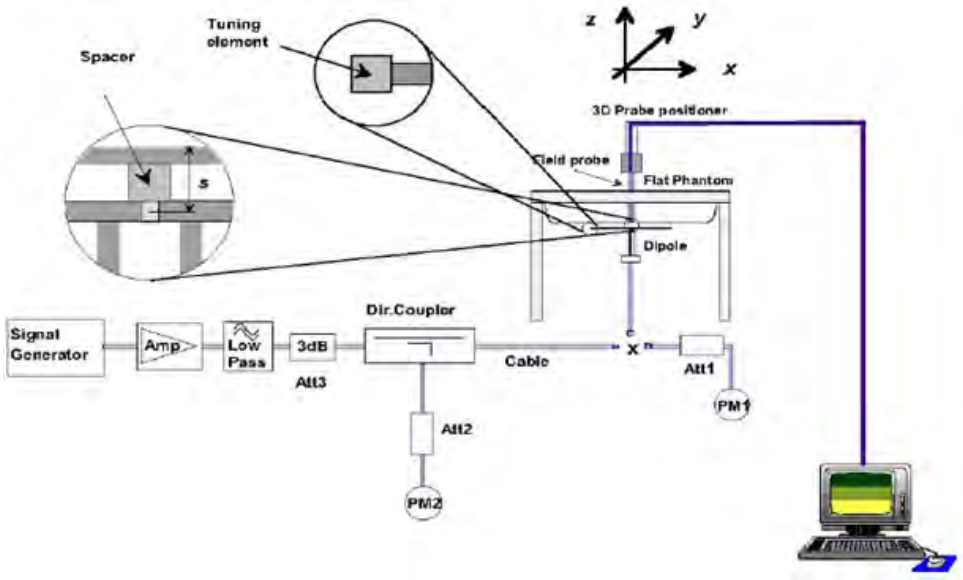
Variant 1&Variant 2

Frequency (MHz)	Test Date	Temp ℃	Measured Dielectric Parameters		Target Dielectric Parameters		Limit (Within ±5%)	
			ε_r	σ(s/m)	ε_r	σ(s/m)	Dev ε_r(%)	Dev σ(%)
750	2022/12/1	21.5	42.3	0.88	41.9	0.89	0.95	-1.12
835	2022/12/2	21.5	41.4	0.88	41.5	0.90	-0.24	-2.22
1750	2022/12/3	21.5	40.2	1.34	40.1	1.37	0.25	-2.19
1900	2022/12/4	21.5	40.1	1.41	40.0	1.40	0.25	0.71
2450	2022/12/5	21.5	38.6	1.81	39.2	1.80	-1.53	0.56
2600	2022/12/5	21.5	38.2	2.01	39.0	1.96	-2.05	2.55
Note: The depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm for SAR measurements ≤ 3 GHz and ≥ 10.0 cm for measurements > 3 GHz.								

8.2 System Performance 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 1System Performance 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	ΔΩ	Imaginary	ΔΩ
Dipole D750V3 SN: 1045	Head Liquid	8/28/2020	26.6	/	54.3	/	-2.29	/
		8/27/2021	26.2	-1.5	53.9	-0.4	-2.28	0.01
		8/26/2022	26.0	-0.8	52.1	-1.8	-2.25	0.03
Dipole D835V2 SN: 4d020	Head Liquid	8/28/2020	26.2	/	54.8	/	1.73	/
		8/27/2021	26.5	1.1	55.2	0.4	1.74	0.01
		8/26/2022	27.2	2.6	55.5	0.3	1.74	0
Dipole D1750V2 SN: 1033	Head Liquid	2/25/2020	38.3	/	48.8	/	-0.06	/
		2/24/2021	40.0	4.4	49.9	1.1	-0.06	0
		2/23/2022	40.6	1.5	51.1	1.2	-0.05	0.01
Dipole D1900V2 SN: 5d060	Head Liquid	8/27/2020	23.3	/	52.5	/	6.58	/
		8/26/2021	23.0	-1.3	51.9	-0.6	6.54	-0.04
		8/25/2022	22.2	-3.5	51.2	-0.7	6.53	-0.01
Dipole D2450V2 SN: 786	Head Liquid	8/27/2020	27.1	0.7	53.8	-0.7	1.43	-0.01
		8/26/2021	27.4	1.1	53.4	-0.4	1.43	0
		8/25/2022	22.9	/	50.1	/	-7.19	/
Dipole D2600V2 SN: 1025	Head Liquid	4/23/2021	22.4	-2.2	50.7	0.6	-7.23	-0.04
		4/22/2022	27.5	/	48.2	/	3.80	/

System Check results

Original

Frequency (MHz)	Test Date	Temp ℃	250mW Measured SAR_{1g} (W/kg)	1W Normalized SAR_{1g} (W/kg)	1W Target SAR_{1g} (W/kg)	Δ % (Limit ±10%)	Plot No.
835	2022/6/25	21.5	2.46	9.84	9.65	1.97	1
	2022/6/26	21.5	2.43	9.72	9.65	0.73	2
1750	2022/6/24	21.5	8.99	35.96	35.90	0.17	3
	2022/6/27	21.5	8.92	35.68	35.90	-0.61	4
	2022/6/29	21.5	9.03	36.12	35.90	0.61	5
1900	2022/6/21	21.5	9.88	39.52	39.50	0.05	6
	2022/6/22	21.5	9.85	39.40	39.50	-0.25	7
	2022/6/23	21.5	9.55	38.20	39.50	-3.29	8
	2022/6/30	21.5	9.60	38.40	39.50	-2.78	9
2450	2022/6/28	21.5	13.52	54.08	52.30	3.40	10
	2022/7/2	21.5	13.70	54.80	52.30	4.78	11
2600	2022/6/30	21.5	13.9	55.60	56.10	-0.89	12
	2022/7/1	21.5	13.88	55.52	56.10	-1.03	13

	2022/7/2	21.5	13.94	55.76	56.10	-0.61	14
	2022/7/3	21.5	13.9	55.60	56.10	-0.89	15
	2022/7/4	21.5	13.9	55.60	56.10	-0.89	16
	2022/7/5	21.5	13.85	55.40	56.10	-1.25	17
Note: Target Values used derive from the calibration certificate Data Storage and Evaluation.							

Variant 1&Variant 2

Frequency (MHz)	Test Date	Temp ℃	250mW Measured SAR_{1g} (W/kg)	1W Normalized SAR_{1g} (W/kg)	1W Target SAR_{1g} (W/kg)	Δ % (Limit ±10%)	Plot No.
750	2022/12/1	21.5	2.13	8.52	8.37	1.79	18
835	2022/12/2	21.5	2.44	9.76	9.65	1.14	19
1750	2022/12/3	21.5	8.95	35.80	35.90	-0.28	20
1900	2022/12/4	21.5	9.88	39.52	39.50	0.05	21
2450	2022/12/5	21.5	13.70	54.80	52.30	4.78	22
2600	2022/12/5	21.5	13.90	55.60	56.10	-0.89	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
2450	2022/12/28	7543	EX3DV4	2450	Head	39.2	1.80	PASS	PASS	PASS

Frequency [MHz]	Date	Probe SN	Probe Type	Probe Cal Point		PERM (Er)	COND (Σ)	CW Validation		
								Sensitivity	Probe Linearity	Probe Isotropy
835	2021/8/12	3677	EX3DV4	835	Head	41.5	0.90	PASS	PASS	PASS
1750	2021/8/12	3677	EX3DV4	1750	Head	40.1	1.37	PASS	PASS	PASS
1900	2021/8/12	3677	EX3DV4	1900	Head	40.0	1.40	PASS	PASS	PASS
2450	2021/8/12	3677	EX3DV4	2450	Head	39.2	1.80	PASS	PASS	PASS
2600	2021/8/12	3677	EX3DV4	2600	Head	39.0	1.96	PASS	PASS	PASS

Frequency [MHz]	Date	Probe SN	Probe Type	Probe Cal Point		PERM (Er)	COND (Σ)	CW Validation		
								Sensitivity	Probe Linearity	Probe Isotropy
750	2022/7/8	3677	EX3DV4	750	Head	41.9	0.89	PASS	PASS	PASS
835	2022/7/8	3677	EX3DV4	835	Head	41.5	0.90	PASS	PASS	PASS
1750	2022/7/8	3677	EX3DV4	1750	Head	40.1	1.37	PASS	PASS	PASS
1900	2022/7/8	3677	EX3DV4	1900	Head	40.0	1.40	PASS	PASS	PASS
2450	2022/7/8	3677	EX3DV4	2450	Head	39.2	1.80	PASS	PASS	PASS
2600	2022/7/8	3677	EX3DV4	2600	Head	39.0	1.96	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

Low Antenna

GSM 850 DSI1		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	190 /836.6	251 /848.8
GSM	CS	33.50	32.75	32.66	32.52	9.03	24.47	23.72	23.63	23.49
GPRS/ EGPRS (GMSK)	1 Tx Slot	33.50	32.74	32.69	32.52	9.03	24.47	23.71	23.66	23.49
	2 Tx Slots	30.50	29.29	29.25	29.02	6.02	24.48	23.27	23.23	23.00
	3 Tx Slots	29.50	28.90	28.89	28.74	4.26	**25.24**	24.64	24.63	24.48
	4 Tx Slots	28.00	27.67	27.50	27.34	3.01	24.99	24.66	24.49	24.33
EGPRS (8PSK)	1 Tx Slot	28.00	27.20	27.19	27.00	9.03	18.97	18.17	18.16	17.97
	2 Tx Slots	25.50	24.09	24.01	23.81	6.02	19.48	18.07	17.99	17.79
	3 Tx Slots	24.50	23.31	23.36	23.02	4.26	20.24	19.05	19.10	18.76
	4 Tx Slots	23.50	22.20	22.07	21.92	3.01	20.49	19.19	19.06	18.91
Notes: The worst-case configuration and mode for SAR testing is determined to be as follows: 1. Standalone: GSM 850 GMSK (GPRS) mode with 3 time slots for Max power, based on the output power measurements above.										

GSM 850 DSI2		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	190 /836.6	251 /848.8
GSM	CS	34.50	33.23	33.15	33.04	9.03	25.47	24.20	24.12	24.01
GPRS/ EGPRS (GMSK)	1 Tx Slot	34.50	33.23	33.15	33.04	9.03	**25.47**	24.20	24.12	24.01
	2 Tx Slots	30.50	29.30	29.11	29.08	6.02	24.48	23.28	23.09	23.06
	3 Tx Slots	29.50	29.01	28.88	28.73	4.26	25.24	24.75	24.62	24.47
	4 Tx Slots	28.00	27.74	27.56	27.42	3.01	24.99	24.73	24.55	24.41
EGPRS (8PSK)	1 Tx Slot	29.00	27.33	27.14	27.01	9.03	19.97	18.30	18.11	17.98
	2 Tx Slots	25.50	24.26	23.96	23.81	6.02	19.48	18.24	17.94	17.79
	3 Tx Slots	24.50	23.34	23.28	23.02	4.26	20.24	19.08	19.02	18.76
	4 Tx Slots	23.50	22.34	22.00	21.92	3.01	20.49	19.33	18.99	18.91
Notes: The worst-case configuration and mode for SAR testing is determined to be as follows:										

1. Standalone: GSM 850 GMSK (GPRS) mode with 1 time slots for Max power, based on the output power measurements above.

GSM 850 DSI4		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	190 /836.6	251 /848.8
GSM	CS	32.50	32.12	32.05	31.90	9.03	23.47	23.09	23.02	22.87
GPRS/ EGPRS (GMSK)	1 Tx Slot	32.50	32.12	32.05	31.90	9.03	23.47	23.09	23.02	22.87
	2 Tx Slots	30.50	29.09	29.16	28.82	6.02	24.48	23.07	23.14	22.80
	3 Tx Slots	29.50	28.65	28.95	28.50	4.26	**25.24**	24.39	24.69	24.24
	4 Tx Slots	28.00	27.39	27.61	27.26	3.01	24.99	24.38	24.60	24.25
EGPRS (8PSK)	1 Tx Slot	28.00	27.20	27.19	27.00	9.03	18.97	18.17	18.16	17.97
	2 Tx Slots	25.50	24.09	24.01	23.81	6.02	19.48	18.07	17.99	17.79
	3 Tx Slots	24.50	23.31	23.36	23.02	4.26	20.24	19.05	19.10	18.76
	4 Tx Slots	23.50	22.20	22.07	21.92	3.01	20.49	19.19	19.06	18.91

Notes: The worst-case configuration and mode for SAR testing is determined to be as follows:
1. Standalone: GSM 850 GMSK (GPRS) mode with 3 time slots for Max power, based on the output power measurements above.

GSM 1900 DSI1&DSI2		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	30.50	29.43	29.48	29.35	9.03	21.47	20.40	20.45	20.32
GPRS/ EGPRS (GMSK)	1 Tx Slot	30.50	29.43	29.48	29.35	9.03	21.47	20.40	20.45	20.32
	2 Tx Slots	27.50	26.04	25.96	25.90	6.02	21.48	20.02	19.94	19.88
	3 Tx Slots	26.00	25.87	25.72	25.72	4.26	21.74	21.61	21.46	21.46
	4 Tx Slots	25.00	24.49	24.56	24.32	3.01	**21.99**	21.48	21.55	21.31
EGPRS (8PSK)	1 Tx Slot	27.00	25.82	25.79	25.72	9.03	17.97	16.79	16.76	16.69
	2 Tx Slots	25.50	23.51	23.52	23.54	6.02	19.48	17.49	17.50	17.52
	3 Tx Slots	23.50	21.82	21.94	21.82	4.26	19.24	17.56	17.68	17.56
	4 Tx Slots	22.50	20.53	20.54	20.56	3.01	19.49	17.52	17.53	17.55

Notes: The worst-case configuration and mode for SAR testing is determined to be as follows:
1. GSM 1900 GMSK (GPRS) mode with 4 time slots for Max power, based on the output power measurements above.

GSM 1900 DSI4		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	27.50	27.17	27.17	27.04	9.03	18.47	18.14	18.14	18.01
GPRS/ EGPRS (GMSK)	1 Tx Slot	27.50	27.17	27.17	27.04	9.03	18.47	18.14	18.14	18.01
	2 Tx Slots	27.50	25.92	26.10	25.90	6.02	21.48	19.90	20.08	19.88
	3 Tx Slots	26.00	25.70	25.96	25.75	4.26	21.74	21.44	21.70	21.49
	4 Tx Slots	25.00	24.50	24.59	24.33	3.01	**21.99**	21.49	21.58	21.32
EGPRS (8PSK)	1 Tx Slot	27.00	25.82	25.79	25.72	9.03	17.97	16.79	16.76	16.69
	2 Tx Slots	25.50	23.51	23.52	23.54	6.02	19.48	17.49	17.50	17.52
	3 Tx Slots	23.50	21.82	21.94	21.82	4.26	19.24	17.56	17.68	17.56
	4 Tx Slots	22.50	20.53	20.54	20.56	3.01	19.49	17.52	17.53	17.55
Notes: The worst-case configuration and mode for SAR testing is determined to be as follows: 1. GSM 1900 GMSK (GPRS) mode with 4 time slots for Max power, based on the output power measurements above.										

Upper Antenna

GSM 850 DSI1		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	190 /836.6	251 /848.8
GSM	CS	31.00	30.42	30.41	30.29	9.03	21.97	21.39	21.38	21.26
GPRS/ EGPRS (GMSK)	1 Tx Slot	31.00	30.42	30.41	30.29	9.03	21.97	21.39	21.38	21.26
	2 Tx Slots	30.50	29.58	29.72	29.52	6.02	24.48	23.56	23.70	23.50
	3 Tx Slots	29.50	29.30	29.45	29.24	4.26	**25.24**	25.04	25.19	24.98
	4 Tx Slots	28.00	27.95	27.95	27.97	3.01	24.99	24.94	24.94	24.96
EGPRS (8PSK)	1 Tx Slot	28.00	27.76	27.84	27.67	9.03	18.97	18.73	18.81	18.64
	2 Tx Slots	25.50	24.62	24.81	24.52	6.02	19.48	18.60	18.79	18.50
	3 Tx Slots	24.50	23.81	24.00	23.65	4.26	20.24	19.55	19.74	19.39
	4 Tx Slots	23.50	22.74	22.90	22.70	3.01	20.49	19.73	19.89	19.69
Notes: The worst-case configuration and mode for SAR testing is determined to be as follows: 1. Standalone: GSM 850 GMSK (GPRS) mode with 3 time slots for Max power, based on the output power measurements above.										

GSM 850 DSI2		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	190 /836.6	251 /848.8
GSM	CS	34.50	33.22	33.17	32.96	9.03	25.47	24.19	24.14	23.93
GPRS/ EGPRS (GMSK)	1 Tx Slot	34.50	33.22	33.17	32.96	9.03	**25.47**	24.19	24.14	23.93
	2 Tx Slots	30.50	29.90	29.71	29.55	6.02	24.48	23.88	23.69	23.53
	3 Tx Slots	29.50	29.42	29.42	29.33	4.26	25.24	25.16	25.16	25.07
	4 Tx Slots	28.00	28.00	27.96	27.91	3.01	24.99	24.99	24.95	24.90
EGPRS (8PSK)	1 Tx Slot	29.00	27.76	27.84	27.67	9.03	19.97	18.73	18.81	18.64
	2 Tx Slots	25.50	24.62	24.81	24.52	6.02	19.48	18.60	18.79	18.50
	3 Tx Slots	24.50	23.81	24.00	23.65	4.26	20.24	19.55	19.74	19.39
	4 Tx Slots	23.50	22.74	22.90	22.70	3.01	20.49	19.73	19.89	19.69
Notes: The worst-case configuration and mode for SAR testing is determined to be as follows: 1. Standalone: GSM 850 GMSK (GPRS) mode with 1 time slots for Max power, based on the output power measurements above.										

GSM 850 DSI4		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	190 /836.6	251 /848.8
GSM	CS	31.50	31.13	31.05	30.86	9.03	22.47	22.10	22.02	21.83
GPRS/ EGPRS (GMSK)	1 Tx Slot	31.50	31.13	31.05	30.86	9.03	22.47	22.10	22.02	21.83
	2 Tx Slots	30.50	29.97	29.74	29.75	6.02	24.48	23.95	23.72	23.73
	3 Tx Slots	30.00	29.74	29.45	29.52	4.26	**25.74**	25.48	25.19	25.26
	4 Tx Slots	28.50	28.36	28.21	28.25	3.01	25.49	25.35	25.20	25.24
EGPRS (8PSK)	1 Tx Slot	28.00	27.76	27.84	27.67	9.03	18.97	18.73	18.81	18.64
	2 Tx Slots	25.50	24.62	24.81	24.52	6.02	19.48	18.60	18.79	18.50
	3 Tx Slots	24.50	23.81	24.00	23.65	4.26	20.24	19.55	19.74	19.39
	4 Tx Slots	23.50	22.74	22.90	22.70	3.01	20.49	19.73	19.89	19.69
Notes: The worst-case configuration and mode for SAR testing is determined to be as follows: 1. Standalone: GSM 850 GMSK (GPRS) mode with 3 time slots for Max power, based on the output power measurements above.										

GSM 1900 DSI1		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	25.50	25.27	25.32	25.11	9.03	16.47	16.24	16.29	16.08
GPRS/ EGPRS (GMSK)	1 Tx Slot	25.50	25.27	25.32	25.11	9.03	16.47	16.24	16.29	16.08
	2 Tx Slots	27.00	26.76	26.92	26.64	6.02	20.98	20.74	20.90	20.62
	3 Tx Slots	27.00	26.51	26.78	26.46	4.26	22.74	22.25	22.52	22.20
	4 Tx Slots	26.00	25.13	25.29	25.08	3.01	**22.99**	22.12	22.28	22.07
EGPRS (8PSK)	1 Tx Slot	25.00	24.78	24.79	24.65	9.03	15.97	15.75	15.76	15.62
	2 Tx Slots	25.00	23.17	23.24	23.17	6.02	18.98	17.15	17.22	17.15
	3 Tx Slots	23.50	22.52	22.47	22.54	4.26	19.24	18.26	18.21	18.28
	4 Tx Slots	22.50	21.09	21.10	21.09	3.01	19.49	18.08	18.09	18.08
Notes: The worst-case configuration and mode for SAR testing is determined to be as follows: 1. GSM 1900 GMSK (GPRS) mode with 4 time slots for Max power, based on the output power measurements above.										

GSM 1900 DSI2		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	30.50	30.40	30.41	30.15	9.03	21.47	21.37	21.38	21.12
GPRS/ EGPRS (GMSK)	1 Tx Slot	30.50	30.40	30.41	30.15	9.03	21.47	21.37	21.38	21.12
	2 Tx Slots	27.50	26.66	26.77	26.42	6.02	21.48	20.64	20.75	20.40
	3 Tx Slots	27.00	26.48	26.56	26.17	4.26	22.74	22.22	22.30	21.91
	4 Tx Slots	26.00	25.00	25.11	24.76	3.01	**22.99**	21.99	22.10	21.75
EGPRS (8PSK)	1 Tx Slot	27.00	26.78	26.49	26.59	9.03	17.97	17.75	17.46	17.56
	2 Tx Slots	25.50	23.51	23.56	23.61	6.02	19.48	17.49	17.54	17.59
	3 Tx Slots	23.50	22.82	22.60	22.57	4.26	19.24	18.56	18.34	18.31
	4 Tx Slots	22.50	21.46	21.26	21.32	3.01	19.49	18.45	18.25	18.31
Notes: The worst-case configuration and mode for SAR testing is determined to be as follows: 1. GSM 1900 GMSK (GPRS) mode with 4 time slots for Max power, based on the output power measurements above.										

GSM 1900 DSI4		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	28.00	27.54	27.45	27.31	9.03	18.97	18.51	18.42	18.28
GPRS/ EGPRS (GMSK)	1 Tx Slot	28.00	27.54	27.45	27.31	9.03	18.97	18.51	18.42	18.28
	2 Tx Slots	27.50	26.91	26.70	26.71	6.02	21.48	20.89	20.68	20.69
	3 Tx Slots	27.00	26.63	26.47	26.50	4.26	22.74	22.37	22.21	22.24
	4 Tx Slots	26.00	25.32	25.09	25.24	3.01	**22.99**	22.31	22.08	22.23
EGPRS (8PSK)	1 Tx Slot	27.00	26.78	26.49	26.50	9.03	17.97	17.75	17.46	17.47
	2 Tx Slots	25.50	23.51	23.54	23.52	6.02	19.48	17.49	17.52	17.50
	3 Tx Slots	23.50	22.82	22.60	22.39	4.26	19.24	18.56	18.34	18.13
	4 Tx Slots	22.50	21.46	21.26	21.18	3.01	19.49	18.45	18.25	18.17
Notes: The worst-case configuration and mode for SAR testing is determined to be as follows: 1. 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.

Low Antenna

WCDMA		Band II(dBm) DSI1&DSI2				Band IV(dBm) DSI1&DSI2				Band V(dBm) DSI1&DSI4			
Tx Channel		9262	9400	9538	Tune-up Limit	1312	1413	1513	Tune-up Limit	4132	4183	4233	Tune-up Limit
Frequency(MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.6	846.6	
RMC	12.2kbps	22.83	22.78	22.77	**24.00**	22.87	**22.96**	22.83	24.00	23.61	**23.63**	23.45	24.50
AMR	12.2kbps	22.73	22.69	22.64	24.00	22.77	22.87	22.70	24.00	23.51	23.54	23.32	24.50
HSDPA	Sub 1	22.25	22.20	22.19	23.50	22.29	22.38	22.25	23.50	23.03	23.05	22.87	23.50
	Sub 2	22.24	22.19	22.18	23.50	22.28	22.37	22.24	23.50	23.02	23.04	22.86	23.50
	Sub 3	21.73	21.68	21.67	23.50	21.77	21.86	21.73	23.50	22.51	22.53	22.35	23.50
	Sub 4	21.72	21.67	21.66	23.50	21.76	21.85	21.72	23.50	22.50	22.52	22.34	23.50
HSUPA	Sub 1	20.81	20.76	20.75	22.00	20.85	20.94	20.81	22.00	21.59	21.61	21.43	22.00
	Sub 2	20.40	20.35	20.34	22.00	20.44	20.53	20.40	22.00	21.18	21.20	21.02	22.00
	Sub 3	21.38	21.34	21.33	22.50	21.42	21.52	21.39	22.50	22.16	22.19	22.01	22.50
	Sub 4	19.77	19.73	19.72	21.00	19.81	19.91	19.78	21.00	20.55	20.58	20.40	22.00
	Sub 5	21.36	21.32	21.31	22.50	21.40	21.50	21.37	22.50	22.14	22.17	21.99	22.50
DC-HSDPA	Sub 1	22.17	22.14	22.11	23.50	22.21	22.32	22.17	23.50	22.95	22.99	22.79	23.50
	Sub 2	22.16	22.13	22.10	23.50	22.20	22.31	22.16	23.50	22.94	22.98	22.78	23.50
	Sub 3	21.74	21.62	21.61	23.50	21.78	21.80	21.67	23.50	22.52	22.47	22.29	23.50
	Sub 4	21.73	21.61	21.60	23.50	21.77	21.79	21.66	23.50	22.51	22.46	22.28	23.50
Note: 1.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(dBm) DSI4				Band IV(dBm) DSI4				Band V(dBm) DSI2			
Tx Channel		9262	9400	9538	Tune-up Limit	1312	1413	1513	Tune-up Limit	4132	4183	4233	Tune-up Limit
Frequency(MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.6	846.6	
RMC	12.2kbps	20.30	20.24	20.18	**21.50**	**19.42**	19.41	19.35	20.50	24.54	**24.58**	24.42	25.50
AMR	12.2kbps	20.34	20.28	20.34	21.50	19.32	19.57	19.31	20.50	24.44	24.49	24.29	25.50
HSDPA	Sub 1	20.16	20.24	20.02	21.50	19.48	19.31	19.27	20.50	23.96	24.00	23.84	24.50
	Sub 2	20.44	20.30	20.32	21.50	19.58	19.35	19.29	20.50	23.95	23.99	23.83	24.50
	Sub 3	20.20	20.32	20.26	21.50	19.32	19.45	19.27	20.50	23.44	23.48	23.32	24.50
	Sub 4	20.18	20.36	20.20	21.50	19.56	19.25	19.49	20.50	23.43	23.47	23.31	24.50
HSUPA	Sub 1	19.68	19.90	19.68	21.00	18.86	18.77	18.91	20.50	22.52	22.56	22.40	23.00
	Sub 2	19.94	19.80	19.68	21.00	18.92	18.91	18.95	20.50	22.11	22.15	21.99	23.00
	Sub 3	20.16	20.40	20.08	21.50	19.56	19.51	19.25	20.50	23.09	23.14	22.98	23.50
	Sub 4	19.64	19.72	19.52	21.00	18.98	18.83	18.83	20.50	21.48	21.53	21.37	23.00
	Sub 5	20.28	20.22	20.30	21.50	19.50	19.55	19.31	20.50	23.07	23.12	22.96	23.50
DC-HSDPA	Sub 1	20.26	20.18	20.24	21.50	19.46	19.51	19.51	20.50	23.88	23.94	23.76	24.50
	Sub 2	20.16	20.18	20.12	21.50	19.58	19.35	19.25	20.50	23.87	23.93	23.75	24.50
	Sub 3	20.24	20.32	20.14	21.50	19.28	19.55	19.35	20.50	23.45	23.42	23.26	24.50
	Sub 4	20.44	20.22	20.02	21.50	19.42	19.53	19.23	20.50	23.44	23.41	23.25	24.50
Note: 1.Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”.													

Upper Antenna

WCDMA		Band II(dBm) DSI1				Band IV(dBm) DSI1				Band V(dBm) DSI1			
Tx Channel		9262	9400	9538	Tune-up Limit	1312	1413	1513	Tune-up Limit	4132	4183	4233	Tune-up Limit
Frequency(MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.6	846.6	
RMC	12.2kbps	**16.62**	16.54	16.61	17.00	16.89	**16.91**	16.84	17.00	**21.63**	21.61	21.45	23.00
AMR	12.2kbps	16.76	16.48	16.53	17.00	16.73	16.83	16.90	17.00	21.53	21.45	21.49	23.00
HSDPA	Sub 1	16.62	16.50	16.45	17.00	16.79	16.95	16.72	17.00	21.59	21.75	21.43	23.00
	Sub 2	16.64	16.60	16.77	17.00	16.75	16.93	16.72	17.00	21.55	21.53	21.31	23.00
	Sub 3	16.68	16.66	16.51	17.00	16.75	16.93	16.64	17.00	21.75	21.71	21.35	23.00
	Sub 4	16.72	16.60	16.69	17.00	16.93	16.83	16.66	17.00	21.77	21.69	21.57	23.00
HSUPA	Sub 1	16.24	15.90	16.13	17.00	16.41	16.19	16.40	17.00	21.07	21.21	21.03	21.50
	Sub 2	16.26	16.00	16.01	17.00	16.13	16.33	16.12	17.00	21.25	21.27	21.05	21.50
	Sub 3	16.70	16.50	16.49	17.00	16.93	16.75	16.58	17.00	21.61	21.45	21.51	22.50
	Sub 4	16.20	16.16	16.23	17.00	16.41	16.41	16.14	17.00	21.03	21.19	20.89	21.50
	Sub 5	16.78	16.58	16.51	17.00	16.83	16.71	16.60	17.00	21.49	21.55	21.29	22.50
DC-HSDPA	Sub 1	16.78	16.42	16.45	17.00	16.87	16.77	16.72	17.00	21.59	21.77	21.61	23.00
	Sub 2	16.56	16.52	16.67	17.00	16.83	16.93	16.60	17.00	21.59	21.61	21.51	23.00
	Sub 3	16.68	16.66	16.69	17.00	16.65	16.69	16.70	17.00	21.59	21.51	21.43	23.00
	Sub 4	16.64	16.44	16.47	17.00	16.75	16.77	16.70	17.00	21.53	21.55	21.39	23.00
Note: 1.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(dBm) DSI2				Band IV(dBm) DSI2				Band V(dBm) DSI2			
Tx Channel		9262	9400	9538	Tune-up Limit	1312	1413	1513	Tune-up Limit	4132	4183	4233	Tune-up Limit
Frequency(MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.6	846.6	
RMC	12.2kbps	**23.64**	23.56	23.62	24.00	23.89	**23.93**	23.86	24.00	**24.18**	24.14	24.03	25.50
AMR	12.2kbps	23.54	23.47	23.49	24.00	23.79	23.84	23.73	24.00	24.08	24.05	23.90	25.50
HSDPA	Sub 1	23.06	22.98	23.04	23.50	23.31	23.35	23.28	23.50	23.60	23.56	23.45	24.00
	Sub 2	23.05	22.97	23.03	23.50	23.30	23.34	23.27	23.50	23.59	23.55	23.44	24.00
	Sub 3	22.54	22.46	22.52	23.50	22.79	22.83	22.76	23.50	23.08	23.04	22.93	24.00
	Sub 4	22.53	22.45	22.51	23.50	22.78	22.82	22.75	23.50	23.07	23.03	22.92	24.00
HSUPA	Sub 1	21.62	21.54	21.60	22.00	21.87	21.91	21.84	22.00	22.16	22.12	22.01	22.50
	Sub 2	21.21	21.13	21.19	22.00	21.46	21.50	21.43	22.00	21.75	21.71	21.60	22.50
	Sub 3	22.19	22.12	22.18	22.50	22.44	22.49	22.42	22.50	22.73	22.70	22.59	23.50
	Sub 4	20.58	20.51	20.57	22.00	20.83	20.88	20.81	22.00	21.12	21.09	20.98	22.50
	Sub 5	22.17	22.10	22.16	22.50	22.42	22.47	22.40	22.50	22.71	22.68	22.57	23.50
DC-HSDPA	Sub 1	22.98	22.92	22.96	23.50	23.23	23.29	23.20	23.50	23.52	23.50	23.37	24.00
	Sub 2	22.97	22.91	22.95	23.50	23.22	23.28	23.19	23.50	23.51	23.49	23.36	24.00
	Sub 3	22.55	22.40	22.46	23.50	22.80	22.77	22.70	23.50	23.09	22.98	22.87	24.00

	Sub 4	22.54	22.39	22.45	23.50	22.79	22.76	22.69	23.50	23.08	22.97	22.86	24.00
Note: 1.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(dBm) DSI4				Band IV(dBm) DSI4				Band V(dBm) DSI4			
Tx Channel		9262	9400	9538	Tune-up	1312	1413	1513	Tune-up	4132	4183	4233	Tune-up
Frequency(MHz)		1852.4	1880	1907.6	Limit	1712.4	1732.6	1752.6	Limit	826.4	836.6	846.6	Limit
RMC	12.2kbps	**20.62**	20.55	20.58	21.00	22.37	**22.42**	22.33	22.50	**23.15**	23.11	22.96	24.50
AMR	12.2kbps	20.64	20.41	20.64	21.00	22.27	22.33	22.20	22.50	23.05	23.02	22.83	24.50
HSDPA	Sub 1	20.54	20.71	20.50	21.00	21.79	21.84	21.75	22.50	22.57	22.53	22.38	23.00
	Sub 2	20.74	20.71	20.54	21.00	21.78	21.83	21.74	22.50	22.56	22.52	22.37	23.00
	Sub 3	20.66	20.65	20.70	21.00	21.27	21.32	21.23	22.50	22.05	22.01	21.86	23.00
	Sub 4	20.76	20.53	20.70	21.00	21.26	21.31	21.22	22.50	22.04	22.00	21.85	23.00
HSUPA	Sub 1	20.12	20.05	20.10	21.00	20.35	20.40	20.31	21.00	21.13	21.09	20.94	21.50
	Sub 2	19.98	19.93	19.98	21.00	19.94	19.99	19.90	21.00	20.72	20.68	20.53	21.50
	Sub 3	20.70	20.65	20.46	21.00	20.92	20.98	20.89	22.00	21.70	21.67	21.52	22.50
	Sub 4	20.14	20.01	20.04	21.00	19.31	19.37	19.28	21.00	20.09	20.06	19.91	21.50
	Sub 5	20.46	20.51	20.52	21.00	20.90	20.96	20.87	22.00	21.68	21.65	21.50	22.50
DC-HSDPA	Sub 1	20.60	20.67	20.64	21.00	21.71	21.78	21.67	22.50	22.49	22.47	22.30	23.00
	Sub 2	20.54	20.69	20.68	21.00	21.70	21.77	21.66	22.50	22.48	22.46	22.29	23.00
	Sub 3	20.54	20.49	20.44	21.00	21.28	21.26	21.17	22.50	22.06	21.95	21.80	23.00
	Sub 4	20.60	20.41	20.62	21.00	21.27	21.25	21.16	22.50	22.05	21.94	21.79	23.00
Note: 1.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

Low Antenna

LTE Band2							
DSI1&DSI2				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	22.52	22.46	22.40	24.00
		1	2	22.76	22.72	22.75	24.00
		1	5	22.28	22.29	22.51	24.00
		3	0	22.66	22.72	22.64	24.00
		3	2	22.69	22.66	22.73	24.00
		3	3	22.68	22.64	22.56	24.00
		6	0	21.72	21.76	21.70	23.00
	16QAM	1	0	21.86	21.75	21.69	23.00
		1	2	22.11	21.99	21.98	23.00
		1	5	21.68	21.56	21.72	23.00
		3	0	21.66	21.69	21.63	23.00
		3	2	21.76	21.66	21.71	23.00
		3	3	21.73	21.68	21.51	23.00
		6	0	20.72	20.77	20.71	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	22.54	22.50	22.43	24.00
		1	7	22.74	22.75	22.79	24.00
		1	14	22.31	22.34	22.55	24.00
		8	0	21.76	21.84	21.77	23.00
		8	4	21.81	21.76	21.85	23.00
		8	7	21.78	21.75	21.66	23.00
		15	0	21.72	21.80	21.73	23.00
	16QAM	1	0	21.86	21.77	21.72	23.00
		1	7	22.11	21.99	22.02	23.00

		1	14	21.70	21.60	21.75	23.00
		8	0	20.77	20.82	20.75	22.00
		8	4	20.87	20.79	20.83	22.00
		8	7	20.83	20.80	20.64	22.00
		15	0	20.75	20.81	20.74	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	22.51	22.48	22.39	24.00
		1	13	22.72	22.71	22.76	24.00
		1	24	22.28	22.29	22.51	24.00
		12	0	21.73	21.79	21.73	23.00
		12	6	21.79	21.72	21.80	23.00
		12	13	21.76	21.73	21.62	23.00
		25	0	21.72	21.79	21.71	23.00
	16QAM	1	0	21.86	21.73	21.69	23.00
		1	13	22.11	21.97	21.99	23.00
		1	24	21.67	21.58	21.71	23.00
		12	0	20.75	20.78	20.72	22.00
		12	6	20.84	20.74	20.79	22.00
		12	13	20.80	20.75	20.60	22.00
		25	0	20.73	20.77	20.69	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	22.53	22.49	22.42	24.00
		1	25	22.75	22.76	22.80	24.00
		1	49	22.30	22.33	22.54	24.00
		25	0	21.76	21.84	21.77	23.00
		25	13	21.82	21.77	21.84	23.00
		25	25	21.78	21.77	21.67	23.00
		50	0	21.76	21.81	21.75	23.00
	16QAM	1	0	21.90	21.76	21.71	23.00
		1	25	22.15	22.01	22.02	23.00
		1	49	21.70	21.60	21.74	23.00
		25	0	20.78	20.83	20.76	22.00
		25	13	20.86	20.78	20.82	22.00
		25	25	20.83	20.80	20.64	22.00
		50	0	20.76	20.82	20.73	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	22.52	22.45	22.40	24.00
		1	38	22.73	22.75	22.77	24.00
		1	74	22.27	22.28	22.50	24.00

		36	0	21.74	21.80	21.74	23.00
		36	18	21.79	21.72	21.80	23.00
		36	39	21.75	21.74	21.63	23.00
		75	0	21.74	21.77	21.70	23.00
	16QAM	1	0	21.88	21.74	21.69	23.00
		1	38	22.13	21.98	22.00	23.00
		1	74	21.68	21.56	21.71	23.00
		36	0	20.75	20.81	20.73	22.00
		36	18	20.83	20.73	20.78	22.00
		36	39	20.81	20.76	20.61	22.00
		75	0	20.73	20.77	20.69	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	22.49	22.41	22.37	24.00
		1	50	**22.72**	**22.71**	**22.75**	24.00
		1	99	22.25	22.27	22.47	24.00
		50	0	21.71	**21.75**	21.70	23.00
		50	25	**21.77**	21.68	**21.77**	23.00
		50	50	21.72	21.69	21.59	23.00
		100	0	21.71	**21.72**	21.66	23.00
	16QAM	1	0	21.85	21.70	21.64	23.00
		1	50	22.10	21.96	21.96	23.00
		1	99	21.65	21.53	21.69	23.00
		50	0	20.72	20.77	20.70	22.00
		50	25	20.80	20.71	20.75	22.00
		50	50	20.78	20.71	20.57	22.00
		100	0	20.71	20.73	20.66	22.00

LTE Band2							
DSI4				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	20.04	20.05	19.91	21.50
		1	2	20.30	20.24	20.27	21.50
		1	5	19.88	19.81	20.02	21.50
		3	0	20.20	20.37	20.28	21.50
		3	2	20.28	20.23	20.33	21.50
		3	3	20.23	20.20	20.12	21.50
		6	0	20.18	20.25	20.23	21.50
	16QAM	1	0	20.34	20.33	20.27	21.50
		1	2	20.58	20.62	20.53	21.50
		1	5	20.18	20.17	20.24	21.50

		3	0	20.21	20.30	20.22	21.50
		3	2	20.33	20.26	20.29	21.50
		3	3	20.28	20.26	20.15	21.50
		6	0	20.23	20.26	20.24	21.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	20.01	20.01	19.88	21.50
		1	7	20.29	20.20	20.25	21.50
		1	14	19.86	19.80	19.99	21.50
		8	0	20.17	20.32	20.24	21.50
		8	4	20.26	20.19	20.30	21.50
		8	7	20.20	20.15	20.08	21.50
		15	0	20.15	20.20	20.19	21.50
	16QAM	1	0	20.31	20.29	20.22	21.50
		1	7	20.55	20.60	20.49	21.50
		1	14	20.15	20.14	20.22	21.50
		8	0	20.18	20.26	20.19	21.50
		8	4	20.30	20.24	20.26	21.50
		8	7	20.25	20.21	20.11	21.50
		15	0	20.21	20.22	20.21	21.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	19.98	19.99	19.84	21.50
		1	13	20.27	20.16	20.22	21.50
		1	24	19.83	19.75	19.95	21.50
		12	0	20.14	20.27	20.20	21.50
		12	6	20.24	20.15	20.25	21.50
		12	13	20.18	20.13	20.04	21.50
		25	0	20.15	20.19	20.17	21.50
	16QAM	1	0	20.31	20.25	20.19	21.50
		1	13	20.55	20.58	20.46	21.50
		1	24	20.12	20.12	20.18	21.50
		12	0	20.16	20.22	20.16	21.50
		12	6	20.27	20.19	20.22	21.50
		12	13	20.22	20.16	20.07	21.50
		25	0	20.19	20.18	20.16	21.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	20.00	20.00	19.87	21.50
		1	25	20.30	20.21	20.26	21.50
		1	49	19.85	19.79	19.98	21.50
		25	0	20.17	20.32	20.24	21.50
		25	13	20.27	20.20	20.29	21.50

		25	25	20.20	20.17	20.09	21.50
		50	0	20.19	20.21	20.21	21.50
	16QAM	1	0	20.35	20.28	20.21	21.50
		1	25	20.59	20.62	20.49	21.50
		1	49	20.15	20.14	20.21	21.50
		25	0	20.19	20.27	20.20	21.50
		25	13	20.29	20.23	20.25	21.50
		25	25	20.25	20.21	20.11	21.50
		50	0	20.22	20.23	20.20	21.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	19.99	19.96	19.85	21.50
		1	38	20.28	20.20	20.23	21.50
		1	74	19.82	19.74	19.94	21.50
		36	0	20.15	20.28	20.21	21.50
		36	18	20.24	20.15	20.25	21.50
		36	39	20.17	20.14	20.05	21.50
		75	0	20.17	20.17	20.16	21.50
	16QAM	1	0	20.33	20.26	20.19	21.50
		1	38	20.57	20.59	20.47	21.50
		1	74	20.13	20.10	20.18	21.50
		36	0	20.16	20.25	20.17	21.50
		36	18	20.26	20.18	20.21	21.50
		36	39	20.23	20.17	20.08	21.50
		75	0	20.19	20.18	20.16	21.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	19.96	19.92	19.82	21.50
		1	50	**20.27**	**20.16**	**20.21**	21.50
		1	99	19.80	19.73	19.91	21.50
		50	0	20.12	**20.23**	20.17	21.50
		50	25	**20.22**	20.11	**20.22**	21.50
		50	50	20.14	20.09	20.01	21.50
		100	0	**20.14**	20.12	20.12	21.50
	16QAM	1	0	20.30	20.22	20.14	21.50
		1	50	20.54	20.57	20.43	21.50
		1	99	20.10	20.07	20.16	21.50
		50	0	20.13	20.21	20.14	21.50
		50	25	20.23	20.16	20.18	21.50
		50	50	20.20	20.12	20.04	21.50
		100	0	20.17	20.14	20.13	21.50

LTE Band4							
DSI1&DSI2				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	22.86	22.97	22.89	24.00
		1	2	23.24	23.19	23.09	24.00
		1	5	22.77	22.71	22.75	24.00
		3	0	23.11	23.12	23.14	24.00
		3	2	23.08	23.16	23.08	24.00
		3	3	23.05	23.10	22.91	24.00
		6	0	22.17	22.16	22.15	23.00
	16QAM	1	0	22.17	22.24	22.17	23.00
		1	2	22.48	22.40	22.37	23.00
		1	5	22.07	21.95	22.15	23.00
		3	0	22.14	22.08	22.14	23.00
		3	2	22.13	22.09	22.07	23.00
		3	3	22.08	22.08	21.92	23.00
		6	0	21.15	21.16	21.15	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19965/1711.5	20175/1732.5	20385/1753.5	
3MHz	QPSK	1	0	22.88	23.01	22.92	24.00
		1	7	23.22	23.22	23.13	24.00
		1	14	22.80	22.76	22.79	24.00
		8	0	22.21	22.24	22.27	23.00
		8	4	22.20	22.26	22.20	23.00
		8	7	22.15	22.21	22.01	23.00
		15	0	22.17	22.20	22.18	23.00
	16QAM	1	0	22.17	22.26	22.20	23.00
		1	7	22.48	22.40	22.41	23.00
		1	14	22.09	21.99	22.18	23.00
		8	0	21.25	21.21	21.26	22.00
		8	4	21.24	21.22	21.19	22.00
		8	7	21.18	21.20	21.05	22.00
		15	0	21.18	21.20	21.18	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19975/1712.5	20175/1732.5	20375/1752.5	
5MHz	QPSK	1	0	22.85	22.99	22.88	24.00
		1	13	23.20	23.18	23.10	24.00
		1	24	22.77	22.71	22.75	24.00
		12	0	22.18	22.19	22.23	23.00
		12	6	22.18	22.22	22.15	23.00
		12	13	22.13	22.19	21.97	23.00

		25	0	22.17	22.19	22.16	23.00
	16QAM	1	0	22.17	22.22	22.17	23.00
		1	13	22.48	22.38	22.38	23.00
		1	24	22.06	21.97	22.14	23.00
		12	0	21.23	21.17	21.23	22.00
		12	6	21.21	21.17	21.15	22.00
		12	13	21.15	21.15	21.01	22.00
		25	0	21.16	21.16	21.13	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	22.87	23.00	22.91	24.00
		1	25	23.23	23.23	23.14	24.00
		1	49	22.79	22.75	22.78	24.00
		25	0	22.21	22.24	22.27	23.00
		25	13	22.21	22.27	22.19	23.00
		25	25	22.15	22.23	22.02	23.00
		50	0	22.21	22.21	22.20	23.00
	16QAM	1	0	22.21	22.25	22.19	23.00
		1	25	22.52	22.42	22.41	23.00
		1	49	22.09	21.99	22.17	23.00
		25	0	21.26	21.22	21.27	22.00
		25	13	21.23	21.21	21.18	22.00
		25	25	21.18	21.20	21.05	22.00
		50	0	21.19	21.21	21.17	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20025/1717.5	20175/1732.5	20325/1747.5	
15MHz	QPSK	1	0	22.86	22.96	22.89	24.00
		1	38	23.21	23.22	23.11	24.00
		1	74	22.76	22.70	22.74	24.00
		36	0	22.19	22.20	22.24	23.00
		36	18	22.18	22.22	22.15	23.00
		36	39	22.12	22.20	21.98	23.00
		75	0	22.19	22.17	22.15	23.00
	16QAM	1	0	22.19	22.23	22.17	23.00
		1	38	22.50	22.39	22.39	23.00
		1	74	22.07	21.95	22.14	23.00
		36	0	21.23	21.20	21.24	22.00
		36	18	21.20	21.16	21.14	22.00
		36	39	21.16	21.16	21.02	22.00
		75	0	21.16	21.16	21.13	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	22.83	22.92	22.86	24.00

		1	50	**23.20**	**23.18**	**23.09**	24.00
		1	99	22.74	22.69	22.71	24.00
		50	0	**22.16**	22.15	**22.20**	23.00
		50	25	**22.16**	**22.18**	22.12	23.00
		50	50	22.09	22.15	21.94	23.00
		100	0	**22.16**	22.12	22.11	23.00
	16QAM	1	0	22.16	22.19	22.12	23.00
		1	50	22.47	22.37	22.35	23.00
		1	99	22.04	21.92	22.12	23.00
		50	0	21.20	21.16	21.21	22.00
		50	25	21.17	21.14	21.11	22.00
		50	50	21.13	21.11	20.98	22.00
		100	0	21.14	21.12	21.10	22.00

LTE Band4							
DSI4				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	18.93	19.08	18.97	20.00
		1	2	19.11	19.20	19.12	20.00
		1	5	18.84	18.80	18.84	20.00
		3	0	19.21	19.20	19.23	20.00
		3	2	19.20	19.21	19.18	20.00
		3	3	19.17	19.10	18.99	20.00
		6	0	19.14	19.19	19.14	20.00
	16QAM	1	0	19.24	19.33	19.24	20.00
		1	2	19.46	19.43	19.38	20.00
		1	5	19.16	19.07	19.05	20.00
		3	0	19.27	19.17	19.23	20.00
		3	2	19.20	19.20	19.17	20.00
		3	3	19.12	19.18	19.01	20.00
		6	0	19.15	19.19	19.15	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19965/1711.5	20175/1732.5	20385/1753.5	
3MHz	QPSK	1	0	18.91	19.01	18.95	20.00
		1	7	19.11	19.20	19.11	20.00
		1	14	18.81	18.78	18.80	20.00
		8	0	19.19	19.16	19.20	20.00
		8	4	19.18	19.17	19.15	20.00
		8	7	19.13	19.06	18.96	20.00
		15	0	19.13	19.12	19.09	20.00
	16QAM	1	0	19.23	19.30	19.19	20.00
		1	7	19.45	19.42	19.35	20.00

		1	14	19.14	19.02	19.03	20.00
		8	0	19.24	19.16	19.21	20.00
		8	4	19.16	19.17	19.13	20.00
		8	7	19.10	19.14	18.98	20.00
		15	0	19.13	19.15	19.12	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19975/1712.5	20175/1732.5	20375/1752.5	
5MHz	QPSK	1	0	18.88	18.99	18.91	20.00
		1	13	19.09	19.16	19.08	20.00
		1	24	18.78	18.73	18.76	20.00
		12	0	19.16	19.11	19.16	20.00
		12	6	19.16	19.13	19.10	20.00
		12	13	19.11	19.04	18.92	20.00
		25	0	19.13	19.11	19.07	20.00
	16QAM	1	0	19.23	19.26	19.16	20.00
		1	13	19.45	19.40	19.32	20.00
		1	24	19.11	19.00	18.99	20.00
		12	0	19.22	19.12	19.18	20.00
		12	6	19.13	19.12	19.09	20.00
		12	13	19.07	19.09	18.94	20.00
		25	0	19.11	19.11	19.07	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	18.90	19.00	18.94	20.00
		1	25	19.12	19.21	19.12	20.00
		1	49	18.80	18.77	18.79	20.00
		25	0	19.19	19.16	19.20	20.00
		25	13	19.19	19.18	19.14	20.00
		25	25	19.13	19.08	18.97	20.00
		50	0	19.17	19.13	19.11	20.00
	16QAM	1	0	19.27	19.29	19.18	20.00
		1	25	19.49	19.44	19.35	20.00
		1	49	19.14	19.02	19.02	20.00
		25	0	19.25	19.17	19.22	20.00
		25	13	19.15	19.16	19.12	20.00
		25	25	19.10	19.14	18.98	20.00
		50	0	19.14	19.16	19.11	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20025/1717.5	20175/1732.5	20325/1747.5	
15MHz	QPSK	1	0	18.89	18.96	18.92	20.00
		1	38	19.10	19.20	19.09	20.00
		1	74	18.77	18.72	18.75	20.00
		36	0	19.17	19.12	19.17	20.00

		36	18	19.16	19.13	19.10	20.00
		36	39	19.10	19.05	18.93	20.00
		75	0	19.15	19.09	19.06	20.00
	16QAM	1	0	19.25	19.27	19.16	20.00
		1	38	19.47	19.41	19.33	20.00
		1	74	19.12	18.98	18.99	20.00
		36	0	19.22	19.15	19.19	20.00
		36	18	19.12	19.11	19.08	20.00
		36	39	19.08	19.10	18.95	20.00
		75	0	19.11	19.11	19.07	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	18.86	18.92	18.89	20.00
		1	50	**19.09**	**19.16**	**19.07**	20.00
		1	99	18.75	18.71	18.72	20.00
		50	0	**19.14**	19.07	**19.13**	20.00
		50	25	**19.14**	**19.09**	19.07	20.00
		50	50	19.07	19.00	18.89	20.00
		100	0	**19.12**	19.04	19.02	20.00
	16QAM	1	0	19.22	19.23	19.11	20.00
		1	50	19.44	19.39	19.29	20.00
		1	99	19.09	18.95	18.97	20.00
		50	0	19.19	19.11	19.16	20.00
		50	25	19.09	19.09	19.05	20.00
		50	50	19.05	19.05	18.91	20.00
		100	0	19.09	19.07	19.04	20.00

LTE Band5							
DSI1&DSI4				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	23.13	23.17	23.20	24.50
		1	2	23.36	23.23	23.31	24.50
		1	5	23.13	23.22	23.19	24.50
		3	0	24.22	24.25	24.29	24.50
		3	2	24.18	24.26	24.24	24.50
		3	3	24.28	24.25	24.24	24.50
		6	0	23.27	23.36	23.36	23.50
	16QAM	1	0	23.35	23.36	23.43	23.50
		1	2	23.34	23.41	23.42	23.50
		1	5	23.34	23.39	23.35	23.50
		3	0	23.25	23.16	23.25	23.50
		3	2	23.29	23.27	23.25	23.50

		3	3	23.28	23.26	23.19	23.50
		6	0	22.30	22.39	22.36	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20415/825.5	20525/836.5	20635/847.5	
3MHz	QPSK	1	0	23.14	23.20	23.22	24.50
		1	7	23.35	23.27	23.36	24.50
		1	14	23.15	23.26	23.22	24.50
		8	0	23.32	23.37	23.42	23.50
		8	4	23.31	23.37	23.35	23.50
		8	7	23.38	23.38	23.35	23.50
		15	0	23.31	23.41	23.41	23.50
	16QAM	1	0	23.39	23.37	23.45	23.50
		1	7	23.38	23.43	23.46	23.50
		1	14	23.36	23.43	23.37	23.50
		8	0	22.37	22.30	22.38	22.50
		8	4	22.39	22.39	22.36	22.50
		8	7	22.38	22.38	22.32	22.50
		15	0	22.34	22.44	22.38	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20425/826.5	20525/836.5	20625/846.5	
5MHz	QPSK	1	0	23.13	23.16	23.20	24.50
		1	13	23.33	23.26	23.33	24.50
		1	24	23.12	23.21	23.18	24.50
		12	0	23.30	23.33	23.39	23.50
		12	6	23.28	23.32	23.31	23.50
		12	13	23.35	23.35	23.31	23.50
		25	0	23.29	23.37	23.36	23.50
	16QAM	1	0	23.37	23.35	23.43	23.50
		1	13	23.36	23.40	23.44	23.50
		1	24	23.34	23.39	23.34	23.50
		12	0	22.34	22.28	22.35	22.50
		12	6	22.36	22.34	22.32	22.50
		12	13	22.36	22.34	22.29	22.50
		25	0	22.31	22.39	22.34	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	23.10	23.12	23.17	24.50
		1	25	**23.32**	**23.22**	**23.31**	24.50
		1	49	23.10	23.20	23.15	24.50
		25	0	23.27	23.28	**23.35**	23.50
		25	13	23.26	23.28	23.28	23.50
		25	25	**23.32**	**23.30**	23.27	23.50
		50	0	23.26	**23.32**	**23.32**	23.50

	16QAM	1	0	23.34	23.31	23.38	23.50
		1	25	23.33	23.38	23.40	23.50
		1	49	23.31	23.36	23.32	23.50
		25	0	22.31	22.24	22.32	22.50
		25	13	22.33	22.32	22.29	22.50
		25	25	22.33	22.29	22.25	22.50
		50	0	22.29	22.35	22.31	22.50

LTE Band5							
DSI2				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	24.48	24.52	24.50	25.50
		1	2	24.66	24.57	24.59	25.50
		1	5	24.51	24.58	24.51	25.50
		3	0	24.59	24.60	24.64	25.50
		3	2	24.55	24.64	24.62	25.50
		3	3	24.63	24.64	24.60	25.50
		6	0	23.66	23.70	23.71	24.50
	16QAM	1	0	23.73	23.74	23.79	24.50
		1	2	23.88	23.83	23.84	24.50
		1	5	23.74	23.81	23.72	24.50
		3	0	23.56	23.54	23.60	24.50
		3	2	23.60	23.60	23.59	24.50
		3	3	23.66	23.61	23.55	24.50
		6	0	22.69	22.71	22.70	23.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20415/825.5	20525/836.5	20635/847.5	
3MHz	QPSK	1	0	24.49	24.55	24.52	25.50
		1	7	24.65	24.61	24.64	25.50
		1	14	24.53	24.62	24.54	25.50
		8	0	23.69	23.72	23.77	24.50
		8	4	23.68	23.75	23.73	24.50
		8	7	23.73	23.77	23.71	24.50
		15	0	23.70	23.75	23.76	24.50
	16QAM	1	0	23.77	23.75	23.81	24.50
		1	7	23.92	23.85	23.88	24.50
		1	14	23.76	23.85	23.74	24.50
		8	0	22.68	22.68	22.73	23.50
		8	4	22.70	22.72	22.70	23.50
		8	7	22.76	22.73	22.68	23.50
		15	0	22.73	22.76	22.72	23.50

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20425/826.5	20525/836.5	20625/846.5	
5MHz	QPSK	1	0	24.48	24.51	24.50	25.50
		1	13	24.63	24.60	24.61	25.50
		1	24	24.50	24.57	24.50	25.50
		12	0	23.67	23.68	23.74	24.50
		12	6	23.65	23.70	23.69	24.50
		12	13	23.70	23.74	23.67	24.50
		25	0	23.68	23.71	23.71	24.50
	16QAM	1	0	23.75	23.73	23.79	24.50
		1	13	23.90	23.82	23.86	24.50
		1	24	23.74	23.81	23.71	24.50
		12	0	22.65	22.66	22.70	23.50
		12	6	22.67	22.67	22.66	23.50
		12	13	22.74	22.69	22.65	23.50
		25	0	22.70	22.71	22.68	23.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	24.45	24.47	24.47	25.50
		1	25	**24.62**	**24.56**	**24.59**	25.50
		1	49	24.48	**24.56**	24.47	25.50
		25	0	23.64	23.63	**23.70**	24.50
		25	13	23.63	23.66	23.66	24.50
		25	25	**23.67**	**23.69**	23.63	24.50
		50	0	23.65	23.66	**23.67**	24.50
	16QAM	1	0	23.72	23.69	23.74	24.50
		1	25	23.87	23.80	23.82	24.50
		1	49	23.71	23.78	23.69	24.50
		25	0	22.62	22.62	22.67	23.50
		25	13	22.64	22.65	22.63	23.50
		25	25	22.71	22.64	22.61	23.50
		50	0	22.68	22.67	22.65	23.50

LTE Band7							
DSI1				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	22.09	22.26	22.25	24.00
		1	13	22.50	22.68	22.61	24.00
		1	24	22.21	22.36	22.33	24.00
		12	0	21.95	22.09	22.12	23.00
		12	6	22.02	22.18	22.19	23.00
		12	13	22.08	22.14	22.03	23.00

		25	0	22.01	22.12	22.10	23.00
	16QAM	1	0	22.03	21.96	21.96	23.00
		1	13	22.27	22.40	22.34	23.00
		1	24	22.02	22.10	22.05	23.00
		12	0	20.90	21.06	21.10	22.00
		12	6	21.02	21.10	21.18	22.00
		12	13	21.02	21.10	21.02	22.00
		25	0	20.97	21.06	21.05	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	22.11	22.27	22.28	24.00
		1	25	22.53	22.73	22.65	24.00
		1	49	22.23	22.40	22.36	24.00
		25	0	21.98	22.14	22.16	23.00
		25	13	22.05	22.23	22.23	23.00
		25	25	22.10	22.18	22.08	23.00
		50	0	22.05	22.14	22.14	23.00
	16QAM	1	0	22.07	21.99	21.98	23.00
		1	25	22.31	22.44	22.37	23.00
		1	49	22.05	22.12	22.08	23.00
		25	0	20.93	21.11	21.14	22.00
		25	13	21.04	21.14	21.21	22.00
		25	25	21.05	21.15	21.06	22.00
		50	0	21.00	21.11	21.09	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	22.10	22.23	22.26	24.00
		1	38	22.51	22.72	22.62	24.00
		1	74	22.20	22.35	22.32	24.00
		36	0	21.96	22.10	22.13	23.00
		36	18	22.02	22.18	22.19	23.00
		36	39	22.07	22.15	22.04	23.00
		75	0	22.03	22.10	22.09	23.00
	16QAM	1	0	22.05	21.97	21.96	23.00
		1	38	22.29	22.41	22.35	23.00
		1	74	22.03	22.08	22.05	23.00
		36	0	20.90	21.09	21.11	22.00
		36	18	21.01	21.09	21.17	22.00
		36	39	21.03	21.11	21.03	22.00
		75	0	20.97	21.06	21.05	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	22.07	22.19	22.23	24.00

		1	50	**22.50**	**22.68**	**22.60**	24.00
		1	99	22.18	22.34	22.29	24.00
		50	0	21.93	22.05	22.09	23.00
		50	25	22.00	**22.14**	**22.16**	23.00
		50	50	**22.04**	22.10	22.00	23.00
		100	0	22.00	**22.05**	**22.05**	23.00
	16QAM	1	0	22.02	21.93	21.91	23.00
		1	50	22.26	22.39	22.31	23.00
		1	99	22.00	22.05	22.03	23.00
		50	0	20.87	21.05	21.08	22.00
		50	25	20.98	21.07	21.14	22.00
		50	50	21.00	21.06	20.99	22.00
		100	0	20.95	21.02	21.02	22.00

LTE Band7							
DSI2				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	22.65	22.89	22.90	24.50
		1	13	23.10	23.23	23.30	24.50
		1	24	22.84	23.00	23.07	24.50
		12	0	22.03	22.23	22.33	23.50
		12	6	22.13	22.33	22.37	23.50
		12	13	22.18	22.29	22.25	23.50
		25	0	22.12	22.28	22.27	23.50
	16QAM	1	0	22.01	22.09	22.16	23.50
		1	13	22.49	22.45	22.56	23.50
		1	24	22.18	22.28	22.33	23.50
		12	0	21.09	21.22	21.29	22.50
		12	6	21.18	21.30	21.37	22.50
		12	13	21.17	21.27	21.21	22.50
		25	0	21.13	21.22	21.24	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	22.67	22.90	22.93	24.50
		1	25	23.13	23.28	23.34	24.50
		1	49	22.86	23.04	23.10	24.50
		25	0	22.06	22.28	22.37	23.50
		25	13	22.16	22.38	22.41	23.50
		25	25	22.20	22.33	22.30	23.50
		50	0	22.16	22.30	22.31	23.50
	16QAM	1	0	22.05	22.12	22.18	23.50
		1	25	22.53	22.49	22.59	23.50

		1	49	22.21	22.30	22.36	23.50
		25	0	21.12	21.27	21.33	22.50
		25	13	21.20	21.34	21.40	22.50
		25	25	21.20	21.32	21.25	22.50
		50	0	21.16	21.27	21.28	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	22.66	22.86	22.91	24.50
		1	38	23.11	23.27	23.31	24.50
		1	74	22.83	22.99	23.06	24.50
		36	0	22.04	22.24	22.34	23.50
		36	18	22.13	22.33	22.37	23.50
		36	39	22.17	22.30	22.26	23.50
		75	0	22.14	22.26	22.26	23.50
	16QAM	1	0	22.03	22.10	22.16	23.50
		1	38	22.51	22.46	22.57	23.50
		1	74	22.19	22.26	22.33	23.50
		36	0	21.09	21.25	21.30	22.50
		36	18	21.17	21.29	21.36	22.50
		36	39	21.18	21.28	21.22	22.50
		75	0	21.13	21.22	21.24	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	22.63	22.82	22.88	24.50
		1	50	**23.10**	**23.23**	**23.29**	24.50
		1	99	22.81	22.98	23.03	24.50
		50	0	22.01	22.19	22.30	23.50
		50	25	22.11	**22.29**	**22.34**	23.50
		50	50	**22.14**	22.25	22.22	23.50
		100	0	22.11	22.21	**22.52**	23.50
	16QAM	1	0	22.00	22.06	22.11	23.50
		1	50	22.48	22.44	22.53	23.50
		1	99	22.16	22.23	22.31	23.50
		50	0	21.06	21.21	21.27	22.50
		50	25	21.14	21.27	21.33	22.50
		50	50	21.15	21.23	21.18	22.50
		100	0	21.11	21.18	21.21	22.50

LTE Band7							
DSI4				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	17.68	17.80	17.81	19.50
		1	13	18.15	18.16	18.26	19.50
		1	24	17.87	17.92	17.97	19.50
		12	0	17.97	18.16	18.25	19.50
		12	6	18.06	18.21	18.24	19.50
		12	13	18.08	18.22	18.15	19.50
		25	0	18.05	18.20	18.19	19.50
	16QAM	1	0	18.03	18.16	18.20	19.50
		1	13	18.49	18.66	18.55	19.50
		1	24	18.22	18.30	18.29	19.50
		12	0	18.02	18.21	18.25	19.50
		12	6	18.12	18.25	18.31	19.50
		12	13	18.10	18.26	18.23	19.50
		25	0	18.04	18.22	18.23	19.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	17.70	17.81	17.84	19.50
		1	25	18.18	18.21	18.30	19.50
		1	49	17.89	17.96	18.00	19.50
		25	0	18.00	18.21	18.29	19.50
		25	13	18.09	18.26	18.28	19.50
		25	25	18.10	18.26	18.20	19.50
		50	0	18.09	18.22	18.23	19.50
	16QAM	1	0	18.07	18.19	18.22	19.50
		1	25	18.53	18.70	18.58	19.50
		1	49	18.25	18.32	18.32	19.50
		25	0	18.05	18.26	18.29	19.50
		25	13	18.14	18.29	18.34	19.50
		25	25	18.13	18.31	18.27	19.50
		50	0	18.07	18.27	18.27	19.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	17.69	17.77	17.82	19.50
		1	38	18.16	18.20	18.27	19.50
		1	74	17.86	17.91	17.96	19.50
		36	0	17.98	18.17	18.26	19.50
		36	18	18.06	18.21	18.24	19.50
		36	39	18.07	18.23	18.16	19.50

		75	0	18.07	18.18	18.18	19.50
	16QAM	1	0	18.05	18.17	18.20	19.50
		1	38	18.51	18.67	18.56	19.50
		1	74	18.23	18.28	18.29	19.50
		36	0	18.02	18.24	18.26	19.50
		36	18	18.11	18.24	18.30	19.50
		36	39	18.11	18.27	18.24	19.50
		75	0	18.04	18.22	18.23	19.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	17.66	17.73	17.79	19.50
		1	50	**18.15**	**18.16**	**18.25**	19.50
		1	99	17.84	17.90	17.93	19.50
		50	0	17.95	18.12	**18.22**	19.50
		50	25	**18.04**	18.17	18.21	19.50
		50	50	**18.04**	**18.18**	18.12	19.50
		100	0	18.04	18.13	**18.14**	19.50
	16QAM	1	0	18.02	18.13	18.15	19.50
		1	50	18.48	18.65	18.52	19.50
		1	99	18.20	18.25	18.27	19.50
		50	0	17.99	18.20	18.23	19.50
		50	25	18.08	18.22	18.27	19.50
		50	50	18.08	18.22	18.20	19.50
		100	0	18.02	18.18	18.20	19.50

LTE Band 13							
Full Power&DSI1&DSI2&DSI4				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	22.74	22.75	22.74	24.50
		1	13	22.92	22.95	22.93	24.50
		1	24	22.85	22.84	22.86	24.50
		12	0	21.90	21.92	21.91	23.50
		12	6	21.95	21.97	21.96	23.50
		12	13	21.87	21.89	21.88	23.50
		25	0	21.89	21.91	21.90	23.50
	16QAM	1	0	22.01	22.02	22.03	23.50
		1	13	22.20	22.19	22.21	23.50
		1	24	22.03	22.03	22.02	23.50
		12	0	20.95	20.96	20.95	22.50
		12	6	20.99	20.98	20.99	22.50
		12	13	20.89	20.91	20.90	22.50
		25	0	20.93	20.95	20.94	22.50

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				/	23230/782	/	
10MHz	QPSK	1	0	/	22.71	/	24.50
		1	25	/	**22.91**	/	24.50
		1	49	/	22.83	/	24.50
		25	0	/	21.87	/	23.50
		25	13	/	**21.93**	/	23.50
		25	25	/	21.84	/	23.50
		50	0	/	**21.86**	/	23.50
	16QAM	1	0	/	21.98	/	23.50
		1	25	/	22.17	/	23.50
		1	49	/	22.00	/	23.50
		25	0	/	20.92	/	22.50
		25	13	/	20.96	/	22.50
		25	25	/	20.86	/	22.50
		50	0	/	20.91	/	22.50

LTE Band 26							
Full Power				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	22.96	23.00	22.98	24.50
		1	2	23.18	23.05	23.09	24.50
		1	5	23.04	23.03	23.02	24.50
		3	0	23.06	23.09	23.12	24.50
		3	2	23.08	23.14	23.14	24.50
		3	3	23.15	23.11	23.06	24.50
		6	0	22.14	22.17	22.21	23.50
	16QAM	1	0	22.34	22.29	22.22	23.50
		1	2	22.46	22.37	22.36	23.50
		1	5	22.28	22.34	22.22	23.50
		3	0	22.04	21.99	22.12	23.50
		3	2	22.08	22.10	22.16	23.50
		3	3	22.11	22.10	22.03	23.50
		6	0	21.16	21.16	21.17	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26705/815.5	26865/831.5	27025/847.5	
3MHz	QPSK	1	0	22.95	23.02	22.97	24.50
		1	7	23.14	23.04	23.10	24.50
		1	14	23.04	23.03	23.02	24.50
		8	0	22.13	22.16	22.21	23.50
		8	4	22.18	22.20	22.21	23.50
		8	7	22.23	22.20	22.12	23.50

		15	0	22.14	22.20	22.22	23.50
	16QAM	1	0	22.34	22.27	22.22	23.50
		1	7	22.46	22.35	22.37	23.50
		1	14	22.27	22.36	22.21	23.50
		8	0	21.13	21.08	21.21	22.50
		8	4	21.16	21.18	21.24	22.50
		8	7	21.18	21.17	21.12	22.50
		15	0	21.17	21.16	21.15	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26715/816.5	26865/831.5	27015/846.5	
5MHz	QPSK	1	0	22.97	23.03	23.00	24.50
		1	13	23.17	23.09	23.14	24.50
		1	24	23.06	23.07	23.05	24.50
		12	0	22.16	22.21	22.25	23.50
		12	6	22.21	22.25	22.25	23.50
		12	13	22.25	22.24	22.17	23.50
		25	0	22.18	22.22	22.26	23.50
	16QAM	1	0	22.38	22.30	22.24	23.50
		1	13	22.50	22.39	22.40	23.50
		1	24	22.30	22.38	22.24	23.50
		12	0	21.16	21.13	21.25	22.50
		12	6	21.18	21.22	21.27	22.50
		12	13	21.21	21.22	21.16	22.50
		25	0	21.20	21.21	21.19	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26740/819	26865/831.5	26990/844	
10MHz	QPSK	1	0	22.96	22.99	22.98	24.50
		1	25	23.15	23.08	23.11	24.50
		1	49	23.03	23.02	23.01	24.50
		25	0	22.14	22.17	22.22	23.50
		25	13	22.18	22.20	22.21	23.50
		25	25	22.22	22.21	22.13	23.50
		50	0	22.16	22.18	22.21	23.50
	16QAM	1	0	22.36	22.28	22.22	23.50
		1	25	22.48	22.36	22.38	23.50
		1	49	22.28	22.34	22.21	23.50
		25	0	21.13	21.11	21.22	22.50
		25	13	21.15	21.17	21.23	22.50
		25	25	21.19	21.18	21.13	22.50
		50	0	21.17	21.16	21.15	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26765/821.5	26865/831.5	26965/841.5	
15MHz	QPSK	1	0	22.93	22.95	22.95	24.50

		1	38	**23.14**	**23.04**	**23.09**	24.50
		1	74	23.01	23.01	22.98	24.50
		36	0	22.11	22.12	**22.18**	23.50
		36	18	22.16	**22.16**	**22.18**	23.50
		36	39	**22.19**	**22.16**	22.09	23.50
		75	0	22.13	22.13	**22.17**	23.50
	16QAM	1	0	22.33	22.24	22.17	23.50
		1	38	22.45	22.34	22.34	23.50
		1	74	22.25	22.31	22.19	23.50
		36	0	21.10	21.07	21.19	22.50
		36	18	21.12	21.15	21.20	22.50
		36	39	21.16	21.13	21.09	22.50
		75	0	21.15	21.12	21.12	22.50

LTE Band38							
DSI1				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	22.19	22.25	22.29	24.00
		1	13	22.51	22.60	22.73	24.00
		1	24	22.25	22.36	22.47	24.00
		12	0	21.96	22.02	22.12	23.00
		12	6	22.03	22.11	22.22	23.00
		12	13	22.02	22.10	22.19	23.00
		25	0	22.00	22.11	22.22	23.00
	16QAM	1	0	21.83	21.98	21.99	23.00
		1	13	22.22	22.30	22.39	23.00
		1	24	21.93	22.06	22.09	23.00
		12	0	21.05	21.05	21.15	22.00
		12	6	21.11	21.14	21.28	22.00
		12	13	21.01	21.12	21.28	22.00
		25	0	21.08	21.11	21.21	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	22.21	22.26	22.32	24.00
		1	25	22.54	22.65	22.77	24.00
		1	49	22.27	22.40	22.50	24.00
		25	0	21.99	22.07	22.16	23.00
		25	13	22.06	22.16	22.26	23.00
		25	25	22.04	22.14	22.24	23.00
		50	0	22.04	22.13	22.26	23.00
	16QAM	1	0	21.87	22.01	22.01	23.00
		1	25	22.26	22.34	22.42	23.00

		1	49	21.96	22.08	22.12	23.00
		25	0	21.08	21.10	21.19	22.00
		25	13	21.13	21.18	21.31	22.00
		25	25	21.04	21.17	21.32	22.00
		50	0	21.11	21.16	21.25	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	22.20	22.22	22.30	24.00
		1	38	22.52	22.64	22.74	24.00
		1	74	22.24	22.35	22.46	24.00
		36	0	21.97	22.03	22.13	23.00
		36	18	22.03	22.11	22.22	23.00
		36	39	22.01	22.11	22.20	23.00
		75	0	22.02	22.09	22.21	23.00
	16QAM	1	0	21.85	21.99	21.99	23.00
		1	38	22.24	22.31	22.40	23.00
		1	74	21.94	22.04	22.09	23.00
		36	0	21.05	21.08	21.16	22.00
		36	18	21.10	21.13	21.27	22.00
		36	39	21.02	21.13	21.29	22.00
		75	0	21.08	21.11	21.21	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	22.17	22.18	22.27	24.00
		1	50	**22.51**	**22.60**	**22.72**	24.00
		1	99	22.22	22.34	22.43	24.00
		50	0	21.94	21.98	22.09	23.00
		50	25	**22.01**	**22.07**	**22.19**	23.00
		50	50	21.98	22.06	22.16	23.00
		100	0	21.99	22.04	**22.17**	23.00
	16QAM	1	0	21.82	21.95	21.94	23.00
		1	50	22.21	22.29	22.36	23.00
		1	99	21.91	22.01	22.07	23.00
		50	0	21.02	21.04	21.13	22.00
		50	25	21.07	21.11	21.24	22.00
		50	50	20.99	21.08	21.25	22.00
		100	0	21.06	21.07	21.18	22.00

LTE Band38							
DSI2				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	22.70	22.79	22.81	24.50

		1	13	23.11	23.12	23.22	24.50
		1	24	22.80	22.85	22.97	24.50
		12	0	22.07	22.09	22.17	23.50
		12	6	22.09	22.15	22.26	23.50
		12	13	22.08	22.13	22.23	23.50
		25	0	22.09	22.18	22.28	23.50
	16QAM	1	0	21.91	21.92	22.06	23.50
		1	13	22.30	22.34	22.44	23.50
		1	24	21.98	22.08	22.15	23.50
		12	0	21.11	21.14	21.23	22.50
		12	6	21.18	21.21	21.33	22.50
		12	13	21.08	21.16	21.28	22.50
		25	0	21.14	21.18	21.25	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	22.72	22.80	22.84	24.50
		1	25	23.14	23.17	23.26	24.50
		1	49	22.82	22.89	23.00	24.50
		25	0	22.10	22.14	22.21	23.50
		25	13	22.12	22.20	22.30	23.50
		25	25	22.10	22.17	22.28	23.50
		50	0	22.13	22.20	22.32	23.50
	16QAM	1	0	21.95	21.95	22.08	23.50
		1	25	22.34	22.38	22.47	23.50
		1	49	22.01	22.10	22.18	23.50
		25	0	21.14	21.19	21.27	22.50
		25	13	21.20	21.25	21.36	22.50
		25	25	21.11	21.21	21.32	22.50
		50	0	21.17	21.23	21.29	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	22.71	22.76	22.82	24.50
		1	38	23.12	23.16	23.23	24.50
		1	74	22.79	22.84	22.96	24.50
		36	0	22.08	22.10	22.18	23.50
		36	18	22.09	22.15	22.26	23.50
		36	39	22.07	22.14	22.24	23.50
		75	0	22.11	22.16	22.27	23.50
	16QAM	1	0	21.93	21.93	22.06	23.50
		1	38	22.32	22.35	22.45	23.50
		1	74	21.99	22.06	22.15	23.50
		36	0	21.11	21.17	21.24	22.50
		36	18	21.17	21.20	21.32	22.50

		36	39	21.09	21.17	21.29	22.50
		75	0	21.14	21.18	21.25	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	22.68	22.72	22.79	24.50
		1	50	**23.11**	**23.12**	**23.21**	24.50
		1	99	22.77	22.83	22.93	24.50
		50	0	22.05	22.05	22.14	23.50
		50	25	**22.07**	**22.11**	**22.23**	23.50
		50	50	22.04	22.09	22.20	23.50
		100	0	22.08	22.11	**22.23**	23.50
	16QAM	1	0	21.90	21.89	22.01	23.50
		1	50	22.29	22.33	22.41	23.50
		1	99	21.96	22.03	22.13	23.50
		50	0	21.08	21.13	21.21	22.50
		50	25	21.14	21.18	21.29	22.50
		50	50	21.06	21.12	21.25	22.50
		100	0	21.12	21.14	21.22	22.50

LTE Band38							
DSI4				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	18.86	18.90	18.95	20.50
		1	13	19.24	19.25	19.35	20.50
		1	24	18.95	18.98	19.06	20.50
		12	0	19.09	19.11	19.18	20.50
		12	6	19.13	19.19	19.23	20.50
		12	13	19.12	19.17	19.25	20.50
		25	0	19.09	19.16	19.20	20.50
	16QAM	1	0	19.06	19.08	19.17	20.50
		1	13	19.48	19.49	19.59	20.50
		1	24	19.16	19.19	19.31	20.50
		12	0	19.16	19.15	19.25	20.50
		12	6	19.24	19.21	19.31	20.50
		12	13	19.15	19.22	19.28	20.50
		25	0	19.16	19.17	19.26	20.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	18.88	18.91	18.98	20.50
		1	25	19.27	19.30	19.39	20.50
		1	49	18.97	19.02	19.09	20.50
		25	0	19.12	19.16	19.22	20.50

		25	13	19.16	19.24	19.27	20.50
		25	25	19.14	19.21	19.30	20.50
		50	0	19.13	19.18	19.24	20.50
	16QAM	1	0	19.10	19.11	19.19	20.50
		1	25	19.52	19.53	19.62	20.50
		1	49	19.19	19.21	19.34	20.50
		25	0	19.19	19.20	19.29	20.50
		25	13	19.26	19.25	19.34	20.50
		25	25	19.18	19.27	19.32	20.50
		50	0	19.19	19.22	19.30	20.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	18.87	18.87	18.96	20.50
		1	38	19.25	19.29	19.36	20.50
		1	74	18.94	18.97	19.05	20.50
		36	0	19.10	19.12	19.19	20.50
		36	18	19.13	19.19	19.23	20.50
		36	39	19.11	19.18	19.26	20.50
		75	0	19.11	19.14	19.19	20.50
	16QAM	1	0	19.08	19.09	19.17	20.50
		1	38	19.50	19.50	19.60	20.50
		1	74	19.17	19.17	19.31	20.50
		36	0	19.16	19.18	19.26	20.50
		36	18	19.23	19.20	19.30	20.50
		36	39	19.16	19.23	19.29	20.50
		75	0	19.16	19.17	19.26	20.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	18.84	18.83	18.93	20.50
		1	50	**19.24**	**19.25**	**19.34**	20.50
		1	99	18.92	18.96	19.02	20.50
		50	0	19.07	19.07	19.15	20.50
		50	25	**19.11**	**19.15**	19.20	20.50
		50	50	19.08	19.13	**19.22**	20.50
		100	0	19.08	19.09	**19.15**	20.50
	16QAM	1	0	19.05	19.05	19.12	20.50
		1	50	19.47	19.48	19.56	20.50
		1	99	19.14	19.14	19.29	20.50
		50	0	19.13	19.14	19.23	20.50
		50	25	19.20	19.18	19.27	20.50
		50	50	19.13	19.18	19.25	20.50
		100	0	19.14	19.13	19.23	20.50

LTE Band41									
DSI1				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	22.08	22.22	22.30	22.42	22.44	24.00
		1	13	22.23	22.50	22.56	22.75	22.64	24.00
		1	24	22.10	22.32	22.34	22.53	22.36	24.00
		12	0	21.77	21.99	22.03	22.23	22.13	23.00
		12	6	21.84	22.02	22.09	22.23	22.18	23.00
		12	13	21.84	22.06	22.05	22.21	22.11	23.00
		25	0	21.86	22.09	22.09	22.23	22.18	23.00
	16QAM	1	0	21.64	21.85	22.01	22.13	22.45	23.00
		1	13	21.99	22.15	22.33	22.47	22.69	23.00
		1	24	21.75	22.08	22.03	22.25	22.49	23.00
		12	0	20.80	21.01	21.06	21.27	21.46	22.00
		12	6	20.88	21.07	21.12	21.35	21.48	22.00
		12	13	20.88	21.08	21.09	21.28	21.49	22.00
		25	0	20.84	21.06	21.12	21.30	21.49	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)					Tune-up
				39700/2501	40160/2547	40620/2593	41080/2639	41540/2685	
10MHz	QPSK	1	0	22.10	22.23	22.33	22.44	22.45	24.00
		1	25	22.26	22.55	22.60	22.78	22.69	24.00
		1	49	22.12	22.36	22.37	22.55	22.40	24.00
		25	0	21.80	22.04	22.07	22.26	22.18	23.00
		25	13	21.87	22.07	22.13	22.26	22.23	23.00
		25	25	21.86	22.10	22.10	22.23	22.15	23.00
		50	0	21.90	22.11	22.13	22.27	22.20	23.00
	16QAM	1	0	21.68	21.88	22.03	22.17	22.48	23.00
		1	25	22.03	22.19	22.36	22.51	22.73	23.00
		1	49	21.78	22.10	22.06	22.28	22.51	23.00
		25	0	20.83	21.06	21.10	21.30	21.51	22.00
		25	13	20.90	21.11	21.15	21.37	21.52	22.00
		25	25	20.91	21.13	21.13	21.31	21.54	22.00
		50	0	20.87	21.11	21.16	21.33	21.54	22.00
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	22.09	22.19	22.31	22.43	22.41	24.00
		1	38	22.24	22.54	22.57	22.76	22.68	24.00
		1	74	22.09	22.31	22.33	22.52	22.35	24.00
		36	0	21.78	22.00	22.04	22.24	22.14	23.00
		36	18	21.84	22.02	22.09	22.23	22.18	23.00
		36	39	21.83	22.07	22.06	22.20	22.12	23.00

		75	0	21.88	22.07	22.08	22.25	22.16	23.00
	16QAM	1	0	21.66	21.86	22.01	22.15	22.46	23.00
		1	38	22.01	22.16	22.34	22.49	22.70	23.00
		1	74	21.76	22.06	22.03	22.26	22.47	23.00
		36	0	20.80	21.04	21.07	21.27	21.49	22.00
		36	18	20.87	21.06	21.11	21.34	21.47	22.00
		36	39	20.89	21.09	21.10	21.29	21.50	22.00
		75	0	20.84	21.06	21.12	21.30	21.49	22.00
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	22.06	22.15	22.28	22.40	22.37	24.00
		1	50	**22.23**	**22.50**	**22.55**	**22.75**	**22.64**	24.00
		1	99	22.07	22.30	22.30	22.50	22.34	24.00
		50	0	21.75	21.95	22.00	**22.21**	22.09	23.00
		50	25	**21.82**	21.98	**22.06**	**22.21**	**22.14**	23.00
		50	50	21.80	**22.02**	22.02	22.17	22.07	23.00
		100	0	21.85	22.02	22.04	**22.22**	**22.11**	23.00
	16QAM	1	0	21.63	21.82	21.96	22.12	22.42	23.00
		1	50	21.98	22.14	22.30	22.46	22.68	23.00
		1	99	21.73	22.03	22.01	22.23	22.44	23.00
		50	0	20.77	21.00	21.04	21.24	21.45	22.00
		50	25	20.84	21.04	21.08	21.31	21.45	22.00
		50	50	20.86	21.04	21.06	21.26	21.45	22.00
		100	0	20.82	21.02	21.09	21.28	21.45	22.00

LTE Band41									
DSI2				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	22.54	22.75	22.83	22.90	22.94	24.50
		1	13	22.83	23.06	23.06	23.20	23.10	24.50
		1	24	22.60	22.88	22.84	22.95	22.78	24.50
		12	0	21.79	22.07	22.05	22.16	22.11	23.50
		12	6	21.87	22.07	22.09	22.19	22.17	23.50
		12	13	21.91	22.12	22.07	22.19	22.08	23.50
		25	0	21.90	22.15	22.09	22.21	22.12	23.50
	16QAM	1	0	21.66	21.89	22.03	22.07	22.03	23.50
		1	13	22.02	22.25	22.31	22.39	22.25	23.50
		1	24	21.79	22.11	22.11	22.14	22.01	23.50
		12	0	20.77	21.12	21.10	21.28	21.16	22.50
		12	6	20.94	21.12	21.13	21.31	21.19	22.50
		12	13	20.91	21.13	21.10	21.24	21.16	22.50
		25	0	20.88	21.13	21.12	21.24	21.13	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	22.56	22.76	22.86	22.92	22.95	24.50
		1	25	22.86	23.11	23.10	23.23	23.15	24.50
		1	49	22.62	22.92	22.87	22.97	22.82	24.50
		25	0	21.82	22.12	22.09	22.19	22.16	23.50
		25	13	21.90	22.12	22.13	22.22	22.22	23.50
		25	25	21.93	22.16	22.12	22.21	22.12	23.50
		50	0	21.94	22.17	22.13	22.25	22.14	23.50
	16QAM	1	0	21.70	21.92	22.05	22.11	22.06	23.50
		1	25	22.06	22.29	22.34	22.43	22.29	23.50
		1	49	21.82	22.13	22.14	22.17	22.03	23.50
		25	0	20.80	21.17	21.14	21.31	21.21	22.50
		25	13	20.96	21.16	21.16	21.33	21.23	22.50
		25	25	20.94	21.18	21.14	21.27	21.21	22.50
		50	0	20.91	21.18	21.16	21.27	21.18	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	22.55	22.72	22.84	22.91	22.91	24.50
		1	38	22.84	23.10	23.07	23.21	23.14	24.50
		1	74	22.59	22.87	22.83	22.94	22.77	24.50
		36	0	21.80	22.08	22.06	22.17	22.12	23.50
		36	18	21.87	22.07	22.09	22.19	22.17	23.50
		36	39	21.90	22.13	22.08	22.18	22.09	23.50
		75	0	21.92	22.13	22.08	22.23	22.10	23.50
	16QAM	1	0	21.68	21.90	22.03	22.09	22.04	23.50
		1	38	22.04	22.26	22.32	22.41	22.26	23.50
		1	74	21.80	22.09	22.11	22.15	21.99	23.50
		36	0	20.77	21.15	21.11	21.28	21.19	22.50
		36	18	20.93	21.11	21.12	21.30	21.18	22.50
		36	39	20.92	21.14	21.11	21.25	21.17	22.50
		75	0	20.88	21.13	21.12	21.24	21.13	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	22.68	22.81	22.88	22.87	24.50
		1	50	**22.83**	**23.06**	**23.05**	**23.20**	**23.10**	24.50
		1	99	22.57	22.86	22.80	22.92	22.76	24.50
		50	0	21.77	22.03	22.02	22.14	22.07	23.50
		50	25	21.85	22.03	**22.06**	**22.17**	**22.13**	23.50
		50	50	**21.87**	**22.08**	22.04	22.15	22.04	23.50
		100	0	21.89	22.08	22.04	**22.20**	**22.05**	23.50
	16QAM	1	0	21.65	21.86	21.98	22.06	22.00	23.50

		1	50	22.01	22.24	22.28	22.38	22.24	23.50
		1	99	21.77	22.06	22.09	22.12	21.96	23.50
		50	0	20.74	21.11	21.08	21.25	21.15	22.50
		50	25	20.90	21.09	21.09	21.27	21.16	22.50
		50	50	20.89	21.09	21.07	21.22	21.12	22.50
		100	0	20.86	21.09	21.09	21.22	21.09	22.50

LTE Band41									
DSI4				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	19.58	19.87	19.94	20.02	20.00	21.00
		1	13	19.95	20.16	20.19	20.29	20.17	21.00
		1	24	19.74	19.98	19.95	20.03	19.90	21.00
		12	0	19.84	20.09	20.14	20.20	20.13	21.00
		12	6	19.91	20.11	20.12	20.20	20.13	21.00
		12	13	19.88	20.29	20.12	20.21	20.09	21.00
		25	0	19.85	20.18	20.17	20.18	20.18	21.00
	16QAM	1	0	19.78	20.00	20.18	20.21	20.19	21.00
		1	13	20.17	20.39	20.44	20.51	20.42	21.00
		1	24	19.91	20.22	20.19	20.24	20.14	21.00
		12	0	19.92	20.13	20.16	20.28	20.18	21.00
		12	6	19.95	20.21	20.24	20.31	20.21	21.00
		12	13	19.95	20.19	20.15	20.24	20.20	21.00
		25	0	19.92	20.18	20.21	20.24	20.16	21.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)					Tune-up
				39700/2501	40160/2547	40620/2593	41080/2639	41540/2685	
10MHz	QPSK	1	0	19.60	19.88	19.97	20.04	20.01	21.00
		1	25	19.98	20.21	20.23	20.32	20.22	21.00
		1	49	19.76	20.02	19.98	20.05	19.94	21.00
		25	0	19.87	20.14	20.18	20.23	20.18	21.00
		25	13	19.94	20.16	20.16	20.23	20.18	21.00
		25	25	19.90	20.33	20.17	20.23	20.13	21.00
		50	0	19.89	20.20	20.21	20.22	20.20	21.00
	16QAM	1	0	19.82	20.03	20.20	20.25	20.22	21.00
		1	25	20.21	20.43	20.47	20.55	20.46	21.00
		1	49	19.94	20.24	20.22	20.27	20.16	21.00
		25	0	19.95	20.18	20.20	20.31	20.23	21.00
		25	13	19.97	20.25	20.27	20.33	20.25	21.00
		25	25	19.98	20.24	20.19	20.27	20.25	21.00
		50	0	19.95	20.23	20.25	20.27	20.21	21.00
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	19.59	19.84	19.95	20.03	19.97	21.00
		1	38	19.96	20.20	20.20	20.30	20.21	21.00
		1	74	19.73	19.97	19.94	20.02	19.89	21.00
		36	0	19.85	20.10	20.15	20.21	20.14	21.00
		36	18	19.91	20.11	20.12	20.20	20.13	21.00
		36	39	19.87	20.30	20.13	20.20	20.10	21.00
		75	0	19.87	20.16	20.16	20.20	20.16	21.00
	16QAM	1	0	19.80	20.01	20.18	20.23	20.20	21.00
		1	38	20.19	20.40	20.45	20.53	20.43	21.00
		1	74	19.92	20.20	20.19	20.25	20.12	21.00
		36	0	19.92	20.16	20.17	20.28	20.21	21.00
		36	18	19.94	20.20	20.23	20.30	20.20	21.00
		36	39	19.96	20.20	20.16	20.25	20.21	21.00
		75	0	19.92	20.18	20.21	20.24	20.16	21.00
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	19.56	19.80	19.92	20.00	19.93	21.00
		1	50	**19.95**	**20.16**	**20.18**	**20.29**	**20.17**	21.00
		1	99	19.71	19.96	19.91	20.00	19.88	21.00
		50	0	19.82	20.05	**20.11**	**20.18**	**20.09**	21.00
		50	25	**19.89**	20.07	20.09	**20.18**	**20.09**	21.00
		50	50	19.84	**20.25**	20.09	20.17	20.05	21.00
		100	0	19.84	20.11	20.12	**20.17**	**20.11**	21.00
	16QAM	1	0	19.77	19.97	20.13	20.20	20.16	21.00
		1	50	20.16	20.38	20.41	20.50	20.41	21.00
		1	99	19.89	20.17	20.17	20.22	20.09	21.00
		50	0	19.89	20.12	20.14	20.25	20.17	21.00
		50	25	19.91	20.18	20.20	20.27	20.18	21.00
		50	50	19.93	20.15	20.12	20.22	20.16	21.00
		100	0	19.90	20.14	20.18	20.22	20.12	21.00

LTE Band 66							
Full Power&DSI1&DSI2				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	22.66	22.77	22.83	24.00
		1	2	23.05	23.12	23.15	24.00
		1	5	22.60	22.63	22.75	24.00
		3	0	22.87	23.05	23.13	24.00
		3	2	22.91	23.09	23.10	24.00
		3	3	22.91	23.01	22.94	24.00
		6	0	21.93	22.13	22.13	23.00
	16QAM	1	0	21.96	22.15	22.13	23.00

		1	2	22.34	22.50	22.48	23.00
		1	5	21.96	22.02	22.00	23.00
		3	0	21.90	22.03	22.12	23.00
		3	2	21.98	22.05	22.09	23.00
		3	3	21.91	22.05	21.91	23.00
		6	0	20.95	21.09	21.14	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				1319871711.5	132322/1745	132657/1778.5	
3MHz	QPSK	1	0	22.68	22.81	22.86	24.00
		1	7	23.03	23.15	23.19	24.00
		1	14	22.63	22.68	22.79	24.00
		8	0	21.97	22.17	22.26	23.00
		8	4	22.03	22.19	22.22	23.00
		8	7	22.01	22.12	22.04	23.00
		15	0	21.93	22.17	22.16	23.00
	16QAM	1	0	21.96	22.17	22.16	23.00
		1	7	22.34	22.50	22.52	23.00
		1	14	21.98	22.06	22.03	23.00
		8	0	21.01	21.16	21.24	22.00
		8	4	21.09	21.18	21.21	22.00
		8	7	21.01	21.17	21.04	22.00
		15	0	20.98	21.13	21.17	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131997/1712.5	132322/1745	132647/1777.5	
5MHz	QPSK	1	0	22.65	22.79	22.82	24.00
		1	13	23.01	23.11	23.16	24.00
		1	24	22.60	22.63	22.75	24.00
		12	0	21.94	22.12	22.22	23.00
		12	6	22.01	22.15	22.17	23.00
		12	13	21.99	22.10	22.00	23.00
		25	0	21.93	22.16	22.14	23.00
	16QAM	1	0	21.96	22.13	22.13	23.00
		1	13	22.34	22.48	22.49	23.00
		1	24	21.95	22.04	21.99	23.00
		12	0	20.99	21.12	21.21	22.00
		12	6	21.06	21.13	21.17	22.00
		12	13	20.98	21.12	21.00	22.00
		25	0	20.96	21.09	21.12	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132022/1715	132322/1745	132622/1775	
10MHz	QPSK	1	0	22.67	22.80	22.85	24.00
		1	25	23.04	23.16	23.20	24.00
		1	49	22.62	22.67	22.78	24.00

		25	0	21.97	22.17	22.26	23.00
		25	13	22.04	22.20	22.21	23.00
		25	25	22.01	22.14	22.05	23.00
		50	0	21.97	22.18	22.18	23.00
	16QAM	1	0	22.00	22.16	22.15	23.00
		1	25	22.38	22.52	22.52	23.00
		1	49	21.98	22.06	22.02	23.00
		25	0	21.02	21.17	21.25	22.00
		25	13	21.08	21.17	21.20	22.00
		25	25	21.01	21.17	21.04	22.00
		50	0	20.99	21.14	21.16	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132047/1717.5	132322/1745	132597/1772.5	
15MHz	QPSK	1	0	22.66	22.76	22.83	24.00
		1	38	23.02	23.15	23.17	24.00
		1	74	22.59	22.62	22.74	24.00
		36	0	21.95	22.13	22.23	23.00
		36	18	22.01	22.15	22.17	23.00
		36	39	21.98	22.11	22.01	23.00
		75	0	21.95	22.14	22.13	23.00
	16QAM	1	0	21.98	22.14	22.13	23.00
		1	38	22.36	22.49	22.50	23.00
		1	74	21.96	22.02	21.99	23.00
		36	0	20.99	21.15	21.22	22.00
		36	18	21.05	21.12	21.16	22.00
		36	39	20.99	21.13	21.01	22.00
		75	0	20.96	21.09	21.12	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132072/1720	132322/1745	132572/1770	
20MHz	QPSK	1	0	22.63	22.72	22.80	24.00
		1	50	**23.01**	**23.11**	**23.15**	24.00
		1	99	22.57	22.61	22.71	24.00
		50	0	21.92	22.08	**22.19**	23.00
		50	25	**21.99**	**22.11**	22.14	23.00
		50	50	21.95	22.06	21.97	23.00
		100	0	21.92	**22.09**	**22.09**	23.00
	16QAM	1	0	21.95	22.10	22.08	23.00
		1	50	22.33	22.47	22.46	23.00
		1	99	21.93	21.99	21.97	23.00
		50	0	20.96	21.11	21.19	22.00
		50	25	21.02	21.10	21.13	22.00
		50	50	20.96	21.08	20.97	22.00
		100	0	20.94	21.05	21.09	22.00

LTE Band 66							
DSI4				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	18.77	18.90	18.85	20.00
		1	2	19.08	19.19	19.22	20.00
		1	5	18.71	18.73	18.79	20.00
		3	0	18.99	19.24	19.27	20.00
		3	2	19.02	19.20	19.18	20.00
		3	3	19.02	19.11	19.00	20.00
		6	0	18.92	19.20	19.19	20.00
	16QAM	1	0	18.98	19.13	19.12	20.00
		1	2	19.41	19.46	19.44	20.00
		1	5	18.99	19.02	19.00	20.00
		3	0	19.03	19.17	19.26	20.00
		3	2	19.10	19.21	19.20	20.00
		3	3	18.97	19.11	19.06	20.00
		6	0	18.96	19.18	19.16	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				1319871711.5	132322/1745	132657/1778.5	
3MHz	QPSK	1	0	18.78	18.87	18.86	20.00
		1	7	19.09	19.23	19.23	20.00
		1	14	18.70	18.72	18.78	20.00
		8	0	19.00	19.25	19.28	20.00
		8	4	19.02	19.20	19.18	20.00
		8	7	19.01	19.12	19.01	20.00
		15	0	18.94	19.18	19.18	20.00
	16QAM	1	0	19.00	19.14	19.12	20.00
		1	7	19.43	19.47	19.45	20.00
		1	14	19.00	19.00	19.00	20.00
		8	0	19.03	19.20	19.27	20.00
		8	4	19.09	19.20	19.19	20.00
		8	7	18.98	19.12	19.07	20.00
		15	0	18.96	19.18	19.16	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131997/1712.5	132322/1745	132647/1777.5	
5MHz	QPSK	1	0	18.75	18.83	18.83	20.00
		1	13	19.08	19.19	19.21	20.00
		1	24	18.68	18.71	18.75	20.00
		12	0	18.97	19.20	19.24	20.00
		12	6	19.00	19.16	19.15	20.00
		12	13	18.98	19.07	18.97	20.00

		25	0	18.91	19.13	19.14	20.00
	16QAM	1	0	18.97	19.10	19.07	20.00
		1	13	19.40	19.45	19.41	20.00
		1	24	18.97	18.97	18.98	20.00
		12	0	19.00	19.16	19.24	20.00
		12	6	19.06	19.18	19.16	20.00
		12	13	18.95	19.07	19.03	20.00
		25	0	18.94	19.14	19.13	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132022/1715	132322/1745	132622/1775	
10MHz	QPSK	1	0	18.74	18.82	18.82	20.00
		1	25	19.09	19.20	19.22	20.00
		1	49	18.67	18.70	18.74	20.00
		25	0	18.97	19.20	19.24	20.00
		25	13	19.01	19.17	19.14	20.00
		25	25	18.98	19.09	18.98	20.00
		50	0	18.95	19.14	19.16	20.00
	16QAM	1	0	19.01	19.09	19.06	20.00
		1	25	19.44	19.47	19.41	20.00
		1	49	18.97	18.97	18.97	20.00
		25	0	19.01	19.17	19.25	20.00
		25	13	19.05	19.17	19.15	20.00
		25	25	18.95	19.07	19.03	20.00
		50	0	18.95	19.15	19.12	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132047/1717.5	132322/1745	132597/1772.5	
15MHz	QPSK	1	0	18.73	18.78	18.80	20.00
		1	38	19.07	19.19	19.19	20.00
		1	74	18.64	18.65	18.70	20.00
		36	0	18.95	19.16	19.21	20.00
		36	18	18.98	19.12	19.10	20.00
		36	39	18.95	19.06	18.94	20.00
		75	0	18.93	19.10	19.11	20.00
	16QAM	1	0	18.99	19.07	19.04	20.00
		1	38	19.42	19.44	19.39	20.00
		1	74	18.95	18.93	18.94	20.00
		36	0	18.98	19.15	19.22	20.00
		36	18	19.02	19.12	19.11	20.00
		36	39	18.93	19.03	19.00	20.00
		75	0	18.92	19.10	19.08	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132072/1720	132322/1745	132572/1770	
20MHz	QPSK	1	0	18.70	18.74	18.77	20.00

		1	50	**19.06**	**19.15**	**19.17**	20.00
		1	99	18.62	18.64	18.67	20.00
		50	0	18.92	**19.11**	**19.17**	20.00
		50	25	**18.96**	19.08	19.07	20.00
		50	50	18.92	19.01	18.90	20.00
		100	0	18.90	19.05	**19.07**	20.00
	16QAM	1	0	18.96	19.03	18.99	20.00
		1	50	19.39	19.42	19.35	20.00
		1	99	18.92	18.90	18.92	20.00
		50	0	18.95	19.11	19.19	20.00
		50	25	18.99	19.10	19.08	20.00
		50	50	18.90	18.98	18.96	20.00
		100	0	18.90	19.06	19.05	20.00

Upper Antenna

LTE Band 2							
DSI1				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	16.23	16.47	16.39	17.00
		1	2	16.51	16.63	16.56	17.00
		1	5	16.09	16.14	16.28	17.00
		3	0	16.41	16.63	16.51	17.00
		3	2	16.50	16.55	16.57	17.00
		3	3	16.46	16.51	16.32	17.00
		6	0	16.40	16.57	16.45	17.00
	16QAM	1	0	16.56	16.60	16.61	17.00
		1	2	16.84	16.87	16.91	17.00
		1	5	16.46	16.46	16.60	17.00
		3	0	16.45	16.59	16.53	17.00
		3	2	16.54	16.50	16.57	17.00
		3	3	16.44	16.56	16.36	17.00
		6	0	16.41	16.59	16.50	17.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	16.20	16.43	16.36	17.00
		1	7	16.50	16.59	16.54	17.00
		1	14	16.07	16.13	16.25	17.00
		8	0	16.38	16.58	16.47	17.00
		8	4	16.48	16.51	16.54	17.00
		8	7	16.43	16.46	16.28	17.00
		15	0	16.37	16.52	16.41	17.00
	16QAM	1	0	16.53	16.56	16.56	17.00
		1	7	16.81	16.85	16.87	17.00
		1	14	16.43	16.43	16.58	17.00
		8	0	16.42	16.55	16.50	17.00
		8	4	16.51	16.48	16.54	17.00
		8	7	16.41	16.51	16.32	17.00
		15	0	16.39	16.55	16.47	17.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	16.17	16.41	16.32	17.00
		1	13	16.48	16.55	16.51	17.00
		1	24	16.04	16.08	16.21	17.00
		12	0	16.35	16.53	16.43	17.00
		12	6	16.46	16.47	16.49	17.00
		12	13	16.41	16.44	16.24	17.00

		25	0	16.37	16.51	16.39	17.00
	16QAM	1	0	16.53	16.52	16.53	17.00
		1	13	16.81	16.83	16.84	17.00
		1	24	16.40	16.41	16.54	17.00
		12	0	16.40	16.51	16.47	17.00
		12	6	16.48	16.43	16.50	17.00
		12	13	16.38	16.46	16.28	17.00
		25	0	16.37	16.51	16.42	17.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	16.19	16.42	16.35	17.00
		1	25	16.51	16.60	16.55	17.00
		1	49	16.06	16.12	16.24	17.00
		25	0	16.38	16.58	16.47	17.00
		25	13	16.49	16.52	16.53	17.00
		25	25	16.43	16.48	16.29	17.00
		50	0	16.41	16.53	16.43	17.00
	16QAM	1	0	16.57	16.55	16.55	17.00
		1	25	16.85	16.87	16.87	17.00
		1	49	16.43	16.43	16.57	17.00
		25	0	16.43	16.56	16.51	17.00
		25	13	16.50	16.47	16.53	17.00
		25	25	16.41	16.51	16.32	17.00
		50	0	16.40	16.56	16.46	17.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	16.18	16.38	16.33	17.00
		1	38	16.49	16.59	16.52	17.00
		1	74	16.03	16.07	16.20	17.00
		36	0	16.36	16.54	16.44	17.00
		36	18	16.46	16.47	16.49	17.00
		36	39	16.40	16.45	16.25	17.00
		75	0	16.39	16.49	16.38	17.00
	16QAM	1	0	16.55	16.53	16.53	17.00
		1	38	16.83	16.84	16.85	17.00
		1	74	16.41	16.39	16.54	17.00
		36	0	16.40	16.54	16.48	17.00
		36	18	16.47	16.42	16.49	17.00
		36	39	16.39	16.47	16.29	17.00
		75	0	16.37	16.51	16.42	17.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	16.15	16.34	16.30	17.00
		1	50	**16.48**	**16.55**	**16.50**	17.00
		1	99	16.01	16.06	16.17	17.00
		50	0	16.33	**16.49**	16.40	17.00
		50	25	**16.44**	16.43	**16.46**	17.00
		50	50	16.37	16.40	16.21	17.00
		100	0	16.36	**16.44**	16.34	17.00
	16QAM	1	0	16.52	16.49	16.48	17.00
		1	50	16.80	16.82	16.81	17.00
		1	99	16.38	16.36	16.52	17.00
		50	0	16.37	16.50	16.45	17.00
		50	25	16.44	16.40	16.46	17.00
		50	50	16.36	16.42	16.25	17.00
		100	0	16.35	16.47	16.39	17.00

LTE Band2							
DSI2				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	23.27	23.34	23.27	24.00
		1	2	23.62	23.63	23.53	24.00
		1	5	23.15	23.16	23.28	24.00
		3	0	23.44	23.53	23.49	24.00
		3	2	23.48	23.55	23.58	24.00
		3	3	23.49	23.50	23.41	24.00
		6	0	22.51	22.59	22.58	23.00
	16QAM	1	0	22.63	22.59	22.60	23.00
		1	2	22.84	22.90	22.75	23.00
		1	5	22.45	22.50	22.59	23.00
		3	0	22.44	22.49	22.49	23.00
		3	2	22.56	22.55	22.55	23.00
		3	3	22.51	22.54	22.35	23.00
		6	0	21.57	21.66	21.60	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	23.29	23.38	23.30	24.00
		1	7	23.60	23.66	23.57	24.00
		1	14	23.18	23.21	23.32	24.00
		8	0	22.54	22.65	22.62	23.00
		8	4	22.60	22.65	22.70	23.00
		8	7	22.59	22.61	22.51	23.00

		15	0	22.51	22.63	22.61	23.00
	16QAM	1	0	22.63	22.61	22.63	23.00
		1	7	22.84	22.90	22.79	23.00
		1	14	22.47	22.54	22.62	23.00
		8	0	21.55	21.62	21.61	22.00
		8	4	21.67	21.68	21.67	22.00
		8	7	21.61	21.66	21.48	22.00
		15	0	21.60	21.70	21.63	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	23.26	23.36	23.26	24.00
		1	13	23.58	23.62	23.54	24.00
		1	24	23.15	23.16	23.28	24.00
		12	0	22.51	22.60	22.58	23.00
		12	6	22.58	22.61	22.65	23.00
		12	13	22.57	22.59	22.47	23.00
		25	0	22.51	22.62	22.59	23.00
	16QAM	1	0	22.63	22.57	22.60	23.00
		1	13	22.84	22.88	22.76	23.00
		1	24	22.44	22.52	22.58	23.00
		12	0	21.53	21.58	21.58	22.00
		12	6	21.64	21.63	21.63	22.00
		12	13	21.58	21.61	21.44	22.00
		25	0	21.58	21.66	21.58	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	23.28	23.37	23.29	24.00
		1	25	23.61	23.67	23.58	24.00
		1	49	23.17	23.20	23.31	24.00
		25	0	22.54	22.65	22.62	23.00
		25	13	22.61	22.66	22.69	23.00
		25	25	22.59	22.63	22.52	23.00
		50	0	22.55	22.64	22.63	23.00
	16QAM	1	0	22.67	22.60	22.62	23.00
		1	25	22.88	22.92	22.79	23.00
		1	49	22.47	22.54	22.61	23.00
		25	0	21.56	21.63	21.62	22.00
		25	13	21.66	21.67	21.66	22.00
		25	25	21.61	21.66	21.48	22.00
		50	0	21.61	21.71	21.62	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	23.27	23.33	23.27	24.00

		1	38	23.59	23.66	23.55	24.00
		1	74	23.14	23.15	23.27	24.00
		36	0	22.52	22.61	22.59	23.00
		36	18	22.58	22.61	22.65	23.00
		36	39	22.56	22.60	22.48	23.00
		75	0	22.53	22.60	22.58	23.00
	16QAM	1	0	22.65	22.58	22.60	23.00
		1	38	22.86	22.89	22.77	23.00
		1	74	22.45	22.50	22.58	23.00
		36	0	21.53	21.61	21.59	22.00
		36	18	21.63	21.62	21.62	22.00
		36	39	21.59	21.62	21.45	22.00
		75	0	21.58	21.66	21.58	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	23.24	23.29	23.24	24.00
		1	50	**23.58**	**23.62**	**23.53**	24.00
		1	99	23.12	23.14	23.24	24.00
		50	0	22.49	22.56	22.55	23.00
		50	25	**22.56**	**22.57**	**22.62**	23.00
		50	50	22.53	22.55	22.44	23.00
		100	0	22.50	**22.55**	22.54	23.00
	16QAM	1	0	22.62	22.54	22.55	23.00
		1	50	22.83	22.87	22.73	23.00
		1	99	22.42	22.47	22.56	23.00
		50	0	21.50	21.57	21.56	22.00
		50	25	21.60	21.60	21.59	22.00
		50	50	21.56	21.57	21.41	22.00
		100	0	21.56	21.62	21.55	22.00

LTE Band2							
DSI4				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	17.30	17.29	17.23	18.00
		1	2	17.58	17.60	17.54	18.00
		1	5	17.15	17.12	17.25	18.00
		3	0	17.45	17.64	17.56	18.00
		3	2	17.54	17.58	17.57	18.00
		3	3	17.48	17.52	17.34	18.00
		6	0	17.43	17.59	17.50	18.00
	16QAM	1	0	17.49	17.61	17.63	18.00
		1	2	17.76	17.97	17.95	18.00

		1	5	17.38	17.51	17.61	18.00
		3	0	17.47	17.62	17.56	18.00
		3	2	17.58	17.58	17.58	18.00
		3	3	17.50	17.58	17.38	18.00
		6	0	17.45	17.59	17.49	18.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	17.27	17.25	17.20	18.00
		1	7	17.57	17.56	17.52	18.00
		1	14	17.13	17.11	17.22	18.00
		8	0	17.42	17.59	17.52	18.00
		8	4	17.52	17.54	17.54	18.00
		8	7	17.45	17.47	17.30	18.00
		15	0	17.40	17.54	17.46	18.00
	16QAM	1	0	17.46	17.57	17.58	18.00
		1	7	17.73	17.95	17.91	18.00
		1	14	17.35	17.48	17.59	18.00
		8	0	17.44	17.58	17.53	18.00
		8	4	17.55	17.56	17.55	18.00
		8	7	17.47	17.53	17.34	18.00
		15	0	17.43	17.55	17.46	18.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	17.24	17.23	17.16	18.00
		1	13	17.55	17.52	17.49	18.00
		1	24	17.10	17.06	17.18	18.00
		12	0	17.39	17.54	17.48	18.00
		12	6	17.50	17.50	17.49	18.00
		12	13	17.43	17.45	17.26	18.00
		25	0	17.40	17.53	17.44	18.00
	16QAM	1	0	17.46	17.53	17.55	18.00
		1	13	17.73	17.93	17.88	18.00
		1	24	17.32	17.46	17.55	18.00
		12	0	17.42	17.54	17.50	18.00
		12	6	17.52	17.51	17.51	18.00
		12	13	17.44	17.48	17.30	18.00
		25	0	17.41	17.51	17.41	18.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	17.26	17.24	17.19	18.00
		1	25	17.58	17.57	17.53	18.00
		1	49	17.12	17.10	17.21	18.00
		25	0	17.42	17.59	17.52	18.00

		25	13	17.53	17.55	17.53	18.00
		25	25	17.45	17.49	17.31	18.00
		50	0	17.44	17.55	17.48	18.00
	16QAM	1	0	17.50	17.56	17.57	18.00
		1	25	17.77	17.97	17.91	18.00
		1	49	17.35	17.48	17.58	18.00
		25	0	17.45	17.59	17.54	18.00
		25	13	17.54	17.55	17.54	18.00
		25	25	17.47	17.53	17.34	18.00
		50	0	17.44	17.56	17.45	18.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	17.25	17.20	17.17	18.00
		1	38	17.56	17.56	17.50	18.00
		1	74	17.09	17.05	17.17	18.00
		36	0	17.40	17.55	17.49	18.00
		36	18	17.50	17.50	17.49	18.00
		36	39	17.42	17.46	17.27	18.00
		75	0	17.42	17.51	17.43	18.00
	16QAM	1	0	17.48	17.54	17.55	18.00
		1	38	17.75	17.94	17.89	18.00
		1	74	17.33	17.44	17.55	18.00
		36	0	17.42	17.57	17.51	18.00
		36	18	17.51	17.50	17.50	18.00
		36	39	17.45	17.49	17.31	18.00
		75	0	17.41	17.51	17.41	18.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	17.22	17.16	17.14	18.00
		1	50	**17.55**	**17.52**	**17.48**	18.00
		1	99	17.07	17.04	17.14	18.00
		50	0	17.37	**17.50**	17.45	18.00
		50	25	**17.48**	17.46	**17.46**	18.00
		50	50	17.39	17.41	17.23	18.00
		100	0	17.39	**17.46**	17.39	18.00
	16QAM	1	0	17.45	17.50	17.50	18.00
		1	50	17.72	17.92	17.85	18.00
		1	99	17.30	17.41	17.53	18.00
		50	0	17.39	17.53	17.48	18.00
		50	25	17.48	17.48	17.47	18.00
		50	50	17.42	17.44	17.27	18.00
		100	0	17.39	17.47	17.38	18.00

LTE Band4							
DSI1				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	16.08	16.50	16.23	16.50
		1	2	16.32	16.45	16.31	16.50
		1	5	15.94	15.95	16.01	16.50
		3	0	16.38	16.39	16.37	16.50
		3	2	16.32	16.32	16.27	16.50
		3	3	16.27	16.29	16.13	16.50
		6	0	16.33	16.36	16.27	16.50
	16QAM	1	0	16.33	16.49	16.42	16.50
		1	2	16.35	16.31	16.36	16.50
		1	5	16.26	16.26	16.27	16.50
		3	0	16.41	16.31	16.35	16.50
		3	2	16.36	16.31	16.30	16.50
		3	3	16.32	16.28	16.14	16.50
		6	0	16.30	16.34	16.29	16.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19965/1711.5	20175/1732.5	20385/1753.5	
3MHz	QPSK	1	0	16.05	16.46	16.20	16.50
		1	7	16.31	16.41	16.29	16.50
		1	14	15.92	15.94	15.98	16.50
		8	0	16.35	16.34	16.33	16.50
		8	4	16.30	16.28	16.24	16.50
		8	7	16.24	16.24	16.09	16.50
		15	0	16.30	16.31	16.23	16.50
	16QAM	1	0	16.30	16.45	16.37	16.50
		1	7	16.32	16.29	16.32	16.50
		1	14	16.23	16.23	16.25	16.50
		8	0	16.38	16.27	16.32	16.50
		8	4	16.33	16.29	16.27	16.50
		8	7	16.29	16.23	16.10	16.50
		15	0	16.28	16.30	16.26	16.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19975/1712.5	20175/1732.5	20375/1752.5	
5MHz	QPSK	1	0	16.02	16.44	16.16	16.50
		1	13	16.29	16.37	16.26	16.50
		1	24	15.89	15.89	15.94	16.50
		12	0	16.32	16.29	16.29	16.50
		12	6	16.28	16.24	16.19	16.50
		12	13	16.22	16.22	16.05	16.50
		25	0	16.30	16.30	16.21	16.50

	16QAM	1	0	16.30	16.41	16.34	16.50
		1	13	16.32	16.27	16.29	16.50
		1	24	16.20	16.21	16.21	16.50
		12	0	16.36	16.23	16.29	16.50
		12	6	16.30	16.24	16.23	16.50
		12	13	16.26	16.18	16.06	16.50
		25	0	16.26	16.26	16.21	16.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	16.04	16.45	16.19	16.50
		1	25	16.32	16.42	16.30	16.50
		1	49	15.91	15.93	15.97	16.50
		25	0	16.35	16.34	16.33	16.50
		25	13	16.31	16.29	16.23	16.50
		25	25	16.24	16.26	16.10	16.50
		50	0	16.34	16.32	16.25	16.50
	16QAM	1	0	16.34	16.44	16.36	16.50
		1	25	16.36	16.31	16.32	16.50
		1	49	16.23	16.23	16.24	16.50
		25	0	16.39	16.28	16.33	16.50
		25	13	16.32	16.28	16.26	16.50
		25	25	16.29	16.23	16.10	16.50
		50	0	16.29	16.31	16.25	16.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20025/1717.5	20175/1732.5	20325/1747.5	
15MHz	QPSK	1	0	16.03	16.41	16.17	16.50
		1	38	16.30	16.41	16.27	16.50
		1	74	15.88	15.88	15.93	16.50
		36	0	16.33	16.30	16.30	16.50
		36	18	16.28	16.24	16.19	16.50
		36	39	16.21	16.23	16.06	16.50
		75	0	16.32	16.28	16.20	16.50
	16QAM	1	0	16.32	16.42	16.34	16.50
		1	38	16.34	16.28	16.30	16.50
		1	74	16.21	16.19	16.21	16.50
		36	0	16.36	16.26	16.30	16.50
		36	18	16.29	16.23	16.22	16.50
		36	39	16.27	16.19	16.07	16.50
		75	0	16.26	16.26	16.21	16.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	16.00	**16.37**	16.14	16.50
		1	50	**16.29**	**16.37**	**16.25**	16.50

		1	99	15.86	15.87	15.90	16.50
		50	0	**16.30**	**16.25**	**16.26**	16.50
		50	25	16.26	16.20	16.16	16.50
		50	50	16.18	16.18	16.02	16.50
		100	0	**16.29**	16.23	16.16	16.50
	16QAM	1	0	16.29	16.38	16.29	16.50
		1	50	16.31	16.26	16.26	16.50
		1	99	16.18	16.16	16.19	16.50
		50	0	16.33	16.22	16.27	16.50
		50	25	16.26	16.21	16.19	16.50
		50	50	16.24	16.14	16.03	16.50
		100	0	16.24	16.22	16.18	16.50

LTE Band4							
DSI2				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	23.61	23.68	23.57	24.00
		1	2	23.89	23.88	23.84	24.00
		1	5	23.50	23.47	23.48	24.00
		3	0	23.85	23.83	23.84	24.00
		3	2	23.81	23.88	23.84	24.00
		3	3	23.75	23.83	23.71	24.00
		6	0	22.88	22.90	22.87	23.00
	16QAM	1	0	22.88	22.95	22.91	23.00
		1	2	22.90	22.95	22.96	23.00
		1	5	22.78	22.73	22.73	23.00
		3	0	22.87	22.81	22.87	23.00
		3	2	22.87	22.84	22.82	23.00
		3	3	22.84	22.82	22.70	23.00
		6	0	21.91	21.93	21.90	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19965/1711.5	20175/1732.5	20385/1753.5	
3MHz	QPSK	1	0	23.63	23.72	23.60	24.00
		1	7	23.87	23.91	23.88	24.00
		1	14	23.53	23.52	23.52	24.00
		8	0	22.95	22.95	22.97	23.00
		8	4	22.93	22.98	22.96	23.00
		8	7	22.85	22.94	22.81	23.00
		15	0	22.88	22.94	22.90	23.00
	16QAM	1	0	22.88	22.97	22.94	23.00
		1	7	22.90	22.95	23.00	23.00
		1	14	22.80	22.77	22.76	23.00

		8	0	21.98	21.94	21.99	22.00
		8	4	21.98	21.97	21.94	22.00
		8	7	21.94	21.94	21.83	22.00
		15	0	21.94	21.97	21.93	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19975/1712.5	20175/1732.5	20375/1752.5	
5MHz	QPSK	1	0	23.60	23.70	23.56	24.00
		1	13	23.85	23.87	23.85	24.00
		1	24	23.50	23.47	23.48	24.00
		12	0	22.92	22.90	22.93	23.00
		12	6	22.91	22.94	22.91	23.00
		12	13	22.83	22.92	22.77	23.00
		25	0	22.88	22.93	22.88	23.00
	16QAM	1	0	22.88	22.93	22.91	23.00
		1	13	22.90	22.93	22.97	23.00
		1	24	22.77	22.75	22.72	23.00
		12	0	21.96	21.90	21.96	22.00
		12	6	21.95	21.92	21.90	22.00
		12	13	21.91	21.89	21.79	22.00
		25	0	21.92	21.93	21.88	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	23.62	23.71	23.59	24.00
		1	25	23.88	23.92	23.89	24.00
		1	49	23.52	23.51	23.51	24.00
		25	0	22.95	22.95	22.97	23.00
		25	13	22.94	22.99	22.95	23.00
		25	25	22.85	22.96	22.82	23.00
		50	0	22.92	22.95	22.92	23.00
	16QAM	1	0	22.92	22.96	22.93	23.00
		1	25	22.94	22.97	23.00	23.00
		1	49	22.80	22.77	22.75	23.00
		25	0	21.99	21.95	22.00	22.00
		25	13	21.97	21.96	21.93	22.00
		25	25	21.94	21.94	21.83	22.00
		50	0	21.95	21.98	21.92	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20025/1717.5	20175/1732.5	20325/1747.5	
15MHz	QPSK	1	0	23.61	23.67	23.57	24.00
		1	38	23.86	23.91	23.86	24.00
		1	74	23.49	23.46	23.47	24.00
		36	0	22.93	22.91	22.94	23.00
		36	18	22.91	22.94	22.91	23.00

		36	39	22.82	22.93	22.78	23.00
		75	0	22.90	22.91	22.87	23.00
		1	0	22.90	22.94	22.91	23.00
		1	38	22.92	22.94	22.98	23.00
		1	74	22.78	22.73	22.72	23.00
	16QAM	36	0	21.96	21.93	21.97	22.00
		36	18	21.94	21.91	21.89	22.00
		36	39	21.92	21.90	21.80	22.00
		75	0	21.92	21.93	21.88	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20050/1720	20175/1732.5	20300/1745	
20MHz		1	0	23.58	23.63	23.54	24.00
		1	50	**23.85**	**23.87**	**23.84**	24.00
		1	99	23.47	23.45	23.44	24.00
	QPSK	50	0	**22.90**	22.86	**22.90**	23.00
		50	25	22.89	**22.90**	22.88	23.00
		50	50	22.79	22.88	22.74	23.00
		100	0	**22.87**	22.86	22.83	23.00
		1	0	22.87	22.90	22.86	23.00
		1	50	22.89	22.92	22.94	23.00
		1	99	22.75	22.70	22.70	23.00
	16QAM	50	0	21.93	21.89	21.94	22.00
		50	25	21.91	21.89	21.86	22.00
		50	50	21.89	21.85	21.76	22.00
		100	0	21.90	21.89	21.85	22.00

LTE Band4							
DSI4				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		1	0	21.39	21.52	21.42	22.00
		1	2	21.65	21.66	21.68	22.00
		1	5	21.33	21.31	21.36	22.00
	QPSK	3	0	21.74	21.77	21.79	22.00
		3	2	21.72	21.76	21.70	22.00
		3	3	21.73	21.70	21.60	22.00
		6	0	21.65	21.76	21.73	22.00
		1	0	21.78	21.84	21.81	22.00
		1	2	21.87	21.94	21.97	22.00
		1	5	21.63	21.65	21.69	22.00
	16QAM	3	0	21.74	21.71	21.71	22.00
		3	2	21.79	21.76	21.71	22.00
		3	3	21.70	21.73	21.60	22.00

		6	0	21.69	21.74	21.71	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19965/1711.5	20175/1732.5	20385/1753.5	
3MHz	QPSK	1	0	21.37	21.45	21.40	22.00
		1	7	21.65	21.66	21.67	22.00
		1	14	21.30	21.29	21.32	22.00
		8	0	21.72	21.73	21.76	22.00
		8	4	21.70	21.72	21.67	22.00
		8	7	21.69	21.66	21.57	22.00
		15	0	21.64	21.69	21.68	22.00
	16QAM	1	0	21.77	21.81	21.76	22.00
		1	7	21.86	21.93	21.94	22.00
		1	14	21.61	21.60	21.67	22.00
		8	0	21.71	21.70	21.69	22.00
		8	4	21.75	21.73	21.67	22.00
		8	7	21.68	21.69	21.57	22.00
		15	0	21.67	21.70	21.68	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19975/1712.5	20175/1732.5	20375/1752.5	
5MHz	QPSK	1	0	21.34	21.43	21.36	22.00
		1	13	21.63	21.62	21.64	22.00
		1	24	21.27	21.24	21.28	22.00
		12	0	21.69	21.68	21.72	22.00
		12	6	21.68	21.68	21.62	22.00
		12	13	21.67	21.64	21.53	22.00
		25	0	21.64	21.68	21.66	22.00
	16QAM	1	0	21.77	21.77	21.73	22.00
		1	13	21.86	21.91	21.91	22.00
		1	24	21.58	21.58	21.63	22.00
		12	0	21.69	21.66	21.66	22.00
		12	6	21.72	21.68	21.63	22.00
		12	13	21.65	21.64	21.53	22.00
		25	0	21.65	21.66	21.63	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	21.36	21.44	21.39	22.00
		1	25	21.66	21.67	21.68	22.00
		1	49	21.29	21.28	21.31	22.00
		25	0	21.72	21.73	21.76	22.00
		25	13	21.71	21.73	21.66	22.00
		25	25	21.69	21.68	21.58	22.00
		50	0	21.68	21.70	21.70	22.00
	16QAM	1	0	21.81	21.80	21.75	22.00

		1	25	21.90	21.95	21.94	22.00
		1	49	21.61	21.60	21.66	22.00
		25	0	21.72	21.71	21.70	22.00
		25	13	21.74	21.72	21.66	22.00
		25	25	21.68	21.69	21.57	22.00
		50	0	21.68	21.71	21.67	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20025/1717.5	20175/1732.5	20325/1747.5	
15MHz	QPSK	1	0	21.35	21.40	21.37	22.00
		1	38	21.64	21.66	21.65	22.00
		1	74	21.26	21.23	21.27	22.00
		36	0	21.70	21.69	21.73	22.00
		36	18	21.68	21.68	21.62	22.00
		36	39	21.66	21.65	21.54	22.00
		75	0	21.66	21.66	21.65	22.00
	16QAM	1	0	21.79	21.78	21.73	22.00
		1	38	21.88	21.92	21.92	22.00
		1	74	21.59	21.56	21.63	22.00
		36	0	21.69	21.69	21.67	22.00
		36	18	21.71	21.67	21.62	22.00
		36	39	21.66	21.65	21.54	22.00
		75	0	21.65	21.66	21.63	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	21.32	21.36	21.34	22.00
		1	50	**21.63**	**21.62**	**21.63**	22.00
		1	99	21.24	21.22	21.24	22.00
		50	0	**21.67**	**21.64**	**21.69**	22.00
		50	25	21.66	**21.64**	21.59	22.00
		50	50	21.63	21.60	21.50	22.00
		100	0	**21.63**	21.61	21.61	22.00
	16QAM	1	0	21.76	21.74	21.68	22.00
		1	50	21.85	21.90	21.88	22.00
		1	99	21.56	21.53	21.61	22.00
		50	0	21.66	21.65	21.64	22.00
		50	25	21.68	21.65	21.59	22.00
		50	50	21.63	21.60	21.50	22.00
		100	0	21.63	21.62	21.60	22.00

LTE Band5							
DSI1				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	20.41	20.50	20.25	22.00
		1	2	20.59	20.53	20.44	22.00
		1	5	20.42	20.54	20.36	22.00
		3	0	20.48	20.55	20.47	22.00
		3	2	20.52	20.57	20.42	22.00
		3	3	20.57	20.57	20.38	22.00
		6	0	20.48	20.60	20.42	22.00
	16QAM	1	0	20.68	20.76	20.65	22.00
		1	2	20.93	20.93	20.81	22.00
		1	5	20.71	20.90	20.66	22.00
		3	0	20.52	20.52	20.46	22.00
		3	2	20.52	20.59	20.41	22.00
		3	3	20.55	20.61	20.38	22.00
		6	0	20.53	20.59	20.44	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	20.43	20.51	20.28	22.00
		1	7	20.62	20.58	20.48	22.00
		1	14	20.44	20.58	20.39	22.00
		8	0	20.51	20.60	20.51	22.00
		8	4	20.55	20.62	20.46	22.00
		8	7	20.59	20.61	20.43	22.00
		15	0	20.52	20.62	20.46	22.00
	16QAM	1	0	20.72	20.79	20.67	22.00
		1	7	20.97	20.97	20.84	22.00
		1	14	20.74	20.92	20.69	22.00
		8	0	20.55	20.57	20.50	22.00
		8	4	20.54	20.63	20.44	22.00
		8	7	20.58	20.66	20.42	22.00
		15	0	20.56	20.64	20.48	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	20.42	20.47	20.26	22.00
		1	13	20.60	20.57	20.45	22.00
		1	24	20.41	20.53	20.35	22.00
		12	0	20.49	20.56	20.48	22.00
		12	6	20.52	20.57	20.42	22.00
		12	13	20.56	20.58	20.39	22.00

		25	0	20.50	20.58	20.41	22.00
	16QAM	1	0	20.70	20.77	20.65	22.00
		1	13	20.95	20.94	20.82	22.00
		1	24	20.72	20.88	20.66	22.00
		12	0	20.52	20.55	20.47	22.00
		12	6	20.51	20.58	20.40	22.00
		12	13	20.56	20.62	20.39	22.00
		25	0	20.53	20.59	20.44	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	20.39	20.43	20.23	22.00
		1	25	**20.59**	**20.53**	**20.43**	22.00
		1	49	20.39	20.52	20.32	22.00
		25	0	20.46	20.51	**20.44**	22.00
		25	13	20.50	**20.53**	20.39	22.00
		25	25	**20.53**	**20.53**	20.35	22.00
		50	0	20.47	**20.53**	20.37	22.00
	16QAM	1	0	20.67	20.73	20.60	22.00
		1	25	20.92	20.92	20.78	22.00
		1	49	20.69	20.85	20.64	22.00
		25	0	20.49	20.51	20.44	22.00
		25	13	20.48	20.56	20.37	22.00
		25	25	20.53	20.57	20.35	22.00
		50	0	20.51	20.55	20.41	22.00

LTE Band5							
DSI2				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	23.88	23.89	23.96	25.50
		1	2	24.05	23.99	24.10	25.50
		1	5	23.89	24.00	24.00	25.50
		3	0	23.94	24.04	24.10	25.50
		3	2	23.96	24.09	24.07	25.50
		3	3	24.06	24.06	24.05	25.50
		6	0	23.06	23.16	23.16	24.50
	16QAM	1	0	23.17	23.22	23.29	24.50
		1	2	23.30	23.32	23.40	24.50
		1	5	23.18	23.33	23.25	24.50
		3	0	22.96	22.97	23.12	24.50
		3	2	23.00	23.05	23.12	24.50
		3	3	23.06	23.08	23.06	24.50
		6	0	22.04	22.15	22.19	23.50

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20415/825.5	20525/836.5	20635/847.5	
3MHz	QPSK	1	0	23.89	23.92	23.98	25.50
		1	7	24.04	24.03	24.15	25.50
		1	14	23.91	24.04	24.03	25.50
		8	0	23.04	23.16	23.23	24.50
		8	4	23.09	23.20	23.18	24.50
		8	7	23.16	23.19	23.16	24.50
		15	0	23.10	23.21	23.21	24.50
	16QAM	1	0	23.21	23.23	23.31	24.50
		1	7	23.34	23.34	23.44	24.50
		1	14	23.20	23.37	23.27	24.50
		8	0	22.08	22.11	22.25	23.50
		8	4	22.10	22.17	22.23	23.50
		8	7	22.16	22.20	22.19	23.50
		15	0	22.08	22.20	22.21	23.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20425/826.5	20525/836.5	20625/846.5	
5MHz	QPSK	1	0	23.88	23.88	23.96	25.50
		1	13	24.02	24.02	24.12	25.50
		1	24	23.88	23.99	23.99	25.50
		12	0	23.02	23.12	23.20	24.50
		12	6	23.06	23.15	23.14	24.50
		12	13	23.13	23.16	23.12	24.50
		25	0	23.08	23.17	23.16	24.50
	16QAM	1	0	23.19	23.21	23.29	24.50
		1	13	23.32	23.31	23.42	24.50
		1	24	23.18	23.33	23.24	24.50
		12	0	22.05	22.09	22.22	23.50
		12	6	22.07	22.12	22.19	23.50
		12	13	22.14	22.16	22.16	23.50
		25	0	22.05	22.15	22.17	23.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	23.85	23.84	23.93	25.50
		1	25	**24.01**	**23.98**	**24.10**	25.50
		1	49	23.86	**23.98**	23.96	25.50
		25	0	22.99	23.07	**23.16**	24.50
		25	13	23.04	**23.11**	23.11	24.50
		25	25	**23.10**	**23.11**	23.08	24.50
		50	0	23.05	**23.12**	**23.12**	24.50
	16QAM	1	0	23.16	23.17	23.24	24.50
		1	25	23.29	23.29	23.38	24.50

		1	49	23.15	23.30	23.22	24.50
		25	0	22.02	22.05	22.19	23.50
		25	13	22.04	22.10	22.16	23.50
		25	25	22.11	22.11	22.12	23.50
		50	0	22.03	22.11	22.14	23.50

LTE Band5							
DSI4				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	22.86	22.89	22.92	24.50
		1	2	23.02	23.00	23.03	24.50
		1	5	22.92	22.95	22.96	24.50
		3	0	23.87	23.93	24.00	24.50
		3	2	23.85	23.99	23.93	24.50
		3	3	23.96	23.92	23.98	24.50
		6	0	22.95	23.05	23.05	23.50
	16QAM	1	0	23.12	23.13	23.16	23.50
		1	2	23.28	23.21	23.28	23.50
		1	5	23.15	23.22	23.14	23.50
		3	0	22.90	22.86	23.05	23.50
		3	2	22.95	22.96	22.98	23.50
		3	3	23.01	22.99	23.00	23.50
		6	0	21.96	22.04	22.11	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20415/825.5	20525/836.5	20635/847.5	
3MHz	QPSK	1	0	22.87	22.92	22.94	24.50
		1	7	23.01	23.04	23.08	24.50
		1	14	22.94	22.99	22.99	24.50
		8	0	22.97	23.05	23.13	23.50
		8	4	22.98	23.10	23.04	23.50
		8	7	23.06	23.05	23.09	23.50
		15	0	22.99	23.10	23.10	23.50
	16QAM	1	0	23.16	23.14	23.18	23.50
		1	7	23.32	23.23	23.32	23.50
		1	14	23.17	23.26	23.16	23.50
		8	0	22.02	22.00	22.18	22.50
		8	4	22.05	22.08	22.09	22.50
		8	7	22.11	22.11	22.13	22.50
		15	0	22.00	22.09	22.13	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20425/826.5	20525/836.5	20625/846.5	
5MHz	QPSK	1	0	22.86	22.88	22.92	24.50

		1	13	22.99	23.03	23.05	24.50
		1	24	22.91	22.94	22.95	24.50
		12	0	22.95	23.01	23.10	23.50
		12	6	22.95	23.05	23.00	23.50
		12	13	23.03	23.02	23.05	23.50
		25	0	22.97	23.06	23.05	23.50
	16QAM	1	0	23.14	23.12	23.16	23.50
		1	13	23.30	23.20	23.30	23.50
		1	24	23.15	23.22	23.13	23.50
		12	0	21.99	21.98	22.15	22.50
		12	6	22.02	22.03	22.05	22.50
		12	13	22.09	22.07	22.10	22.50
		25	0	21.97	22.04	22.09	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	22.83	22.84	22.89	24.50
		1	25	**22.98**	**22.99**	**23.03**	24.50
		1	49	22.89	22.93	22.92	24.50
		25	0	22.92	22.96	**23.06**	23.50
		25	13	22.93	**23.01**	22.97	23.50
		25	25	**23.00**	22.97	23.01	23.50
		50	0	22.94	**23.01**	**23.01**	23.50
	16QAM	1	0	23.11	23.08	23.11	23.50
		1	25	23.27	23.18	23.26	23.50
		1	49	23.12	23.19	23.11	23.50
		25	0	21.96	21.94	22.12	22.50
		25	13	21.99	22.01	22.02	22.50
		25	25	22.06	22.02	22.06	22.50
		50	0	21.95	22.00	22.06	22.50

LTE Band7							
DSI1				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	15.26	15.97	15.74	16.50
		1	13	15.68	15.90	15.84	16.50
		1	24	15.39	15.65	15.58	16.50
		12	0	15.53	15.80	15.75	16.50
		12	6	15.62	15.82	15.80	16.50
		12	13	15.64	15.82	15.70	16.50
		25	0	15.55	15.85	15.74	16.50
	16QAM	1	0	15.66	15.86	15.92	16.50
		1	13	16.11	16.28	16.29	16.50

		1	24	15.81	16.06	15.98	16.50
		12	0	15.68	15.85	15.83	16.50
		12	6	15.73	15.91	15.86	16.50
		12	13	15.76	15.91	15.78	16.50
		25	0	15.71	15.90	15.81	16.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	15.28	15.98	15.77	16.50
		1	25	15.71	15.95	15.88	16.50
		1	49	15.41	15.69	15.61	16.50
		25	0	15.56	15.85	15.79	16.50
		25	13	15.65	15.87	15.84	16.50
		25	25	15.66	15.86	15.75	16.50
		50	0	15.59	15.87	15.78	16.50
	16QAM	1	0	15.70	15.89	15.94	16.50
		1	25	16.15	16.32	16.32	16.50
		1	49	15.84	16.08	16.01	16.50
		25	0	15.71	15.90	15.87	16.50
		25	13	15.75	15.95	15.89	16.50
		25	25	15.79	15.96	15.82	16.50
		50	0	15.74	15.95	15.85	16.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	15.27	15.94	15.75	16.50
		1	38	15.69	15.94	15.85	16.50
		1	74	15.38	15.64	15.57	16.50
		36	0	15.54	15.81	15.76	16.50
		36	18	15.62	15.82	15.80	16.50
		36	39	15.63	15.83	15.71	16.50
		75	0	15.57	15.83	15.73	16.50
	16QAM	1	0	15.68	15.87	15.92	16.50
		1	38	16.13	16.29	16.30	16.50
		1	74	15.82	16.04	15.98	16.50
		36	0	15.68	15.88	15.84	16.50
		36	18	15.72	15.90	15.85	16.50
		36	39	15.77	15.92	15.79	16.50
		75	0	15.71	15.90	15.81	16.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	15.24	**15.90**	15.72	16.50
		1	50	**15.68**	**15.90**	**15.83**	16.50
		1	99	15.36	15.63	15.54	16.50
		50	0	15.51	15.76	15.72	16.50

		50	25	**15.60**	**15.78**	**15.77**	16.50
		50	50	**15.60**	**15.78**	15.67	16.50
		100	0	15.54	**15.78**	15.69	16.50
	16QAM	1	0	15.65	15.83	15.87	16.50
		1	50	16.10	16.27	16.26	16.50
		1	99	15.79	16.01	15.96	16.50
		50	0	15.65	15.84	15.81	16.50
		50	25	15.69	15.88	15.82	16.50
		50	50	15.74	15.87	15.75	16.50
		100	0	15.69	15.86	15.78	16.50

LTE Band7							
DSI2				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	23.29	23.48	23.51	24.50
		1	13	23.76	23.86	23.96	24.50
		1	24	23.52	23.62	23.69	24.50
		12	0	22.69	22.84	22.97	23.50
		12	6	22.74	22.87	23.01	23.50
		12	13	22.79	22.88	22.89	23.50
		25	0	22.69	22.88	22.95	23.50
	16QAM	1	0	22.55	22.75	22.86	23.50
		1	13	23.08	23.24	23.27	23.50
		1	24	22.76	22.98	22.96	23.50
		12	0	21.74	21.85	22.00	22.50
		12	6	21.80	21.89	22.07	22.50
		12	13	21.85	21.94	21.89	22.50
		25	0	21.80	21.86	21.92	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	23.31	23.49	23.54	24.50
		1	25	23.79	23.91	24.00	24.50
		1	49	23.54	23.66	23.72	24.50
		25	0	22.72	22.89	23.01	23.50
		25	13	22.77	22.92	23.05	23.50
		25	25	22.81	22.92	22.94	23.50
		50	0	22.73	22.90	22.99	23.50
	16QAM	1	0	22.59	22.78	22.88	23.50
		1	25	23.12	23.28	23.30	23.50
		1	49	22.79	23.00	22.99	23.50
		25	0	21.77	21.90	22.04	22.50
		25	13	21.82	21.93	22.10	22.50

		25	25	21.88	21.99	21.93	22.50
		50	0	21.83	21.91	21.96	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	23.30	23.45	23.52	24.50
		1	38	23.77	23.90	23.97	24.50
		1	74	23.51	23.61	23.68	24.50
		36	0	22.70	22.85	22.98	23.50
		36	18	22.74	22.87	23.01	23.50
		36	39	22.78	22.89	22.90	23.50
		75	0	22.71	22.86	22.94	23.50
	16QAM	1	0	22.57	22.76	22.86	23.50
		1	38	23.10	23.25	23.28	23.50
		1	74	22.77	22.96	22.96	23.50
		36	0	21.74	21.88	22.01	22.50
		36	18	21.79	21.88	22.06	22.50
		36	39	21.86	21.95	21.90	22.50
		75	0	21.80	21.86	21.92	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	23.27	23.41	23.49	24.50
		1	50	**23.76**	**23.86**	**23.95**	24.50
		1	99	23.49	23.60	23.65	24.50
		50	0	22.67	22.80	22.94	23.50
		50	25	22.72	22.83	**22.98**	23.50
		50	50	**22.75**	**22.84**	22.86	23.50
		100	0	22.68	22.81	**22.90**	23.50
	16QAM	1	0	22.54	22.72	22.81	23.50
		1	50	23.07	23.23	23.24	23.50
		1	99	22.74	22.93	22.94	23.50
		50	0	21.71	21.84	21.98	22.50
		50	25	21.76	21.86	22.03	22.50
		50	50	21.83	21.90	21.86	22.50
		100	0	21.78	21.82	21.89	22.50

LTE Band7							
DSI4				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	15.68	16.13	16.19	17.00
		1	13	16.16	16.24	16.32	17.00
		1	24	15.83	15.95	16.06	17.00
		12	0	15.95	16.15	16.26	17.00

		12	6	16.03	16.20	16.28	17.00
		12	13	16.08	16.23	16.22	17.00
		25	0	16.00	16.22	16.28	17.00
	16QAM	1	0	16.08	16.23	16.32	17.00
		1	13	16.52	16.68	16.73	17.00
		1	24	16.30	16.44	16.41	17.00
		12	0	16.04	16.20	16.29	17.00
		12	6	16.13	16.25	16.38	17.00
		12	13	16.14	16.27	16.27	17.00
		25	0	16.09	16.25	16.32	17.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	15.70	16.14	16.22	17.00
		1	25	16.19	16.29	16.36	17.00
		1	49	15.85	15.99	16.09	17.00
		25	0	15.98	16.20	16.30	17.00
		25	13	16.06	16.25	16.32	17.00
		25	25	16.10	16.27	16.27	17.00
		50	0	16.04	16.24	16.32	17.00
	16QAM	1	0	16.12	16.26	16.34	17.00
		1	25	16.56	16.72	16.76	17.00
		1	49	16.33	16.46	16.44	17.00
		25	0	16.07	16.25	16.33	17.00
		25	13	16.15	16.29	16.41	17.00
		25	25	16.17	16.32	16.31	17.00
		50	0	16.12	16.30	16.36	17.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	15.69	16.10	16.20	17.00
		1	38	16.17	16.28	16.33	17.00
		1	74	15.82	15.94	16.05	17.00
		36	0	15.96	16.16	16.27	17.00
		36	18	16.03	16.20	16.28	17.00
		36	39	16.07	16.24	16.23	17.00
		75	0	16.02	16.20	16.27	17.00
	16QAM	1	0	16.10	16.24	16.32	17.00
		1	38	16.54	16.69	16.74	17.00
		1	74	16.31	16.42	16.41	17.00
		36	0	16.04	16.23	16.30	17.00
		36	18	16.12	16.24	16.37	17.00
		36	39	16.15	16.28	16.28	17.00
		75	0	16.09	16.25	16.32	17.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	15.66	16.06	16.17	17.00
		1	50	**16.16**	**16.24**	**16.31**	17.00
		1	99	15.80	15.93	16.02	17.00
		50	0	15.93	16.11	16.23	17.00
		50	25	16.01	16.16	**16.25**	17.00
		50	50	**16.04**	**16.19**	16.19	17.00
		100	0	15.99	16.15	**16.23**	17.00
	16QAM	1	0	16.07	16.20	16.27	17.00
		1	50	16.51	16.67	16.70	17.00
		1	99	16.28	16.39	16.39	17.00
		50	0	16.01	16.19	16.27	17.00
		50	25	16.09	16.22	16.34	17.00
		50	50	16.12	16.23	16.24	17.00
		100	0	16.07	16.21	16.29	17.00

LTE Band 13							
Full Power&DSI1&DSI2				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	22.81	22.82	22.81	24.50
		1	13	22.93	22.96	22.94	24.50
		1	24	22.87	22.86	22.88	24.50
		12	0	21.96	21.98	21.97	23.50
		12	6	21.96	21.98	21.97	23.50
		12	13	21.93	21.95	21.94	23.50
		25	0	21.97	21.99	21.98	23.50
	16QAM	1	0	22.09	22.10	22.11	23.50
		1	13	22.30	22.29	22.31	23.50
		1	24	22.14	22.14	22.13	23.50
		12	0	21.03	21.04	21.03	22.50
		12	6	21.01	21.00	21.01	22.50
		12	13	20.96	20.98	20.97	22.50
		25	0	21.02	21.04	21.03	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				/	23230/782	/	
10MHz	QPSK	1	0	/	22.78	/	24.50
		1	25	/	**22.92**	/	24.50
		1	49	/	22.85	/	24.50
		25	0	/	21.93	/	23.50
		25	13	/	**21.94**	/	23.50
		25	25	/	21.90	/	23.50

		50	0	/	**21.94**	/	23.50
	16QAM	1	0	/	22.06	/	23.50
		1	25	/	22.27	/	23.50
		1	49	/	22.11	/	23.50
		25	0	/	21.00	/	22.50
		25	13	/	20.98	/	22.50
		25	25	/	20.93	/	22.50
		50	0	/	21.00	/	22.50

LTE Band 13							
DSI4				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	20.88	20.89	20.88	22.50
		1	13	21.00	21.03	21.01	22.50
		1	24	20.89	20.88	20.90	22.50
		12	0	21.03	21.05	21.04	22.50
		12	6	21.02	21.04	21.03	22.50
		12	13	20.93	20.95	20.94	22.50
		25	0	21.02	21.04	21.03	22.50
	16QAM	1	0	21.22	21.23	21.24	22.50
		1	13	21.37	21.36	21.38	22.50
		1	24	21.21	21.21	21.20	22.50
		12	0	21.02	21.03	21.02	22.50
		12	6	21.02	21.01	21.02	22.50
		12	13	20.96	20.98	20.97	22.50
		25	0	20.98	21.00	20.99	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				/	23230/782	/	
10MHz	QPSK	1	0	/	20.85	/	22.50
		1	25	/	**20.99**	/	22.50
		1	49	/	20.87	/	22.50
		25	0	/	**21.00**	/	22.50
		25	13	/	**21.00**	/	22.50
		25	25	/	20.90	/	22.50
		50	0	/	**20.99**	/	22.50
	16QAM	1	0	/	21.19	/	22.50
		1	25	/	21.34	/	22.50
		1	49	/	21.18	/	22.50
		25	0	/	20.99	/	22.50
		25	13	/	20.99	/	22.50
		25	25	/	20.93	/	22.50
		50	0	/	20.96	/	22.50

LTE Band 26							
DSI1				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	20.55	20.65	20.56	22.00
		1	2	20.72	20.67	20.73	22.00
		1	5	20.62	20.66	20.64	22.00
		3	0	20.68	20.76	20.77	22.00
		3	2	20.71	20.76	20.82	22.00
		3	3	20.76	20.72	20.68	22.00
		6	0	20.68	20.74	20.72	22.00
	16QAM	1	0	20.90	20.91	20.89	22.00
		1	2	21.10	20.93	21.07	22.00
		1	5	20.89	20.91	20.91	22.00
		3	0	20.74	20.71	20.74	22.00
		3	2	20.77	20.75	20.78	22.00
		3	3	20.86	20.77	20.70	22.00
		6	0	20.79	20.75	20.75	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	20.52	20.63	20.52	22.00
		1	7	20.70	20.63	20.70	22.00
		1	14	20.59	20.61	20.60	22.00
		8	0	20.65	20.71	20.73	22.00
		8	4	20.69	20.72	20.77	22.00
		8	7	20.74	20.70	20.64	22.00
		15	0	20.68	20.73	20.70	22.00
	16QAM	1	0	20.90	20.87	20.86	22.00
		1	7	21.10	20.91	21.04	22.00
		1	14	20.86	20.89	20.87	22.00
		8	0	20.72	20.67	20.71	22.00
		8	4	20.74	20.70	20.74	22.00
		8	7	20.83	20.72	20.66	22.00
		15	0	20.77	20.71	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	20.54	20.64	20.55	22.00
		1	13	20.73	20.68	20.74	22.00
		1	24	20.61	20.65	20.63	22.00
		12	0	20.68	20.76	20.77	22.00
		12	6	20.72	20.77	20.81	22.00
		12	13	20.76	20.74	20.69	22.00

		25	0	20.72	20.75	20.74	22.00
	16QAM	1	0	20.94	20.90	20.88	22.00
		1	13	21.14	20.95	21.07	22.00
		1	24	20.89	20.91	20.90	22.00
		12	0	20.75	20.72	20.75	22.00
		12	6	20.76	20.74	20.77	22.00
		12	13	20.86	20.77	20.70	22.00
		25	0	20.80	20.76	20.74	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26740/819	26865/831.5	26990/844	
10MHz	QPSK	1	0	20.53	20.60	20.53	22.00
		1	25	20.71	20.67	20.71	22.00
		1	49	20.58	20.60	20.59	22.00
		25	0	20.66	20.72	20.74	22.00
		25	13	20.69	20.72	20.77	22.00
		25	25	20.73	20.71	20.65	22.00
		50	0	20.70	20.71	20.69	22.00
	16QAM	1	0	20.92	20.88	20.86	22.00
		1	25	21.12	20.92	21.05	22.00
		1	49	20.87	20.87	20.87	22.00
		25	0	20.72	20.70	20.72	22.00
		25	13	20.73	20.69	20.73	22.00
		25	25	20.84	20.73	20.67	22.00
		50	0	20.77	20.71	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	20.50	20.56	20.50	22.00
		1	38	**20.70**	**20.63**	**20.69**	22.00
		1	74	20.56	20.59	20.56	22.00
		36	0	20.63	20.67	20.70	22.00
		36	18	20.67	**20.68**	**20.74**	22.00
		36	39	**20.70**	20.66	20.61	22.00
		75	0	**20.67**	20.66	20.65	22.00
	16QAM	1	0	20.89	20.84	20.81	22.00
		1	38	21.09	20.90	21.01	22.00
		1	74	20.84	20.84	20.85	22.00
		36	0	20.69	20.66	20.69	22.00
		36	18	20.70	20.67	20.70	22.00
		36	39	20.81	20.68	20.63	22.00
		75	0	20.75	20.67	20.67	22.00

LTE Band 26							
Full Power&DSI2&DSI4				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	22.96	23.10	23.06	24.50
		1	2	23.17	23.10	23.16	24.50
		1	5	23.04	23.08	23.09	24.50
		3	0	23.10	23.12	23.21	24.50
		3	2	23.10	23.19	23.18	24.50
		3	3	23.18	23.17	23.11	24.50
		6	0	22.20	22.22	22.22	23.50
	16QAM	1	0	22.29	22.32	22.30	23.50
		1	2	22.49	22.40	22.38	23.50
		1	5	22.32	22.40	22.26	23.50
		3	0	22.07	22.03	22.19	23.50
		3	2	22.12	22.14	22.16	23.50
		3	3	22.18	22.15	22.07	23.50
		6	0	21.20	21.20	21.28	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26705/815.5	26865/831.5	27025/847.5	
3MHz	QPSK	1	0	22.95	23.12	23.05	24.50
		1	7	23.13	23.09	23.17	24.50
		1	14	23.04	23.08	23.09	24.50
		8	0	22.17	22.19	22.30	23.50
		8	4	22.20	22.25	22.25	23.50
		8	7	22.26	22.26	22.17	23.50
		15	0	22.20	22.25	22.23	23.50
	16QAM	1	0	22.29	22.30	22.30	23.50
		1	7	22.49	22.38	22.39	23.50
		1	14	22.31	22.42	22.25	23.50
		8	0	21.16	21.12	21.28	22.50
		8	4	21.20	21.22	21.24	22.50
		8	7	21.25	21.22	21.16	22.50
		15	0	21.21	21.20	21.26	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26715/816.5	26865/831.5	27015/846.5	
5MHz	QPSK	1	0	22.97	23.13	23.08	24.50
		1	13	23.16	23.14	23.21	24.50
		1	24	23.06	23.12	23.12	24.50
		12	0	22.20	22.24	22.34	23.50
		12	6	22.23	22.30	22.29	23.50
		12	13	22.28	22.30	22.22	23.50

		25	0	22.24	22.27	22.27	23.50
	16QAM	1	0	22.33	22.33	22.32	23.50
		1	13	22.53	22.42	22.42	23.50
		1	24	22.34	22.44	22.28	23.50
		12	0	21.19	21.17	21.32	22.50
		12	6	21.22	21.26	21.27	22.50
		12	13	21.28	21.27	21.20	22.50
		25	0	21.24	21.25	21.30	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26740/819	26865/831.5	26990/844	
10MHz	QPSK	1	0	22.96	23.09	23.06	24.50
		1	25	23.14	23.13	23.18	24.50
		1	49	23.03	23.07	23.08	24.50
		25	0	22.18	22.20	22.31	23.50
		25	13	22.20	22.25	22.25	23.50
		25	25	22.25	22.27	22.18	23.50
		50	0	22.22	22.23	22.22	23.50
	16QAM	1	0	22.31	22.31	22.30	23.50
		1	25	22.51	22.39	22.40	23.50
		1	49	22.32	22.40	22.25	23.50
		25	0	21.16	21.15	21.29	22.50
		25	13	21.19	21.21	21.23	22.50
		25	25	21.26	21.23	21.17	22.50
		50	0	21.21	21.20	21.26	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26765/821.5	26865/831.5	26965/841.5	
15MHz	QPSK	1	0	22.93	23.05	23.03	24.50
		1	38	**23.13**	**23.09**	**23.16**	24.50
		1	74	23.01	23.06	23.05	24.50
		36	0	22.15	22.15	**22.27**	23.50
		36	18	22.18	22.21	22.22	23.50
		36	39	**22.22**	**22.22**	22.14	23.50
		75	0	**22.19**	22.18	22.18	23.50
	16QAM	1	0	22.28	22.27	22.25	23.50
		1	38	22.48	22.37	22.36	23.50
		1	74	22.29	22.37	22.23	23.50
		36	0	21.13	21.11	21.26	22.50
		36	18	21.16	21.19	21.20	22.50
		36	39	21.23	21.18	21.13	22.50
		75	0	21.19	21.16	21.23	22.50

LTE Band38							
DSI1				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	17.45	17.50	17.52	18.50
		1	13	17.84	17.84	17.94	18.50
		1	24	17.55	17.52	17.63	18.50
		12	0	17.70	17.69	17.76	18.50
		12	6	17.70	17.74	17.78	18.50
		12	13	17.71	17.71	17.74	18.50
		25	0	17.64	17.70	17.73	18.50
	16QAM	1	0	17.68	17.78	17.82	18.50
		1	13	18.10	18.12	18.19	18.50
		1	24	17.82	17.82	17.88	18.50
		12	0	17.80	17.80	17.86	18.50
		12	6	17.83	17.82	17.92	18.50
		12	13	17.79	17.84	18.02	18.50
		25	0	17.76	17.78	17.83	18.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	17.47	17.51	17.55	18.50
		1	25	17.87	17.89	17.98	18.50
		1	49	17.57	17.56	17.66	18.50
		25	0	17.73	17.74	17.80	18.50
		25	13	17.73	17.79	17.82	18.50
		25	25	17.73	17.75	17.79	18.50
		50	0	17.68	17.72	17.77	18.50
	16QAM	1	0	17.72	17.81	17.84	18.50
		1	25	18.14	18.16	18.22	18.50
		1	49	17.85	17.84	17.91	18.50
		25	0	17.83	17.85	17.90	18.50
		25	13	17.85	17.86	17.95	18.50
		25	25	17.82	17.89	18.06	18.50
		50	0	17.79	17.83	17.87	18.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	17.46	17.47	17.53	18.50
		1	38	17.85	17.88	17.95	18.50
		1	74	17.54	17.51	17.62	18.50
		36	0	17.71	17.70	17.77	18.50
		36	18	17.70	17.74	17.78	18.50
		36	39	17.70	17.72	17.75	18.50

		75	0	17.66	17.68	17.72	18.50
	16QAM	1	0	17.70	17.79	17.82	18.50
		1	38	18.12	18.13	18.20	18.50
		1	74	17.83	17.80	17.88	18.50
		36	0	17.80	17.83	17.87	18.50
		36	18	17.82	17.81	17.91	18.50
		36	39	17.80	17.85	18.03	18.50
		75	0	17.76	17.78	17.83	18.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	17.43	17.43	17.50	18.50
		1	50	**17.84**	**17.84**	**17.93**	18.50
		1	99	17.52	17.50	17.59	18.50
		50	0	**17.68**	17.65	17.73	18.50
		50	25	**17.68**	**17.70**	**17.75**	18.50
		50	50	17.67	17.67	17.71	18.50
		100	0	17.63	17.63	**17.68**	18.50
	16QAM	1	0	17.67	17.75	17.77	18.50
		1	50	18.09	18.11	18.16	18.50
		1	99	17.80	17.77	17.86	18.50
		50	0	17.77	17.79	17.84	18.50
		50	25	17.79	17.79	17.88	18.50
		50	50	17.77	17.80	17.99	18.50
		100	0	17.74	17.74	17.80	18.50

LTE Band38							
DSI2				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	23.44	23.49	23.52	24.50
		1	13	23.81	23.82	23.88	24.50
		1	24	23.53	23.51	23.54	24.50
		12	0	22.75	22.77	22.79	23.50
		12	6	22.81	22.85	22.86	23.50
		12	13	22.77	22.77	22.79	23.50
		25	0	22.78	22.86	22.84	23.50
	16QAM	1	0	22.63	22.68	22.73	23.50
		1	13	23.05	23.05	23.09	23.50
		1	24	22.74	22.79	22.75	23.50
		12	0	21.85	21.85	21.84	22.50
		12	6	21.93	21.90	21.95	22.50
		12	13	21.81	21.83	21.91	22.50
		25	0	21.83	21.87	21.88	22.50

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	23.46	23.50	23.55	24.50
		1	25	23.84	23.87	23.92	24.50
		1	49	23.55	23.55	23.57	24.50
		25	0	22.78	22.82	22.83	23.50
		25	13	22.84	22.90	22.90	23.50
		25	25	22.79	22.81	22.84	23.50
		50	0	22.82	22.88	22.88	23.50
	16QAM	1	0	22.67	22.71	22.75	23.50
		1	25	23.09	23.09	23.12	23.50
		1	49	22.77	22.81	22.78	23.50
		25	0	21.88	21.90	21.88	22.50
		25	13	21.95	21.94	21.98	22.50
		25	25	21.84	21.88	21.95	22.50
		50	0	21.86	21.92	21.92	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	23.45	23.46	23.53	24.50
		1	38	23.82	23.86	23.89	24.50
		1	74	23.52	23.50	23.53	24.50
		36	0	22.76	22.78	22.80	23.50
		36	18	22.81	22.85	22.86	23.50
		36	39	22.76	22.78	22.80	23.50
		75	0	22.80	22.84	22.83	23.50
	16QAM	1	0	22.65	22.69	22.73	23.50
		1	38	23.07	23.06	23.10	23.50
		1	74	22.75	22.77	22.75	23.50
		36	0	21.85	21.88	21.85	22.50
		36	18	21.92	21.89	21.94	22.50
		36	39	21.82	21.84	21.92	22.50
		75	0	21.83	21.87	21.88	22.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	23.42	23.42	23.50	24.50
		1	50	**23.81**	**23.82**	**23.87**	24.50
		1	99	23.50	23.49	23.50	24.50
		50	0	22.73	22.73	22.76	23.50
		50	25	**22.79**	**22.81**	**22.83**	23.50
		50	50	22.73	22.73	22.76	23.50
		100	0	22.77	**22.79**	**22.79**	23.50
	16QAM	1	0	22.62	22.65	22.68	23.50
		1	50	23.04	23.04	23.06	23.50

		1	99	22.72	22.74	22.73	23.50
		50	0	21.82	21.84	21.82	22.50
		50	25	21.89	21.87	21.91	22.50
		50	50	21.79	21.79	21.88	22.50
		100	0	21.81	21.83	21.85	22.50

LTE Band 38							
DSI4				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	18.27	18.38	18.34	19.00
		1	13	18.68	18.66	18.73	19.00
		1	24	18.38	18.41	18.39	19.00
		12	0	18.53	18.57	18.56	19.00
		12	6	18.55	18.57	18.56	19.00
		12	13	18.55	18.55	18.60	19.00
		25	0	18.49	18.58	18.58	19.00
	16QAM	1	0	18.52	18.55	18.65	19.00
		1	13	18.90	18.91	18.93	19.00
		1	24	18.64	18.67	18.66	19.00
		12	0	18.67	18.61	18.66	19.00
		12	6	18.69	18.75	18.71	19.00
		12	13	18.75	18.66	18.68	19.00
		25	0	18.68	18.62	18.61	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	18.29	18.39	18.37	19.00
		1	25	18.71	18.71	18.77	19.00
		1	49	18.40	18.45	18.42	19.00
		25	0	18.56	18.62	18.60	19.00
		25	13	18.58	18.62	18.60	19.00
		25	25	18.57	18.59	18.65	19.00
		50	0	18.53	18.60	18.62	19.00
	16QAM	1	0	18.56	18.58	18.67	19.00
		1	25	18.94	18.95	18.96	19.00
		1	49	18.67	18.69	18.69	19.00
		25	0	18.70	18.66	18.70	19.00
		25	13	18.71	18.79	18.74	19.00
		25	25	18.78	18.71	18.72	19.00
		50	0	18.71	18.67	18.65	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	18.28	18.35	18.35	19.00

		1	38	18.69	18.70	18.74	19.00
		1	74	18.37	18.40	18.38	19.00
		36	0	18.54	18.58	18.57	19.00
		36	18	18.55	18.57	18.56	19.00
		36	39	18.54	18.56	18.61	19.00
		75	0	18.51	18.56	18.57	19.00
	16QAM	1	0	18.54	18.56	18.65	19.00
		1	38	18.92	18.92	18.94	19.00
		1	74	18.65	18.65	18.66	19.00
		36	0	18.67	18.64	18.67	19.00
		36	18	18.68	18.74	18.70	19.00
		36	39	18.76	18.67	18.69	19.00
		75	0	18.68	18.62	18.61	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	18.25	18.31	18.32	19.00
		1	50	**18.68**	**18.66**	**18.72**	19.00
		1	99	18.35	18.39	18.35	19.00
		50	0	18.51	**18.53**	18.53	19.00
		50	25	**18.53**	**18.53**	18.53	19.00
		50	50	18.51	18.51	**18.57**	19.00
		100	0	18.48	18.51	**18.53**	19.00
	16QAM	1	0	18.51	18.52	18.60	19.00
		1	50	18.89	18.90	18.90	19.00
		1	99	18.62	18.62	18.64	19.00
		50	0	18.64	18.60	18.64	19.00
		50	25	18.65	18.72	18.67	19.00
		50	50	18.73	18.62	18.65	19.00
		100	0	18.66	18.58	18.58	19.00

LTE Band41									
DSI1&DSI4				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	18.24	18.44	18.58	18.49	18.45	19.50
		1	13	18.56	18.75	18.82	18.75	18.64	19.50
		1	24	18.37	18.61	18.59	18.44	18.44	19.50
		12	0	18.38	18.68	18.76	18.66	18.56	19.50
		12	6	18.50	18.71	18.74	18.64	18.60	19.50
		12	13	18.51	18.72	18.70	18.62	18.53	19.50
		25	0	18.44	18.68	18.75	18.64	18.62	19.50
	16QAM	1	0	18.51	18.71	18.89	18.83	18.70	19.50
		1	13	18.84	19.06	19.10	19.03	19.00	19.50

		1	24	18.64	19.03	18.83	18.73	18.75	19.50
		12	0	18.52	18.75	18.86	18.78	18.66	19.50
		12	6	18.61	18.82	18.87	18.78	18.68	19.50
		12	13	18.60	18.84	18.95	18.70	18.67	19.50
		25	0	18.52	18.78	18.83	18.72	18.65	19.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)					Tune-up
				39700/2501	40160/2547	40620/2593	41080/2639	41540/2685	
10MHz	QPSK	1	0	18.26	18.45	18.61	18.51	18.46	19.50
		1	25	18.59	18.80	18.86	18.78	18.69	19.50
		1	49	18.39	18.65	18.62	18.46	18.48	19.50
		25	0	18.41	18.73	18.80	18.69	18.61	19.50
		25	13	18.53	18.76	18.78	18.67	18.65	19.50
		25	25	18.53	18.76	18.75	18.64	18.57	19.50
		50	0	18.48	18.70	18.79	18.68	18.64	19.50
	16QAM	1	0	18.55	18.74	18.91	18.87	18.73	19.50
		1	25	18.88	19.10	19.13	19.07	19.04	19.50
		1	49	18.67	19.05	18.86	18.76	18.77	19.50
		25	0	18.55	18.80	18.90	18.81	18.71	19.50
		25	13	18.63	18.86	18.90	18.80	18.72	19.50
		25	25	18.63	18.89	18.99	18.73	18.72	19.50
		50	0	18.55	18.83	18.87	18.75	18.70	19.50
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	18.25	18.41	18.59	18.50	18.42	19.50
		1	38	18.57	18.79	18.83	18.76	18.68	19.50
		1	74	18.36	18.60	18.58	18.43	18.43	19.50
		36	0	18.39	18.69	18.77	18.67	18.57	19.50
		36	18	18.50	18.71	18.74	18.64	18.60	19.50
		36	39	18.50	18.73	18.71	18.61	18.54	19.50
		75	0	18.46	18.66	18.74	18.66	18.60	19.50
	16QAM	1	0	18.53	18.72	18.89	18.85	18.71	19.50
		1	38	18.86	19.07	19.11	19.05	19.01	19.50
		1	74	18.65	19.01	18.83	18.74	18.73	19.50
		36	0	18.52	18.78	18.87	18.78	18.69	19.50
		36	18	18.60	18.81	18.86	18.77	18.67	19.50
		36	39	18.61	18.85	18.96	18.71	18.68	19.50
		75	0	18.52	18.78	18.83	18.72	18.65	19.50
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	18.37	18.52	18.71	18.62	18.53	19.50
		1	38	**18.71**	**18.90**	**18.96**	**18.90**	**18.79**	19.50
		1	74	18.49	18.74	18.70	18.56	18.57	19.50
		36	0	18.51	**18.77**	**18.79**	**18.78**	18.67	19.50

		36	18	**18.63**	18.76	18.56	18.57	**18.69**	19.50
		36	39	18.62	18.62	18.75	18.73	18.64	19.50
		75	0	18.58	18.76	**18.85**	18.78	**18.70**	19.50
	16QAM	1	0	18.65	18.83	18.99	18.97	18.82	19.50
		1	38	18.98	19.20	19.22	19.17	19.14	19.50
		1	74	18.77	19.13	18.96	18.86	18.85	19.50
		36	0	18.64	18.89	18.99	18.90	18.80	19.50
		36	18	18.72	18.94	18.98	18.89	18.80	19.50
		36	39	18.73	18.95	19.07	18.83	18.78	19.50
		75	0	18.65	18.89	18.95	18.85	18.76	19.50

LTE Band41									
DSI2				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	23.25	23.46	23.53	23.48	23.45	24.50
		1	13	23.61	23.78	23.82	23.74	23.67	24.50
		1	24	23.39	23.61	23.58	23.40	23.42	24.50
		12	0	22.54	22.73	22.83	22.73	22.66	23.50
		12	6	22.61	22.83	22.83	22.72	22.69	23.50
		12	13	22.68	22.82	22.75	22.69	22.67	23.50
		25	0	22.67	22.85	22.81	22.71	22.74	23.50
	16QAM	1	0	22.42	22.63	22.85	22.63	22.61	23.50
		1	13	22.84	23.01	23.02	22.95	22.81	23.50
		1	24	22.58	22.82	22.79	22.61	22.66	23.50
		12	0	21.59	21.77	21.86	21.84	21.71	22.50
		12	6	21.67	21.81	21.91	21.79	21.76	22.50
		12	13	21.68	21.88	21.83	21.71	21.72	22.50
		25	0	21.65	21.86	21.84	21.74	21.72	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	23.27	23.47	23.56	23.50	23.46	24.50
		1	25	23.64	23.83	23.86	23.77	23.72	24.50
		1	49	23.41	23.65	23.61	23.42	23.46	24.50
		25	0	22.57	22.78	22.87	22.76	22.71	23.50
		25	13	22.64	22.88	22.87	22.75	22.74	23.50
		25	25	22.70	22.86	22.80	22.71	22.71	23.50
		50	0	22.71	22.87	22.85	22.75	22.76	23.50
	16QAM	1	0	22.46	22.66	22.87	22.67	22.64	23.50
		1	25	22.88	23.05	23.05	22.99	22.85	23.50
		1	49	22.61	22.84	22.82	22.64	22.68	23.50
		25	0	21.62	21.82	21.90	21.87	21.76	22.50
		25	13	21.69	21.85	21.94	21.81	21.80	22.50

		25	25	21.71	21.93	21.87	21.74	21.77	22.50
		50	0	21.68	21.91	21.88	21.77	21.77	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	23.26	23.43	23.54	23.49	23.42	24.50
		1	38	23.62	23.82	23.83	23.75	23.71	24.50
		1	74	23.38	23.60	23.57	23.39	23.41	24.50
		36	0	22.55	22.74	22.84	22.74	22.67	23.50
		36	18	22.61	22.83	22.83	22.72	22.69	23.50
		36	39	22.67	22.83	22.76	22.68	22.68	23.50
		75	0	22.69	22.83	22.80	22.73	22.72	23.50
	16QAM	1	0	22.44	22.64	22.85	22.65	22.62	23.50
		1	38	22.86	23.02	23.03	22.97	22.82	23.50
		1	74	22.59	22.80	22.79	22.62	22.64	23.50
		36	0	21.59	21.80	21.87	21.84	21.74	22.50
		36	18	21.66	21.80	21.90	21.78	21.75	22.50
		36	39	21.69	21.89	21.84	21.72	21.73	22.50
		75	0	21.65	21.86	21.84	21.74	21.72	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	23.23	23.39	23.51	23.46	23.38	24.50
		1	50	**23.61**	**23.78**	**23.81**	**23.74**	**23.67**	24.50
		1	99	23.36	23.59	23.54	23.37	23.40	24.50
		50	0	22.52	22.69	**22.80**	**22.71**	22.62	23.50
		50	25	22.59	**22.79**	**22.80**	22.70	**22.65**	23.50
		50	50	**22.64**	22.78	22.72	22.65	22.63	23.50
		100	0	22.66	**22.78**	22.76	22.70	**22.67**	23.50
	16QAM	1	0	22.41	22.60	22.80	22.62	22.58	23.50
		1	50	22.83	23.00	22.99	22.94	22.80	23.50
		1	99	22.56	22.77	22.77	22.59	22.61	23.50
		50	0	21.56	21.76	21.84	21.81	21.70	22.50
		50	25	21.63	21.78	21.87	21.75	21.73	22.50
		50	50	21.66	21.84	21.80	21.69	21.68	22.50
		100	0	21.63	21.82	21.81	21.72	21.68	22.50

LTE Band 66							
DSI1				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	15.41	15.74	15.67	17.00
		1	2	15.78	15.76	15.67	17.00
		1	5	15.36	15.29	15.23	17.00
		3	0	15.71	15.84	15.78	17.00

		3	2	15.70	15.78	15.66	17.00
		3	3	15.66	15.70	15.49	17.00
		6	0	15.62	15.77	15.66	17.00
	16QAM	1	0	15.75	15.85	15.74	17.00
		1	2	16.07	16.12	16.02	17.00
		1	5	15.70	15.64	15.54	17.00
		3	0	15.75	15.81	15.77	17.00
		3	2	15.75	15.78	15.67	17.00
		3	3	15.67	15.74	15.52	17.00
		6	0	15.66	15.78	15.66	17.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				1319871711.5	132322/1745	132657/1778.5	
3MHz	QPSK	1	0	15.38	15.70	15.64	16.50
		1	7	15.77	15.72	15.65	16.50
		1	14	15.34	15.28	15.20	16.50
		8	0	15.68	15.79	15.74	16.50
		8	4	15.68	15.74	15.63	16.50
		8	7	15.63	15.65	15.45	16.50
		15	0	15.59	15.72	15.62	16.50
	16QAM	1	0	15.72	15.81	15.69	16.50
		1	7	16.04	16.10	15.98	16.50
		1	14	15.67	15.61	15.52	16.50
		8	0	15.72	15.77	15.74	16.50
		8	4	15.72	15.76	15.64	16.50
		8	7	15.64	15.69	15.48	16.50
		15	0	15.64	15.74	15.63	16.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131997/1712.5	132322/1745	132647/1777.5	
5MHz	QPSK	1	0	15.35	15.68	15.60	16.50
		1	13	15.75	15.68	15.62	16.50
		1	24	15.31	15.23	15.16	16.50
		12	0	15.65	15.74	15.70	16.50
		12	6	15.66	15.70	15.58	16.50
		12	13	15.61	15.63	15.41	16.50
		25	0	15.59	15.71	15.60	16.50
	16QAM	1	0	15.72	15.77	15.66	16.50
		1	13	16.04	16.08	15.95	16.50
		1	24	15.64	15.59	15.48	16.50
		12	0	15.70	15.73	15.71	16.50
		12	6	15.69	15.71	15.60	16.50
		12	13	15.61	15.64	15.44	16.50
		25	0	15.62	15.70	15.58	16.50
Bandwidth	Modulation	RB	Offset	Channel/Frequency(MHz)			Tune-up

		Allocation		132022/1715	132322/1745	132622/1775	
10MHz	QPSK	1	0	15.37	15.69	15.63	16.50
		1	25	15.78	15.73	15.66	16.50
		1	49	15.33	15.27	15.19	16.50
		25	0	15.68	15.79	15.74	16.50
		25	13	15.69	15.75	15.62	16.50
		25	25	15.63	15.67	15.46	16.50
		50	0	15.63	15.73	15.64	16.50
	16QAM	1	0	15.76	15.80	15.68	16.50
		1	25	16.08	16.12	15.98	16.50
		1	49	15.67	15.61	15.51	16.50
		25	0	15.73	15.78	15.75	16.50
		25	13	15.71	15.75	15.63	16.50
		25	25	15.64	15.69	15.48	16.50
		50	0	15.65	15.75	15.62	16.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132047/1717.5	132322/1745	132597/1772.5	
15MHz	QPSK	1	0	15.36	15.65	15.61	16.50
		1	38	15.76	15.72	15.63	16.50
		1	74	15.30	15.22	15.15	16.50
		36	0	15.66	15.75	15.71	16.50
		36	18	15.66	15.70	15.58	16.50
		36	39	15.60	15.64	15.42	16.50
		75	0	15.61	15.69	15.59	16.50
	16QAM	1	0	15.74	15.78	15.66	16.50
		1	38	16.06	16.09	15.96	16.50
		1	74	15.65	15.57	15.48	16.50
		36	0	15.70	15.76	15.72	16.50
		36	18	15.68	15.70	15.59	16.50
		36	39	15.62	15.65	15.45	16.50
		75	0	15.62	15.70	15.58	16.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132072/1720	132322/1745	132572/1770	
20MHz	QPSK	1	0	15.33	15.61	15.58	16.50
		1	50	**15.75**	**15.68**	**15.61**	16.50
		1	99	15.28	15.21	15.12	16.50
		50	0	15.63	**15.70**	**15.67**	16.50
		50	25	**15.64**	15.66	15.55	16.50
		50	50	15.57	15.59	15.38	16.50
		100	0	15.58	**15.64**	15.55	16.50
	16QAM	1	0	15.71	15.74	15.61	16.50
		1	50	16.03	16.07	15.92	16.50
		1	99	15.62	15.54	15.46	16.50

		50	0	15.67	15.72	15.69	16.50
		50	25	15.65	15.68	15.56	16.50
		50	50	15.59	15.60	15.41	16.50
		100	0	15.60	15.66	15.55	16.50

LTE Band 66							
Full Power&DSI2				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	22.89	22.88	22.95	24.00
		1	2	23.21	23.27	23.09	24.00
		1	5	22.78	22.69	22.69	24.00
		3	0	23.09	23.18	23.12	24.00
		3	2	23.09	23.18	23.04	24.00
		3	3	23.09	23.13	22.91	24.00
		6	0	22.13	22.21	22.13	23.00
	16QAM	1	0	22.11	22.26	22.11	23.00
		1	2	22.46	22.54	22.44	23.00
		1	5	22.15	22.04	21.90	23.00
		3	0	22.11	22.14	22.11	23.00
		3	2	22.17	22.13	22.05	23.00
		3	3	22.11	22.12	21.86	23.00
		6	0	21.13	21.22	21.11	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				1319871711.5	132322/1745	132657/1778.5	
3MHz	QPSK	1	0	22.91	22.92	22.98	24.00
		1	7	23.19	23.30	23.13	24.00
		1	14	22.81	22.74	22.73	24.00
		8	0	22.19	22.30	22.25	23.00
		8	4	22.21	22.28	22.16	23.00
		8	7	22.19	22.24	22.01	23.00
		15	0	22.13	22.25	22.16	23.00
	16QAM	1	0	22.11	22.28	22.14	23.00
		1	7	22.46	22.54	22.48	23.00
		1	14	22.17	22.08	21.93	23.00
		8	0	21.22	21.27	21.23	22.00
		8	4	21.28	21.26	21.17	22.00
		8	7	21.21	21.24	20.99	22.00
		15	0	21.16	21.26	21.14	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131997/1712.5	132322/1745	132647/1777.5	
5MHz	QPSK	1	0	22.88	22.90	22.94	24.00
		1	13	23.17	23.26	23.10	24.00

		1	24	22.78	22.69	22.69	24.00
		12	0	22.16	22.25	22.21	23.00
		12	6	22.19	22.24	22.11	23.00
		12	13	22.17	22.22	21.97	23.00
		25	0	22.13	22.24	22.14	23.00
	16QAM	1	0	22.11	22.24	22.11	23.00
		1	13	22.46	22.52	22.45	23.00
		1	24	22.14	22.06	21.89	23.00
		12	0	21.20	21.23	21.20	22.00
		12	6	21.25	21.21	21.13	22.00
		12	13	21.18	21.19	20.95	22.00
		25	0	21.14	21.22	21.09	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132022/1715	132322/1745	132622/1775	
10MHz	QPSK	1	0	22.90	22.91	22.97	24.00
		1	25	23.20	23.31	23.14	24.00
		1	49	22.80	22.73	22.72	24.00
		25	0	22.19	22.30	22.25	23.00
		25	13	22.22	22.29	22.15	23.00
		25	25	22.19	22.26	22.02	23.00
		50	0	22.17	22.26	22.18	23.00
	16QAM	1	0	22.15	22.27	22.13	23.00
		1	25	22.50	22.56	22.48	23.00
		1	49	22.17	22.08	21.92	23.00
		25	0	21.23	21.28	21.24	22.00
		25	13	21.27	21.25	21.16	22.00
		25	25	21.21	21.24	20.99	22.00
		50	0	21.17	21.27	21.13	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132047/1717.5	132322/1745	132597/1772.5	
15MHz	QPSK	1	0	22.89	22.87	22.95	24.00
		1	38	23.18	23.30	23.11	24.00
		1	74	22.77	22.68	22.68	24.00
		36	0	22.17	22.26	22.22	23.00
		36	18	22.19	22.24	22.11	23.00
		36	39	22.16	22.23	21.98	23.00
		75	0	22.15	22.22	22.13	23.00
	16QAM	1	0	22.13	22.25	22.11	23.00
		1	38	22.48	22.53	22.46	23.00
		1	74	22.15	22.04	21.89	23.00
		36	0	21.20	21.26	21.21	22.00
		36	18	21.24	21.20	21.12	22.00
		36	39	21.19	21.20	20.96	22.00

		75	0	21.14	21.22	21.09	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132072/1720	132322/1745	132572/1770	
20MHz	QPSK	1	0	22.86	22.83	22.92	24.00
		1	50	**23.17**	**23.26**	**23.09**	24.00
		1	99	22.75	22.67	22.65	24.00
		50	0	22.14	**22.21**	**22.18**	23.00
		50	25	**22.17**	22.20	22.08	23.00
		50	50	22.13	22.18	21.94	23.00
		100	0	22.12	**22.17**	22.09	23.00
	16QAM	1	0	22.10	22.21	22.06	23.00
		1	50	22.45	22.51	22.42	23.00
		1	99	22.12	22.01	21.87	23.00
		50	0	21.17	21.22	21.18	22.00
		50	25	21.21	21.18	21.09	22.00
		50	50	21.16	21.15	20.92	22.00
		100	0	21.12	21.18	21.06	22.00

LTE Band 66							
DSI4				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	20.96	20.94	20.84	22.00
		1	2	21.24	21.34	21.15	22.00
		1	5	20.86	20.73	20.71	22.00
		3	0	21.21	21.31	21.29	22.00
		3	2	21.26	21.31	21.16	22.00
		3	3	21.23	21.27	21.05	22.00
		6	0	21.18	21.27	21.17	22.00
	16QAM	1	0	21.27	21.28	21.26	22.00
		1	2	21.61	21.54	21.50	22.00
		1	5	21.17	21.08	21.04	22.00
		3	0	21.24	21.32	21.25	22.00
		3	2	21.29	21.31	21.21	22.00
		3	3	21.22	21.30	21.03	22.00
		6	0	21.20	21.29	21.16	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				1319871711.5	132322/1745	132657/1778.5	
3MHz	QPSK	1	0	20.93	20.90	20.81	22.00
		1	7	21.23	21.30	21.13	22.00
		1	14	20.84	20.72	20.68	22.00
		8	0	21.18	21.26	21.25	22.00

		8	4	21.24	21.27	21.13	22.00
		8	7	21.20	21.22	21.01	22.00
		15	0	21.15	21.22	21.13	22.00
	16QAM	1	0	21.24	21.24	21.21	22.00
		1	7	21.58	21.52	21.46	22.00
		1	14	21.14	21.05	21.02	22.00
		8	0	21.21	21.28	21.22	22.00
		8	4	21.26	21.29	21.18	22.00
		8	7	21.19	21.25	20.99	22.00
		15	0	21.18	21.25	21.13	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131997/1712.5	132322/1745	132647/1777.5	
5MHz	QPSK	1	0	20.90	20.88	20.77	22.00
		1	13	21.21	21.26	21.10	22.00
		1	24	20.81	20.67	20.64	22.00
		12	0	21.15	21.21	21.21	22.00
		12	6	21.22	21.23	21.08	22.00
		12	13	21.18	21.20	20.97	22.00
		25	0	21.15	21.21	21.11	22.00
	16QAM	1	0	21.24	21.20	21.18	22.00
		1	13	21.58	21.50	21.43	22.00
		1	24	21.11	21.03	20.98	22.00
		12	0	21.19	21.24	21.19	22.00
		12	6	21.23	21.24	21.14	22.00
		12	13	21.16	21.20	20.95	22.00
		25	0	21.16	21.21	21.08	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132022/1715	132322/1745	132622/1775	
10MHz	QPSK	1	0	20.92	20.89	20.80	22.00
		1	25	21.24	21.31	21.14	22.00
		1	49	20.83	20.71	20.67	22.00
		25	0	21.18	21.26	21.25	22.00
		25	13	21.25	21.28	21.12	22.00
		25	25	21.20	21.24	21.02	22.00
		50	0	21.19	21.23	21.15	22.00
	16QAM	1	0	21.28	21.23	21.20	22.00
		1	25	21.62	21.54	21.46	22.00
		1	49	21.14	21.05	21.01	22.00
		25	0	21.22	21.29	21.23	22.00
		25	13	21.25	21.28	21.17	22.00
		25	25	21.19	21.25	20.99	22.00
		50	0	21.19	21.26	21.12	22.00
Bandwidth	Modulation	RB	Offset	Channel/Frequency(MHz)			Tune-up

		Allocation		132047/1717.5	132322/1745	132597/1772.5	
15MHz	QPSK	1	0	20.91	20.85	20.78	22.00
		1	38	21.22	21.30	21.11	22.00
		1	74	20.80	20.66	20.63	22.00
		36	0	21.16	21.22	21.22	22.00
		36	18	21.22	21.23	21.08	22.00
		36	39	21.17	21.21	20.98	22.00
		75	0	21.17	21.19	21.10	22.00
	16QAM	1	0	21.26	21.21	21.18	22.00
		1	38	21.60	21.51	21.44	22.00
		1	74	21.12	21.01	20.98	22.00
		36	0	21.19	21.27	21.20	22.00
		36	18	21.22	21.23	21.13	22.00
		36	39	21.17	21.21	20.96	22.00
		75	0	21.16	21.21	21.08	22.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132072/1720	132322/1745	132572/1770	
20MHz	QPSK	1	0	20.88	20.81	20.75	22.00
		1	50	**21.21**	**21.26**	**21.09**	22.00
		1	99	20.78	20.65	20.60	22.00
		50	0	21.13	21.17	**21.18**	22.00
		50	25	**21.20**	**21.19**	21.05	22.00
		50	50	21.14	21.16	20.94	22.00
		100	0	**21.14**	**21.14**	21.06	22.00
	16QAM	1	0	21.23	21.17	21.13	22.00
		1	50	21.57	21.49	21.40	22.00
		1	99	21.09	20.98	20.96	22.00
		50	0	21.16	21.23	21.17	22.00
		50	25	21.19	21.21	21.10	22.00
		50	50	21.14	21.16	20.92	22.00
		100	0	21.14	21.17	21.05	22.00

9.4 WLAN Mode

Wi-Fi 2.4G Receiver Off& Receiver On Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11b (1M)	1/2412	19.00	**17.58**
	6/2437	19.00	17.52
	11/2462	19.00	17.57
802.11g (6M)	1/2412	16.50	14.28
	6/2437	16.50	14.10
	11/2462	16.50	14.46
802.11n-HT20 (MCS0)	1/2412	15.50	13.22
	6/2437	15.50	12.96
	11/2462	15.50	13.41
Note: Initial test configuration is 802.11b mode.			

9.5 Bluetooth Mode

Bluetooth	Conducted Power(dBm)			Tune-up Limit (dBm)
	Channel/Frequency(MHz)			
	Ch 0/2402 MHz	Ch 39/2441 MHz	Ch 78/2480 MHz	
GFSK	9.45	9.04	8.07	10.50
π/4DQPSK	6.07	5.55	4.42	8.00
8DPSK	6.00	5.44	4.34	8.00
Bluetooth LE	Ch 0/2402 MHz	Ch 19/2440 MHz	Ch 39/2480 MHz	Tune-up Limit (dBm)
GFSK(1M)	1.29	1.99	0.55	5.00
GFSK(2M)	-0.50	0.28	-1.24	5.00

10 Measured and Reported (Scaled) SAR Results

10.1 EUT Antenna Locations

The Detailed Antenna Locations refer to *Antenna Locations.*

Overall (Length x Width): 164.67 mm x 76.56 mm Overall Diagonal: 181.61 mm/Display Diagonal: 165.54mm						
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	NA	Yes
Upper Antenna	Yes	Yes	Yes	NA	Yes	NA
Bluetooth/Wi-Fi Antenna	Yes	Yes	NA	Yes	Yes	NA

Note: 1. Per KDB 941225 D06, when the overall device length and width are ≥ 9cm*5cm, 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 181.61mm. Per KDB 648474 D04, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 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 W/kg, product specific 10-g SAR is no required.

3. Per FCC KDB 447498 D01, for each exposure position, testing of other requised 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) ≤0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100MHz

b) ≤0.6 W/kg or 1.5 W/kg, for1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz

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

4.When the original highest measured SAR is ≥ 0.80 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 ≤ 1.2 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 ≤ ¼ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.

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≥ 50% limit (1g).

5. 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.

6. The power level of body-worn (Front Side 15mm) is the same as the trigger distance minus 1mm, and 10mm SAR value are more stringent than 15mm, so triggering distance minus 1mm 's Front Side 10mm SAR value can cover body worn Front Side 15mm. Also, for the Body-worn (Front Side 15mm) we use the full power (trigger distance -1mm) SAR value to participate in the simultaneous calculation because it is more stringent than the SAR of the Body-worn (Front Side 15mm). Therefore the product can meet SAR limits under stringent 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 Antenna	Left cheek	0	GSM	DSI1	-	-	190/836.6	33.50	32.66	0.113	-0.090	1.21	0.137	/
		Left Tilt	0	GSM	DSI1	-	-	190/836.6	33.50	32.66	0.057	0.032	1.21	0.069	/
		Right cheek	0	GSM	DSI1	-	-	190/836.6	33.50	32.66	0.113	0.024	1.21	0.137	/
		Right Tilt	0	GSM	DSI1	-	-	190/836.6	33.50	32.66	0.078	-0.070	1.21	0.095	/
	Upper Antenna	Left cheek	0	GSM	DSI1	-	-	190/836.6	31.00	30.41	0.365	-0.100	1.15	0.418	/
		Left Tilt	0	GSM	DSI1	-	-	190/836.6	31.00	30.41	0.250	0.040	1.15	0.286	/
		Right cheek	0	GSM	DSI1	-	-	190/836.6	31.00	30.41	0.486	-0.120	1.15	0.557	/
		Right Tilt	0	GSM	DSI1	-	-	190/836.6	31.00	30.41	0.326	0.096	1.15	0.373	/
		Right cheek Battery1	0	GSM	DSI1	-	-	190/836.6	31.00	30.41	0.512	0.065	1.15	0.587	24
		Right cheek Battery2	0	GSM	DSI1	-	-	190/836.6	31.00	30.41	0.478	0.052	1.15	0.547	/
		Right cheek Battery3	0	GSM	DSI1	-	-	190/836.6	31.00	30.41	0.485	0.011	1.15	0.556	/
GSM 850 (Variant1)	Low Antenna	Right Cheek	0	GSM	DSI1	-	-	190/836.6	33.50	32.66	0.145	0.078	1.21	0.176	/
	Upper Antenna	Right Cheek	0	GSM	DSI1	-	-	190/836.6	31.00	30.41	0.365	-0.180	1.15	0.418	/
GSM 1900 (Original)	Low Antenna	Left cheek	0	GSM	DSI1	-	-	661/1880	30.50	29.48	0.071	0.013	1.26	0.090	/
		Left Tilt	0	GSM	DSI1	-	-	661/1880	30.50	29.48	0.078	0.039	1.26	0.099	/
		Right cheek	0	GSM	DSI1	-	-	661/1880	30.50	29.48	0.063	0.062	1.26	0.080	/

		Right Tilt	0	GSM	DSI1	-	-	661/1880	30.50	29.48	0.078	0.034	1.26	0.099	/
	Upper Antenna	Left cheek	0	GSM	DSI1	-	-	661/1880	25.50	25.32	0.177	0.150	1.04	0.184	/
		Left Tilt	0	GSM	DSI1	-	-	661/1880	25.50	25.32	0.226	0.030	1.04	0.236	/
		Right cheek	0	GSM	DSI1	-	-	661/1880	25.50	25.32	0.269	-0.011	1.04	0.280	/
		Right Tilt	0	GSM	DSI1	-	-	661/1880	25.50	25.32	0.297	0.065	1.04	0.310	/
		Right Tilt Battery1	0	GSM	DSI1	-	-	661/1880	25.50	25.32	0.255	0.033	1.04	0.266	/
		Right Tilt Battery2	0	GSM	DSI1	-	-	661/1880	25.50	25.32	0.322	0.062	1.04	0.336	25
		Right Tilt Battery3	0	GSM	DSI1	-	-	661/1880	25.50	25.32	0.288	0.011	1.04	0.300	/
GSM 1900 (Variant1)	Low Antenna	Right Tilt	0	GSM	DSI1	-	-	661/1880	30.50	29.48	0.050	0.036	1.26	0.063	/
	Upper Antenna	Right Tilt	0	GSM	DSI1	-	-	661/1880	25.50	25.32	0.304	0.085	1.04	0.317	/
WCDMA II (Original)	Low Antenna	Left cheek	0	RMC 12.2K	DSI1	-	-	9400/1880	24.00	22.78	0.146	0.011	1.32	0.193	/
		Left Tilt	0	RMC 12.2K	DSI1	-	-	9400/1880	24.00	22.78	0.171	0.028	1.32	0.226	/
		Right cheek	0	RMC 12.2K	DSI1	-	-	9400/1880	24.00	22.78	0.169	0.101	1.32	0.224	/
		Right Tilt	0	RMC 12.2K	DSI1	-	-	9400/1880	24.00	22.78	0.170	0.111	1.32	0.225	/
	Upper Antenna	Left cheek	0	RMC 12.2K	DSI1	-	-	9400/1880	17.00	16.54	0.190	0.030	1.11	0.211	/
		Left Tilt	0	RMC 12.2K	DSI1	-	-	9400/1880	17.00	16.54	0.215	0.050	1.11	0.239	/
		Right cheek	0	RMC 12.2K	DSI1	-	-	9400/1880	17.00	16.54	0.286	0.044	1.11	0.318	/
		Right Tilt	0	RMC 12.2K	DSI1	-	-	9400/1880	17.00	16.54	0.307	0.066	1.11	0.341	/
		Right Tilt Battery1	0	RMC 12.2K	DSI1	-	-	9400/1880	17.00	16.54	0.322	0.052	1.11	0.358	26
		Right Tilt Battery2	0	RMC 12.2K	DSI1	-	-	9400/1880	17.00	16.54	0.311	0.120	1.11	0.346	/
		Right Tilt Battery3	0	RMC 12.2K	DSI1	-	-	9400/1880	17.00	16.54	0.295	0.032	1.11	0.328	/
WCDMA II (Variant1)	Low Antenna	Left Tilt	0	RMC 12.2K	DSI1	-	-	9400/1880	24.00	22.78	0.183	0.028	1.32	0.242	/
	Upper Antenna	Right Tilt	0	RMC 12.2K	DSI1	-	-	9400/1880	17.00	16.54	0.321	0.120	1.11	0.357	/
WCDMA IV (Original)	Low Antenna	Left cheek	0	RMC 12.2K	DSI1	-	-	1413/1732.6	24.00	22.96	0.109	0.092	1.27	0.138	/
		Left Tilt	0	RMC 12.2K	DSI1	-	-	1413/1732.6	24.00	22.96	0.022	0.053	1.27	0.028	/
		Right cheek	0	RMC 12.2K	DSI1	-	-	1413/1732.6	24.00	22.96	0.117	0.018	1.27	0.149	/
		Right Tilt	0	RMC 12.2K	DSI1	-	-	1413/1732.6	24.00	22.96	0.044	0.090	1.27	0.055	/
	Upper Antenna	Left cheek	0	RMC 12.2K	DSI1	-	-	1413/1732.6	17.00	16.91	0.128	-0.011	1.02	0.131	/
		Left Tilt	0	RMC 12.2K	DSI1	-	-	1413/1732.6	17.00	16.91	0.129	-0.011	1.02	0.132	/
		Right cheek	0	RMC 12.2K	DSI1	-	-	1413/1732.6	17.00	16.91	0.403	0.011	1.02	0.411	/
		Right Tilt	0	RMC 12.2K	DSI1	-	-	1413/1732.6	17.00	16.91	0.636	0.010	1.02	0.649	/
		Right Tilt Battery1	0	RMC 12.2K	DSI1	-	-	1413/1732.6	17.00	16.91	0.608	0.018	1.02	0.621	/
		Right Tilt	0	RMC 12.2K	DSI1	-	-	1413/1732.6	17.00	16.91	0.645	0.036	1.02	0.659	27

		Battery2													
		Right Tilt Battery3	0	RMC 12.2K	DSI1	-	-	1413/1732.6	17.00	16.91	0.622	0.022	1.02	0.635	/
WCDMA IV (Variant1)	Low Antenna	Right Cheek	0	RMC 12.2K	DSI1	-	-	1413/1732.6	24.00	22.96	0.152	-0.120	1.27	0.193	/
	Upper Antenna	Right Tilt	0	RMC 12.2K	DSI1	-	-	1413/1732.6	17.00	16.91	0.338	0.170	1.02	0.345	/
WCDMA V (Original)	Low Antenna	Left cheek	0	RMC 12.2K	DSI1	-	-	4183/836.6	24.50	23.63	0.109	0.020	1.22	0.133	/
		Left Tilt	0	RMC 12.2K	DSI1	-	-	4183/836.6	24.50	23.63	0.061	0.102	1.22	0.075	/
		Right cheek	0	RMC 12.2K	DSI1	-	-	4183/836.6	24.50	23.63	0.123	0.020	1.22	0.150	/
		Right Tilt	0	RMC 12.2K	DSI1	-	-	4183/836.6	24.50	23.63	0.065	0.001	1.22	0.079	/
	Upper Antenna	Left cheek	0	RMC 12.2K	DSI1	-	-	4183/836.6	23.00	21.61	0.498	0.012	1.38	0.686	/
		Left Tilt	0	RMC 12.2K	DSI1	-	-	4183/836.6	23.00	21.61	0.399	0.025	1.38	0.549	/
		Right cheek	0	RMC 12.2K	DSI1	-	-	4183/836.6	23.00	21.61	0.734	0.023	1.38	1.011	28
		Right cheek	0	RMC 12.2K	DSI1	-	-	4132/826.4	23.00	21.63	0.712	0.015	1.37	0.976	/
		Right cheek	0	RMC 12.2K	DSI1	-	-	4233/846.6	23.00	21.45	0.702	0.011	1.43	1.003	/
		Right Tilt	0	RMC 12.2K	DSI1	-	-	4183/836.6	23.00	21.61	0.447	0.011	1.38	0.616	/
		Right cheek Battery1	0	RMC 12.2K	DSI1	-	-	4183/836.6	23.00	21.61	0.666	0.032	1.38	0.917	/
		Right cheek Battery2	0	RMC 12.2K	DSI1	-	-	4183/836.6	23.00	21.61	0.695	0.022	1.38	0.957	/
		Right cheek Battery3	0	RMC 12.2K	DSI1	-	-	4183/836.6	23.00	21.61	0.655	0.028	1.38	0.902	/
WCDMA V (Variant1)	Low Antenna	Right Cheek	0	RMC 12.2K	DSI1	-	-	4183/836.6	24.50	23.63	0.158	0.045	1.22	0.193	/
	Upper Antenna	Right Cheek	0	RMC 12.2K	DSI1	-	-	4183/836.6	23.00	21.61	0.345	0.028	1.38	0.475	/
LTE 2 (Original)	Low Antenna	Left cheek	0	QPSK	DSI1	1	50	19100/1900	24.00	22.75	0.165	-0.030	1.33	0.220	/
			0	QPSK	DSI1	50%	25	19100/1900	23.00	21.77	0.122	0.000	1.33	0.162	/
		Left Tilt	0	QPSK	DSI1	1	50	19100/1900	24.00	22.75	0.172	0.010	1.33	0.229	/
			0	QPSK	DSI1	50%	25	19100/1900	23.00	21.77	0.143	-0.020	1.33	0.190	/
		Right cheek	0	QPSK	DSI1	1	50	19100/1900	24.00	22.75	0.164	0.010	1.33	0.219	/
			0	QPSK	DSI1	50%	25	19100/1900	23.00	21.77	0.134	0.060	1.33	0.178	/
		Right Tilt	0	QPSK	DSI1	1	50	19100/1900	24.00	22.75	0.129	0.020	1.33	0.172	/
			0	QPSK	DSI1	50%	25	19100/1900	23.00	21.77	0.104	0.040	1.33	0.138	/
	Upper Antenna	Left cheek	0	QPSK	DSI1	1	50	18900/1880	17.00	16.55	0.272	0.025	1.11	0.302	/
			0	QPSK	DSI1	50%	0	18900/1880	17.00	16.49	0.301	0.036	1.12	0.338	/
		Left Tilt	0	QPSK	DSI1	1	50	18900/1880	17.00	16.55	0.344	0.022	1.11	0.381	/
			0	QPSK	DSI1	50%	0	18900/1880	17.00	16.49	0.358	0.011	1.12	0.402	/
		Right cheek	0	QPSK	DSI1	1	50	18900/1880	17.00	16.55	0.415	0.032	1.11	0.460	/
			0	QPSK	DSI1	50%	0	18900/1880	17.00	16.49	0.415	0.012	1.12	0.467	/
		Right Tilt	0	QPSK	DSI1	1	50	18900/1880	17.00	16.55	0.501	0.096	1.11	0.556	/
			0	QPSK	DSI1	50%	0	18900/1880	17.00	16.49	0.544	0.026	1.12	0.612	29

		Right Tilt Battery1	0	QPSK	DSI1	50%	0	18900/1880	17.00	16.49	0.521	0.021	1.12	0.586	/
		Right Tilt Battery2	0	QPSK	DSI1	50%	0	18900/1880	17.00	16.49	0.518	-0.096	1.12	0.583	/
		Right Tilt Battery3	0	QPSK	DSI1	50%	0	18900/1880	17.00	16.49	0.507	0.011	1.12	0.570	/
LTE 2 (Variant1)	Low Antenna	Left Cheek	0	QPSK	DSI1	1	50	19100/1900	24.00	22.75	0.183	0.100	1.33	0.244	/
	Upper Antenna	Right Tilt	0	QPSK	DSI1	50%	0	18900/1880	17.00	16.49	0.413	0.025	1.12	0.464	/
LTE 4 (Original)	Low Antenna	Left cheek	0	QPSK	DSI1	1	50	20050/1720	24.00	23.20	0.086	0.060	1.20	0.103	/
			0	QPSK	DSI1	50%	0	20300/1745	23.00	22.20	0.064	0.030	1.20	0.077	/
		Left Tilt	0	QPSK	DSI1	1	50	20050/1720	24.00	23.20	0.098	0.010	1.20	0.118	/
			0	QPSK	DSI1	50%	0	20300/1745	23.00	22.20	0.076	-0.030	1.20	0.091	/
		Right cheek	0	QPSK	DSI1	1	50	20050/1720	24.00	23.20	0.128	0.000	1.20	0.154	/
			0	QPSK	DSI1	50%	0	20300/1745	23.00	22.20	0.091	0.020	1.20	0.109	/
		Right Tilt	0	QPSK	DSI1	1	50	20050/1720	24.00	23.20	0.094	-0.080	1.20	0.113	/
			0	QPSK	DSI1	50%	0	20300/1745	23.00	22.20	0.072	0.030	1.20	0.087	/
	Upper Antenna	Left cheek	0	QPSK	DSI1	1	50	20175/1732.5	16.50	16.37	0.333	0.066	1.03	0.343	/
			0	QPSK	DSI1	50%	0	20050/1720	16.50	16.30	0.305	0.044	1.05	0.319	/
		Left Tilt	0	QPSK	DSI1	1	50	20175/1732.5	16.50	16.37	0.374	0.120	1.03	0.386	/
			0	QPSK	DSI1	50%	0	20050/1720	16.50	16.30	0.347	0.065	1.05	0.363	/
		Right cheek	0	QPSK	DSI1	1	50	20175/1732.5	16.50	16.37	0.513	0.055	1.03	0.529	/
			0	QPSK	DSI1	50%	0	20050/1720	16.50	16.30	0.444	0.052	1.05	0.465	/
		Right Tilt	0	QPSK	DSI1	1	50	20175/1732.5	16.50	16.37	0.499	0.063	1.03	0.514	/
			0	QPSK	DSI1	50%	0	20050/1720	16.50	16.30	0.527	0.020	1.05	0.552	/
		Right Tilt Battery1	0	QPSK	DSI1	50%	0	20050/1720	16.50	16.30	0.506	0.014	1.05	0.530	/
		Right Tilt Battery2	0	QPSK	DSI1	50%	0	20050/1720	16.50	16.30	0.544	0.022	1.05	0.570	30
		Right Tilt Battery3	0	QPSK	DSI1	50%	0	20050/1720	16.50	16.30	0.498	0.033	1.05	0.521	/
LTE 4 (Variant1)	Low Antenna	Left Tilt	0	QPSK	DSI1	1	50	20050/1720	24.00	23.20	0.109	0.052	1.20	0.131	/
	Upper Antenna	Right Tilt	0	QPSK	DSI1	50%	0	20050/1720	16.50	16.30	0.395	0.130	1.05	0.414	/
LTE 5 (Original)	Low Antenna	Left cheek	0	QPSK	DSI1	1	25	20450/829	24.50	23.32	0.146	0.000	1.31	0.192	/
			0	QPSK	DSI1	50%	0	20600/844	23.50	23.35	0.149	0.010	1.04	0.154	/
		Left Tilt	0	QPSK	DSI1	1	25	20450/829	24.50	23.32	0.106	-0.010	1.31	0.139	/
			0	QPSK	DSI1	50%	0	20600/844	23.50	23.35	0.109	0.020	1.04	0.113	/
		Right cheek	0	QPSK	DSI1	1	25	20450/829	24.50	23.32	0.174	0.000	1.31	0.228	/
			0	QPSK	DSI1	50%	0	20600/844	23.50	23.35	0.185	0.000	1.04	0.192	/
		Right Tilt	0	QPSK	DSI1	1	25	20450/829	24.50	23.32	0.100	0.080	1.31	0.131	/
			0	QPSK	DSI1	50%	0	20600/844	23.50	23.35	0.107	0.010	1.04	0.111	/

	Upper Antenna	Left cheek	0	QPSK	DSI1	1	25	20450/829	22.00	20.59	0.422	0.010	1.38	0.584	/
			0	QPSK	DSI1	50%	25	20450/829	22.00	20.53	0.250	0.045	1.40	0.351	/
		Left Tilt	0	QPSK	DSI1	1	25	20450/829	22.00	20.59	0.329	0.010	1.38	0.455	/
			0	QPSK	DSI1	50%	25	20450/829	22.00	20.53	0.345	0.036	1.40	0.484	/
		Right cheek	0	QPSK	DSI1	1	25	20450/829	22.00	20.59	0.562	0.000	1.38	0.778	/
			0	QPSK	DSI1	50%	25	20450/829	22.00	20.53	0.588	0.050	1.40	0.825	/
			0	QPSK	DSI1	50%	25	20525/836.5	22.00	20.53	0.592	0.060	1.40	0.830	/
			0	QPSK	DSI1	50%	0	20600/844	22.00	20.44	0.605	0.050	1.43	0.866	/
		Right Tilt	0	QPSK	DSI1	1	25	20450/829	22.00	20.59	0.446	0.090	1.38	0.617	/
			0	QPSK	DSI1	50%	25	20450/829	22.00	20.53	0.350	0.022	1.40	0.491	/
		Right cheek Battery1	0	QPSK	DSI1	50%	0	20600/844	22.00	20.44	0.575	0.060	1.43	0.824	/
		Right cheek Battery2	0	QPSK	DSI1	50%	0	20600/844	22.00	20.44	0.622	0.030	1.43	0.891	31
		Right cheek Battery3	0	QPSK	DSI1	50%	0	20600/844	22.00	20.44	0.611	-0.096	1.43	0.875	/
LTE 5 (Variant1)	Low Antenna	Right Cheek	0	QPSK	DSI1	1	25	20450/829	24.50	23.32	0.165	0.036	1.31	0.217	/
	Upper Antenna	Right Cheek	0	QPSK	DSI1	50%	0	20600/844	22.00	20.44	0.568	0.025	1.43	0.813	/
LTE 7 (Original)	Low Antenna	Left cheek	0	QPSK	DSI1	1	50	21100/2535	24.00	22.68	0.204	0.196	1.36	0.276	/
			0	QPSK	DSI1	50%	25	21350/2560	23.00	22.16	0.161	0.027	1.21	0.195	/
		Left Tilt	0	QPSK	DSI1	1	50	21100/2535	24.00	22.68	0.144	-0.100	1.36	0.195	/
			0	QPSK	DSI1	50%	25	21350/2560	23.00	22.16	0.117	0.046	1.21	0.142	/
		Right cheek	0	QPSK	DSI1	1	50	21100/2535	24.00	22.68	0.103	0.093	1.36	0.140	/
			0	QPSK	DSI1	50%	25	21350/2560	23.00	22.16	0.079	0.150	1.21	0.095	/
		Right Tilt	0	QPSK	DSI1	1	50	21100/2535	24.00	22.68	0.083	0.039	1.36	0.113	/
			0	QPSK	DSI1	50%	25	21350/2560	23.00	22.16	0.059	0.026	1.21	0.072	/
	Upper Antenna	Left cheek	0	QPSK	DSI1	1	50	21100/2535	16.50	15.90	0.373	0.088	1.15	0.428	/
			0	QPSK	DSI1	50%	50	21100/2535	16.50	15.78	0.366	0.022	1.18	0.432	/
		Left Tilt	0	QPSK	DSI1	1	50	21100/2535	16.50	15.90	0.483	0.134	1.15	0.555	/
			0	QPSK	DSI1	50%	50	21100/2535	16.50	15.78	0.510	0.022	1.18	0.602	/
		Right cheek	0	QPSK	DSI1	1	50	21100/2535	16.50	15.90	0.610	0.057	1.15	0.700	/
			0	QPSK	DSI1	50%	50	21100/2535	16.50	15.78	0.518	0.002	1.18	0.611	/
			0	QPSK	DSI1	50%	50	20850/2510	16.50	15.60	0.479	0.011	1.23	0.589	/
			0	QPSK	DSI1	50%	25	21350/2560	16.50	15.77	0.515	0.021	1.18	0.609	/
		Right Tilt	0	QPSK	DSI1	1	50	21100/2535	16.50	15.90	0.922	-0.140	1.15	1.059	32
			0	QPSK	DSI1	1	50	20850/2510	16.50	15.68	0.755	0.114	1.21	0.912	/
			0	QPSK	DSI1	1	50	21350/2560	16.50	15.83	0.795	0.000	1.17	0.928	/
			0	QPSK	DSI1	50%	50	21100/2535	16.50	15.78	0.808	-0.050	1.18	0.954	/
			0	QPSK	DSI1	50%	50	20850/2510	16.50	15.60	0.755	0.114	1.23	0.929	/
			0	QPSK	DSI1	50%	25	21350/2560	16.50	15.77	0.808	-0.050	1.18	0.956	/
			0	QPSK	DSI1	100%	0	21100/2535	16.50	15.78	0.789	0.052	1.18	0.931	/

			0	QPSK	DSI1	100%	0	20850/2510	16.50	15.54	0.765	0.015	1.25	0.954	/
			0	QPSK	DSI1	100%	0	21350/2560	16.50	15.69	0.811	-0.055	1.21	0.977	/
		Right Tilt Repeat	0	QPSK	DSI1	1	50	21100/2535	16.50	15.90	0.908	0.025	1.15	1.043	/
		Right Tilt Battery1	0	QPSK	DSI1	1	50	21100/2535	16.50	15.90	0.901	0.011	1.15	1.034	/
		Right Tilt Battery2	0	QPSK	DSI1	1	50	21100/2535	16.50	15.90	0.899	-0.052	1.15	1.032	/
		Right Tilt Battery3	0	QPSK	DSI1	1	50	21100/2535	16.50	15.90	0.918	0.063	1.15	1.054	/
LTE 7 (Variant1)	Low Antenna	Left Cheek	0	QPSK	DSI1	1	50	21100/2535	24.00	22.68	0.130	0.058	1.36	0.176	/
	Upper Antenna	Right Tilt	0	QPSK	DSI1	1	50	21100/2535	16.50	15.90	0.399	0.058	1.15	0.458	/
LTE 13 (Variant1)	Low Antenna	Left Cheek	0	QPSK	DSI1	1	25	23230/782	24.50	22.91	0.066	-0.037	1.44	0.095	/
			0	QPSK	DSI1	50%	13	23230/782	23.50	21.93	0.053	-0.058	1.44	0.076	/
		Left Tilt	0	QPSK	DSI1	1	25	23230/782	24.50	22.91	0.032	-0.120	1.44	0.046	/
			0	QPSK	DSI1	50%	13	23230/782	23.50	21.93	0.026	-0.149	1.44	0.037	/
		Right Cheek	0	QPSK	DSI1	1	25	23230/782	24.50	22.91	0.086	0.047	1.44	0.124	/
			0	QPSK	DSI1	50%	13	23230/782	23.50	21.93	0.090	0.050	1.44	0.129	/
		Right Tilt	0	QPSK	DSI1	1	25	23230/782	24.50	22.91	0.041	-0.041	1.44	0.060	/
			0	QPSK	DSI1	50%	13	23230/782	23.50	21.93	0.039	-0.037	1.44	0.056	/
	Upper Antenna	Left Cheek	0	QPSK	DSI1	1	25	23230/782	24.50	22.92	0.248	-0.060	1.44	0.357	/
			0	QPSK	DSI1	50%	13	23230/782	23.50	21.94	0.254	0.024	1.43	0.364	/
		Left Tilt	0	QPSK	DSI1	1	25	23230/782	24.50	22.92	0.248	-0.060	1.44	0.357	/
			0	QPSK	DSI1	50%	13	23230/782	23.50	21.94	0.207	-0.051	1.43	0.296	/
		Right Cheek	0	QPSK	DSI1	1	25	23230/782	24.50	22.92	0.650	-0.100	1.44	0.935	/
			0	QPSK	DSI1	50%	13	23230/782	23.50	21.94	0.594	0.057	1.43	0.851	/
			0	QPSK	DSI1	100%	13	23230/782	23.50	21.94	0.625	0.086	1.43	0.895	/
		Right Tilt	0	QPSK	DSI1	1	25	23230/782	24.50	22.92	0.489	0.050	1.44	0.704	/
			0	QPSK	DSI1	50%	13	23230/782	23.50	21.94	0.435	-0.150	1.43	0.623	/
		Right Cheek Battery1	0	QPSK	DSI1	1	25	23230/782	24.50	22.92	0.704	0.025	1.44	1.013	33
		Right Cheek Battery2	0	QPSK	DSI1	1	25	23230/782	24.50	22.92	0.608	0.110	1.44	0.875	/
		Right Cheek Battery3	0	QPSK	DSI1	1	25	23230/782	24.50	22.92	0.340	0.085	1.44	0.489	/
LTE 26 (Variant1)	Low Antenna	Left Cheek	0	QPSK	DSI1	1	38	26765/821.5	24.50	23.14	0.126	-0.093	1.37	0.172	/
			0	QPSK	DSI1	50%	39	26765/821.5	23.50	22.19	0.099	-0.027	1.35	0.134	/
		Left Tilt	0	QPSK	DSI1	1	38	26765/821.5	24.50	23.14	0.058	-0.102	1.37	0.079	/
			0	QPSK	DSI1	50%	39	26765/821.5	23.50	22.19	0.050	-0.158	1.35	0.067	/
		Right Cheek	0	QPSK	DSI1	1	38	26765/821.5	24.50	23.14	0.158	0.069	1.37	0.216	/
			0	QPSK	DSI1	50%	39	26765/821.5	23.50	22.19	0.126	0.028	1.35	0.170	/

		Right Tilt	0	QPSK	DSI1	1	38	26765/821.5	24.50	23.14	0.094	0.190	1.37	0.129	/
			0	QPSK	DSI1	50%	39	26765/821.5	23.50	22.19	0.075	0.110	1.35	0.101	/
	Upper Antenna	Left Cheek	0	QPSK	DSI1	1	38	26765/821.5	22.00	20.70	0.446	0.180	1.35	0.602	/
			0	QPSK	DSI1	50%	18	26965/841.5	22.00	20.74	0.447	0.035	1.34	0.597	/
		Left Tilt	0	QPSK	DSI1	1	38	26765/821.5	22.00	20.70	0.372	-0.180	1.35	0.502	/
			0	QPSK	DSI1	50%	18	26965/841.5	22.00	20.74	0.368	-0.069	1.34	0.492	/
		Right Cheek	0	QPSK	DSI1	1	38	26765/821.5	22.00	20.70	0.550	0.150	1.35	0.742	/
			0	QPSK	DSI1	50%	18	26965/841.5	22.00	20.74	0.546	0.130	1.34	0.730	/
		Right Tilt	0	QPSK	DSI1	1	38	26765/821.5	22.00	20.70	0.424	-0.028	1.35	0.572	/
			0	QPSK	DSI1	50%	18	26965/841.5	22.00	20.74	0.417	-0.190	1.34	0.557	/
		Right Cheek Battery1	0	QPSK	DSI1	1	38	26765/821.5	22.00	20.70	0.592	0.015	1.35	0.799	34
		Right Cheek Battery2	0	QPSK	DSI1	1	38	26765/821.5	22.00	20.70	0.498	0.140	1.35	0.672	/
		Right Cheek Battery3	0	QPSK	DSI1	1	38	26765/821.5	22.00	20.70	0.363	0.160	1.35	0.490	/
LTE 38 (Original)	Low Antenna	Left cheek	0	QPSK	DSI1	1	50	38150/2610	24.00	22.72	0.105	0.132	1.34	0.141	/
			0	QPSK	DSI1	50%	25	38150/2610	23.00	22.19	0.061	0.196	1.21	0.073	/
		Left Tilt	0	QPSK	DSI1	1	50	38150/2610	24.00	22.72	0.098	0.076	1.34	0.131	/
			0	QPSK	DSI1	50%	25	38150/2610	23.00	22.19	0.046	0.051	1.21	0.055	/
		Right cheek	0	QPSK	DSI1	1	50	38150/2610	24.00	22.72	0.078	0.050	1.34	0.104	/
			0	QPSK	DSI1	50%	25	38150/2610	23.00	22.19	0.030	0.082	1.21	0.036	/
		Right Tilt	0	QPSK	DSI1	1	50	38150/2610	24.00	22.72	0.057	0.114	1.34	0.076	/
			0	QPSK	DSI1	50%	25	38150/2610	23.00	22.19	0.033	0.045	1.21	0.040	/
	Upper Antenna	Left cheek	0	QPSK	DSI1	1	50	38150/2610	18.50	17.93	0.257	0.142	1.14	0.293	/
			0	QPSK	DSI1	50%	25	38150/2610	18.50	17.75	0.254	0.033	1.19	0.302	/
		Left Tilt	0	QPSK	DSI1	1	50	38150/2610	18.50	17.93	0.346	0.158	1.14	0.395	/
			0	QPSK	DSI1	50%	25	38150/2610	18.50	17.75	0.339	0.040	1.19	0.403	/
		Right cheek	0	QPSK	DSI1	1	50	38150/2610	18.50	17.93	0.603	0.050	1.14	0.688	/
			0	QPSK	DSI1	50%	25	38150/2610	18.50	17.75	0.582	0.182	1.19	0.692	/
		Right Tilt	0	QPSK	DSI1	1	50	38150/2610	18.50	17.93	0.775	0.146	1.14	0.884	/
			0	QPSK	DSI1	1	50	37850/2580	18.50	17.84	0.670	0.132	1.16	0.780	/
			0	QPSK	DSI1	1	50	38000/2595	18.50	17.84	0.663	0.022	1.16	0.772	/
			0	QPSK	DSI1	50%	25	38150/2610	18.50	17.75	0.723	0.077	1.19	0.859	/
			0	QPSK	DSI1	50%	25	37850/2580	18.50	17.68	0.763	0.060	1.21	0.922	/
			0	QPSK	DSI1	50%	25	38000/2595	18.50	17.70	0.757	0.035	1.20	0.910	/
		Right Tilt Battery1	0	QPSK	DSI1	50%	25	37850/2580	18.50	17.68	0.786	0.033	1.21	0.949	35
		Right Tilt Battery2	0	QPSK	DSI1	50%	25	37850/2580	18.50	17.68	0.744	0.018	1.21	0.899	/
		Right Tilt Battery3	0	QPSK	DSI1	50%	25	37850/2580	18.50	17.68	0.774	-0.065	1.21	0.935	/
LTE	Low	Left Cheek	0	QPSK	DSI1	1	50	38150/2610	24.00	22.72	0.104	0.025	1.34	0.140	/

38	Antenna														
(Variant1)	Upper Antenna	Right Tilt	0	QPSK	DSI1	50%	25	37850/2580	18.50	17.68	0.490	0.028	1.21	0.592	/
LTE 41 (Original)	Low Antenna	Left cheek	0	QPSK	DSI1	1	50	41055/2636.5	24.00	22.75	0.133	-0.020	1.33	0.177	/
			0	QPSK	DSI1	50%	25	41055/2636.5	23.00	22.21	0.086	0.160	1.20	0.103	/
		Left Tilt	0	QPSK	DSI1	1	50	41055/2636.5	24.00	22.75	0.081	-0.080	1.33	0.108	/
			0	QPSK	DSI1	50%	25	41055/2636.5	23.00	22.21	0.055	0.048	1.20	0.066	/
		Right cheek	0	QPSK	DSI1	1	50	41055/2636.5	24.00	22.75	0.067	-0.130	1.33	0.089	/
			0	QPSK	DSI1	50%	25	41055/2636.5	23.00	22.21	0.044	0.191	1.20	0.053	/
		Right Tilt	0	QPSK	DSI1	1	50	41055/2636.5	24.00	22.75	0.056	-0.120	1.33	0.075	/
			0	QPSK	DSI1	50%	25	41055/2636.5	23.00	22.21	0.040	0.041	1.20	0.048	/
	Upper Antenna	Left cheek	0	QPSK	DSI1	1	50	40620/2593	19.50	18.96	0.524	0.010	1.13	0.593	/
			0	QPSK	DSI1	50%	0	40620/2593	19.50	18.79	0.333	0.161	1.18	0.392	/
		Left Tilt	0	QPSK	DSI1	1	50	40620/2593	19.50	18.96	0.641	0.040	1.13	0.726	/
			0	QPSK	DSI1	50%	0	40620/2593	19.50	18.79	0.445	0.021	1.18	0.524	/
		Right cheek	0	QPSK	DSI1	1	50	40620/2593	19.50	18.96	0.752	0.030	1.13	0.852	/
			0	QPSK	DSI1	50%	0	40620/2593	19.50	18.79	0.769	0.050	1.18	0.906	/
		Right Tilt	0	QPSK	DSI1	1	50	40620/2593	19.50	18.96	0.922	-0.010	1.13	1.044	/
			0	QPSK	DSI1	1	50	40185/2549.5	19.50	18.90	0.916	0.052	1.15	1.052	/
			0	QPSK	DSI1	1	50	41055/2636.5	19.50	18.90	0.908	0.045	1.15	1.043	/
			0	QPSK	DSI1	50%	0	40620/2593	19.50	18.79	0.932	0.150	1.18	1.098	36
			0	QPSK	DSI1	50%	0	40185/2549.5	19.50	18.77	0.896	0.025	1.18	1.060	/
			0	QPSK	DSI1	50%	0	41055/2636.5	19.50	18.78	0.911	0.045	1.18	1.076	/
			0	QPSK	DSI1	100%	0	40620/2593	19.50	18.85	0.905	0.045	1.16	1.051	/
			0	QPSK	DSI1	100%	0	40185/2549.5	19.50	18.76	0.876	-0.065	1.19	1.039	/
			0	QPSK	DSI1	100%	0	41055/2636.5	19.50	18.78	0.886	0.052	1.18	1.046	/
		Right Tilt Repeat	0	QPSK	DSI1	50%	0	40620/2593	19.50	18.88	0.916	0.032	1.15	1.057	/
		Right Tilt Configure 2	0	QPSK	DSI1	50%	0	40620/2593	19.50	18.79	0.490	0.010	1.18	0.577	/
		Right Tilt Battery1	0	QPSK	DSI1	50%	0	40620/2593	19.50	18.79	0.915	0.000	1.18	1.078	/
		Right Tilt Battery2	0	QPSK	DSI1	50%	0	40620/2593	19.50	18.79	0.885	0.022	1.18	1.042	/
		Right Tilt Battery3	0	QPSK	DSI1	50%	0	40620/2593	19.50	18.79	0.876	-0.015	1.18	1.032	/
LTE 41 (Variant1)	Low Antenna	Left Cheek	0	QPSK	DSI1	1	50	41055/2636.5	24.00	22.75	0.109	0.085	1.33	0.145	/
	Upper Antenna	Right Tilt	0	QPSK	DSI1	50%	0	40620/2593	19.50	18.79	0.549	-0.040	1.18	0.647	/
	Upper Antenna	Right Tilt	0	QPSK	DSI1	50%	0	40620/2593	19.50	18.79	0.518	-0.013	1.18	0.610	/
LTE 41	Upper Antenna	Right Tilt	0	QPSK	DSI1	50%	0	40620/2593	19.50	18.79	0.588	0.184	1.18	0.692	/

(Variant2)															
LTE 66 (Variant1)	Low Antenna	Left Cheek	0	QPSK	DSI1	1	50	132572/1770	24.00	23.15	0.120	-0.020	1.22	0.146	/
			0	QPSK	DSI1	50%	0	132572/1770	23.00	22.19	0.100	0.090	1.21	0.121	/
		Left Tilt	0	QPSK	DSI1	1	50	132572/1770	24.00	23.15	0.125	-0.050	1.22	0.152	/
			0	QPSK	DSI1	50%	0	132572/1770	23.00	22.19	0.100	0.020	1.21	0.121	/
		Right Cheek	0	QPSK	DSI1	1	50	132572/1770	24.00	23.15	0.112	0.070	1.22	0.136	/
			0	QPSK	DSI1	50%	0	132572/1770	23.00	22.19	0.094	-0.050	1.21	0.113	/
		Right Tilt	0	QPSK	DSI1	1	50	132572/1770	24.00	23.15	0.102	-0.040	1.22	0.124	/
			0	QPSK	DSI1	50%	0	132572/1770	23.00	22.19	0.085	-0.050	1.21	0.102	/
	Upper Antenna	Left Cheek	0	QPSK	DSI1	1	50	132072/1720	16.50	15.75	0.219	-0.040	1.19	0.260	/
			0	QPSK	DSI1	50%	0	132322/1745	16.50	15.70	0.223	-0.050	1.20	0.268	/
		Left Tilt	0	QPSK	DSI1	1	50	132072/1720	16.50	15.75	0.245	-0.060	1.19	0.291	/
			0	QPSK	DSI1	50%	0	132322/1745	16.50	15.70	0.251	0.030	1.20	0.302	/
		Right Cheek	0	QPSK	DSI1	1	50	132072/1720	16.50	15.75	0.383	0.020	1.19	0.455	/
			0	QPSK	DSI1	50%	0	132322/1745	16.50	15.70	0.400	-0.020	1.20	0.481	37
		Right Tilt	0	QPSK	DSI1	1	50	132072/1720	16.50	15.75	0.371	-0.030	1.19	0.441	/
			0	QPSK	DSI1	50%	0	132322/1745	16.50	15.70	0.386	-0.010	1.20	0.464	/
		Right Cheek Battery1	0	QPSK	DSI1	50%	0	132322/1745	16.50	15.7	0.304	0.011	1.20	0.365	/
		Right Cheek Battery2	0	QPSK	DSI1	50%	0	132322/1745	16.50	15.7	0.286	0.025	1.20	0.344	/
		Right Cheek Battery3	0	QPSK	DSI1	50%	0	132322/1745	16.50	15.7	0.267	0.085	1.20	0.321	/

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	98.0%	Receiver on	1/2412	19.00	17.58	0.539	0.040	1.42	0.763	/
		Left Tilt	0	802.11b	98.0%	Receiver on	1/2412	19.00	17.58	0.501	-0.100	1.42	0.709	/
		Right cheek	0	802.11b	98.0%	Receiver on	1/2412	19.00	17.58	0.268	0.025	1.42	0.380	/
		Right Tilt	0	802.11b	98.0%	Receiver on	1/2412	19.00	17.58	0.254	0.000	1.42	0.359	/
		Left cheek Battery1	0	802.11b	98.0%	Receiver on	1/2412	19.00	17.58	0.512	0.041	1.42	0.725	/
		Left cheek Battery2	0	802.11b	98.0%	Receiver on	1/2412	19.00	17.58	0.456	-0.120	1.42	0.645	/
		Left cheek Battery3	0	802.11b	98.0%	Receiver on	1/2412	19.00	17.58	0.518	-0.095	1.42	0.733	/
2.4G (Variant1)	Wi-Fi	Left cheek	0	802.11b	98.0%	Receiver on	1/2412	19.00	17.58	0.561	0.032	1.42	0.794	38
Bluetooth (Original)	Bluetooth	Left cheek	0	DH5	76.0%	Full Power	0/2402	10.50	9.45	0.053	-0.020	1.68	0.088	/
		Left Tilt	0	DH5	76.0%	Full Power	0/2402	10.50	9.45	0.042	-0.150	1.68	0.071	/
		Right cheek	0	DH5	76.0%	Full Power	0/2402	10.50	9.45	0.020	0.122	1.68	0.034	/
		Right Tilt	0	DH5	76.0%	Full Power	0/2402	10.50	9.45	0.018	0.040	1.68	0.031	/
		Left cheek Battery1	0	DH5	76.0%	Full Power	0/2402	10.50	9.45	0.049	0.012	1.68	0.082	/
		Left cheek Battery2	0	DH5	76.0%	Full Power	0/2402	10.50	9.45	0.046	0.011	1.68	0.077	/
		Left cheek Battery3	0	DH5	76.0%	Full Power	0/2402	10.50	9.45	0.048	-0.052	1.68	0.080	/
Bluetooth (Variant1)	Bluetooth	Left cheek	0	DH5	76.0%	Full Power	0/2402	10.50	9.45	0.068	0.060	1.68	0.114	39

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 Antenna	Back Side	15	GSM	DSI2	-	-	190/836.6	34.50	33.15	0.122	0.020	1.36	0.166	/
	Upper Antenna	Back Side	15	GSM	DSI2	-	-	190/836.6	34.50	33.17	0.213	0.010	1.36	0.290	/
	Upper Antenna	Back Side Battery1	15	GSM	DSI2	-	-	190/836.6	34.50	33.17	0.238	0.000	1.36	0.323	40
		Back Side Battery2	15	GSM	DSI2	-	-	190/836.6	34.50	33.17	0.185	0.052	1.36	0.251	/
		Back Side Battery1	15	GSM	DSI2	-	-	190/836.6	34.50	33.17	0.221	0.000	1.36	0.300	/
GSM 850 (Variant1)	Low Antenna	Back Side	15	GSM	DSI2	-	-	190/836.6	34.50	33.15	0.187	0.030	1.36	0.255	/
	Upper Antenna	Back Side	15	GSM	DSI2	-	-	190/836.6	34.50	33.17	0.212	0.013	1.36	0.288	/
GSM 1900 (Variant1)	Low Antenna	Back Side	15	GSM	DSI2	-	-	661/1880	30.50	29.48	0.202	0.020	1.26	0.255	/
	Upper Antenna	Back Side	15	GSM	DSI2	-	-	661/1880	30.50	30.41	0.274	0.026	1.02	0.280	/
	Upper Antenna	Back Side Battery1	15	GSM	DSI2	-	-	661/1880	30.50	30.41	0.306	0.025	1.02	0.312	41
		Back Side Battery2	15	GSM	DSI2	-	-	661/1880	30.50	30.41	0.306	0.015	1.02	0.312	/
		Back Side Battery3	15	GSM	DSI2	-	-	661/1880	30.50	30.41	0.302	0.039	1.02	0.308	/
WCDMA II (Variant1)	Low Antenna	Back Side	15	RMC	DSI2	-	-	9400/1880	24.00	22.78	0.455	0.012	1.32	0.603	/
	Upper Antenna	Back Side	15	RMC	DSI2	-	-	9400/1880	24.00	23.56	0.330	0.022	1.11	0.365	/
	Low Antenna	Back Side Battery1	15	RMC	DSI2	-	-	9400/1880	24.00	22.78	0.432	0.045	1.32	0.572	/
		Back Side Battery2	15	RMC	DSI2	-	-	9400/1880	24.00	22.78	0.449	0.078	1.32	0.595	/
		Back Side Battery3	15	RMC	DSI2	-	-	9400/1880	24.00	22.78	0.412	0.038	1.32	0.546	/
WCDMA IV (Variant1)	Low Antenna	Back Side	15	RMC	DSI2	-	-	1413/1732.6	24.00	22.96	0.513	0.020	1.27	0.652	/
	Upper Antenna	Back Side	15	RMC	DSI2	-	-	1413/1732.6	24.00	23.93	0.448	0.030	1.02	0.455	/
	Low Antenna	Back Side Battery1	15	RMC	DSI2	-	-	1413/1732.6	24.00	22.96	0.476	0.052	1.27	0.605	/

		Back Side Battery2	15	RMC	DSI2	-	-	1413/1732.6	24.00	22.96	0.528	0.150	1.27	0.671	/
		Back Side Battery3	15	RMC	DSI2	-	-	1413/1732.6	24.00	22.96	0.518	-0.036	1.27	0.658	/
WCDMA V (Variant1)	Low Antenna	Back Side	15	RMC	DSI2	-	-	4183/836.6	25.50	24.58	0.192	0.015	1.24	0.237	/
	Upper Antenna	Back Side	15	RMC	DSI2	-	-	4183/836.6	25.50	24.14	0.282	0.030	1.37	0.386	42
	Low Antenna	Back Side Battery1	15	RMC	DSI2	-	-	4183/836.6	25.50	24.14	0.222	0.054	1.37	0.304	/
		Back Side Battery2	15	RMC	DSI2	-	-	4183/836.6	25.50	24.14	0.205	0.045	1.37	0.280	/
		Back Side Battery3	15	RMC	DSI2	-	-	4183/836.6	25.50	24.14	0.193	0.085	1.37	0.264	/
LTE 2 (Original)	Low Antenna	Back Side	15	QPSK	DSI2	1	50	19100/1900	24.00	22.75	0.452	0.041	1.33	0.603	/
			15	QPSK	DSI2	50%	25	18700/1860	23.00	21.77	0.329	0.020	1.33	0.437	/
	Low Antenna	Back Side Battery1	15	QPSK	DSI2	1	50	19100/1900	24.00	22.75	0.488	-0.096	1.33	0.651	/
		Back Side Battery2	15	QPSK	DSI2	1	50	19100/1900	24.00	22.75	0.423	0.015	1.33	0.564	/
		Back Side Battery3	15	QPSK	DSI2	1	50	19100/1900	24.00	22.75	0.465	0.022	1.33	0.620	/
LTE 2 (Variant1)	Low Antenna	Back Side	15	QPSK	DSI2	1	50	19100/1900	24.00	22.75	0.453	0.055	1.33	0.604	/
	Upper Antenna	Back Side	15	QPSK	DSI2	1	50	18900/1880	24.00	23.62	0.420	0.036	1.09	0.458	/
			15	QPSK	DSI2	50%	25	19100/1900	23.00	22.62	0.327	0.030	1.09	0.357	/
LTE 4 (Original)	Low Antenna	Back Side	15	QPSK	DSI2	1	50	20050/1720	24.00	23.20	0.610	0.071	1.20	0.733	/
			15	QPSK	DSI2	50%	0	20300/1745	23.00	22.20	0.462	0.023	1.20	0.555	/
	Upper Antenna	Back Side	15	QPSK	DSI2	1	50	20175/1732.5	24.00	23.87	0.285	0.030	1.03	0.294	/
			15	QPSK	DSI2	50%	25	20175/1732.5	23.00	22.90	0.282	0.100	1.02	0.289	/
	Low Antenna	Back Side Battery1	15	QPSK	DSI2	1	50	20050/1720	24.00	23.20	0.632	0.022	1.20	0.760	43
		Back Side Battery2	15	QPSK	DSI2	1	50	20050/1720	24.00	23.20	0.577	0.000	1.20	0.694	/
		Back Side Battery3	15	QPSK	DSI2	1	50	20050/1720	24.00	23.20	0.593	-0.065	1.20	0.713	/
LTE 4 (Variant1)	Low Antenna	Back Side	15	QPSK	DSI2	1	50	20050/1720	24.00	23.20	0.544	0.030	1.20	0.654	/
	Upper Antenna	Back Side	15	QPSK	DSI2	1	50	20175/1732.5	24.00	23.87	0.364	0.020	1.03	0.375	/
LTE 5 (Original)	Low Antenna	Back Side	15	QPSK	DSI2	1	25	20450/829	25.50	24.62	0.236	0.087	1.22	0.289	/
			15	QPSK	DSI2	50%	0	20600/844	24.50	23.70	0.191	-0.100	1.20	0.230	/
	Upper Antenna	Back Side	15	QPSK	DSI2	1	25	20600/844	25.50	24.10	0.245	0.025	1.38	0.338	/
			15	QPSK	DSI2	50%	0	20600/844	24.50	23.16	0.251	0.107	1.36	0.342	/

	Upper Antenna	Back Side Battery1	15	QPSK	DSI2	50%	0	20600/844	24.50	23.16	0.284	0.120	1.36	0.387	/
		Back Side Battery2	15	QPSK	DSI2	50%	0	20600/844	24.50	23.16	0.236	-0.085	1.36	0.321	/
		Back Side Battery3	15	QPSK	DSI2	50%	0	20600/844	24.50	23.16	0.263	0.045	1.36	0.358	/
LTE 5 (Variant1)	Low Antenna	Back Side	15	QPSK	DSI2	1	25	20450/829	25.50	24.62	0.220	0.150	1.22	0.269	/
	Upper Antenna	Back Side	15	QPSK	DSI2	50%	0	20600/844	24.50	23.16	0.210	0.020	1.36	0.286	/
LTE 7 (Original)	Low Antenna	Back Side	15	QPSK	DSI2	1	50	21350/2560	24.50	23.29	0.748	0.037	1.32	0.988	/
			15	QPSK	DSI2	1	50	20850/2510	24.50	23.10	0.658	0.144	1.38	0.908	/
			15	QPSK	DSI2	1	50	21100/2535	24.50	23.23	0.695	0.010	1.34	0.931	/
			15	QPSK	DSI2	100%	0	21350/2560	23.50	22.52	0.612	0.015	1.25	0.767	/
			15	QPSK	DSI2	50%	25	21350/2560	23.50	22.34	0.594	-0.086	1.31	0.776	/
	Low Antenna	Back Side Configure 2	15	QPSK	DSI2	1	50	21350/2560	24.50	23.29	0.658	0.010	1.32	0.869	/
		Back Side Battery1	15	QPSK	DSI2	1	50	21350/2560	24.50	23.29	0.765	0.022	1.32	1.011	/
		Back Side Battery2	15	QPSK	DSI2	1	50	21350/2560	24.50	23.29	0.712	-0.020	1.32	0.941	/
		Back Side Battery3	15	QPSK	DSI2	1	50	21350/2560	24.50	23.29	0.752	0.140	1.32	0.994	/
LTE 7 (Variant1)	Low Antenna	Back Side	15	QPSK	DSI2	1	50	21350/2560	24.50	23.29	0.524	0.040	1.32	0.692	/
		Back Side	15	QPSK	DSI2	1	50	21350/2560	24.50	23.29	0.726	0.120	1.32	0.959	/
	Upper Antenna	Back Side	15	QPSK	DSI2	1	50	21350/2560	24.50	23.95	0.628	0.040	1.14	0.713	/
			15	QPSK	DSI2	50%	25	21350/2560	23.50	22.98	0.827	0.150	1.13	0.932	44
			15	QPSK	DSI2	50%	50	20850/2510	23.50	22.75	0.812	0.058	1.19	0.965	/
			15	QPSK	DSI2	50%	50	21100/2535	23.50	22.84	0.822	0.094	1.16	0.957	/
LTE 7 (Variant2)	Low Antenna	Back Side	15	QPSK	DSI2	1	50	21350/2560	24.50	23.29	0.492	-0.096	1.32	0.650	/
LTE 13 FDD (Variant1)	Low Antenna	Back Side	15	QPSK	DSI2	1	25	23230/782	24.50	22.91	0.135	0.020	1.44	0.195	/
			15	QPSK	DSI2	50%	13	23230/782	23.50	21.93	0.108	0.010	1.44	0.155	/
	Upper Antenna	Back Side	15	QPSK	DSI2	1	25	23230/782	24.50	22.91	0.266	0.035	1.44	0.384	45
			15	QPSK	DSI2	50%	13	23230/782	23.50	21.93	0.234	0.012	1.44	0.336	
		Back Side Battery1	15	QPSK	DSI2	1	25	23230/782	24.50	22.91	0.122	0.180	1.44	0.176	/
		Back Side Battery2	15	QPSK	DSI2	1	25	23230/782	24.50	22.91	0.147	-0.150	1.44	0.212	/
		Back Side Battery3	15	QPSK	DSI2	1	25	23230/782	24.50	22.91	0.112	0.036	1.44	0.162	/
LTE	Low	Back Side	15	QPSK	DSI2	1	38	26765/821.5	24.50	23.14	0.182	0.020	1.37	0.249	/

26 FDD (Variant1)	Antenna		15	QPSK	DSI2	50%	39	26765/821.5	23.50	22.19	0.152	0.013	1.35	0.206	/
	Upper Antenna	Back Side	15	QPSK	DSI2	1	38	26965/841.5	24.50	23.16	0.265	0.030	1.36	0.361	46
			15	QPSK	DSI2	50%	0	26965/841.5	23.50	22.27	0.228	0.010	1.33	0.303	/
		Back Side Battery1	15	QPSK	DSI2	1	38	26965/841.5	24.50	23.16	0.183	0.150	1.36	0.249	/
		Back Side Battery2	15	QPSK	DSI2	1	38	26965/841.5	24.50	23.16	0.218	0.038	1.36	0.297	/
		Back Side Battery3	15	QPSK	DSI2	1	38	26965/841.5	24.50	23.16	0.192	0.058	1.36	0.261	/
LTE 38 TDD (Variant1)	Low Antenna	Back Side	15	QPSK	DSI2	1	50	38150/2610	24.50	23.21	0.364	0.010	1.35	0.490	/
			15	QPSK	DSI2	50%	25	38150/2610	23.50	22.23	0.235	0.045	1.34	0.315	/
	Upper Antenna	Back Side	15	QPSK	DSI2	1	50	38150/2610	24.50	23.87	0.592	0.039	1.16	0.684	47
			15	QPSK	DSI2	50%	25	38150/2610	23.50	22.83	0.550	0.010	1.17	0.642	/
		Back Side Battery1	15	QPSK	DSI2	1	50	38150/2610	24.50	23.87	0.367	-0.032	1.16	0.424	/
		Back Side Battery2	15	QPSK	DSI2	1	50	38150/2610	24.50	23.87	0.514	0.045	1.16	0.594	/
		Back Side Battery3	15	QPSK	DSI2	1	50	38150/2610	24.50	23.87	0.514	0.054	1.16	0.594	/
LTE 41 TDD (Original)	Low Antenna	Back Side	15	QPSK	DSI4	1	50	41055/2636.5	21.00	20.29	0.293	0.111	1.18	0.345	/
			15	QPSK	DSI4	50%	25	41055/2636.5	21.00	20.18	0.261	0.069	1.21	0.315	/
	Upper Antenna	Back Side	15	QPSK	DSI4	1	50	40620/2593	19.50	18.96	0.259	0.080	1.13	0.293	/
			15	QPSK	DSI4	50%	0	40620/2593	19.50	18.79	0.257	0.052	1.18	0.303	/
		Back Side Battery1	15	QPSK	DSI4	1	50	41055/2636.5	21.00	20.29	0.302	0.052	1.18	0.356	/
		Back Side Battery2	15	QPSK	DSI4	1	50	41055/2636.5	21.00	20.29	0.245	0.025	1.18	0.289	/
		Back Side Battery3	15	QPSK	DSI4	1	50	41055/2636.5	21.00	20.29	0.285	0.020	1.18	0.336	/
LTE 41 TDD (Variant1)	Low Antenna	Back Side	15	QPSK	DSI4	1	50	41055/2636.5	21.00	20.29	0.392	0.020	1.18	0.462	48
	Upper Antenna	Back Side	15	QPSK	DSI4	50%	0	40620/2593	19.50	18.79	0.195	0.030	1.18	0.230	/
LTE 66 FDD (Variant1)	Low Antenna	Back Side	15	QPSK	DSI2	1	50	132572/1770	24.00	23.15	0.451	0.020	1.22	0.548	/
			15	QPSK	DSI2	50%	0	132572/1770	23.00	22.19	0.362	0.015	1.21	0.436	/
	Upper Antenna	Back Side	15	QPSK	DSI2	1	50	132322/1745	24.00	23.26	0.270	0.010	1.19	0.320	/
			15	QPSK	DSI2	50%	0	132322/1745	23.00	22.21	0.214	0.023	1.20	0.257	/
		Back Side Battery1	15	QPSK	DSI2	1	50	132572/1770	24.00	23.15	0.562	-0.036	1.22	0.683	49
		Back Side Battery2	15	QPSK	DSI2	1	50	132572/1770	24.00	23.15	0.517	0.054	1.22	0.629	/
		Back Side Battery3	15	QPSK	DSI2	1	50	132572/1770	24.00	23.15	0.535	0.075	1.22	0.651	/

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	15	802.11b	98.0%	Receiver off	1/2412	19.50	17.58	0.138	0.027	1.59	0.219	/
		Front Side	15	802.11b	98.0%	Receiver off	1/2412	19.50	17.58	0.082	0.020	1.59	0.130	/
		Back Side Battery1	15	802.11b	98.0%	Receiver off	1/2412	19.50	17.58	0.154	0.021	1.59	0.245	50
		Back Side Battery2	15	802.11b	98.0%	Receiver off	1/2412	19.50	17.58	0.122	-0.074	1.59	0.194	/
		Back Side Battery1	15	802.11b	98.0%	Receiver off	1/2412	19.50	17.58	0.116	0.041	1.59	0.184	/
2.4G (Variant1)	Wi-Fi	Back Side	15	802.11b	98.0%	Receiver off	1/2412	19.50	17.58	0.131	0.069	1.59	0.208	/

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 Antenna	Back Side	10	GPRS 3TX Slots	DSI4	-	-	190/836.6	29.50	28.95	0.563	-0.048	1.14	0.639	/
		Front Side	10	GPRS 1TX Slots	DSI2	-	-	190/836.6	34.50	33.15	0.177	-0.068	1.36	0.242	/
		Left Edge	10	GPRS 1TX Slots	DSI2	-	-	190/836.6	34.50	33.15	0.162	-0.070	1.36	0.221	/
		Right Edge	10	GPRS 1TX Slots	DSI2	-	-	190/836.6	34.50	33.15	0.273	-0.060	1.36	0.373	/
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
		Bottom Edge	10	GPRS 3TX Slots	DSI4	-	-	190/836.6	29.50	28.95	0.355	-0.150	1.14	0.403	/
	Upper Antenna	Back Side	10	GPRS 3TX Slots	DSI4	-	-	190/836.6	30.00	29.45	0.384	0.041	1.14	0.436	/
		Front Side	10	GPRS 1TX Slots	DSI2	-	-	190/836.6	34.50	33.17	0.215	-0.080	1.36	0.292	/
		Left Edge	10	GPRS 1TX Slots	DSI2	-	-	190/836.6	34.50	33.17	0.138	0.024	1.36	0.187	/
		Right Edge	10	GPRS 1TX Slots	DSI2	-	-	190/836.6	34.50	33.17	0.124	0.060	1.36	0.168	/
		Top Edge	10	GPRS 3TX Slots	DSI4	-	-	190/836.6	30.00	29.45	0.350	0.055	1.14	0.397	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
	Low Antenna	Back Side Battery1	10	GPRS 3TX Slots	DSI4	-	-	190/836.6	29.50	28.95	0.582	0.011	1.14	0.661	51
		Back Side Battery2	10	GPRS 3TX Slots	DSI4	-	-	190/836.6	29.50	28.95	0.532	0.010	1.14	0.604	/
		Back Side Battery3	10	GPRS 3TX Slots	DSI4	-	-	190/836.6	29.50	28.95	0.545	0.052	1.14	0.619	/
GSM850 (Variant1)	Low Antenna	Back Side	10	GPRS 3TX Slots	DSI4	-	-	190/836.6	29.50	28.95	0.278	0.090	1.14	0.316	/
	Upper Antenna	Back Side	10	GPRS 3TX Slots	DSI4	-	-	190/836.6	30.00	29.45	0.230	-0.137	1.14	0.261	/
GSM1900 (Original)	Low Antenna	Back Side	10	GPRS 4TX Slots	DSI4	-	-	661/1880	25.00	24.59	0.182	0.040	1.10	0.200	/
		Front Side	10	GPRS 4TX Slots	DSI2	-	-	661/1880	25.00	24.56	0.000	-0.043	1.11	0.000	/
		Left Edge	10	GPRS 4TX Slots	DSI2	-	-	661/1880	25.00	24.56	0.000	0.027	1.11	0.000	/
		Right Edge	10	GPRS 4TX Slots	DSI2	-	-	661/1880	25.00	24.56	0.000	0.058	1.11	0.000	/
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
		Bottom Edge	10	GPRS 4TX Slots	DSI4	-	-	661/1880	25.00	24.59	0.310	0.117	1.10	0.341	/
	Upper Antenna	Back Side	10	GPRS 4TX Slots	DSI4	-	-	661/1880	26.00	25.09	0.354	-0.025	1.23	0.437	/
		Front Side	10	GPRS 4TX Slots	DSI2	-	-	661/1880	26.00	25.11	0.000	-0.020	1.23	0.000	/
		Left Edge	10	GPRS 4TX Slots	DSI2	-	-	661/1880	26.00	25.11	0.000	0.033	1.23	0.000	/
		Right Edge	10	GPRS 4TX Slots	DSI2	-	-	661/1880	26.00	25.11	0.000	-0.085	1.23	0.000	/
		Top Edge	10	GPRS 4TX Slots	DSI4	-	-	661/1880	26.00	25.09	0.495	0.160	1.23	0.610	52
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
	Upper Antenna	Top Edge Battery1	10	GPRS 4TX Slots	DSI4	-	-	661/1880	26.00	25.09	0.365	0.045	1.23	0.450	/
		Top Edge Battery2	10	GPRS 4TX Slots	DSI4	-	-	661/1880	26.00	25.09	0.312	0.022	1.23	0.385	/
		Top Edge	10	GPRS 4TX Slots	DSI4	-	-	661/1880	26.00	25.09	0.352	0.100	1.23	0.434	/

		Battery3													
GSM1900 (Variant1)	Low Antenna	Bottom Edge	10	GPRS 4TX Slots	DSI4	-	-	661/1880	25.00	24.59	0.305	0.020	1.10	0.335	/
	Upper Antenna	Top Edge	10	GPRS 4TX Slots	DSI4	-	-	661/1880	26.00	25.09	0.256	0.030	1.23	0.316	/
WCDMA II (Original)	Low Antenna	Back Side	10	RMC	DSI4	-	-	9400/1880	21.50	20.24	0.518	0.035	1.34	0.692	/
		Front Side	10	RMC	DSI2	-	-	9400/1880	24.00	22.78	0.476	0.080	1.32	0.630	/
		Left Edge	10	RMC	DSI2	-	-	9400/1880	24.00	22.78	0.248	0.030	1.32	0.328	/
		Right Edge	10	RMC	DSI2	-	-	9400/1880	24.00	22.78	0.143	0.020	1.32	0.189	/
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
		Bottom Edge	10	RMC	DSI4	-	-	9400/1880	21.50	20.24	0.745	0.060	1.34	0.996	/
		Bottom Edge	10	RMC	DSI4	-	-	9262/1852.4	21.50	20.30	0.756	0.073	1.32	0.997	53
		Bottom Edge	10	RMC	DSI4	-	-	9538/1907.6	21.50	20.18	0.677	0.023	1.36	0.917	/
	Upper Antenna	Back Side	10	RMC	DSI4	-	-	9400/1880	21.00	20.55	0.450	0.065	1.11	0.499	/
		Front Side	10	RMC	DSI2	-	-	9400/1880	24.00	23.56	0.472	0.120	1.11	0.522	/
		Left Edge	10	RMC	DSI2	-	-	9400/1880	24.00	23.56	0.157	0.082	1.11	0.174	/
		Right Edge	10	RMC	DSI2	-	-	9400/1880	24.00	23.56	0.069	0.000	1.11	0.076	/
		Top Edge	10	RMC	DSI4	-	-	9400/1880	21.00	20.55	0.672	0.050	1.11	0.745	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
	Low Antenna	Bottom Edge Battery1	10	RMC	DSI4	-	-	9262/1852.4	21.50	20.30	0.717	0.120	1.32	0.945	/
		Bottom Edge Battery2	10	RMC	DSI4	-	-	9262/1852.4	21.50	20.30	0.664	0.020	1.32	0.876	/
		Bottom Edge Battery3	10	RMC	DSI4	-	-	9262/1852.4	21.50	20.30	0.688	0.030	1.32	0.907	/
WCDMA II (Variant1)	Low Antenna	Bottom Edge	10	RMC	DSI4	-	-	9262/1852.4	21.50	20.30	0.705	0.100	1.32	0.929	/
	Upper Antenna	Top Edge	10	RMC	DSI4	-	-	9400/1880	21.00	20.55	0.652	0.200	1.11	0.723	/
WCDMA IV (Original)	Low Antenna	Back Side	10	RMC	DSI4	-	-	1413/1732.6	20.50	19.41	0.578	0.049	1.29	0.743	/
		Front Side	10	RMC	DSI2	-	-	1413/1732.6	24.00	22.96	0.366	0.022	1.27	0.465	/
		Left Edge	10	RMC	DSI2	-	-	1413/1732.6	24.00	22.96	0.161	0.066	1.27	0.205	/
		Right Edge	10	RMC	DSI2	-	-	1413/1732.6	24.00	22.96	0.140	-0.021	1.27	0.178	/
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
		Bottom Edge	10	RMC	DSI4	-	-	1413/1732.6	20.50	19.41	0.808	-0.146	1.29	1.039	/
		Bottom Edge	10	RMC	DSI4			1312/1712.4	20.50	19.42	0.785	-0.011	1.28	1.007	/
		Bottom Edge	10	RMC	DSI4	-	-	1513/1752.6	20.50	19.35	0.776	0.065	1.30	1.011	/
	Upper Antenna	Back Side	10	RMC	DSI4	-	-	1413/1732.6	22.50	22.42	0.685	-0.030	1.02	0.698	/
		Front Side	10	RMC	DSI2	-	-	1413/1732.6	24.00	23.93	0.684	0.045	1.02	0.695	/
		Left Edge	10	RMC	DSI2	-	-	1413/1732.6	24.00	23.93	0.281	0.023	1.02	0.286	/
		Right Edge	10	RMC	DSI2	-	-	1413/1732.6	24.00	23.93	0.157	0.148	1.02	0.160	/
		Top Edge	10	RMC	DSI4	-	-	1413/1732.6	22.50	22.42	0.978	0.113	1.02	0.996	54
		Top Edge	10	RMC	DSI4	-	-	1413/1732.6	22.50	22.42	0.965	0.000	1.02	0.983	/

		Repeat													
		Top Edge	10	RMC	DSI4	-	-	1312/1712.4	22.50	22.37	0.666	0.020	1.03	0.686	/
		Top Edge	10	RMC	DSI4	-	-	1513/1752.6	22.50	22.33	0.863	0.140	1.04	0.897	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
	Low Antenna	Bottom Edge Configure 2	10	RMC	DSI4	-	-	1413/1732.6	20.50	19.41	0.521	0.120	1.29	0.670	/
		Bottom Edge Battery1	10	RMC	DSI4	-	-	1413/1732.6	20.50	19.41	0.785	0.052	1.29	1.009	/
		Bottom Edge Battery2	10	RMC	DSI4	-	-	1413/1732.6	20.50	19.41	0.746	0.044	1.29	0.959	/
		Bottom Edge Battery3	10	RMC	DSI4	-	-	1413/1732.6	20.50	19.41	0.775	0.022	1.29	0.996	/
WCDMA IV (Variant1)	Low Antenna	Bottom Edge	10	RMC	DSI4	-	-	1413/1732.6	20.50	19.41	0.588	0.140	1.29	0.756	/
		Bottom Edge	10	RMC	DSI4	-	-	1413/1732.6	20.50	19.41	0.392	0.160	1.29	0.504	/
	Upper Antenna	Top Edge	10	RMC	DSI4	-	-	1413/1732.6	22.50	22.42	0.884	0.021	1.02	0.900	/
WCDMA IV (Variant2)	Low Antenna	Bottom Edge	10	RMC	DSI4	-	-	1413/1732.6	20.50	19.41	0.592	0.150	1.29	0.761	/
WCDMA V (Original)	Low Antenna	Back Side	10	RMC	DSI4	-	-	4183/836.6	24.50	23.63	0.153	-0.025	1.22	0.187	/
		Front Side	10	RMC	DSI2	-	-	4183/836.6	25.50	24.58	0.168	0.080	1.24	0.208	/
		Left Edge	10	RMC	DSI2	-	-	4183/836.6	25.50	24.58	0.000	0.030	1.24	0.000	/
		Right Edge	10	RMC	DSI2	-	-	4183/836.6	25.50	24.58	0.058	-0.082	1.24	0.072	/
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
		Bottom Edge	10	RMC	DSI4	-	-	4183/836.6	24.50	23.63	0.255	-0.111	1.22	0.312	/
	Upper Antenna	Back Side	10	RMC	DSI4	-	-	4183/836.6	24.50	23.11	0.186	-0.190	1.38	0.256	/
		Front Side	10	RMC	DSI2	-	-	4183/836.6	25.50	24.14	0.198	0.000	1.37	0.271	/
		Left Edge	10	RMC	DSI2	-	-	4183/836.6	25.50	24.14	0.087	-0.050	1.37	0.119	/
		Right Edge	10	RMC	DSI2	-	-	4183/836.6	25.50	24.14	0.057	0.000	1.37	0.078	/
		Top Edge	10	RMC	DSI4	-	-	4183/836.6	24.50	23.11	0.341	0.090	1.38	0.470	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
	Upper Antenna	Top Edge Battery1	10	RMC	DSI4	-	-	4183/836.6	24.50	23.11	0.362	0.000	1.38	0.499	/
		Top Edge Battery2	10	RMC	DSI4	-	-	4183/836.6	24.50	23.11	0.315	0.052	1.38	0.434	/
		Top Edge Battery3	10	RMC	DSI4	-	-	4183/836.6	24.50	23.11	0.352	0.050	1.38	0.485	/
WCDMA V (Variant1)	Low Antenna	Bottom Edge	10	RMC	DSI4	-	-	4183/836.6	24.50	23.63	0.295	0.030	1.22	0.360	/
	Upper Antenna	Top Edge	10	RMC	DSI4	-	-	4183/836.6	24.50	23.11	0.428	-0.030	1.38	0.589	55
LTE 2 (Original)	Low Antenna	Back Side	10	QPSK	DSI4	1	50	18700/1860	21.50	20.27	0.470	-0.030	1.33	0.624	/
			10	QPSK	DSI4	50%	0	18900/1880	21.50	20.23	0.493	-0.049	1.34	0.660	/
		Front Side	10	QPSK	DSI2	1	50	19100/1900	24.00	22.75	0.509	0.040	1.33	0.679	/

			10	QPSK	DSI2	50%	25	19100/1900	23.00	21.77	0.411	-0.036	1.33	0.546	/
		Left Edge	10	QPSK	DSI2	1	50	19100/1900	24.00	22.75	0.244	-0.140	1.33	0.325	/
			10	QPSK	DSI2	50%	25	19100/1900	23.00	21.77	0.202	-0.072	1.33	0.268	/
		Right Edge	10	QPSK	DSI2	1	50	19100/1900	24.00	22.75	0.137	-0.069	1.33	0.183	/
			10	QPSK	DSI2	50%	25	19100/1900	23.00	21.77	0.115	0.050	1.33	0.153	/
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
		Bottom Edge	10	QPSK	DSI4	1	50	18700/1860	21.50	20.27	0.716	0.000	1.33	0.950	/
			10	QPSK	DSI4	1	50	18900/1880	21.50	20.16	0.693	0.020	1.36	0.943	/
			10	QPSK	DSI4	1	50	19100/1900	21.50	20.21	0.679	0.020	1.35	0.914	/
			10	QPSK	DSI4	50%	0	18900/1880	21.50	20.23	0.719	0.020	1.34	0.963	/
			10	QPSK	DSI4	50%	25	18700/1860	21.50	20.22	0.710	-0.102	1.34	0.953	/
			10	QPSK	DSI4	50%	25	19100/1900	21.50	20.22	0.691	-0.064	1.34	0.928	/
			10	QPSK	DSI4	100%	0	18700/1860	21.50	20.14	0.685	0.011	1.37	0.937	/
			10	QPSK	DSI4	100%	0	18700/1860	21.50	20.12	0.674	0.022	1.37	0.926	/
			10	QPSK	DSI4	100%	0	19100/1900	21.50	20.12	0.652	0.052	1.37	0.896	/
	Upper Antenna	Back Side	10	QPSK	DSI4	1	50	18700/1860	18.00	17.55	0.237	-0.099	1.11	0.263	/
			10	QPSK	DSI4	50%	0	18900/1880	18.00	17.50	0.239	-0.140	1.12	0.268	/
		Front Side	10	QPSK	DSI2	1	50	18900/1880	24.00	23.62	0.479	-0.151	1.09	0.523	/
			10	QPSK	DSI2	50%	25	19100/1900	23.00	22.62	0.368	-0.164	1.09	0.402	/
		Left Edge	10	QPSK	DSI2	1	50	18900/1880	24.00	23.62	0.159	-0.113	1.09	0.174	/
			10	QPSK	DSI2	50%	25	19100/1900	23.00	22.62	0.121	0.140	1.09	0.132	/
		Right Edge	10	QPSK	DSI2	1	50	18900/1880	24.00	23.62	0.074	0.110	1.09	0.081	/
			10	QPSK	DSI2	50%	25	19100/1900	23.00	22.62	0.056	0.037	1.09	0.061	/
		Top Edge	10	QPSK	DSI4	1	50	18700/1860	18.00	17.55	0.327	0.070	1.11	0.363	/
			10	QPSK	DSI4	50%	0	18900/1880	18.00	17.50	0.307	0.020	1.12	0.344	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
	Low Antenna	Bottom Edge Battery1	10	QPSK	DSI4	50%	0	18900/1880	21.50	20.23	0.744	0.022	1.34	0.997	56
		Bottom Edge Battery2	10	QPSK	DSI4	50%	0	18900/1880	21.50	20.23	0.689	-0.077	1.34	0.923	/
		Bottom Edge Battery3	10	QPSK	DSI4	50%	0	18900/1880	21.50	20.23	0.703	0.062	1.34	0.942	/
LTE 2 (Variant1)	Low Antenna	Bottom Edge	10	QPSK	DSI2	1	50	18900/1880	24.00	23.62	0.489	0.021	1.09	0.534	/
	Upper Antenna	Front Side	10	QPSK	DSI4	50%	0	18900/1880	21.50	20.23	0.710	0.130	1.34	0.951	/
LTE 4 (Original)	Low Antenna	Back Side	10	QPSK	DSI4	1	50	20175/1732.5	20.00	19.16	0.541	0.023	1.21	0.656	/
			10	QPSK	DSI4	50%	0	20050/1720	20.00	19.14	0.548	0.090	1.22	0.668	/
		Front Side	10	QPSK	DSI2	1	50	20050/1720	24.00	23.20	0.379	0.120	1.20	0.456	/
			10	QPSK	DSI2	50%	50	20300/1745	23.00	22.20	0.315	0.055	1.20	0.379	/
		Left Edge	10	QPSK	DSI2	1	50	20050/1720	24.00	23.20	0.146	-0.037	1.20	0.176	/

			10	QPSK	DSI2	50%	50	20300/1745	23.00	22.20	0.145	-0.023	1.20	0.174	/
		Right Edge	10	QPSK	DSI2	1	50	20050/1720	24.00	23.20	0.142	0.184	1.20	0.171	/
			10	QPSK	DSI2	50%	50	20300/1745	23.00	22.20	0.115	0.025	1.20	0.138	/
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
		Bottom Edge	10	QPSK	DSI4	1	50	20175/1732.5	20.00	19.16	0.738	-0.063	1.21	0.895	/
			10	QPSK	DSI4	1	50	20050/1720	20.00	19.09	0.590	0.114	1.23	0.728	/
			10	QPSK	DSI4	1	50	20300/1745	20.00	19.07	0.618	0.029	1.24	0.766	/
			10	QPSK	DSI4	50%	0	20050/1720	20.00	19.14	0.699	0.156	1.22	0.852	/
			10	QPSK	DSI4	50%	25	20175/1732.5	20.00	19.09	0.614	0.023	1.23	0.757	/
			10	QPSK	DSI4	50%	0	20300/1745	20.00	19.13	0.628	0.086	1.22	0.767	/
			10	QPSK	DSI4	100%	0	20050/1720	20.00	19.12	0.598	0.011	1.22	0.732	/
	Upper Antenna	Back Side	10	QPSK	DSI4	1	50	20300/1745	22.00	21.63	0.682	0.040	1.09	0.743	/
			10	QPSK	DSI4	50%	0	20300/1745	22.00	21.69	0.658	0.020	1.07	0.707	/
		Front Side	10	QPSK	DSI2	1	50	20175/1732.5	24.00	23.87	0.713	0.081	1.03	0.735	/
			10	QPSK	DSI2	50%	25	20175/1732.5	23.00	22.90	0.587	0.134	1.02	0.601	/
		Left Edge	10	QPSK	DSI2	1	50	20175/1732.5	24.00	23.87	0.238	-0.150	1.03	0.245	/
			10	QPSK	DSI2	50%	25	20175/1732.5	23.00	22.90	0.224	-0.069	1.02	0.229	/
		Right Edge	10	QPSK	DSI2	1	50	20175/1732.5	24.00	23.87	0.140	0.075	1.03	0.144	/
			10	QPSK	DSI2	50%	25	20175/1732.5	23.00	22.90	0.126	0.075	1.02	0.129	/
		Top Edge	10	QPSK	DSI4	1	50	20300/1745	22.00	21.63	0.906	-0.024	1.09	0.987	/
			10	QPSK	DSI4	1	50	20050/1720	22.00	21.63	0.628	0.170	1.09	0.684	/
			10	QPSK	DSI4	1	50	20175/1732.5	22.00	21.62	0.672	0.025	1.09	0.733	/
			10	QPSK	DSI4	50%	0	20300/1745	22.00	21.69	0.654	0.000	1.07	0.702	/
			10	QPSK	DSI4	100%	0	20050/1720	22.00	21.63	0.645	0.011	1.09	0.702	/
		Top Edge Repeat	10	QPSK	DSI4	1	50	20300/1745	22.00	21.63	0.899	0.011	1.09	0.979	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
	Upper Antenna	Top Edge Battery1	10	QPSK	DSI4	1	50	20300/1745	22.00	21.63	0.876	0.051	1.09	0.954	/
		Top Edge Battery2	10	QPSK	DSI4	1	50	20300/1745	22.00	21.63	0.944	0.021	1.09	1.028	57
		Top Edge Battery3	10	QPSK	DSI4	1	50	20300/1745	22.00	21.63	0.885	0.044	1.09	0.964	/
LTE 4 (Variant1)	Low Antenna	Bottom Edge	10	QPSK	DSI4	1	50	20175/1732.5	20.00	19.16	0.527	0.040	1.21	0.639	/
	Upper Antenna	Top Edge	10	QPSK	DSI4	1	50	20300/1745	22.00	21.63	0.699	0.100	1.09	0.761	/
LTE 5 (Original)	Low Antenna	Back Side	10	QPSK	DSI4	1	25	20450/829	24.50	23.32	0.410	0.030	1.31	0.538	/
			10	QPSK	DSI4	50%	0	20600/844	23.50	23.35	0.391	-0.040	1.04	0.405	/
		Front Side	10	QPSK	DSI2	1	25	20450/829	25.50	24.62	0.324	0.000	1.22	0.397	/
			10	QPSK	DSI2	50%	0	20600/844	24.50	23.70	0.176	0.060	1.20	0.212	/

		Left Edge	10	QPSK	DSI2	1	25	20450/829	25.50	24.62	0.168	0.120	1.22	0.206	/
			10	QPSK	DSI2	50%	0	20600/844	24.50	23.70	0.158	0.140	1.20	0.190	/
		Right Edge	10	QPSK	DSI2	1	25	20450/829	25.50	24.62	0.280	-0.078	1.22	0.343	/
			10	QPSK	DSI2	50%	0	20600/844	24.50	23.70	0.246	0.150	1.20	0.296	/
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
		Bottom Edge	10	QPSK	DSI4	1	25	20450/829	24.50	23.32	0.252	-0.020	1.31	0.331	/
			10	QPSK	DSI4	50%	0	20600/844	23.50	23.35	0.245	-0.020	1.04	0.254	/
	Upper Antenna	Back Side	10	QPSK	DSI4	1	25	20600/844	24.50	23.03	0.402	0.010	1.40	0.564	/
			10	QPSK	DSI4	50%	0	20600/844	23.50	23.06	0.416	0.160	1.11	0.460	/
		Front Side	10	QPSK	DSI2	1	25	20600/844	25.50	24.10	0.471	0.060	1.38	0.650	/
			10	QPSK	DSI2	50%	0	20600/844	24.50	23.16	0.369	-0.040	1.36	0.502	/
		Left Edge	10	QPSK	DSI2	1	25	20600/844	25.50	24.10	0.173	0.012	1.38	0.239	/
			10	QPSK	DSI2	50%	0	20600/844	24.50	23.16	0.129	-0.160	1.36	0.176	/
		Right Edge	10	QPSK	DSI2	1	25	20600/844	25.50	24.10	0.114	0.014	1.38	0.157	/
			10	QPSK	DSI2	50%	0	20600/844	24.50	23.16	0.087	0.020	1.36	0.118	/
		Top Edge	10	QPSK	DSI4	1	25	20600/844	24.50	23.03	0.364	0.049	1.40	0.511	/
			10	QPSK	DSI4	50%	0	20600/844	23.50	23.06	0.328	0.120	1.11	0.363	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
	Upper Antenna	Front Side Battery1	10	QPSK	DSI2	1	25	20600/844	25.50	24.10	0.495	0.041	1.38	0.683	58
		Front Side Battery2	10	QPSK	DSI2	1	25	20600/844	25.50	24.10	0.436	0.011	1.38	0.602	/
		Front Side Battery3	10	QPSK	DSI2	1	25	20600/844	25.50	24.10	0.475	-0.055	1.38	0.656	/
LTE 5 (Variant1)	Low Antenna	Back Side	10	QPSK	DSI4	1	25	20450/829	24.50	23.32	0.361	-0.030	1.31	0.474	/
	Upper Antenna	Front Side	10	QPSK	DSI2	1	25	20600/844	25.50	24.10	0.277	-0.027	1.38	0.382	/
LTE 7 (Original)	Low Antenna	Back Side	10	QPSK	DSI4	1	50	21350/2560	19.50	18.25	0.485	-0.100	1.33	0.647	/
			10	QPSK	DSI4	50%	0	21350/2560	19.50	18.22	0.492	-0.024	1.34	0.661	/
		Front Side	10	QPSK	DSI2	1	50	21350/2560	24.50	23.29	0.385	0.050	1.32	0.509	/
			10	QPSK	DSI2	50%	25	21350/2560	23.50	22.34	0.306	-0.080	1.31	0.400	/
		Left Edge	10	QPSK	DSI2	1	50	21350/2560	24.50	23.29	0.180	0.030	1.32	0.238	/
			10	QPSK	DSI2	50%	25	21350/2560	23.50	22.34	0.147	0.011	1.31	0.192	/
		Right Edge	10	QPSK	DSI2	1	50	21350/2560	24.50	23.29	0.208	-0.060	1.32	0.275	/
			10	QPSK	DSI2	50%	25	21350/2560	23.50	22.34	0.166	0.170	1.31	0.217	/
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
		Bottom Edge	10	QPSK	DSI4	1	50	21350/2560	19.50	18.25	0.474	-0.031	1.33	0.632	/
			10	QPSK	DSI4	50%	0	21350/2560	19.50	18.22	0.457	0.020	1.34	0.614	/
	Upper	Back Side	10	QPSK	DSI4	1	50	21350/2560	17.00	16.31	0.515	0.080	1.17	0.604	/

	Antenna		10	QPSK	DSI4	50%	25	21350/2560	17.00	16.25	0.501	-0.010	1.19	0.595	/
		Front Side	10	QPSK	DSI2	1	50	21350/2560	24.50	23.95	0.895	-0.090	1.14	1.016	59
			10	QPSK	DSI2	1	50	20850/2510	24.50	23.76	0.744	-0.040	1.19	0.882	/
			10	QPSK	DSI2	1	50	21100/2535	24.50	23.86	0.807	0.011	1.16	0.935	/
			10	QPSK	DSI2	50%	25	21350/2560	23.50	22.98	0.718	0.120	1.13	0.809	/
			10	QPSK	DSI2	50%	50	20850/2510	23.50	22.75	0.588	-0.038	1.19	0.699	/
			10	QPSK	DSI2	50%	50	21100/2535	23.50	22.84	0.638	0.024	1.16	0.743	/
			10	QPSK	DSI2	100%	0	21350/2560	23.50	22.90	0.611	0.022	1.15	0.702	/
		Left Edge	10	QPSK	DSI2	1	50	21350/2560	24.50	23.95	0.798	-0.130	1.14	0.906	/
			10	QPSK	DSI2	50%	25	21350/2560	23.50	22.98	0.636	0.090	1.13	0.717	/
		Right Edge	10	QPSK	DSI2	1	50	21350/2560	24.50	23.95	0.052	-0.047	1.14	0.059	/
			10	QPSK	DSI2	50%	25	21350/2560	23.50	22.98	0.041	0.020	1.13	0.046	/
		Top Edge	10	QPSK	DSI4	1	50	21350/2560	17.00	16.31	0.615	-0.019	1.17	0.721	/
			10	QPSK	DSI4	50%	25	21350/2560	17.00	16.25	0.607	0.020	1.19	0.721	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
	Upper Antenna	Front Side Repeat	10	QPSK	DSI2	1	50	21350/2560	24.50	23.95	0.884	0.000	1.14	1.003	/
		Front Side Battery1	10	QPSK	DSI2	1	50	21350/2560	24.50	23.95	0.875	0.011	1.14	0.993	/
		Front Side Battery2	10	QPSK	DSI2	1	50	21350/2560	24.50	23.95	0.862	0.014	1.14	0.978	/
		Front Side Battery3	10	QPSK	DSI2	1	50	21350/2560	24.50	23.95	0.886	-0.096	1.14	1.006	/
LTE 7 (Variant1)	Low Antenna	Back Side	10	QPSK	DSI4	50%	0	21350/2560	19.50	18.22	0.460	0.150	1.34	0.618	/
	Upper Antenna	Front Side	10	QPSK	DSI2	1	50	21350/2560	24.50	23.95	0.373	0.036	1.14	0.423	/
LTE 13 (Variant1)	Low Antenna	Back Side	10	QPSK	DSI4	1	25	23230/782	24.50	22.91	0.208	0.011	1.44	0.300	/
			10	QPSK	DSI4	50%	13	23230/782	23.50	21.93	0.171	0.023	1.44	0.245	/
		Front Side	10	QPSK	DSI2	1	25	23230/782	24.50	22.91	0.085	0.012	1.44	0.123	/
			10	QPSK	DSI2	50%	13	23230/782	23.50	21.93	0.067	0.030	1.44	0.096	/
		Left Edge	10	QPSK	DSI2	1	25	23230/782	24.50	22.91	0.000	0.000	1.44	0.000	/
			10	QPSK	DSI2	50%	13	23230/782	23.50	21.93	0.000	0.000	1.44	0.000	/
		Right Edge	10	QPSK	DSI2	1	25	23230/782	24.50	22.91	0.095	0.050	1.44	0.137	/
			10	QPSK	DSI2	50%	13	23230/782	23.50	21.93	0.086	0.011	1.44	0.123	/
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
		Bottom Edge	10	QPSK	DSI4	1	25	23230/782	24.50	22.91	0.072	0.022	1.44	0.104	/
			10	QPSK	DSI4	50%	13	23230/782	23.50	21.93	0.064	0.021	1.44	0.092	/
	Upper Antenna	Back Side	10	QPSK	DSI4	1	25	23230/782	22.50	20.99	0.196	0.015	1.42	0.277	/
			10	QPSK	DSI4	50%	0	23230/782	22.50	21.00	0.211	0.012	1.41	0.298	60
		Front Side	10	QPSK	DSI2	1	25	23230/782	24.50	22.91	0.161	0.024	1.44	0.232	/

			10	QPSK	DSI2	50%	13	23230/782	23.50	21.93	0.162	0.022	1.44	0.233	/
		Left Edge	10	QPSK	DSI2	1	25	23230/782	24.50	22.91	0.094	0.010	1.44	0.136	/
			10	QPSK	DSI2	50%	13	23230/782	23.50	21.93	0.095	0.011	1.44	0.136	/
		Right Edge	10	QPSK	DSI2	1	25	23230/782	24.50	22.91	0.128	0.020	1.44	0.185	/
			10	QPSK	DSI2	50%	13	23230/782	23.50	21.93	0.107	0.013	1.44	0.154	/
		Top Edge	10	QPSK	DSI4	1	25	23230/782	22.50	20.99	0.132	0.011	1.42	0.187	/
			10	QPSK	DSI4	50%	0	23230/782	22.50	21.00	0.147	0.022	1.41	0.208	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
	Low Antenna	Back Side	10	QPSK	DSI4	1	25	23230/782	24.50	22.91	0.157	0.150	1.44	0.226	/
		Back Side	10	QPSK	DSI4	1	25	23230/782	24.50	22.91	0.129	-0.038	1.44	0.186	/
		Back Side	10	QPSK	DSI4	1	25	23230/782	24.50	22.91	0.146	0.048	1.44	0.211	/
LTE 26 (Variant1)	Low Antenna	Back Side	10	QPSK	DSI4	1	38	26765/821.5	24.50	23.14	0.371	0.023	1.37	0.507	/
			10	QPSK	DSI4	50%	39	26765/821.5	23.50	22.19	0.309	0.060	1.35	0.418	/
		Front Side	10	QPSK	DSI2	1	38	26765/821.5	24.50	23.14	0.164	0.012	1.37	0.224	/
			10	QPSK	DSI2	50%	39	26765/821.5	23.50	22.19	0.134	0.023	1.35	0.181	/
		Left Edge	10	QPSK	DSI2	1	38	26765/821.5	24.50	23.14	0.054	0.011	1.37	0.074	/
			10	QPSK	DSI2	50%	39	26765/821.5	23.50	22.19	0.060	0.010	1.35	0.081	/
		Right Edge	10	QPSK	DSI2	1	38	26765/821.5	24.50	23.14	0.179	0.020	1.37	0.245	/
			10	QPSK	DSI2	50%	39	26765/821.5	23.50	22.19	0.169	0.135	1.35	0.229	/
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
		Bottom Edge	10	QPSK	DSI4	1	38	26765/821.5	24.50	23.14	0.153	0.011	1.37	0.209	/
			10	QPSK	DSI4	50%	39	26765/821.5	23.50	22.19	0.126	0.010	1.35	0.170	/
	Upper Antenna	Back Side	10	QPSK	DSI4	1	38	26965/841.5	24.50	23.16	0.394	0.050	1.36	0.536	61
			10	QPSK	DSI4	50%	0	26965/841.5	23.50	22.27	0.337	0.020	1.33	0.447	/
		Front Side	10	QPSK	DSI2	1	38	26965/841.5	24.50	23.16	0.299	0.020	1.36	0.407	/
			10	QPSK	DSI2	50%	0	26965/841.5	23.50	22.27	0.222	0.017	1.33	0.295	/
		Left Edge	10	QPSK	DSI2	1	38	26965/841.5	24.50	23.16	0.108	0.010	1.36	0.147	/
			10	QPSK	DSI2	50%	0	26965/841.5	23.50	22.27	0.093	0.030	1.33	0.123	/
		Right Edge	10	QPSK	DSI2	1	38	26965/841.5	24.50	23.16	0.158	0.032	1.36	0.215	/
			10	QPSK	DSI2	50%	0	26965/841.5	23.50	22.27	0.142	0.050	1.33	0.188	/
		Top Edge	10	QPSK	DSI4	1	38	26965/841.5	24.50	23.16	0.287	0.030	1.36	0.391	/
			10	QPSK	DSI4	50%	0	26965/841.5	23.50	22.27	0.229	0.020	1.33	0.304	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
	Upper Antenna	Back Side	10	QPSK	DSI4	1	38	26965/841.5	24.50	23.16	0.261	0.160	1.36	0.355	/
		Back Side	10	QPSK	DSI4	1	38	26965/841.5	24.50	23.16	0.330	0.045	1.36	0.449	/
		Back Side	10	QPSK	DSI4	1	38	26965/841.5	24.50	23.16	0.329	-0.096	1.36	0.448	/
LTE 38 TDD (Original)	Low Antenna	Back Side	10	QPSK	DSI4	1	50	38150/2610	20.50	19.34	0.363	-0.090	1.31	0.474	/
			10	QPSK	DSI4	50%	50	38150/2610	20.50	19.22	0.356	0.190	1.34	0.478	/
		Front Side	10	0.130	DSI2	1	50	38150/2610	24.50	23.21	0.307	-0.150	1.35	0.413	/
			10	QPSK	DSI2	50%	25	38150/2610	23.50	22.23	0.241	0.025	1.34	0.323	/

		Left Edge	10	QPSK	DSI2	1	50	38150/2610	24.50	23.21	0.163	0.080	1.35	0.219	/
			10	QPSK	DSI2	50%	25	38150/2610	23.50	22.23	0.131	0.120	1.34	0.175	/
		Right Edge	10	QPSK	DSI2	1	50	38150/2610	24.50	23.21	0.120	0.190	1.35	0.162	/
			10	QPSK	DSI2	50%	25	38150/2610	23.50	22.23	0.097	0.021	1.34	0.130	/
		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
		Bottom Edge	10	QPSK	DSI4	1	50	38150/2610	20.50	19.34	0.349	-0.010	1.31	0.456	/
			10	QPSK	DSI4	50%	50	38150/2610	20.50	19.22	0.316	0.028	1.34	0.424	/
	Upper Antenna	Back Side	10	QPSK	DSI4	1	50	38150/2610	19.00	18.72	0.595	0.035	1.07	0.635	/
			10	QPSK	DSI4	50%	50	38150/2610	19.00	18.57	0.577	0.016	1.10	0.637	/
		Front Side	10	QPSK	DSI2	1	50	38150/2610	24.50	23.87	0.580	-0.080	1.16	0.670	/
			10	QPSK	DSI2	50%	25	38150/2610	23.50	22.83	0.444	-0.140	1.17	0.518	/
		Left Edge	10	QPSK	DSI2	1	50	38150/2610	24.50	23.87	0.523	-0.140	1.16	0.605	/
			10	QPSK	DSI2	50%	25	38150/2610	23.50	22.83	0.396	0.050	1.17	0.462	/
		Right Edge	10	QPSK	DSI2	1	50	38150/2610	24.50	23.87	0.024	0.020	1.16	0.027	/
			10	QPSK	DSI2	50%	25	38150/2610	23.50	22.83	0.024	0.027	1.17	0.028	/
		Top Edge	10	QPSK	DSI4	1	50	38150/2610	19.00	18.72	0.779	0.060	1.07	0.830	/
			10	QPSK	DSI4	1	50	37850/2580	19.00	18.68	0.745	0.000	1.08	0.802	/
			10	QPSK	DSI4	1	50	38000/2595	19.00	18.66	0.716	-0.056	1.08	0.774	/
			10	QPSK	DSI4	50%	50	38150/2610	19.00	18.57	0.729	0.100	1.10	0.805	/
			10	QPSK	DSI4	50%	25	37850/2580	19.00	18.53	0.709	0.022	1.11	0.790	/
			10	QPSK	DSI4	50%	25	38000/2595	19.00	18.53	0.733	0.110	1.11	0.817	/
			10	QPSK	DSI4	100%	0	38150/2610	19.00	18.53	0.702	0.110	1.11	0.782	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
	Upper Antenna	Top Edge Battery1	10	QPSK	DSI4	1	50	38150/2610	19.00	18.72	0.814	0.150	1.07	0.868	62
		Top Edge Battery2	10	QPSK	DSI4	1	50	38150/2610	19.00	18.72	0.797	0.052	1.07	0.851	/
		Top Edge Battery3	10	QPSK	DSI4	1	50	38150/2610	19.00	18.72	0.748	0.044	1.07	0.798	/
LTE 38 TDD (Variant1)	Low Antenna	Back Side	10	QPSK	DSI4	50%	50	38150/2610	20.50	19.22	0.295	0.045	1.34	0.396	/
	Upper Antenna	Top Edge	10	QPSK	DSI4	1	50	38150/2610	19.00	18.72	0.555	-0.150	1.07	0.592	/
LTE 41 TDD (Original)	Low Antenna	Back Side	10	QPSK	DSI4	1	50	41055/2636.5	21.00	20.29	0.466	0.023	1.18	0.549	/
			10	QPSK	DSI4	50%	25	41055/2636.5	21.00	20.18	0.453	0.025	1.21	0.547	/
		Front Side	10	QPSK	DSI2	1	50	41055/2636.5	24.50	23.20	0.357	0.041	1.35	0.482	/
			10	QPSK	DSI2	50%	25	41055/2636.5	23.50	22.17	0.282	-0.024	1.36	0.383	/
		Left Edge	10	QPSK	DSI2	1	50	41055/2636.5	24.50	23.20	0.217	0.026	1.35	0.293	/
			10	QPSK	DSI2	50%	25	41055/2636.5	23.50	22.17	0.148	0.020	1.36	0.201	/
		Right Edge	10	QPSK	DSI2	1	50	41055/2636.5	24.50	23.20	0.134	0.011	1.35	0.181	/
			10	QPSK	DSI2	50%	25	41055/2636.5	23.50	22.17	0.101	-0.120	1.36	0.137	/

		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
		Bottom Edge	10	QPSK	DSI4	1	50	41055/2636.5	21.00	20.29	0.437	-0.140	1.18	0.515	/
			10	QPSK	DSI4	50%	25	41055/2636.5	21.00	20.18	0.452	0.010	1.21	0.546	/
	Upper Antenna	Back Side	10	QPSK	DSI4	1	50	40620/2593	19.50	18.96	0.675	-0.091	1.13	0.764	/
			10	QPSK	DSI4	50%	0	40620/2593	19.50	18.79	0.666	0.021	1.18	0.784	/
		Front Side	10	QPSK	DSI2	1	50	40620/2593	24.50	23.81	0.648	0.028	1.17	0.759	/
			10	QPSK	DSI2	50%	25	40620/2593	23.50	22.80	0.507	0.099	1.17	0.596	/
		Left Edge	10	QPSK	DSI2	1	50	40620/2593	24.50	23.81	0.577	0.000	1.17	0.677	/
			10	QPSK	DSI2	50%	25	40620/2593	23.50	22.80	0.439	0.000	1.17	0.516	/
		Right Edge	10	QPSK	DSI2	1	50	40620/2593	24.50	23.81	0.026	0.000	1.17	0.031	/
			10	QPSK	DSI2	50%	25	40620/2593	23.50	22.80	0.033	0.015	1.17	0.038	/
		Top Edge	10	QPSK	DSI4	1	50	40620/2593	19.50	18.96	0.818	-0.100	1.13	0.927	/
			10	QPSK	DSI4	1	50	40185/2549.5	19.50	18.90	0.795	0.015	1.15	0.913	/
			10	QPSK	DSI4	1	50	41055/2636.5	19.50	18.90	0.779	0.021	1.15	0.894	/
			10	QPSK	DSI4	50%	0	40620/2593	19.50	18.79	0.847	0.140	1.18	0.997	/
			10	QPSK	DSI4	50%	0	40185/2549.5	19.50	18.77	0.821	-0.021	1.18	0.971	/
			10	QPSK	DSI4	50%	0	41055/2636.5	19.50	18.78	0.788	0.000	1.18	0.930	/
			10	QPSK	DSI4	100%	0	40620/2593	19.50	18.85	0.755	0.010	1.16	0.877	/
			10	QPSK	DSI4	100%	0	40185/2549.5	19.50	18.76	0.768	0.015	1.19	0.911	/
			10	QPSK	DSI4	100%	0	41055/2636.5	19.50	18.78	0.771	-0.096	1.18	0.910	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
	Upper Antenna	Top Edge Repeat	10	QPSK	DSI4	50%	0	40620/2593	19.50	18.79	0.821	0.011	1.18	0.967	/
		Top Edge Battery1	10	QPSK	DSI4	50%	0	40620/2593	19.50	18.79	0.876	0.110	1.18	1.032	/
		Top Edge Battery2	10	QPSK	DSI4	50%	0	40620/2593	19.50	18.79	0.822	-0.045	1.18	0.968	/
		Top Edge Battery3	10	QPSK	DSI4	50%	0	40620/2593	19.50	18.79	0.878	0.087	1.18	1.034	63
LTE 41 TDD (Variant1)	Low Antenna	Back Side	10	QPSK	DSI4	1	50	41055/2636.5	21.00	20.29	0.316	-0.096	1.18	0.372	/
	Upper Antenna	Top Edge	10	QPSK	DSI4	50%	0	40620/2593	19.50	18.79	0.664	0.036	1.18	0.782	/
LTE 66 (Variant1)	Low Antenna	Back Side	10	QPSK	DSI4	1	50	132572/1770	20.00	19.17	0.348	0.030	1.21	0.421	/
			10	QPSK	DSI4	50%	0	132572/1770	20.00	19.17	0.376	0.020	1.21	0.455	/
		Front Side	10	QPSK	DSI2	1	50	132572/1770	24.00	23.15	0.342	0.013	1.22	0.416	/
			10	QPSK	DSI2	50%	0	132572/1770	23.00	22.19	0.287	0.026	1.21	0.346	/
		Left Edge	10	QPSK	DSI2	1	50	132572/1770	24.00	23.15	0.129	0.020	1.22	0.157	/
			10	QPSK	DSI2	50%	0	132572/1770	23.00	22.19	0.106	0.050	1.21	0.128	/
		Right Edge	10	QPSK	DSI2	1	50	132572/1770	24.00	23.15	0.060	0.035	1.22	0.073	/
			10	QPSK	DSI2	50%	0	132572/1770	23.00	22.19	0.051	0.110	1.21	0.061	/

		Top Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
		Bottom Edge	10	QPSK	DSI4	1	50	132572/1770	20.00	19.17	0.449	0.050	1.21	0.544	/
			10	QPSK	DSI4	50%	0	132572/1770	20.00	19.17	0.480	0.032	1.21	0.581	/
	Upper Antenna	Back Side	10	QPSK	DSI4	1	50	132322/1745	22.00	21.26	0.551	0.020	1.19	0.653	/
			10	QPSK	DSI4	50%	25	132072/1745	22.00	21.20	0.442	0.060	1.20	0.531	/
		Front Side	10	QPSK	DSI2	1	50	132322/1745	24.00	23.26	0.568	0.020	1.19	0.674	/
			10	QPSK	DSI2	50%	0	132322/1745	23.00	22.21	0.456	0.060	1.20	0.547	/
		Left Edge	10	QPSK	DSI2	1	50	132322/1745	24.00	23.26	0.170	0.013	1.19	0.202	/
			10	QPSK	DSI2	50%	0	132322/1745	23.00	22.21	0.126	0.020	1.20	0.151	/
		Right Edge	10	QPSK	DSI2	1	50	132322/1745	24.00	23.26	0.079	0.060	1.19	0.094	/
			10	QPSK	DSI2	50%	0	132322/1745	23.00	22.21	0.074	0.013	1.20	0.089	/
		Top Edge	10	QPSK	DSI4	1	50	132322/1745	22.00	21.26	0.745	0.020	1.19	0.883	/
			10	QPSK	DSI4	1	50	132072/1720	22.00	21.21	0.726	0.085	1.20	0.871	/
			10	QPSK	DSI4	1	50	132572/1770	22.00	21.09	0.708	0.096	1.23	0.873	/
			10	QPSK	DSI4	50%	25	132072/1745	22.00	21.20	0.714	0.060	1.20	0.858	/
			10	QPSK	DSI4	50%	25	132322/1745	22.00	21.19	0.725	0.086	1.21	0.874	/
			10	QPSK	DSI4	50%	0	132572/1770	22.00	21.18	0.744	0.096	1.21	0.899	/
			10	QPSK	DSI4	100%	0	132322/1745	22.00	21.14	0.700	0.045	1.22	0.853	/
			10	QPSK	DSI4	100%	0	132072/1720	22.00	21.14	0.746	0.086	1.22	0.909	/
			10	QPSK	DSI4	100%	0	132572/1770	22.00	21.06	0.726	0.075	1.24	0.901	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
			10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	/
	Upper Antenna	Top Edge Battery1	10	QPSK	DSI4	1	50	132322/1745	22.00	21.26	0.841	0.065	1.19	0.997	/
		Top Edge Battery2	10	QPSK	DSI4	1	50	132322/1745	22.00	21.26	0.843	0.048	1.19	1.000	64
		Top Edge Battery3	10	QPSK	DSI4	1	50	132322/1745	22.00	21.26	0.839	0.047	1.19	0.995	/

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	98.0%	Receiver off	1/2412	19.00	17.58	0.234	0.020	1.42	0.331	/
		Front Side	10	802.11b	98.0%	Receiver off	1/2412	19.00	17.58	0.158	0.010	1.42	0.224	/
		Left Edge	10	802.11b	98.0%	Receiver off	1/2412	19.00	17.58	0.051	0.025	1.42	0.072	/
		Right Edge	10	802.11b	98.0%	Receiver off	1/2412	19.00	17.58	0.155	0.025	1.42	0.219	/
		Top Edge	10	802.11b	98.0%	Receiver off	1/2412	19.00	17.58	0.171	-0.030	1.42	0.242	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Back Side Battery1	10	802.11b	98.0%	Receiver off	1/2412	19.00	17.58	0.256	0.011	1.42	0.362	65
		Back Side Battery2	10	802.11b	98.0%	Receiver off	1/2412	19.00	17.58	0.224	-0.150	1.42	0.317	/
		Back Side Battery3	10	802.11b	98.0%	Receiver off	1/2412	19.00	17.58	0.228	0.036	1.42	0.323	/
2.4G (Variant1)	Wi-Fi	Back Side	10	802.11b	98.0%	Receiver off	1/2412	19.00	17.58	0.250	0.049	1.42	0.354	/
Bluetooth (Original)	Bluetooth	Back Side	10	DH5	76.0%	Full Power	0/2402	10.50	9.45	0.000	-0.028	1.68	0.000	/
		Front Side	10	DH5	76.0%	Full Power	0/2402	10.50	9.45	0.000	0.073	1.68	0.000	/
		Left Edge	10	DH5	76.0%	Full Power	0/2402	10.50	9.45	0.000	-0.070	1.68	0.000	/
		Right Edge	10	DH5	76.0%	Full Power	0/2402	10.50	9.45	0.000	0.023	1.68	0.000	/
		Top Edge	10	DH5	76.0%	Full Power	0/2402	10.50	9.45	0.000	0.043	1.68	0.000	/
		Bottom Edge	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Back Side Battery1	10	DH5	76.0%	Full Power	0/2402	10.50	9.45	0.000	0.010	1.68	0.000	/
		Back Side Battery2	10	DH5	76.0%	Full Power	0/2402	10.50	9.45	0.000	-0.012	1.68	0.000	/
		Back Side Battery3	10	DH5	76.0%	Full Power	0/2402	10.50	9.45	0.000	0.063	1.68	0.000	/
Bluetooth (Variant1)	Bluetooth	Back Side	10	DH5	76.0%	Full Power	0/2402	10.50	9.45	0.026	0.095	1.68	0.044	66

Product-specific 10g SAR Evaluation

Band	Antenna	Test Position	Mode	Power Reduction	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g（W/kg）	Scaling Factor	Report SAR1g（W/kg）	Note
GSM850 (Original)	Low Antenna	Back Side	GPRS 3TX Slots	DSI4	190/836.6	29.50	29.50	0.563	1.00	0.563	No
		Front Side	GPRS 1TX Slots	DSI2	190/836.6	34.50	34.50	0.177	1.00	0.177	No
		Left Edge	GPRS 1TX Slots	DSI2	190/836.6	34.50	34.50	0.162	1.00	0.162	No
		Right Edge	GPRS 1TX Slots	DSI2	190/836.6	34.50	34.50	0.273	1.00	0.273	No
		Bottom Edge	GPRS 3TX Slots	DSI4	190/836.6	29.50	29.50	0.355	1.00	0.355	No
	Upper Antenna	Back Side	GPRS 3TX Slots	DSI4	190/836.6	29.50	29.50	0.384	1.00	0.384	No
		Front Side	GPRS 1TX Slots	DSI2	190/836.6	34.50	34.50	0.215	1.00	0.215	No
		Left Edge	GPRS 1TX Slots	DSI2	190/836.6	34.50	34.50	0.138	1.00	0.138	No
		Right Edge	GPRS 1TX Slots	DSI2	190/836.6	34.50	34.50	0.124	1.00	0.124	No
		Top Edge	GPRS 3TX Slots	DSI4	190/836.6	29.50	29.50	0.350	1.00	0.350	No
GSM1900 (Original)	Low Antenna	Back Side	GPRS 4TX Slots	DSI4	661/1880	24.00	23.00	0.182	1.26	0.229	No
		Front Side	GPRS 4TX Slots	DSI2	661/1880	30.50	25.00	0.000	3.55	0.000	No
		Left Edge	GPRS 4TX Slots	DSI2	661/1880	30.50	25.00	0.000	3.55	0.000	No
		Right Edge	GPRS 4TX Slots	DSI2	661/1880	30.50	25.00	0.000	3.55	0.000	No
		Bottom Edge	GPRS 4TX Slots	DSI4	661/1880	24.00	23.00	0.310	1.26	0.390	No
	Upper Antenna	Back Side	GPRS 4TX Slots	DSI4	661/1880	24.00	25.00	0.354	0.79	0.281	No
		Front Side	GPRS 4TX Slots	DSI2	661/1880	30.50	25.00	0.000	3.55	0.000	No
		Left Edge	GPRS 4TX Slots	DSI2	661/1880	30.50	25.00	0.000	3.55	0.000	No
		Right Edge	GPRS 4TX Slots	DSI2	661/1880	30.50	25.00	0.000	3.55	0.000	No
		Top Edge	GPRS 4TX Slots	DSI4	661/1880	24.00	25.00	0.495	0.79	0.393	No
WCDMA II (Original)	Low Antenna	Back Side	RMC	DSI4	9400/1880	24.00	21.50	0.518	1.78	0.921	No
		Front Side	RMC	DSI2	9400/1880	24.00	24.00	0.476	1.00	0.476	No
		Left Edge	RMC	DSI2	9400/1880	24.00	24.00	0.248	1.00	0.248	No
		Right Edge	RMC	DSI2	9400/1880	24.00	24.00	0.143	1.00	0.143	No
		Bottom Edge	RMC	DSI4	9400/1880	24.00	21.500	0.745	1.78	1.325	Yes
		Bottom Edge	RMC	DSI4	9262/1852.4	24.00	21.500	0.756	1.78	1.344	Yes
		Bottom Edge	RMC	DSI4	9538/1907.6	24.00	21.50	0.677	1.78	1.204	Yes
	Upper Antenna	Back Side	RMC	DSI4	9400/1880	24.00	21.00	0.450	2.00	0.898	No
		Front Side	RMC	DSI2	9400/1880	24.00	24.00	0.472	1.00	0.472	No
		Left Edge	RMC	DSI2	9400/1880	24.00	24.00	0.157	1.00	0.157	No
		Right Edge	RMC	DSI2	9400/1880	24.00	24.00	0.069	1.00	0.069	No
		Top Edge	RMC	DSI4	9400/1880	24.00	21.00	0.672	2.00	1.341	Yes
WCDMA IV (Original)	Low Antenna	Back Side	RMC	DSI4	1413/1732.6	24.00	20.50	0.578	2.24	1.294	Yes
		Front Side	RMC	DSI2	1413/1732.6	24.00	24.00	0.366	1.00	0.366	No
		Left Edge	RMC	DSI2	1413/1732.6	24.00	24.00	0.161	1.00	0.161	No
		Right Edge	RMC	DSI2	1413/1732.6	24.00	24.00	0.140	1.00	0.140	No
		Bottom Edge	RMC	DSI4	1413/1732.6	24.00	20.50	0.808	2.24	1.809	Yes
		Bottom Edge	RMC	DSI4	1312/1712.4	24.00	20.50	0.785	2.24	1.757	Yes
		Bottom Edge	RMC	DSI4	1513/1752.6	24.00	20.50	0.776	2.24	1.737	Yes
	Upper	Back Side	RMC	DSI4	1413/1732.6	24.00	22.50	0.685	1.41	0.968	No

	Antenna	Front Side	RMC	DSI2	1413/1732.6	24.00	24.00	0.684	1.00	0.684	No
		Left Edge	RMC	DSI2	1413/1732.6	24.00	24.00	0.281	1.00	0.281	No
		Right Edge	RMC	DSI2	1413/1732.6	24.00	24.00	0.157	1.00	0.157	No
		Top Edge	RMC	DSI4	1413/1732.6	24.00	22.50	0.978	1.41	1.381	Yes
		Top Edge	RMC	DSI4	1312/1712.4	24.00	22.50	0.666	1.41	0.941	No
		Top Edge	RMC	DSI4	1513/1752.6	24.00	22.50	0.863	1.41	1.219	Yes
WCDMA V (Original)	Low Antenna	Back Side	RMC	DSI4	4183/836.6	25.50	24.50	0.153	1.26	0.193	No
		Front Side	RMC	DSI2	4183/836.6	25.50	25.50	0.168	1.00	0.168	No
		Left Edge	RMC	DSI2	4183/836.6	25.50	25.50	0.000	1.00	0.000	No
		Right Edge	RMC	DSI2	4183/836.6	25.50	25.50	0.058	1.00	0.058	No
		Bottom Edge	RMC	DSI4	4183/836.6	25.50	24.50	0.255	1.26	0.321	No
	Upper Antenna	Back Side	RMC	DSI4	4183/836.6	25.50	24.50	0.186	1.26	0.234	No
		Front Side	RMC	DSI2	4183/836.6	25.50	25.50	0.198	1.00	0.198	No
		Left Edge	RMC	DSI2	4183/836.6	25.50	25.50	0.087	1.00	0.087	No
		Right Edge	RMC	DSI2	4183/836.6	25.50	25.50	0.057	1.00	0.057	No
		Top Edge	RMC	DSI4	4183/836.6	25.50	24.50	0.341	1.26	0.429	No

Band	Antenna	Test Position	Mode	Power Reduction	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g（W/kg）	Scaling Factor	Report SAR1g（W/kg）	Note
LTE 2	Low Antenna	Back Side	QPSK	DSI4	1	50	18700/1860	24.00	21.50	0.470	1.78	0.836	No
			QPSK	DSI4	50%	0	18900/1880	23.00	21.50	0.493	1.41	0.696	No
		Front Side	QPSK	DSI2	1	50	19100/1900	24.00	24.00	0.509	1.00	0.509	No
			QPSK	DSI2	50%	25	19100/1900	23.00	23.00	0.411	1.00	0.411	No
		Left Edge	QPSK	DSI2	1	50	19100/1900	24.00	24.00	0.244	1.00	0.244	No
			QPSK	DSI2	50%	25	19100/1900	23.00	23.00	0.202	1.00	0.202	No
		Right Edge	QPSK	DSI2	1	50	19100/1900	24.00	24.00	0.137	1.00	0.137	No
			QPSK	DSI2	50%	25	19100/1900	23.00	23.00	0.115	1.00	0.115	No
		Bottom Edge	QPSK	DSI4	1	50	18700/1860	24.00	21.50	0.716	1.78	1.273	Yes
			QPSK	DSI4	1	50	18900/1880	24.00	21.50	0.693	1.78	1.232	Yes
			QPSK	DSI4	1	50	19100/1900	24.00	21.50	0.679	1.78	1.207	Yes
			QPSK	DSI4	50%	0	18900/1880	23.00	21.50	0.719	1.41	1.016	No
			QPSK	DSI4	50%	25	18700/1860	23.00	21.50	0.710	1.41	1.003	No
			QPSK	DSI4	50%	25	19100/1900	23.00	21.50	0.691	1.41	0.976	No
			QPSK	DSI4	100%	0	18700/1860	23.00	21.50	0.685	1.41	0.968	No
			QPSK	DSI4	100%	0	18700/1860	23.00	21.50	0.674	1.41	0.952	No
			QPSK	DSI4	100%	0	19100/1900	23.00	21.50	0.652	1.41	0.921	No
	Upper Antenna	Back Side	QPSK	DSI4	1	50	18700/1860	24.00	18.00	0.237	3.98	0.944	No
			QPSK	DSI4	50%	0	18900/1880	23.00	18.00	0.239	3.16	0.756	No
		Front Side	QPSK	DSI2	1	50	18900/1880	24.00	24.00	0.479	1.00	0.479	No
			QPSK	DSI2	50%	25	19100/1900	23.00	23.00	0.368	1.00	0.368	No
		Left Edge	QPSK	DSI2	1	50	18900/1880	24.00	24.00	0.159	1.00	0.159	No
			QPSK	DSI2	50%	25	19100/1900	23.00	23.00	0.121	1.00	0.121	No
		Right Edge	QPSK	DSI2	1	50	18900/1880	24.00	24.00	0.074	1.00	0.074	No

			QPSK	DSI2	50%	25	19100/1900	23.00	23.00	0.056	1.00	0.056	No
		Top Edge	QPSK	DSI4	1	50	18700/1860	24.00	18.00	0.327	3.98	1.302	Yes
			QPSK	DSI4	50%	0	18900/1880	23.00	18.00	0.307	3.16	0.971	No
LTE 4	Low Antenna	Back Side	QPSK	DSI4	1	50	20175/1732.5	24.00	20.00	0.541	2.51	1.359	Yes
			QPSK	DSI4	50%	0	20050/1720	23.00	20.00	0.548	2.00	1.093	No
		Front Side	QPSK	DSI2	1	50	20050/1720	24.00	24.00	0.379	1.00	0.379	No
			QPSK	DSI2	50%	50	20300/1745	23.00	23.00	0.315	1.00	0.315	No
		Left Edge	QPSK	DSI2	1	50	20050/1720	24.00	24.00	0.146	1.00	0.146	No
			QPSK	DSI2	50%	50	20300/1745	23.00	23.00	0.145	1.00	0.145	No
		Right Edge	QPSK	DSI2	1	50	20050/1720	24.00	24.00	0.142	1.00	0.142	No
			QPSK	DSI2	50%	50	20300/1745	23.00	23.00	0.115	1.00	0.115	No
		Bottom Edge	QPSK	DSI4	1	50	20175/1732.5	24.00	20.00	0.738	2.51	1.854	Yes
			QPSK	DSI4	1	50	20050/1720	24.00	20.00	0.590	2.51	1.482	Yes
			QPSK	DSI4	1	50	20300/1745	24.00	20.00	0.618	2.51	1.552	Yes
			QPSK	DSI4	50%	0	20050/1720	23.00	20.00	0.699	2.00	1.395	Yes
			QPSK	DSI4	50%	25	20175/1732.5	23.00	20.00	0.614	2.00	1.225	Yes
			QPSK	DSI4	50%	0	20300/1745	23.00	20.00	0.628	2.00	1.253	Yes
			QPSK	DSI4	100%	0	20050/1720	23.00	20.00	0.598	2.00	1.193	No
	Upper Antenna	Back Side	QPSK	DSI4	1	50	20300/1745	24.00	22.00	0.682	1.58	1.081	No
			QPSK	DSI4	50%	0	20300/1745	23.00	22.00	0.658	1.26	0.828	No
		Front Side	QPSK	DSI2	1	50	20175/1732.5	24.00	24.00	0.713	1.00	0.713	No
			QPSK	DSI2	50%	25	20175/1732.5	23.00	23.00	0.587	1.00	0.587	No
		Left Edge	QPSK	DSI2	1	50	20175/1732.5	24.00	24.00	0.238	1.00	0.238	No
			QPSK	DSI2	50%	25	20175/1732.5	23.00	23.00	0.224	1.00	0.224	No
		Right Edge	QPSK	DSI2	1	50	20175/1732.5	24.00	24.00	0.140	1.00	0.140	No
			QPSK	DSI2	50%	25	20175/1732.5	23.00	23.00	0.126	1.00	0.126	No
		Top Edge	QPSK	DSI4	1	50	20300/1745	24.00	22.00	0.906	1.58	1.436	Yes
			QPSK	DSI4	1	50	20050/1720	24.00	22.00	0.628	1.58	0.995	No
			QPSK	DSI4	1	50	20175/1732.5	24.00	22.00	0.672	1.58	1.065	No
			QPSK	DSI4	50%	0	20300/1745	24.00	22.00	0.654	1.58	1.037	No
			QPSK	DSI4	100%	0	20050/1720	23.00	22.00	0.645	1.26	0.812	No
LTE 5	Low Antenna	Back Side	QPSK	DSI4	1	25	20450/829	25.50	24.50	0.410	1.26	0.516	No
			QPSK	DSI4	50%	0	20600/844	24.50	23.50	0.391	1.26	0.492	No
		Front Side	QPSK	DSI2	1	25	20450/829	25.50	25.50	0.324	1.00	0.324	No
			QPSK	DSI2	50%	0	20600/844	24.50	24.50	0.176	1.00	0.176	No
		Left Edge	QPSK	DSI2	1	25	20450/829	25.50	25.50	0.168	1.00	0.168	No
			QPSK	DSI2	50%	0	20600/844	24.50	24.50	0.158	1.00	0.158	No
		Right Edge	QPSK	DSI2	1	25	20450/829	25.50	25.50	0.280	1.00	0.280	No
			QPSK	DSI2	50%	0	20600/844	24.50	24.50	0.246	1.00	0.246	No
		Bottom Edge	QPSK	DSI4	1	25	20450/829	25.50	24.50	0.252	1.26	0.317	No
			QPSK	DSI4	50%	0	20600/844	24.50	23.50	0.245	1.26	0.308	No
	Upper Antenna	Back Side	QPSK	DSI4	1	25	20600/844	25.50	24.50	0.402	1.26	0.506	No
			QPSK	DSI4	50%	0	20600/844	24.50	23.50	0.416	1.26	0.524	No

		Front Side	QPSK	DSI2	1	25	20600/844	25.50	25.50	0.471	1.00	0.471	No
			QPSK	DSI2	50%	0	20600/844	24.50	24.50	0.369	1.00	0.369	No
		Left Edge	QPSK	DSI2	1	25	20600/844	25.50	25.50	0.173	1.00	0.173	No
			QPSK	DSI2	50%	0	20600/844	24.50	24.50	0.129	1.00	0.129	No
		Right Edge	QPSK	DSI2	1	25	20600/844	25.50	25.50	0.114	1.00	0.114	No
			QPSK	DSI2	50%	0	20600/844	24.50	24.50	0.087	1.00	0.087	No
		Top Edge	QPSK	DSI4	1	25	20600/844	25.50	24.50	0.364	1.26	0.458	No
			QPSK	DSI4	50%	0	20600/844	24.50	23.50	0.328	1.26	0.413	No
LTE 7	Low Antenna	Back Side	QPSK	DSI4	1	50	21350/2560	24.50	19.50	0.485	3.16	1.534	Yes
			QPSK	DSI4	50%	0	21350/2560	23.50	19.50	0.492	2.51	1.236	Yes
		Front Side	QPSK	DSI2	1	50	21350/2560	24.50	24.50	0.385	1.00	0.385	No
			QPSK	DSI2	50%	25	21350/2560	23.50	23.50	0.306	1.00	0.306	No
		Left Edge	QPSK	DSI2	1	50	21350/2560	24.50	24.50	0.180	1.00	0.180	No
			QPSK	DSI2	50%	25	21350/2560	23.50	23.50	0.147	1.00	0.147	No
		Right Edge	QPSK	DSI2	1	50	21350/2560	24.50	24.50	0.208	1.00	0.208	No
			QPSK	DSI2	50%	25	21350/2560	23.50	23.50	0.166	1.00	0.166	No
		Bottom Edge	QPSK	DSI4	1	50	21350/2560	24.50	19.50	0.474	3.16	1.499	Yes
			QPSK	DSI4	50%	0	21350/2560	23.50	19.50	0.457	2.51	1.148	No
	Upper Antenna	Back Side	QPSK	DSI4	1	50	21350/2560	24.50	17.00	0.515	5.62	2.896	Yes
			QPSK	DSI4	50%	25	21350/2560	23.50	17.00	0.501	4.47	2.238	Yes
		Front Side	QPSK	DSI2	1	50	21350/2560	24.50	24.50	0.895	1.00	0.895	No
			QPSK	DSI2	1	50	20850/2510	24.50	24.50	0.744	1.00	0.744	No
			QPSK	DSI2	1	50	21100/2535	24.50	24.50	0.807	1.00	0.807	No
			QPSK	DSI2	50%	25	21350/2560	23.50	23.50	0.718	1.00	0.718	No
			QPSK	DSI2	50%	50	20850/2510	23.50	23.50	0.588	1.00	0.588	No
			QPSK	DSI2	50%	50	21100/2535	23.50	23.50	0.638	1.00	0.638	No
			QPSK	DSI2	100%	0	21350/2560	23.50	23.50	0.611	1.00	0.611	No
		Left Edge	QPSK	DSI2	1	50	21350/2560	24.50	24.50	0.798	1.00	0.798	No
			QPSK	DSI2	50%	25	21350/2560	23.50	23.50	0.636	1.00	0.636	No
		Right Edge	QPSK	DSI2	1	50	21350/2560	24.50	24.50	0.052	1.00	0.052	No
			QPSK	DSI2	50%	25	21350/2560	23.50	23.50	0.041	1.00	0.041	No
		Top Edge	QPSK	DSI4	1	50	21350/2560	24.50	17.00	0.615	5.62	3.458	Yes
			QPSK	DSI4	50%	25	21350/2560	23.50	17.00	0.607	4.47	2.711	Yes
LTE 13	Low Antenna	Back Side	QPSK	DSI4	1	25	23230/782	24.50	24.50	0.208	1.00	0.208	No
			QPSK	DSI4	50%	13	23230/782	23.50	23.50	0.171	1.00	0.171	No
		Front Side	QPSK	DSI2	1	25	23230/782	24.50	24.50	0.085	1.00	0.085	No
			QPSK	DSI2	50%	13	23230/782	23.50	23.50	0.067	1.00	0.067	No
		Left Edge	QPSK	DSI2	1	25	23230/782	24.50	24.50	0.000	1.00	0.000	No
			QPSK	DSI2	50%	13	23230/782	23.50	23.50	0.000	1.00	0.000	No
		Right Edge	QPSK	DSI2	1	25	23230/782	24.50	24.50	0.095	1.00	0.095	No
			QPSK	DSI2	50%	13	23230/782	23.50	23.50	0.086	1.00	0.086	No
		Bottom Edge	QPSK	DSI4	1	25	23230/782	24.50	24.50	0.072	1.00	0.072	No
			QPSK	DSI4	50%	13	23230/782	23.50	23.50	0.064	1.00	0.064	No

	Upper Antenna	Back Side	QPSK	DSI4	1	25	23230/782	24.50	22.50	0.196	1.58	0.311	No
			QPSK	DSI4	50%	0	23230/782	23.50	22.50	0.211	1.26	0.266	No
		Front Side	QPSK	DSI2	1	25	23230/782	24.50	24.50	0.161	1.00	0.161	No
			QPSK	DSI2	50%	13	23230/782	23.50	23.50	0.162	1.00	0.162	No
		Left Edge	QPSK	DSI2	1	25	23230/782	24.50	24.50	0.094	1.00	0.094	No
			QPSK	DSI2	50%	13	23230/782	23.50	23.50	0.095	1.00	0.095	No
		Right Edge	QPSK	DSI2	1	25	23230/782	24.50	24.50	0.128	1.00	0.128	No
			QPSK	DSI2	50%	13	23230/782	23.50	23.50	0.107	1.00	0.107	No
		Top Edge	QPSK	DSI4	1	25	23230/782	24.50	22.50	0.132	1.58	0.209	No
			QPSK	DSI4	50%	0	23230/782	23.50	22.50	0.147	1.26	0.185	No
LTE 26	Low Antenna	Back Side	QPSK	DSI4	1	38	26765/821.5	24.50	24.50	0.371	1.00	0.371	No
			QPSK	DSI4	50%	39	26765/821.5	23.50	23.50	0.309	1.00	0.309	No
		Front Side	QPSK	DSI2	1	38	26765/821.5	24.50	24.50	0.164	1.00	0.164	No
			QPSK	DSI2	50%	39	26765/821.5	23.50	23.50	0.134	1.00	0.134	No
		Left Edge	QPSK	DSI2	1	38	26765/821.5	24.50	24.50	0.054	1.00	0.054	No
			QPSK	DSI2	50%	39	26765/821.5	23.50	23.50	0.060	1.00	0.060	No
		Right Edge	QPSK	DSI2	1	38	26765/821.5	24.50	24.50	0.179	1.00	0.179	No
			QPSK	DSI2	50%	39	26765/821.5	23.50	23.50	0.169	1.00	0.169	No
		Bottom Edge	QPSK	DSI4	1	38	26765/821.5	24.50	24.50	0.153	1.00	0.153	No
			QPSK	DSI4	50%	39	26765/821.5	23.50	23.50	0.126	1.00	0.126	No
	Upper Antenna	Back Side	QPSK	DSI4	1	38	26965/841.5	24.50	24.50	0.394	1.00	0.394	No
			QPSK	DSI4	50%	0	26965/841.5	23.50	23.50	0.337	1.00	0.337	No
		Front Side	QPSK	DSI2	1	38	26965/841.5	24.50	24.50	0.299	1.00	0.299	No
			QPSK	DSI2	50%	0	26965/841.5	23.50	23.50	0.222	1.00	0.222	No
		Left Edge	QPSK	DSI2	1	38	26965/841.5	24.50	24.50	0.108	1.00	0.108	No
			QPSK	DSI2	50%	0	26965/841.5	23.50	23.50	0.093	1.00	0.093	No
		Right Edge	QPSK	DSI2	1	38	26965/841.5	24.50	24.50	0.158	1.00	0.158	No
			QPSK	DSI2	50%	0	26965/841.5	23.50	23.50	0.142	1.00	0.142	No
		Top Edge	QPSK	DSI4	1	38	26965/841.5	24.50	24.50	0.287	1.00	0.287	No
			QPSK	DSI4	50%	0	26965/841.5	23.50	23.50	0.229	1.00	0.229	No
LTE 38 TDD	Low Antenna	Back Side	QPSK	DSI4	1	50	38150/2610	24.50	20.50	0.363	2.51	0.912	No
			QPSK	DSI4	50%	50	38150/2610	23.50	20.50	0.356	2.00	0.710	No
		Front Side	0.130	DSI2	1	50	38150/2610	24.50	24.50	0.307	1.00	0.307	No
			QPSK	DSI2	50%	25	38150/2610	23.50	23.50	0.241	1.00	0.241	No
		Left Edge	QPSK	DSI2	1	50	38150/2610	24.50	24.50	0.163	1.00	0.163	No
			QPSK	DSI2	50%	25	38150/2610	23.50	23.50	0.131	1.00	0.131	No
		Right Edge	QPSK	DSI2	1	50	38150/2610	24.50	24.50	0.120	1.00	0.120	No
			QPSK	DSI2	50%	25	38150/2610	23.50	23.50	0.097	1.00	0.097	No
		Bottom Edge	QPSK	DSI4	1	50	38150/2610	24.50	20.50	0.349	2.51	0.877	No
			QPSK	DSI4	50%	50	38150/2610	23.50	20.50	0.316	2.00	0.631	No
	Upper Antenna	Back Side	QPSK	DSI4	1	50	38150/2610	24.50	19.00	0.595	3.55	2.112	Yes
			QPSK	DSI4	50%	50	38150/2610	23.50	19.00	0.577	2.82	1.627	Yes
		Front Side	QPSK	DSI2	1	50	38150/2610	24.50	24.50	0.580	1.00	0.580	No

			QPSK	DSI2	50%	25	38150/2610	23.50	23.50	0.444	1.00	0.444	No
		Left Edge	QPSK	DSI2	1	50	38150/2610	24.50	24.50	0.523	1.00	0.523	No
			QPSK	DSI2	50%	25	38150/2610	23.50	23.50	0.396	1.00	0.396	No
		Right Edge	QPSK	DSI2	1	50	38150/2610	24.50	24.50	0.024	1.00	0.024	No
			QPSK	DSI2	50%	25	38150/2610	23.50	23.50	0.024	1.00	0.024	No
		Top Edge	QPSK	DSI4	1	50	38150/2610	24.50	19.00	0.779	3.55	2.762	Yes
			QPSK	DSI4	1	50	37850/2580	24.50	19.00	0.745	3.55	2.643	Yes
			QPSK	DSI4	1	50	38000/2595	24.50	19.00	0.716	3.55	2.540	Yes
			QPSK	DSI4	50%	50	38150/2610	24.50	19.00	0.729	3.55	2.586	Yes
			QPSK	DSI4	50%	25	37850/2580	24.50	19.00	0.709	3.55	2.516	Yes
			QPSK	DSI4	50%	25	38000/2595	24.50	19.00	0.733	3.55	2.601	Yes
			QPSK	DSI4	100%	0	38150/2610	23.50	19.00	0.702	2.82	1.979	Yes
LTE 41 TDD	Low Antenna	Back Side	QPSK	DSI4	1	50	41055/2636.5	24.50	21.00	0.466	2.24	1.043	No
			QPSK	DSI4	50%	25	41055/2636.5	23.50	21.00	0.453	1.78	0.806	No
		Front Side	QPSK	DSI2	1	50	41055/2636.5	24.50	24.50	0.357	1.00	0.357	No
			QPSK	DSI2	50%	25	41055/2636.5	23.50	23.50	0.282	1.00	0.282	No
		Left Edge	QPSK	DSI2	1	50	41055/2636.5	24.50	24.50	0.217	1.00	0.217	No
			QPSK	DSI2	50%	25	41055/2636.5	23.50	23.50	0.148	1.00	0.148	No
		Right Edge	QPSK	DSI2	1	50	41055/2636.5	24.50	24.50	0.134	1.00	0.134	No
			QPSK	DSI2	50%	25	41055/2636.5	23.50	23.50	0.101	1.00	0.101	No
		Bottom Edge	QPSK	DSI4	1	50	41055/2636.5	24.50	21.50	0.437	2.00	0.872	No
			QPSK	DSI4	50%	25	41055/2636.5	23.50	21.50	0.452	1.58	0.716	No
	Upper Antenna	Back Side	QPSK	DSI4	1	50	40620/2593	24.50	19.50	0.675	3.16	2.135	Yes
			QPSK	DSI4	50%	0	40620/2593	23.50	19.50	0.666	2.51	1.673	Yes
		Front Side	QPSK	DSI2	1	50	40620/2593	24.50	24.50	0.648	1.00	0.648	No
			QPSK	DSI2	50%	25	40620/2593	23.50	23.50	0.507	1.00	0.507	No
		Left Edge	QPSK	DSI2	1	50	40620/2593	24.50	24.50	0.577	1.00	0.577	No
			QPSK	DSI2	50%	25	40620/2593	23.50	23.50	0.439	1.00	0.439	No
		Right Edge	QPSK	DSI2	1	50	40620/2593	24.50	24.50	0.026	1.00	0.026	No
			QPSK	DSI2	50%	25	40620/2593	23.50	23.50	0.033	1.00	0.033	No
		Top Edge	QPSK	DSI4	1	50	40620/2593	24.50	19.50	0.818	3.16	2.588	Yes
			QPSK	DSI4	1	50	40185/2549.5	24.50	19.50	0.795	3.16	2.514	Yes
			QPSK	DSI4	1	50	41055/2636.5	24.50	19.50	0.779	3.16	2.463	Yes
			QPSK	DSI4	50%	0	40620/2593	23.50	19.50	0.847	2.51	2.128	Yes
			QPSK	DSI4	50%	0	40185/2549.5	23.50	19.50	0.821	2.51	2.062	Yes
			QPSK	DSI4	50%	0	41055/2636.5	23.50	19.50	0.788	2.51	1.979	Yes
			QPSK	DSI4	100%	0	40620/2593	23.50	19.50	0.755	2.51	1.896	Yes
			QPSK	DSI4	100%	0	40185/2549.5	23.50	19.50	0.768	2.51	1.929	Yes
			QPSK	DSI4	100%	0	41055/2636.5	23.50	19.50	0.771	2.51	1.937	Yes
LTE 66	Low Antenna	Back Side	QPSK	DSI4	1	50	132572/1770	24.00	20.00	0.348	2.51	0.874	No
			QPSK	DSI4	50%	0	132572/1770	23.00	20.00	0.376	2.00	0.750	No
		Front Side	QPSK	DSI2	1	50	132572/1770	24.00	24.00	0.342	1.00	0.342	No
			QPSK	DSI2	50%	0	132572/1770	23.00	23.00	0.287	1.00	0.287	No

		Left Edge	QPSK	DSI2	1	50	132572/1770	24.00	24.00	0.129	1.00	0.129	No
			QPSK	DSI2	50%	0	132572/1770	23.00	23.00	0.106	1.00	0.106	No
		Right Edge	QPSK	DSI2	1	50	132572/1770	24.00	24.00	0.060	1.00	0.060	No
			QPSK	DSI2	50%	0	132572/1770	23.00	23.00	0.051	1.00	0.051	No
		Bottom Edge	QPSK	DSI4	1	50	132572/1770	24.00	20.00	0.449	2.51	1.128	No
			QPSK	DSI4	50%	0	132572/1770	23.00	20.00	0.480	2.00	0.958	No
	Upper Antenna	Back Side	QPSK	DSI4	1	50	132322/1745	24.00	22.00	0.551	1.58	0.873	No
			QPSK	DSI4	50%	25	132072/1745	23.00	22.00	0.442	1.26	0.556	No
		Front Side	QPSK	DSI2	1	50	132322/1745	24.00	24.00	0.568	1.00	0.568	No
			QPSK	DSI2	50%	0	132322/1745	23.00	23.00	0.456	1.00	0.456	No
		Left Edge	QPSK	DSI2	1	50	132322/1745	24.00	24.00	0.170	1.00	0.170	No
			QPSK	DSI2	50%	0	132322/1745	23.00	23.00	0.126	1.00	0.126	No
		Right Edge	QPSK	DSI2	1	50	132322/1745	24.00	24.00	0.079	1.00	0.079	No
			QPSK	DSI2	50%	0	132322/1745	23.00	23.00	0.074	1.00	0.074	No
		Top Edge	QPSK	DSI4	1	50	132322/1745	24.00	22.00	0.745	1.58	1.181	No
			QPSK	DSI4	50%	25	132072/1745	23.00	22.00	0.714	1.26	0.899	No

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.
WCDMA II (Original)	Low Antenna	Bottom Edge	0	RMC	DSI4	-	-	9400/1880	21.50	20.24	1.820	-0.040	1.34	2.433	/
		Bottom Edge	0	RMC	DSI4	-	-	9262/1852.4	21.50	20.30	1.880	0.050	1.32	2.478	67
		Bottom Edge	0	RMC	DSI4	-	-	9538/1907.6	21.50	20.18	1.790	-0.050	1.36	2.426	/
	Upper Antenna	Top Edge	0	RMC	DSI4	-	-	9400/1880	21.00	20.55	1.680	-0.019	1.11	1.863	/
WCDMA II (Variant1)	Low Antenna	Bottom Edge	0	RMC	DSI4	-	-	9262/1852.4	21.50	20.30	1.690	0.054	1.32	2.228	/
	Upper Antenna	Top Edge	0	RMC	DSI4	-	-	9400/1880	21.00	20.55	1.580	0.085	1.11	1.752	/
WCDMA IV (Original)	Low Antenna	Back Side	0	RMC	DSI4	-	-	1413/1732.6	20.50	19.41	1.410	0.022	1.29	1.812	/
		Bottom Edge	0	RMC	DSI4	-	-	1413/1732.6	20.50	19.41	2.020	0.120	1.29	2.596	68
		Bottom Edge	0	RMC	DSI4	-	-	1312/1712.4	20.50	19.42	1.850	0.011	1.28	2.372	/
		Bottom Edge	0	RMC	DSI4	-	-	1513/1752.6	20.50	19.35	1.760	-0.074	1.30	2.294	/
	Upper Antenna	Top Edge	0	RMC	DSI4	-	-	1413/1732.6	22.50	22.42	1.730	0.150	1.02	1.762	/
		Top Edge	0	RMC	DSI4	-	-	1513/1752.6	22.50	22.33	1.820	-0.010	1.04	1.893	/
WCDMA IV (Variant1)	Low Antenna	Bottom Edge	0	RMC	DSI4	-	-	1413/1732.6	20.50	19.41	1.710	0.058	1.29	2.198	/
		Bottom Edge	0	RMC	DSI4	-	-	1413/1732.6	20.50	19.41	1.730	0.074	1.29	2.224	/
	Upper Antenna	Top Edge	0	RMC	DSI4	-	-	1513/1752.6	22.50	22.33	1.810	0.140	1.04	1.882	/
WCDMA IV (Variant2)	Low Antenna	Bottom Edge	0	RMC	DSI4	-	-	1413/1732.6	20.50	19.41	1.620	0.023	1.29	2.082	/

LTE 2 (Original)	Low Antenna	Bottom Edge	0	QPSK	DSI4	1	50	18700/1860	21.50	20.27	1.840	0.047	1.33	2.442	69
			0	QPSK	DSI4	1	50	18900/1880	21.50	20.16	1.830	-0.090	1.36	2.491	/
			0	QPSK	DSI4	1	50	19100/1900	21.50	20.21	1.760	0.015	1.35	2.369	/
	Upper Antenna	Top Edge	0	QPSK	DSI4	1	50	18700/1860	18.00	17.55	0.768	0..085	1.11	0.852	/
LTE 2 (Variant1)	Low Antenna	Bottom Edge	0	QPSK	DSI4	1	50	18900/1880	21.50	20.16	1.540	0.037	1.36	2.097	
	Upper Antenna	Top Edge	0	QPSK	DSI4	1	50	18700/1860	18.00	17.55	0.704	-0.079	1.11	0.781	
LTE 4 (Original)	Low Antenna	Back Side	0	QPSK	DSI4	1	50	20175/1732.5	20.00	19.16	1.300	0.050	1.21	1.577	/
		Bottom Edge	0	QPSK	DSI4	1	50	20175/1732.5	20.00	19.16	1.720	-0.049	1.21	2.087	/
			0	QPSK	DSI4	1	50	20050/1720	20.00	19.09	1.760	-0.027	1.23	2.170	70
			0	QPSK	DSI4	1	50	20300/1745	20.00	19.07	1.720	0.133	1.24	2.131	/
			0	QPSK	DSI4	50%	0	20050/1720	20.00	19.14	1.740	0.020	1.22	2.121	/
			0	QPSK	DSI4	50%	25	20175/1732.5	20.00	19.09	1.730	0.080	1.23	2.133	/
			0	QPSK	DSI4	50%	0	20300/1745	20.00	19.13	1.730	-0.018	1.22	2.114	/
			0	QPSK	DSI4	100%	0	20050/1720	20.00	19.12	1.600	0.058	1.22	1.959	/
	Upper Antenna	Top Edge	0	QPSK	DSI4	1	50	20300/1745	22.00	21.63	1.560	0.016	1.09	1.699	/
LTE 4 (Variant1)	Low Antenna	Bottom Edge	0	QPSK	DSI4	1	50	18900/1880	21.50	20.16	1.540	0.037	1.36	2.097	
	Upper Antenna	Top Edge	0	QPSK	DSI4	1	50	18700/1860	18.00	17.55	0.704	-0.079	1.11	0.781	
LTE 7 (Original)	Low Antenna	Back Side	0	QPSK	DSI4	1	50	21350/2560	19.50	18.25	1.260	0.027	1.33	1.680	71
			0	QPSK	DSI4	50%	0	21350/2560	19.50	18.22	1.180	0.175	1.34	1.584	/
		Bottom Edge	0	QPSK	DSI4	1	50	21350/2560	19.50	18.25	1.090	0.131	1.33	1.454	/
	Upper Antenna	Back Side	0	QPSK	DSI4	1	50	21350/2560	17.00	16.31	0.813	-0.027	1.17	0.953	/
			0	QPSK	DSI4	50%	25	21350/2560	17.00	16.25	0.778	0.199	1.19	0.925	/
		Top Edge	0	QPSK	DSI4	1	50	21350/2560	17.00	16.31	1.260	0.070	1.17	1.477	/
			0	QPSK	DSI4	50%	25	21350/2560	17.00	16.25	1.220	0.042	1.19	1.450	/
LTE 7 (Variant1)	Low Antenna	Back Side	0	QPSK	DSI4	1	50	21350/2560	19.50	18.25	1.250	0.058	1.33	1.667	/
	Upper Antenna	Top Edge	0	QPSK	DSI4	1	50	21350/2560	17.00	16.31	1.240	0.048	1.17	1.454	/
LTE B38 (Original)	Upper Antenna	Back Side	0	QPSK	DSI4	1	50	38150/2610	19.00	18.72	0.861	-0.016	1.07	0.918	/
			0	QPSK	DSI4	50%	50	38150/2610	19.00	18.57	0.704	-0.090	1.10	0.777	/
		Top Edge	0	QPSK	DSI4	1	50	38150/2610	19.00	18.72	1.200	0.040	1.07	1.280	72
			0	QPSK	DSI4	1	50	37850/2580	19.00	18.68	1.080	0.080	1.08	1.163	/
			0	QPSK	DSI4	1	50	38000/2595	19.00	18.66	0.965	0.000	1.08	1.044	/
			0	QPSK	DSI4	50%	50	38150/2610	19.00	18.57	0.988	0.032	1.10	1.091	/
			0	QPSK	DSI4	50%	25	37850/2580	19.00	18.53	1.110	0.014	1.11	1.237	/
			0	QPSK	DSI4	50%	25	38000/2595	19.00	18.53	0.958	-0.085	1.11	1.067	/
			0	QPSK	DSI4	100%	0	38150/2610	19.00	18.53	0.878	-0.012	1.11	0.978	/

LTE B38 (Variant1)	Upper Antenna	Top Edge	0	QPSK	DSI4	1	50	38150/2610	19.00	18.72	1.160	0.058	1.07	1.237	/
LTE B41 (Original)	Upper Antenna	Back Side	0	QPSK	DSI4	1	50	41490/2680	24.00	22.64	0.825	0.023	1.37	1.128	/
			0	QPSK	DSI4	50%	25	41055/2636.5	23.00	22.21	0.882	-0.090	1.20	1.058	/
		Top Edge	0	QPSK	DSI4	1	50	40620/2593	19.50	18.96	1.250	0.193	1.13	1.416	/
			0	QPSK	DSI4	1	50	40185/2549.5	19.50	18.90	0.911	0.025	1.15	1.046	/
			0	QPSK	DSI4	1	50	41055/2636.5	19.50	18.90	1.120	-0.052	1.15	1.286	/
			0	QPSK	DSI4	50%	0	40620/2593	19.50	18.79	1.000	0.041	1.18	1.178	/
			0	QPSK	DSI4	50%	50	40185/2549.5	19.50	18.77	0.965	-0.052	1.18	1.142	/
			0	QPSK	DSI4	50%	25	41055/2636.5	19.50	18.78	1.120	0.021	1.18	1.322	/
			0	QPSK	DSI4	100%	0	40620/2593	19.50	18.85	1.080	0.014	1.16	1.254	/
			0	QPSK	DSI4	100%	0	40185/2549.5	19.50	18.76	0.956	0.150	1.19	1.134	/
			0	QPSK	DSI4	100%	0	41055/2636.5	19.50	18.78	1.050	0.000	1.18	1.239	/
LTE B41 (Variant1)	Upper Antenna	Top Edge	0	QPSK	DSI4	1	50	40620/2593	19.50	18.96	1.280	0.050	1.13	1.449	73

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	Power Drift (dB)	Scaling Factor	Report SAR1g	Plot No.
GSM850 (Original)	Low Antenna	16	Back Side	GPRS 1TX Slots	DSI2	-	-	190/836.6	34.50	33.15	0.213	0.087	1.36	0.291	/
		10	Front Side	GPRS 1TX Slots	DSI2	-	-	190/836.6	34.50	33.15	0.177	0.097	1.36	0.242	/
		16	Bottom Edge	GPRS 1TX Slots	DSI2	-	-	190/836.6	34.50	33.15	0.131	0.033	1.36	0.179	/
	Upper Antenna	16	Back Side	GPRS 1TX Slots	DSI2	-	-	190/836.6	34.50	33.17	0.112	0.013	1.36	0.152	/
		10	Front Side	GPRS 1TX Slots	DSI2	-	-	190/836.6	34.50	33.17	0.215	-0.026	1.36	0.292	/
		16	Top Edge	GPRS 1TX Slots	DSI2	-	-	190/836.6	34.50	33.17	0.082	-0.045	1.36	0.111	/
GSM1900 (Original)	Low Antenna	16	Back Side	GPRS 4TX Slots	DSI2	-	-	661/1880	25.00	24.56	0.198	0.022	1.11	0.219	/
		10	Front Side	GPRS 4TX Slots	DSI2	-	-	661/1880	25.00	24.56	0.000	0.140	1.11	0.000	/
		16	Bottom Edge	GPRS 4TX Slots	DSI2	-	-	661/1880	25.00	24.56	0.303	-0.063	1.11	0.335	/
	Upper Antenna	16	Back Side	GPRS 4TX Slots	DSI2	-	-	661/1880	26.00	25.11	0.145	0.100	1.23	0.178	/
		10	Front Side	GPRS 4TX Slots	DSI2	-	-	661/1880	26.00	25.11	0.000	-0.090	1.23	0.000	/
		16	Top Edge	GPRS 4TX Slots	DSI2	-	-	661/1880	26.00	25.11	0.214	0.038	1.23	0.263	/
WCDMA II (Original)	Low Antenna	16	Back Side	RMC 12.2K	DSI2	-	-	9400/1880	24.00	22.78	0.437	-0.079	1.32	0.579	/
		10	Front Side	RMC 12.2K	DSI2	-	-	9400/1880	24.00	22.78	0.476	0.043	1.32	0.630	74
		16	Bottom Edge	RMC 12.2K	DSI2	-	-	9400/1880	24.00	22.78	0.590	0.100	1.32	0.781	/
	Upper Antenna	16	Back Side	RMC 12.2K	DSI2	-	-	9400/1880	24.00	23.56	0.191	0.021	1.11	0.211	/
		10	Front Side	RMC 12.2K	DSI2	-	-	9400/1880	24.00	23.56	0.472	0.159	1.11	0.522	/
		16	Top Edge	RMC 12.2K	DSI2	-	-	9400/1880	24.00	23.56	0.265	-0.016	1.11	0.293	/
WCDMA IV (Original)	Low Antenna	16	Back Side	RMC 12.2K	DSI2	-	-	1413/1732.6	24.00	22.96	0.572	0.000	1.27	0.727	/
		10	Front Side	RMC 12.2K	DSI2	-	-	1413/1732.6	24.00	22.96	0.366	0.028	1.27	0.465	/
		16	Bottom Edge	RMC 12.2K	DSI2	-	-	1413/1732.6	24.00	22.96	0.813	-0.099	1.27	1.033	/
		16	Bottom Edge	RMC 12.2K	DSI2	-	-	1312/1712.4	24.00	22.87	0.784	0.142	1.30	1.017	/
		16	Bottom Edge	RMC 12.2K	DSI2	-	-	1513/1752.6	24.00	22.83	0.796	0.014	1.31	1.042	/

	Upper Antenna	16	Back Side	RMC 12.2K	DSI2	-	-	1413/1732.6	24.00	23.93	0.265	-0.051	1.02	0.269	/
		10	Front Side	RMC 12.2K	DSI2	-	-	1413/1732.6	24.00	23.93	0.684	-0.100	1.02	0.695	75
		16	Top Edge	RMC 12.2K	DSI2	-	-	1413/1732.6	24.00	23.93	0.358	-0.033	1.02	0.364	/
WCDMA IV (Variant1)	Low Antenna	16	Bottom Edge	RMC 12.2K	DSI2	-	-	1513/1752.6	24.00	22.83	0.779	0.150	1.31	1.020	/
		16	Bottom Edge	RMC 12.2K	DSI2	-	-	1513/1752.6	24.00	22.83	0.718	0.052	1.31	0.940	/
WCDMA IV (Variant2)	Low Antenna	16	Bottom Edge	RMC 12.2K	DSI2	-	-	1513/1752.6	24.00	22.83	0.698	0.070	1.31	0.914	/
WCDMA V (Original)	Low Antenna	16	Back Side	RMC 12.2K	DSI2	-	-	4183/836.6	25.50	24.58	0.206	0.061	1.24	0.255	/
		10	Front Side	RMC 12.2K	DSI2	-	-	4183/836.6	25.50	24.58	0.168	0.064	1.24	0.208	/
		16	Bottom Edge	RMC 12.2K	DSI2	-	-	4183/836.6	25.50	24.58	0.148	-0.058	1.24	0.183	/
	Upper Antenna	16	Back Side	RMC 12.2K	DSI2	-	-	4183/836.6	25.50	24.14	0.241	-0.021	1.37	0.330	/
		10	Front Side	RMC 12.2K	DSI2	-	-	4183/836.6	25.50	24.14	0.198	0.090	1.37	0.271	/
		16	Top Edge	RMC 12.2K	DSI2	-	-	4183/836.6	25.50	24.14	0.176	0.011	1.37	0.241	/
LTE 2 (Original)	Low Antenna	16	Back Side	QPSK	DSI2	1	50	19100/1900	24.00	22.75	0.452	-0.030	1.33	0.603	/
		10	Front Side	QPSK	DSI2	1	50	19100/1900	24.00	22.75	0.509	0.012	1.33	0.679	76
		16	Bottom Edge	QPSK	DSI2	1	50	19100/1900	24.00	22.75	0.628	-0.069	1.33	0.837	/
		16	Bottom Edge	QPSK	DSI2	1	50	18700/1860	24.00	22.72	0.570	0.015	1.34	0.765	/
		16	Bottom Edge	QPSK	DSI2	1	50	18900/1880	24.00	22.71	0.632	-0.042	1.35	0.851	/
	Upper Antenna	16	Back Side	QPSK	DSI2	1	50	18900/1880	24.00	23.62	0.097	0.017	1.09	0.106	/
		10	Front Side	QPSK	DSI2	1	50	18900/1880	24.00	23.62	0.479	0.120	1.09	0.523	/
		16	Top Edge	QPSK	DSI2	1	50	18900/1880	24.00	23.62	0.127	0.020	1.09	0.139	/
LTE 4 (Original)	Low Antenna	16	Back Side	QPSK	DSI2	1	50	20050/1720	24.00	23.20	0.610	-0.050	1.20	0.733	/
		10	Front Side	QPSK	DSI2	1	50	20050/1720	24.00	23.20	0.379	0.040	1.20	0.456	/
		16	Bottom Edge	QPSK	DSI2	1	50	20050/1720	24.00	23.20	0.786	0.097	1.20	0.945	/
		16	Bottom Edge	QPSK	DSI2	1	50	20175/1732.5	24.00	23.18	0.659	0.140	1.21	0.796	/
		16	Bottom Edge	QPSK	DSI2	1	50	20300/1745	24.00	23.09	0.774	-0.040	1.23	0.954	/
	Upper Antenna	16	Back Side	QPSK	DSI2	1	50	20175/1732.5	24.00	23.87	0.285	0.070	1.03	0.294	/
		10	Front Side	QPSK	DSI2	1	50	20175/1732.5	24.00	23.87	0.713	-0.049	1.03	0.735	/
		16	Top Edge	QPSK	DSI2	1	50	20175/1732.5	24.00	23.87	0.406	0.012	1.03	0.418	/
LTE 5 (Original)	Low Antenna	16	Back Side	QPSK	DSI2	1	25	20450/829	25.50	24.62	0.236	0.024	1.22	0.289	/
		10	Front Side	QPSK	DSI2	1	25	20450/829	25.50	24.62	0.324	0.099	1.22	0.397	/
		16	Bottom Edge	QPSK	DSI2	1	25	20450/829	25.50	24.62	0.158	-0.118	1.22	0.193	/
	Upper Antenna	16	Back Side	QPSK	DSI2	1	25	20600/844	25.50	24.10	0.245	0.025	1.38	0.338	/
		10	Front Side	QPSK	DSI2	1	25	20600/844	25.50	24.10	0.471	-0.101	1.38	0.650	77
		16	Top Edge	QPSK	DSI2	1	25	20600/844	25.50	24.10	0.150	0.062	1.38	0.207	/
LTE 7 (Original)	Low Antenna	16	Back Side	QPSK	DSI2	1	50	21350/2560	24.50	23.29	0.748	-0.047	1.32	0.988	/
		16	Back Side	QPSK	DSI2	1	50	20850/2510	24.50	23.10	0.278	-0.070	1.38	0.384	/
		16	Back Side	QPSK	DSI2	1	50	21100/2535	24.50	23.23	0.268	-0.167	1.34	0.359	/
		10	Front Side	QPSK	DSI2	1	50	21350/2560	24.50	23.29	0.385	-0.010	1.32	0.509	/
		16	Bottom Edge	QPSK	DSI2	1	50	21350/2560	24.50	23.29	0.721	-0.067	1.32	0.953	/
		16	Bottom Edge	QPSK	DSI2	1	50	20850/2510	24.50	23.10	0.644	0.180	1.38	0.889	/
		16	Bottom Edge	QPSK	DSI2	1	50	21100/2535	24.50	23.23	0.745	0.020	1.34	0.998	/
	Upper	16	Back Side	QPSK	DSI2	1	50	21350/2560	24.50	23.95	0.248	0.025	1.14	0.281	/

	Antenna	10	Front Side	QPSK	DSI2	1	50	21350/2560	24.50	23.95	0.891	0.000	1.14	1.011	/
		10	Front Side	QPSK	DSI2	1	50	20850/2510	24.50	23.76	0.744	0.029	1.19	0.882	/
		10	Front Side	QPSK	DSI2	1	50	21100/2535	24.50	23.86	0.807	0.160	1.16	0.935	/
		16	Top Edge	QPSK	DSI2	1	50	21350/2560	24.50	23.95	0.243	0.034	1.14	0.276	/
LTE 13 (Variant1)	Low Antenna	16	Back Side	QPSK	DSI2	1	25	23230/782	24.50	22.91	0.134	0.032	1.44	0.193	/
		10	Front Side	QPSK	DSI2	1	25	23230/782	24.50	22.91	0.130	0.060	1.44	0.187	/
		16	Bottom Edge	QPSK	DSI2	1	25	23230/782	24.50	22.91	0.067	-0.022	1.44	0.097	/
	Upper Antenna	16	Back Side	QPSK	DSI2	1	25	23230/782	24.50	22.91	0.153	0.051	1.44	0.221	/
		10	Front Side	QPSK	DSI2	1	25	23230/782	24.50	22.91	0.154	-0.050	1.44	0.222	/
		16	Top Edge	QPSK	DSI2	1	25	23230/782	24.50	22.91	0.091	0.027	1.44	0.131	/
LTE 26 (Variant1)	Low Antenna	16	Back Side	QPSK	DSI2	1	38	26765/821.5	24.50	23.14	0.181	0.041	1.37	0.248	/
		10	Front Side	QPSK	DSI2	1	38	26765/821.5	24.50	23.14	0.138	-0.160	1.37	0.189	/
		16	Bottom Edge	QPSK	DSI2	1	38	26765/821.5	24.50	23.14	0.125	0.029	1.37	0.171	/
	Upper Antenna	16	Back Side	QPSK	DSI2	1	38	26965/841.5	24.50	23.16	0.265	0.033	1.36	0.361	/
		10	Front Side	QPSK	DSI2	1	38	26965/841.5	24.50	23.16	0.272	0.051	1.36	0.370	78
		16	Top Edge	QPSK	DSI2	1	38	26965/841.5	24.50	23.16	0.153	0.045	1.36	0.208	/
LTE 38 (Original)	Low Antenna	16	Back Side	QPSK	DSI2	1	50	38150/2610	24.50	23.21	0.197	0.020	1.35	0.265	/
		10	Front Side	QPSK	DSI2	1	50	38150/2610	24.50	23.21	0.307	0.021	1.35	0.413	/
		16	Bottom Edge	QPSK	DSI2	1	50	38150/2610	24.50	23.21	0.166	0.060	1.35	0.223	/
	Upper Antenna	16	Back Side	QPSK	DSI2	1	50	38150/2610	24.50	23.87	0.228	0.150	1.16	0.264	/
		10	Front Side	QPSK	DSI2	1	50	38150/2610	24.50	23.87	0.490	0.110	1.16	0.566	/
		16	Top Edge	QPSK	DSI2	1	50	38150/2610	24.50	23.87	0.276	-0.198	1.16	0.319	/
LTE 41 (Original)	Low Antenna	16	Back Side	QPSK	DSI2	1	50	41055/2636.5	24.50	23.20	0.250	-0.023	1.35	0.337	/
		10	Front Side	QPSK	DSI2	1	50	41055/2636.5	24.50	23.20	0.357	0.110	1.35	0.482	/
		16	Bottom Edge	QPSK	DSI2	1	50	41055/2636.5	24.50	23.20	0.247	-0.020	1.35	0.333	/
	Upper Antenna	16	Back Side	QPSK	DSI2	1	50	40620/2593	24.50	23.81	0.228	-0.010	1.17	0.267	/
		10	Front Side	QPSK	DSI2	1	50	40620/2593	24.50	23.81	0.497	0.060	1.17	0.583	79
		16	Top Edge	QPSK	DSI2	1	50	40620/2593	24.50	23.81	0.209	-0.010	1.17	0.245	/
LTE 66 (Variant1)	Low Antenna	16	Back Side	QPSK	DSI2	1	50	132572/1770	24.00	23.15	0.473	0.017	1.22	0.575	/
		10	Front Side	QPSK	DSI2	1	50	132572/1770	24.00	23.15	0.323	-0.040	1.22	0.393	/
		16	Bottom Edge	QPSK	DSI2	1	50	132572/1770	24.00	23.15	0.769	0.030	1.22	0.935	/
		16	Bottom Edge	QPSK	DSI2	1	50	132072/1720	24.00	23.01	0.744	0.085	1.26	0.934	/
		16	Bottom Edge	QPSK	DSI2	1	50	132322/1745	24.00	23.11	0.752	-0.160	1.23	0.923	/
		16	Bottom Edge	QPSK	DSI2	100%	0	132322/1745	23.00	22.09	0.625	0.085	1.23	0.771	/
	Upper Antenna	16	Back Side	QPSK	DSI2	1	50	132322/1745	24.00	23.26	0.471	0.190	1.19	0.558	/
		10	Front Side	QPSK	DSI2	1	50	132322/1745	24.00	23.26	0.558	-0.038	1.19	0.662	/
		16	Top Edge	QPSK	DSI2	1	50	132322/1745	24.00	23.26	0.735	0.035	1.19	0.872	/

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
Upper Antenna + WLAN	Yes	Yes	Yes	Yes
Low Antenna + WLAN	Yes	Yes	Yes	Yes
Bluetooth + WLAN	Yes	Yes	Yes	Yes
Low Antenna + Bluetooth + WLAN	Yes	Yes	Yes	Yes
Upper Antenna + Bluetooth + WLAN	Yes	Yes	Yes	Yes
Low Antenna + Upper Antenna	NA	NA	NA	NA

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 < 1.6W/kg, simultaneously transmission SAR measurement is not necessary.

ii) SPLSR = (SAR1 + SAR2)^1.5 / (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 SPLSR ≤ 0.04, simultaneously transmission SAR measurement is not necessary.

The Maximum $SAR_{1g/10g}$ Value for Low Antenna

$SAR_{1g/10g}$ (W/kg) / Test Position		GSM 850	GSM 1900	WCDMA Band 2	WCDMA Band 4	WCDMA Band 5	LTE 2	LTE 4	LTE 5	LTE 7	LTE 13	LTE 26	LTE 38	LTE 41	LTE 66	MAX. $SAR_{1g/10g}$
Head	Left Cheek	0.137	0.090	0.193	0.138	0.133	0.244	0.103	0.192	0.276	0.095	0.172	0.141	0.177	0.146	0.276
	Left Tilt	0.069	0.099	0.242	0.028	0.075	0.229	0.131	0.139	0.195	0.046	0.079	0.131	0.108	0.152	0.242
	Right Cheek	0.176	0.080	0.224	0.193	0.193	0.219	0.154	0.228	0.140	0.129	0.216	0.104	0.089	0.136	0.228
	Right Tilt	0.095	0.099	0.225	0.055	0.079	0.172	0.113	0.131	0.113	0.060	0.129	0.076	0.075	0.124	0.225
Body worn	Back Side	0.255	0.255	0.603	0.671	0.237	0.651	0.760	0.289	1.011	0.195	0.249	0.490	0.462	0.683	1.011
	Front Side	0.242	0.000	0.630	0.465	0.208	0.679	0.456	0.397	0.509	0.187	0.189	0.413	0.482	0.393	0.679
Hotspot	Back Side	0.661	0.200	0.692	0.743	0.187	0.660	0.668	0.538	0.661	0.300	0.507	0.478	0.549	0.455	0.743
	Front Side	0.242	0.000	0.630	0.465	0.208	0.679	0.456	0.397	0.509	0.187	0.224	0.413	0.482	0.416	0.679
	Left Edge	0.221	0.000	0.328	0.205	0.000	0.325	0.176	0.206	0.238	0.000	0.081	0.219	0.293	0.157	0.328
	Right Edge	0.373	0.000	0.189	0.178	0.072	0.183	0.171	0.343	0.275	0.137	0.245	0.162	0.181	0.073	0.373
	Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bottom Edge	0.403	0.341	0.997	1.039	0.360	0.997	0.895	0.331	0.632	0.104	0.209	0.456	0.546	0.581	1.039
Product Specific 10-g SAR	Back Side	NA	NA	NA	1.812	NA	NA	1.577	NA	1.680	NA	NA	NA	NA	NA	1.812
	Front Side	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Left Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bottom Edge	NA	NA	2.478	2.596	NA	2.491	2.170	NA	1.454	NA	NA	NA	NA	NA	2.596

The Maximum $SAR_{1g/10g}$ Value for Upper Antenna

$SAR_{1g/10g}$ (W/kg) / Test Position		GSM 850	GSM 1900	WCDMA Band 2	WCDMA Band 4	WCDMA Band 5	LTE 2	LTE 4	LTE 5	LTE 7	LTE 13	LTE 26	LTE 38	LTE 41	LTE 66	MAX. $SAR_{1g/10g}$
Head	Left Cheek	0.418	0.184	0.211	0.131	0.686	0.338	0.343	0.584	0.432	0.364	0.602	0.302	0.593	0.268	0.686
	Left Tilt	0.286	0.236	0.239	0.132	0.549	0.402	0.386	0.484	0.602	0.357	0.502	0.403	0.726	0.302	0.726
	Right Cheek	0.587	0.280	0.318	0.411	1.011	0.467	0.529	0.891	0.700	1.013	0.799	0.692	0.906	0.481	1.013
	Right Tilt	0.373	0.336	0.358	0.659	0.616	0.612	0.570	0.617	1.059	0.704	0.572	0.949	1.098	0.464	1.098
Body worn	Back Side	0.323	0.312	0.365	0.455	0.386	0.458	0.375	0.387	0.965	0.384	0.361	0.684	0.303	0.320	0.965
	Front Side	0.292	0.000	0.522	0.695	0.271	0.523	0.735	0.650	1.011	0.222	0.370	0.566	0.583	0.662	1.011
Hotspot	Back Side	0.436	0.437	0.499	0.698	0.256	0.268	0.743	0.564	0.604	0.298	0.536	0.637	0.784	0.653	0.784
	Front Side	0.292	0.000	0.522	0.695	0.271	0.523	0.735	0.683	1.016	0.233	0.407	0.670	0.759	0.674	1.016
	Left Edge	0.187	0.000	0.174	0.286	0.119	0.174	0.245	0.239	0.906	0.136	0.147	0.605	0.677	0.202	0.906
	Right Edge	0.168	0.000	0.076	0.160	0.078	0.081	0.144	0.157	0.059	0.185	0.215	0.028	0.038	0.094	0.215
	Top Edge	0.397	0.610	0.745	0.996	0.589	0.363	1.028	0.511	0.721	0.208	0.391	0.868	1.034	1.000	1.034
	Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Product Specific 10-g SAR	Back Side	NA	NA	NA	NA	NA	NA	NA	NA	0.953	NA	NA	0.918	1.128	NA	1.128
	Front Side	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Left Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Top Edge	NA	NA	1.863	1.893	0.852	1.699	NA	NA	1.477	NA	NA	1.280	1.449	NA	1.893
	Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

Test Position \ $SAR_{1g/10g}$(W/kg)		Low antenna	Upper Antenna	Bluetooth	Wi-Fi 2.4G	MAX. $\Sigma SAR_{1g/10g}$
Head	Left Cheek	0.276	**0.686**	0.114	0.794	1.594
	Left Tilt	0.242	**0.726**	0.071	0.709	1.506
	Right Cheek	0.228	**1.013**	0.034	0.380	1.427
	Right Tilt	0.225	**1.098**	0.031	0.359	1.488
Body worn	Back Side	**1.011**	0.965	0.044	0.245	1.300
	Front Side	0.679	**1.011**	0.000	0.130	1.141
Hotspot	Back Side	0.743	**0.784**	0.044	0.362	1.190
	Front Side	0.679	**1.016**	0.000	0.224	1.240
	Left Edge	0.328	**0.906**	0.000	0.072	0.978
	Right Edge	**0.373**	0.215	0.000	0.219	0.592
	Top Edge	NA	**1.034**	0.000	0.242	1.276
	Bottom Edge	**1.039**	NA	N/A	N/A	1.039
Product Specific 10-g SAR	Back Side	**1.812**	1.128	NA	NA	1.812
	Front Side	NA	NA	NA	NA	NA
	Left Edge	NA	NA	NA	NA	NA
	Right Edge	NA	NA	NA	NA	NA
	Top Edge	NA	**1.893**	NA	NA	1.893
	Bottom Edge	**2.596**	NA	NA	NA	2.596

Note: 1.The value with blue color is the maximum $\Sigma SAR_{1g/10g}$ Value.

2. MAX. $\Sigma SAR_{1g/10g}$ =Unlicensed SAR_{MAX} +Licensed SAR_{MAX}

MAX. ΣSAR_{1g} =1.594 W/kg<1.6W/kg and MAX. ΣSAR10g =2.596 W/kg<4 W/kg,So the Simultaneous transmutation SAR with volume scan are not required for Wi-Fi and BT and Low Antenna/Upper Antenna.

11 Measurement Uncertainty

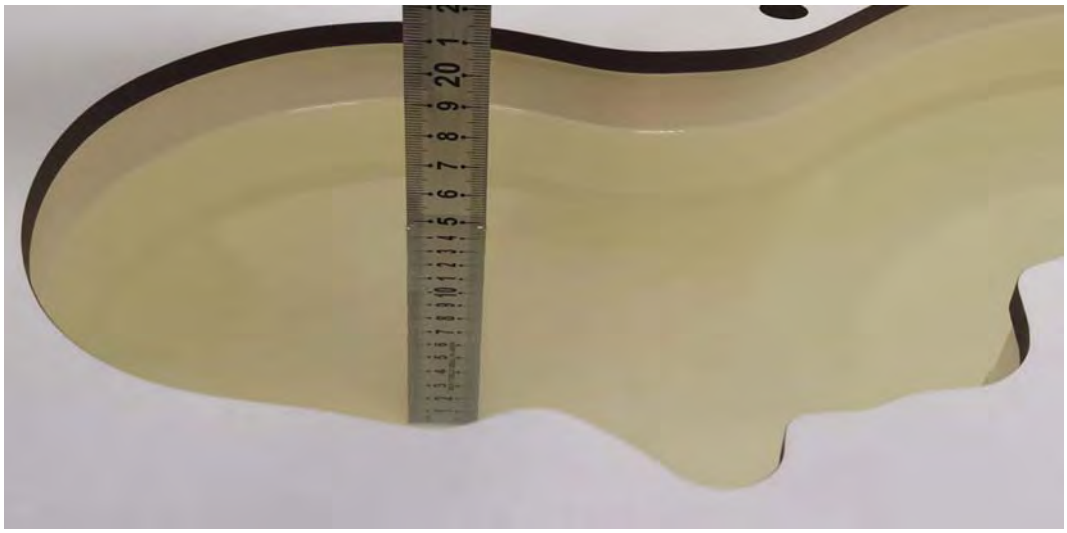
Per KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528- 2013 is not required in SAR reports submitted for equipment approval. This also applies to the 10-g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

********END OF REPORT ********

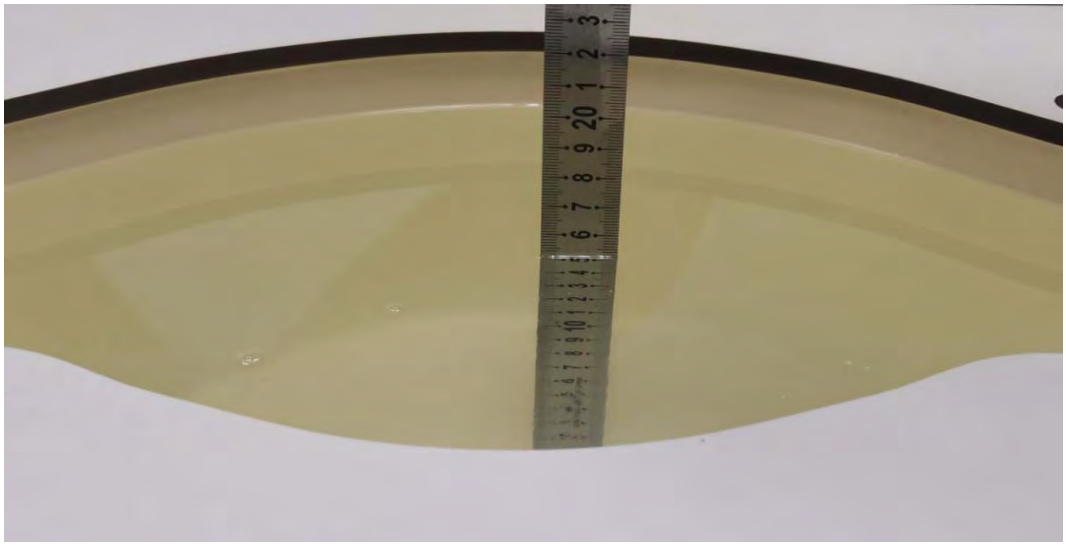
ANNEX A: Test Layout

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 body tissue simulating liquid. For Head and Body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm, which is shown in Picture 3 and Picture 4.



Picture 3: liquid depth in the head Phantom



Picture 4: Liquid depth in the flat Phantom

ANNEX B: System Check Results

Original

Plot 1 System Performance Check at 835 MHz TSL

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d020

Date: 2022/6/25

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

Medium parameters used: f = 835 MHz; σ =0.87 S/m; ε_r = 41.3; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.30, 9.30, 9.30); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 2.59 W/kg

d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 54.3 V/m; Power Drift = -0.06 dB

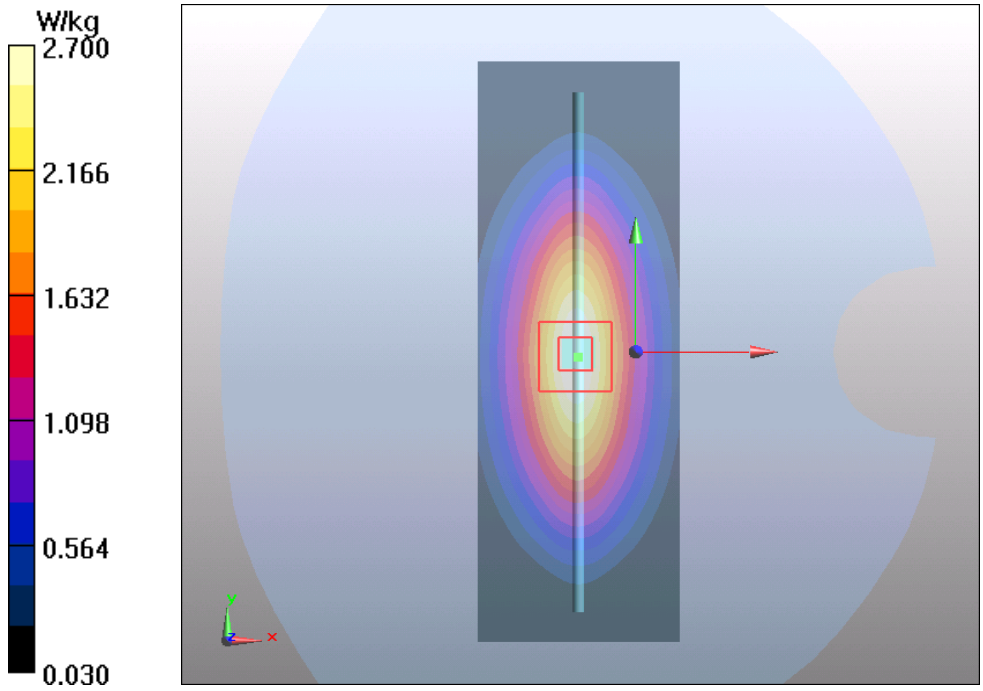
Peak SAR (extrapolated) = 3.67 W/kg

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

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

Ratio of SAR at M2 to SAR at M1 = 68.2%

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



Plot 2 System Performance Check at 835 MHz TSL

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d020

Date: 2022/6/26

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

Medium parameters used: f = 835 MHz; σ = 0.92 S/m; ε_r = 41.4; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.30, 9.30, 9.30); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 2.64 W/kg

d=15mm, Pin=250mW/Zoom Scan(5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 54.4 V/m; Power Drift = -0.076 dB

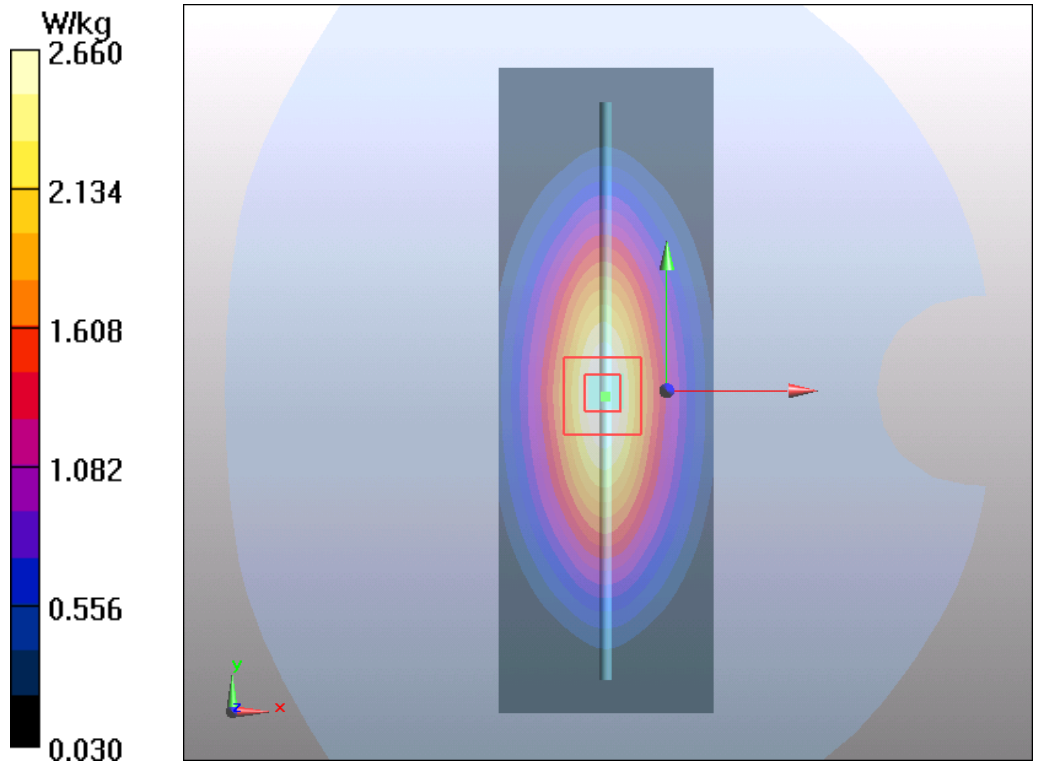
Peak SAR (extrapolated) = 3.67 W/kg

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

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

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

Maximum value of SAR (measured) = 2.66 W/kg



Plot 3 System Performance Check at 1750 MHz TSL

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1033

Date: 2022/6/24

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

Medium parameters used: f = 1750 MHz; σ = 1.37 S/m; ε_r = 39.3; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(8.22, 8.22, 8.22); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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 (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 80 V/m; Power Drift = 0.075 dB

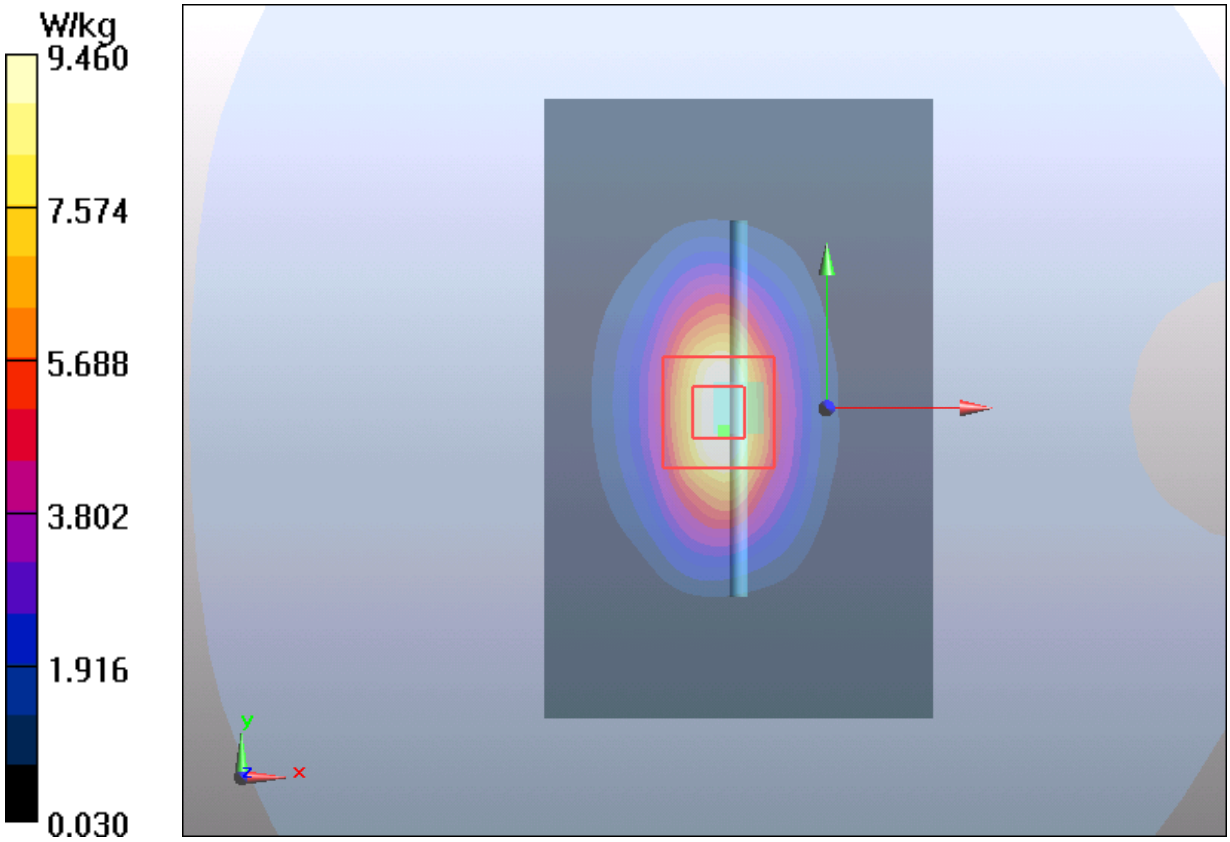
Peak SAR (extrapolated) = 15.47 W/kg

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

Smallest distance from peaks to all points 3 dB below = 10.2mm

Ratio of SAR at M2 to SAR at M1 = 53.4%

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



Plot 4 System Performance Check at 1750 MHz TSL

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1033

Date: 2022/6/27

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

Medium parameters used: f = 1750 MHz; σ = 1.36 S/m; ε_r = 40.2; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(8.22, 8.22, 8.22); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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 (interpolated) = 9.77 W/kg

d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 80 V/m; Power Drift = 0.025 dB

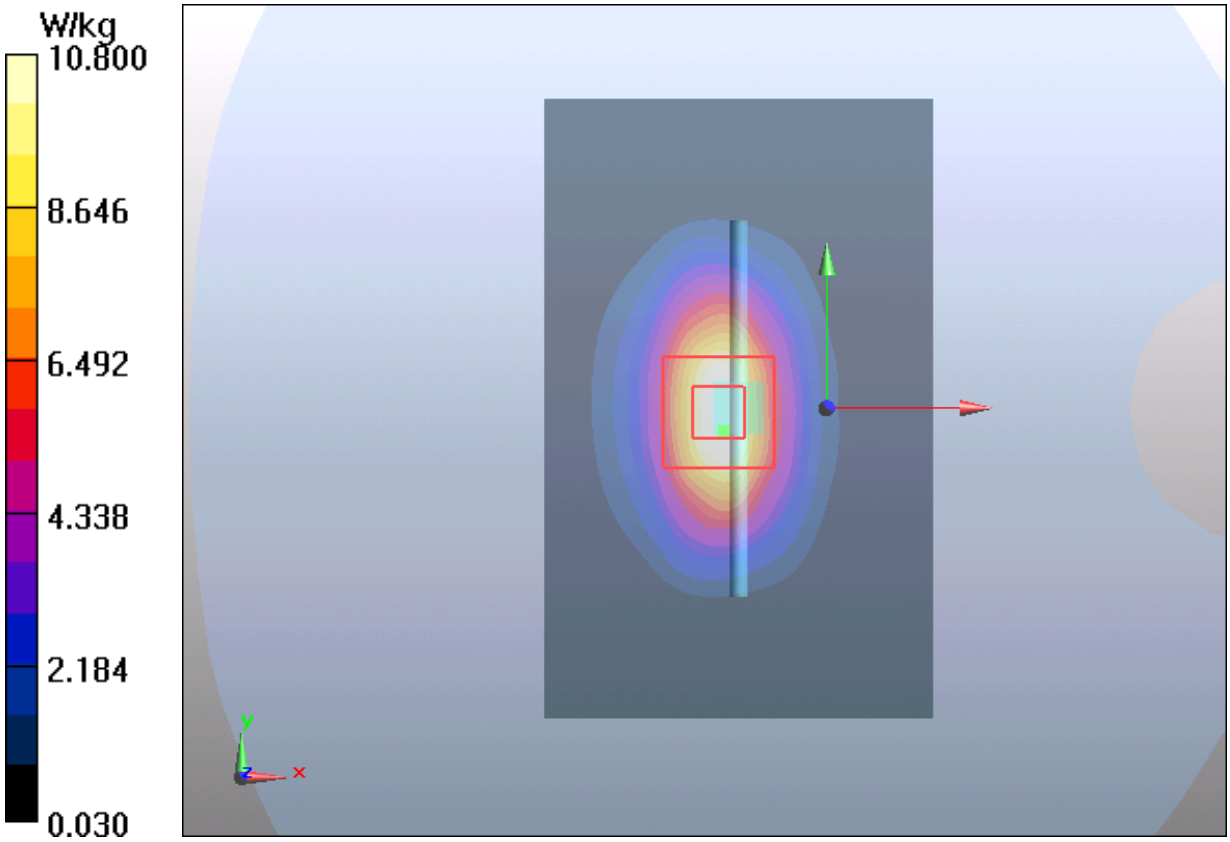
Peak SAR (extrapolated) = 15.5 W/kg

SAR(1 g) = 8.92 W/kg; SAR(10 g) = 4.65 W/kg

Smallest distance from peaks to all points 3 dB below = 10.5mm

Ratio of SAR at M2 to SAR at M1 = 53.6%

Maximum value of SAR (measured) = 10.8 W/kg



Plot 5 System Performance Check at 1750 MHz TSL

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1033

Date: 2022/6/29

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

Medium parameters used: f = 1750 MHz; σ = 1.33 S/m; ε_r = 40.0; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(8.22, 8.22, 8.22); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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 (interpolated) = 9.7 W/kg

d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 80 V/m; Power Drift = 0.065 dB

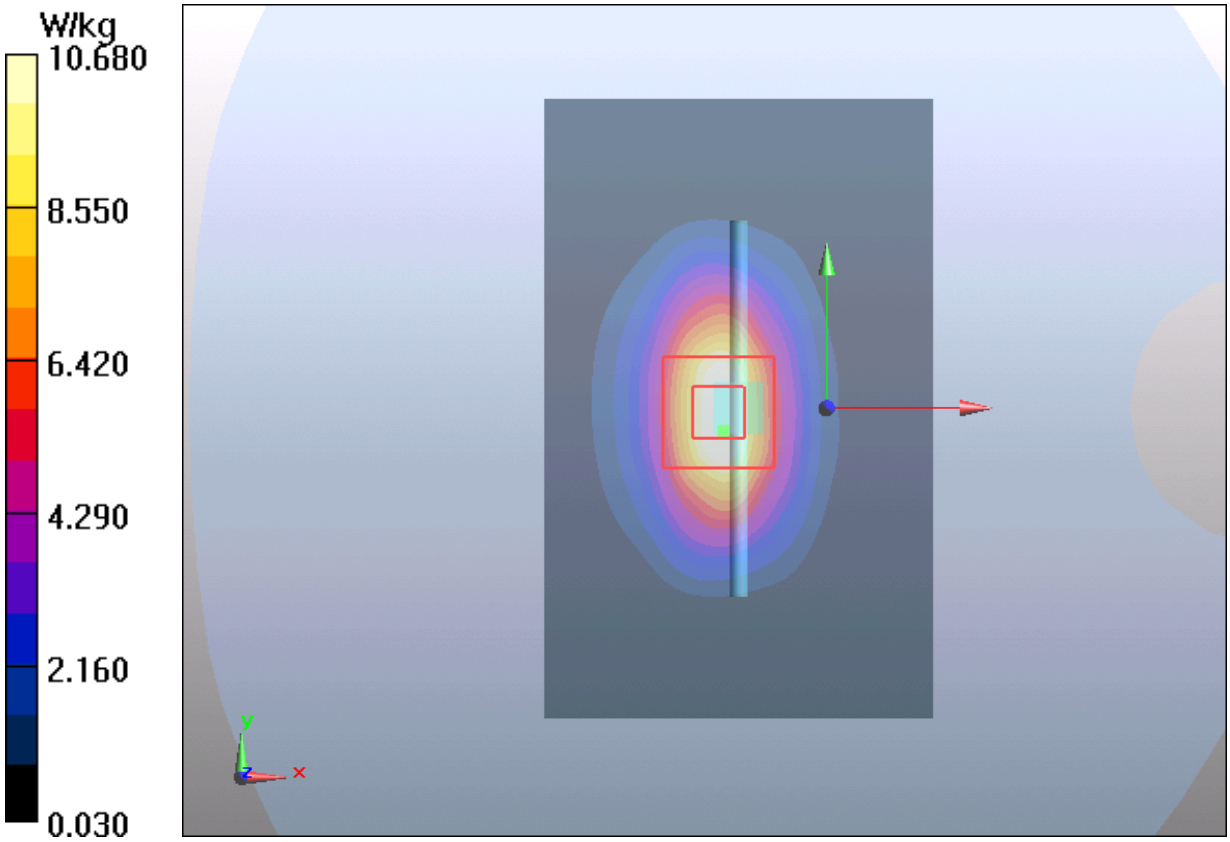
Peak SAR (extrapolated) = 14.8 W/kg

SAR(1 g) = 9.03 W/kg; SAR(10 g) = 4.84 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) = 10.68 W/kg



Plot 6 System Performance Check at 1900 MHz TSL

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d060

Date: 2022/6/21

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

Medium parameters used: f = 1900 MHz; σ = 1.41 S/m; ε_r = 40.1; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.88, 7.88, 7.88); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 11.3 W/kg

d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 85.5 V/m; Power Drift = 0.028 dB

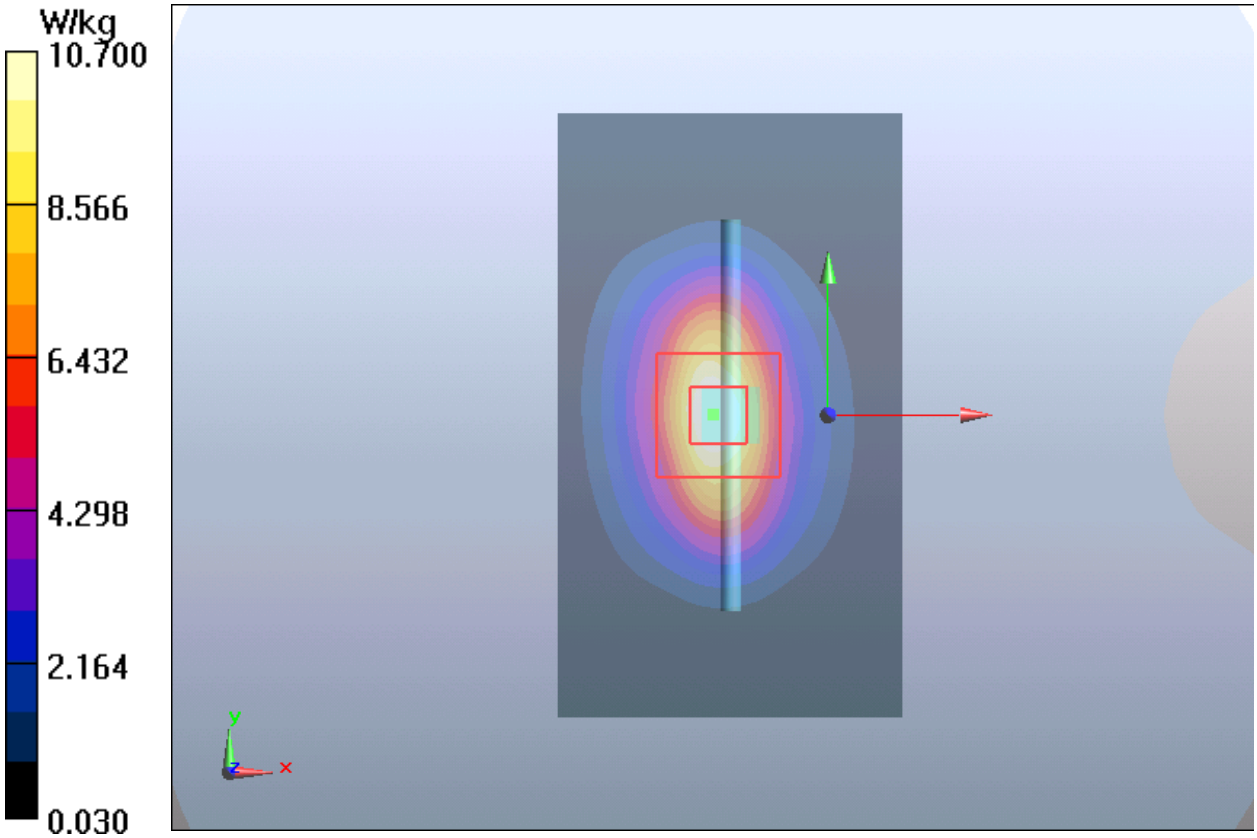
Peak SAR (extrapolated) = 17.8 W/kg

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

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

Ratio of SAR at M2 to SAR at M1 = 51.9%

Maximum value of SAR (measured) = 10.7 W/kg



Plot 7 System Performance Check at 1900 MHz TSL

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d060

Date: 2022/6/22

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

Medium parameters used: f = 1900 MHz; σ = 1.43 S/m; ε_r = 40.2; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.88, 7.88, 7.88); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 11.23 W/kg

d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 85.0 V/m; Power Drift = 0.01 dB

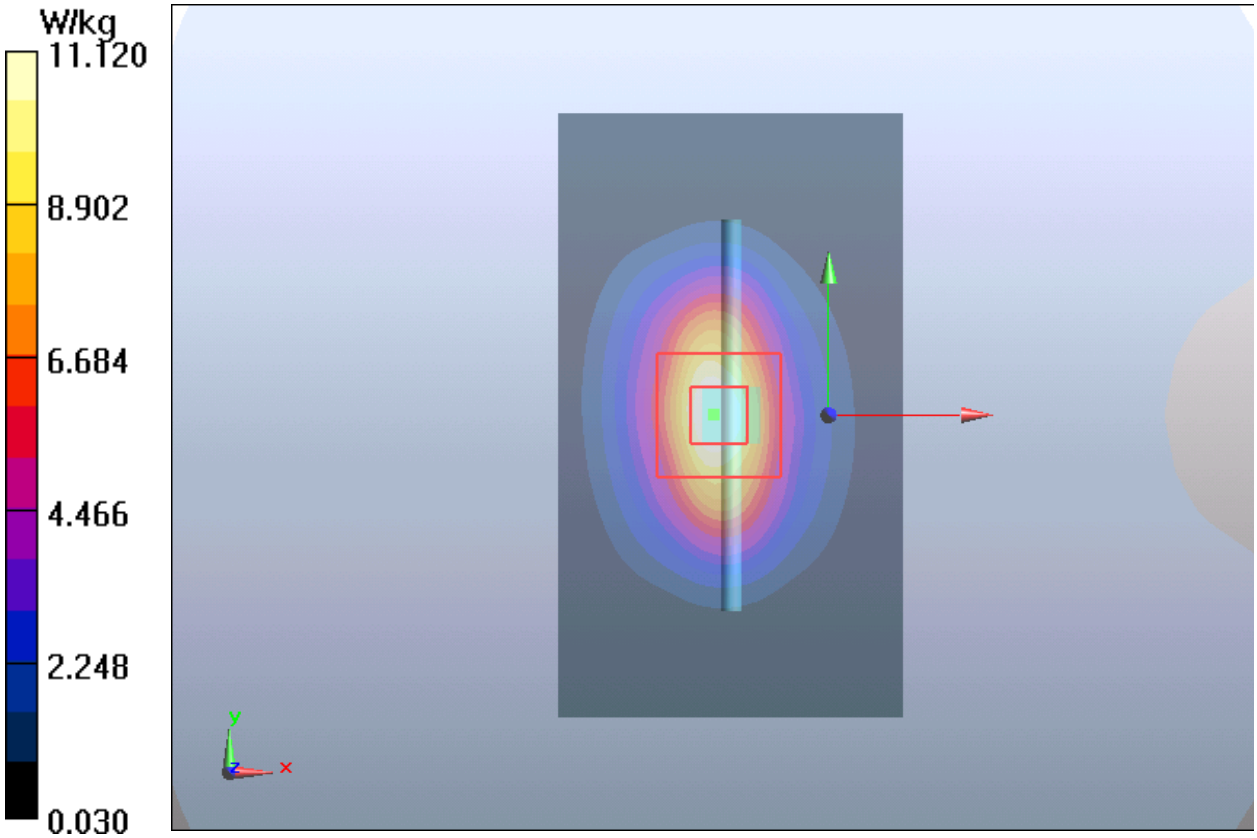
Peak SAR (extrapolated) = 17.8 W/kg

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

Smallest distance from peaks to all points 3 dB below = 10.4 mm

Ratio of SAR at M2 to SAR at M1 = 51.8%

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



Plot 8 System Performance Check at 1900 MHz

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d060

Date: 2022/6/23

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

Medium parameters used: f = 1900 MHz; σ = 1.40 S/m; ε_r = 40.0; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.88, 7.88, 7.88); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 12.9 W/kg

d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 87.8 V/m; Power Drift = 0.030 dB

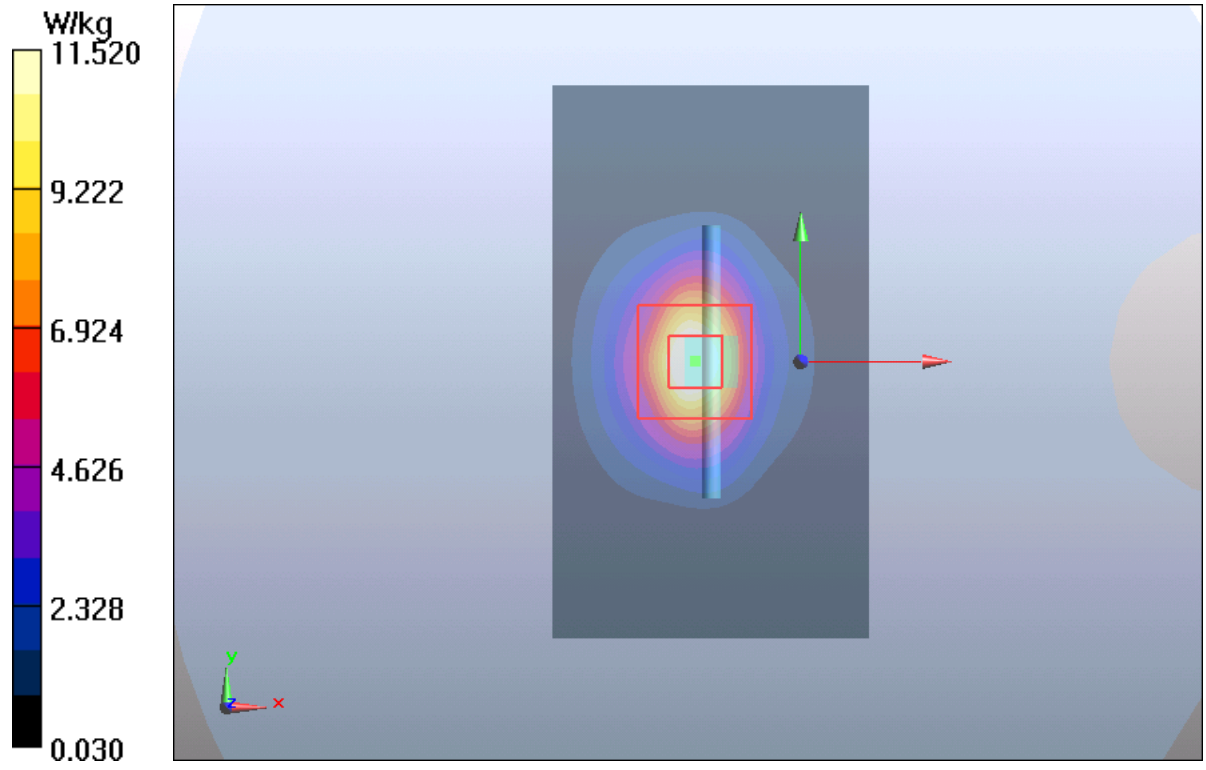
Peak SAR (extrapolated) = 20.1 W/kg

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

Smallest distance from peaks to all points 3 dB below = 10.8 mm

Ratio of SAR at M2 to SAR at M1 = 51.5%

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



Plot 9 System Performance Check at 1900 MHz

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d060

Date: 2022/6/30

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

Medium parameters used: f = 1900 MHz; σ = 1.34 S/m; ε_r = 40.5; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.88, 7.88, 7.88); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 12.74 W/kg

d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 87.5 V/m; Power Drift = 0.032 dB

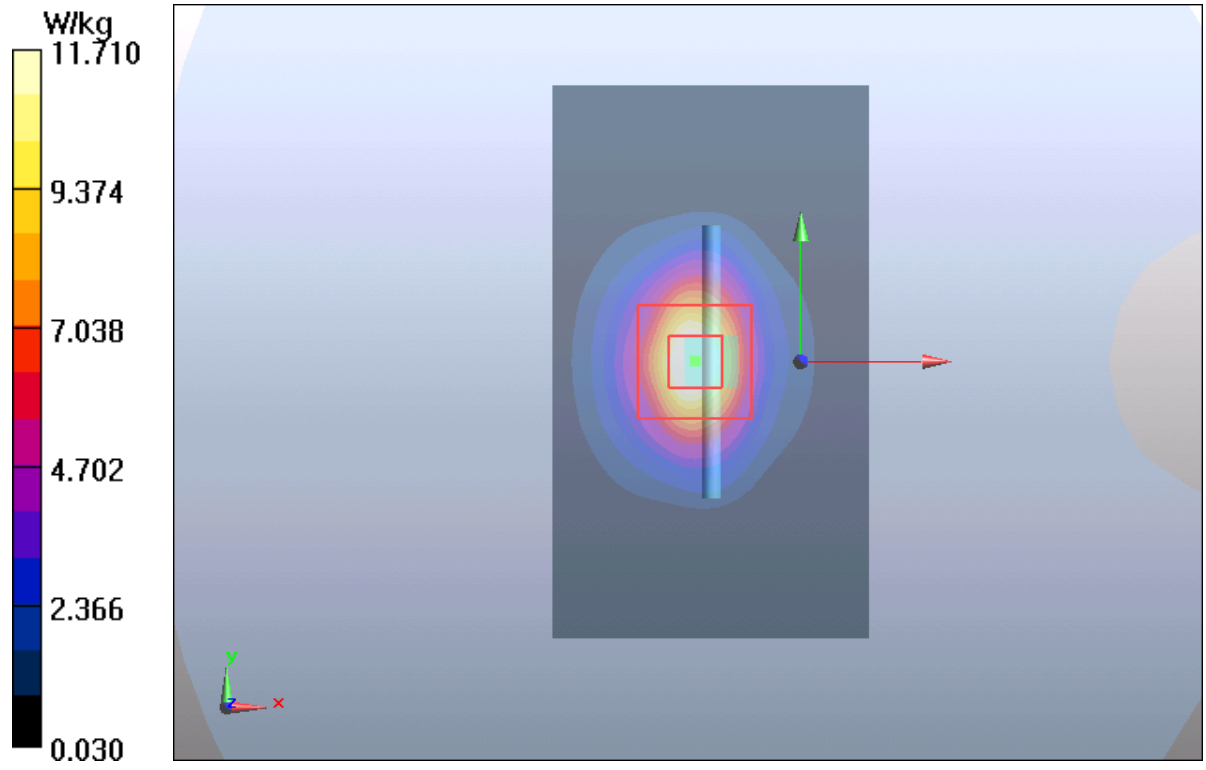
Peak SAR (extrapolated) = 20.0 W/kg

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

Smallest distance from peaks to all points 3 dB below = 10.1 mm

Ratio of SAR at M2 to SAR at M1 = 51.7%

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



Plot 10 System Performance Check at 2450 MHz TSL

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 786

Date: 2022/6/28

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

Medium parameters used: f = 2450 MHz; σ = 1.82 S/m; ε_r = 38.7; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.50, 7.50, 7.50); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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 (interpolated) = 21.11 W/kg

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

Reference Value = 67.0 V/m; Power Drift = 0.06 dB

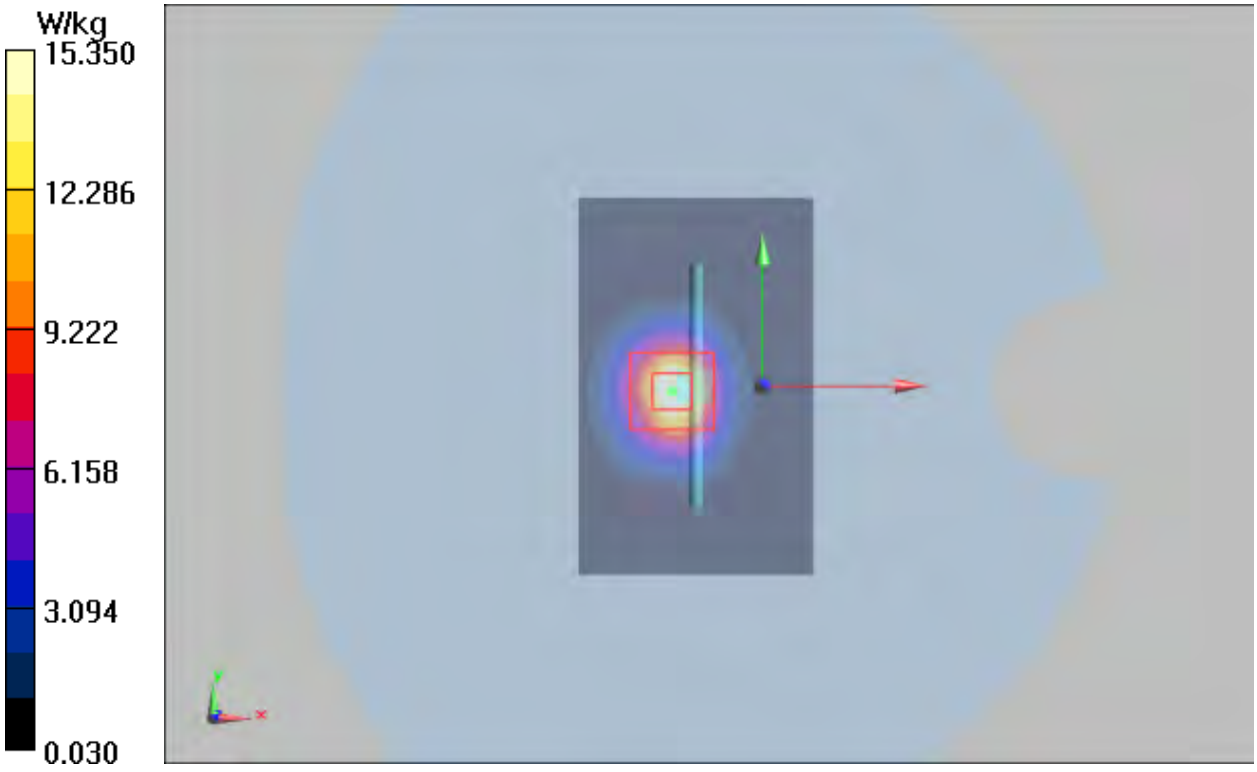
Peak SAR (extrapolated) = 28.0 W/kg

SAR(1 g) = 13.52 W/kg; SAR(10 g) = 6.17 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) = 15.35 W/kg



Plot 11 System Performance Check at 2450 MHz TSL

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 786

Date: 2022/7/2

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

Medium parameters used: f = 2450 MHz; σ = 1.81 S/m; ε_r = 38.6; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7543; ConvF(7.49, 7.49, 7.49); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: SAM;

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) = 18.2 W/kg

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

Reference Value = 88.8 V/m; Power Drift = 0.075 dB

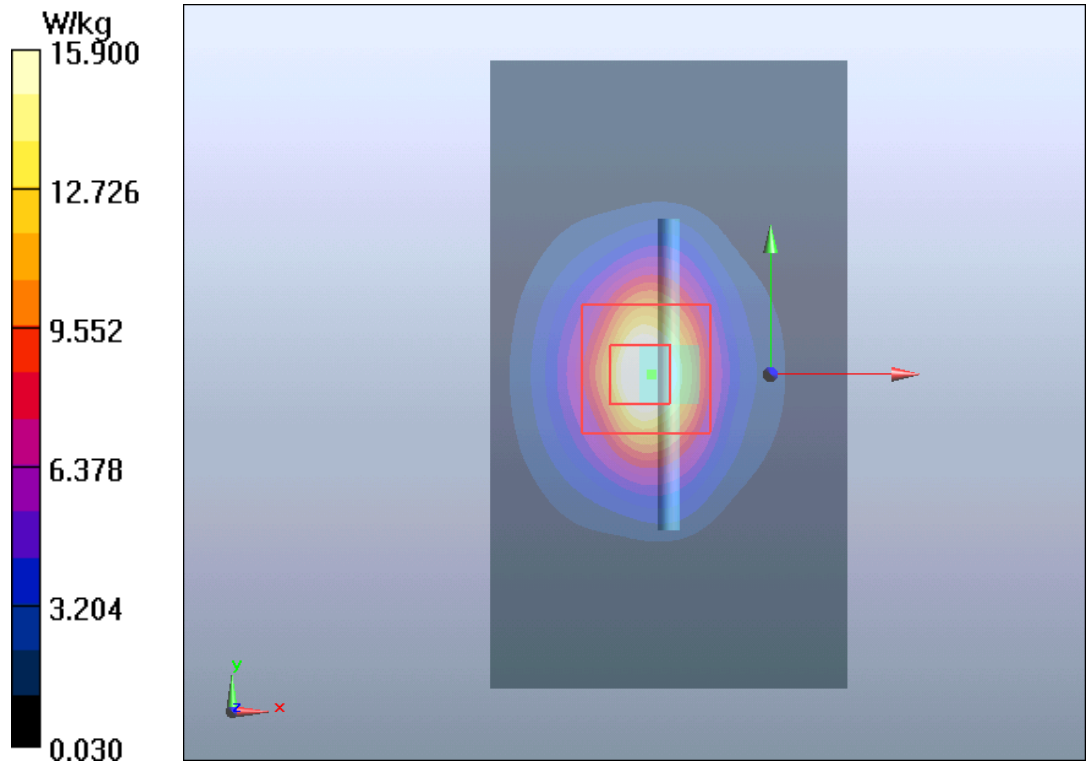
Peak SAR (extrapolated) = 30 W/kg

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

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

Ratio of SAR at M2 to SAR at M1 = 47.5%

Maximum value of SAR (measured) = 15.9 W/kg



Plot 12 System Performance Check at 2600 MHz TSL

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1025

Date: 2022/6/30

Communication System: CW; Frequency: 2600 MHz

Medium parameters used: f = 2600 MHz; σ = 2.01 S/m; ε_r = 38.2; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.25, 7.25, 7.25); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 17.439 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

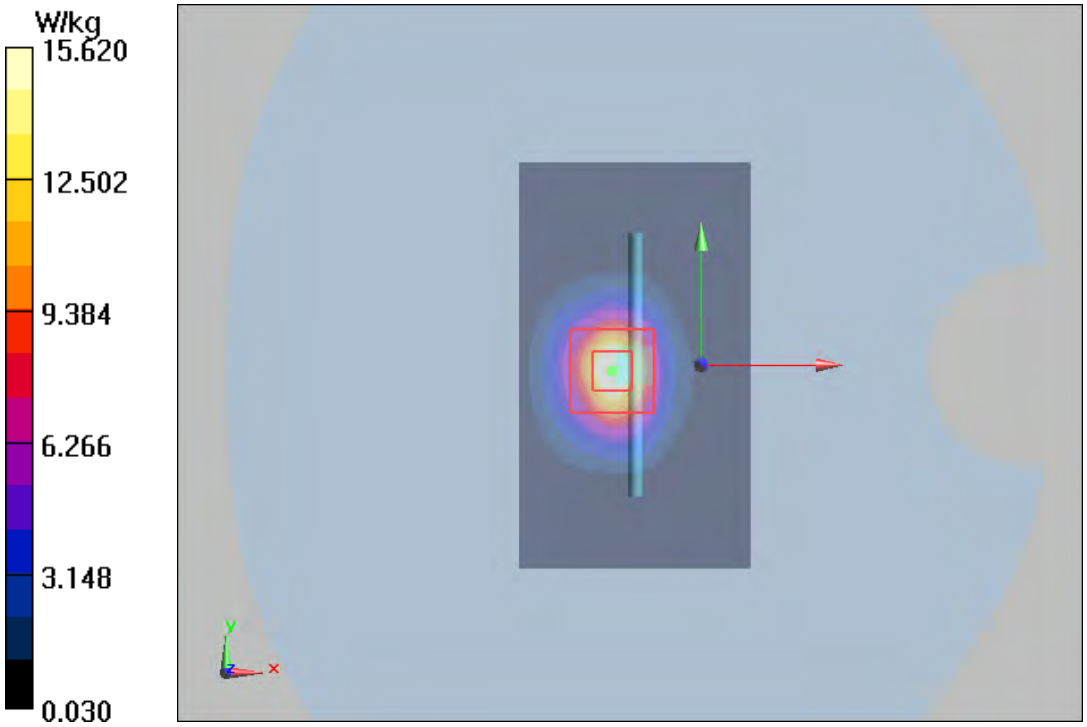
Peak SAR (extrapolated) = 31.858 W/kg

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

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

Ratio of SAR at M2 to SAR at M1 = 44.5%

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



Plot 13 System Performance Check at 2600 MHz TSL

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1025

Date: 2022/7/1

Communication System: CW; Frequency: 2600 MHz

Medium parameters used: f = 2600 MHz; σ =1.94S/m; ε_r = 38.4; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.25, 7.25, 7.25); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 17.59 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

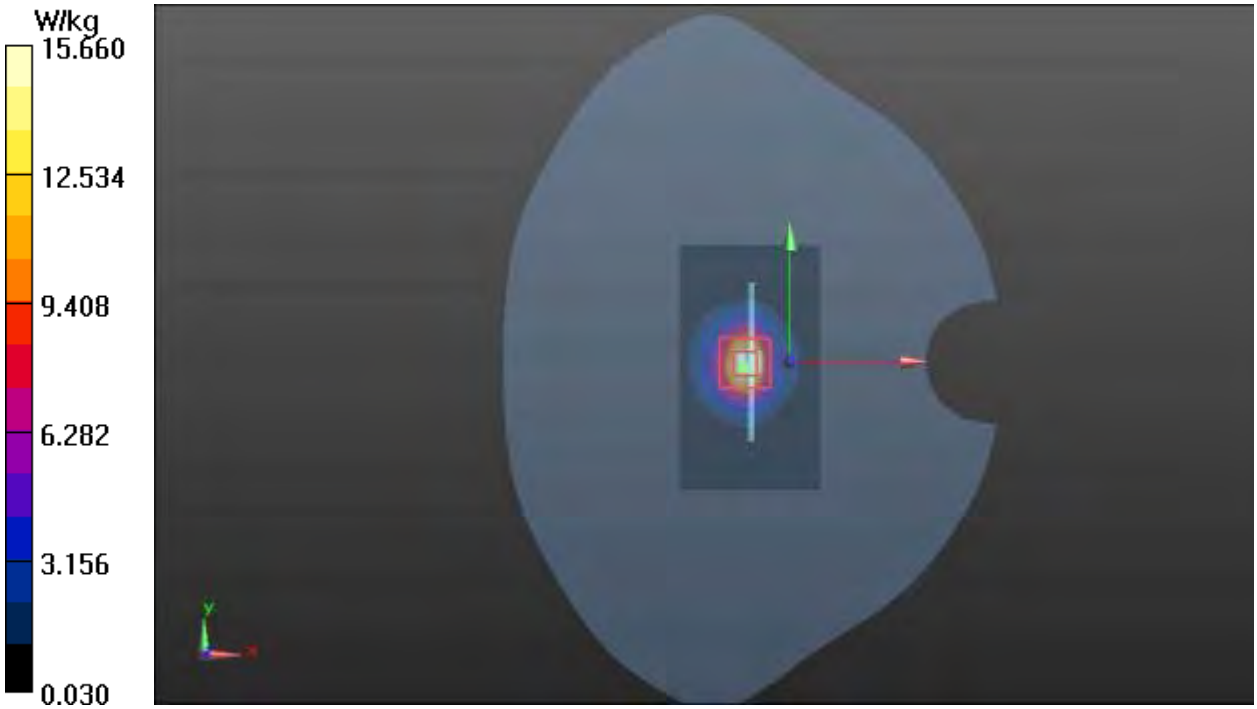
Peak SAR (extrapolated) = 31.858 W/kg

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

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

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

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



Plot 14 System Performance Check at 2600 MHz TSL

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1025

Date: 2022/7/2

Communication System: CW; Frequency: 2600 MHz

Medium parameters used: f = 2600 MHz; σ = 1.99 S/m; ε_r = 38.3; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.25, 7.25, 7.25); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 17.32 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

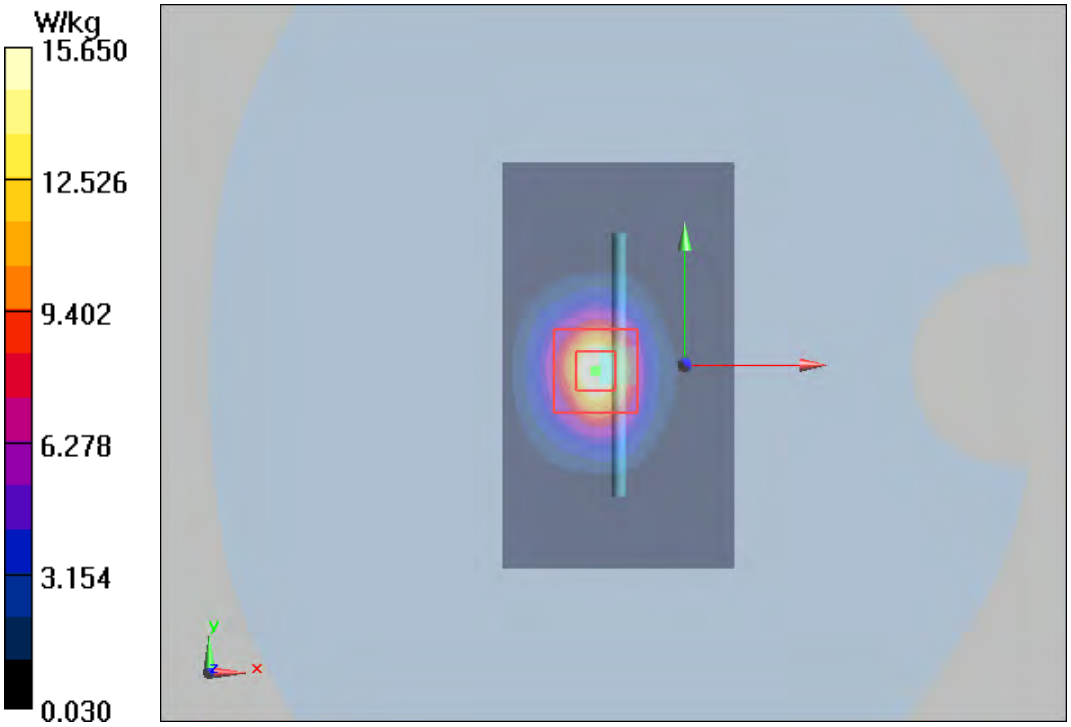
Peak SAR (extrapolated) = 31.85 W/kg

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

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

Ratio of SAR at M2 to SAR at M1 = 44%

Maximum value of SAR (measured) = 15.65 W/kg



Plot 15 System Performance Check at 2600 MHz TSL

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1025

Date: 2022/7/3

Communication System: CW; Frequency: 2600 MHz

Medium parameters used: f = 2600 MHz; σ =1.95S/m; ε_r = 38.5; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.25, 7.25, 7.25); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 17.59 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) = 31.858 W/kg

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

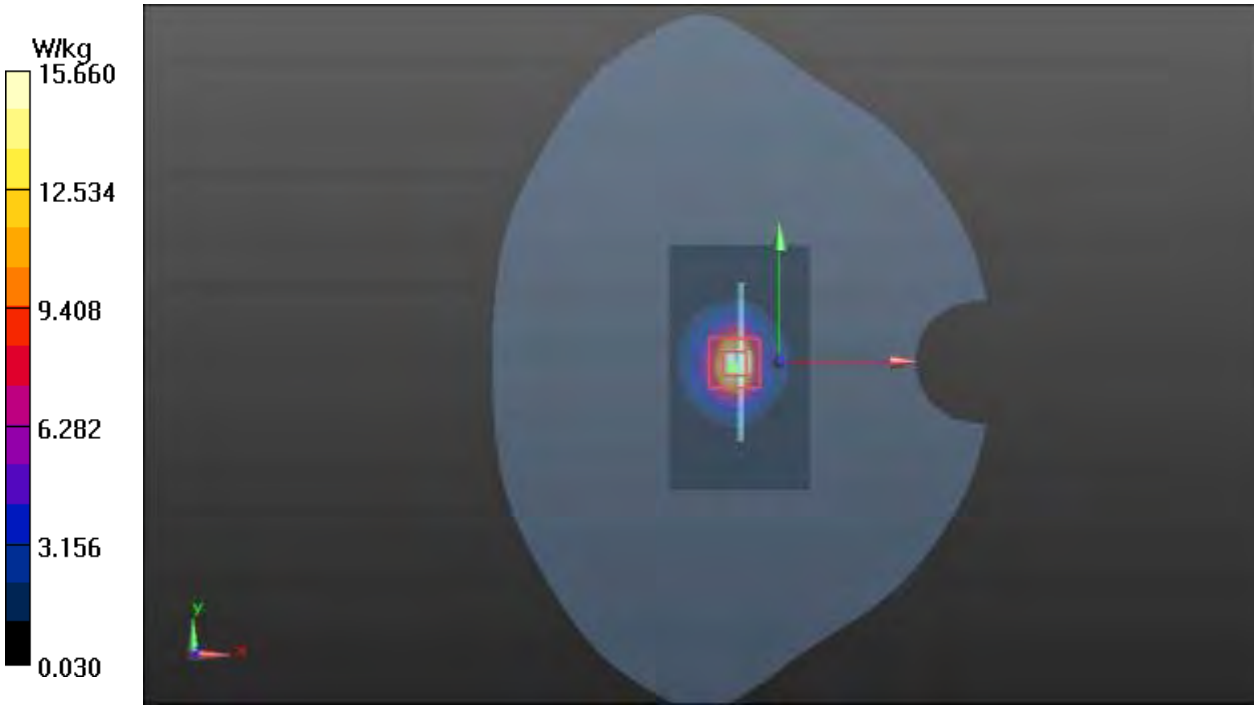
Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 44%

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

Ratio of SAR at M2 to SAR at M1 = 44%

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



Plot 16 System Performance Check at 2600 MHz TSL

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1025

Date: 2022/7/4

Communication System: CW; Frequency: 2600 MHz

Medium parameters used: f = 2600 MHz; σ = 1.96S/m; ε_r = 38.2; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.25, 7.25, 7.25); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 17.439 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

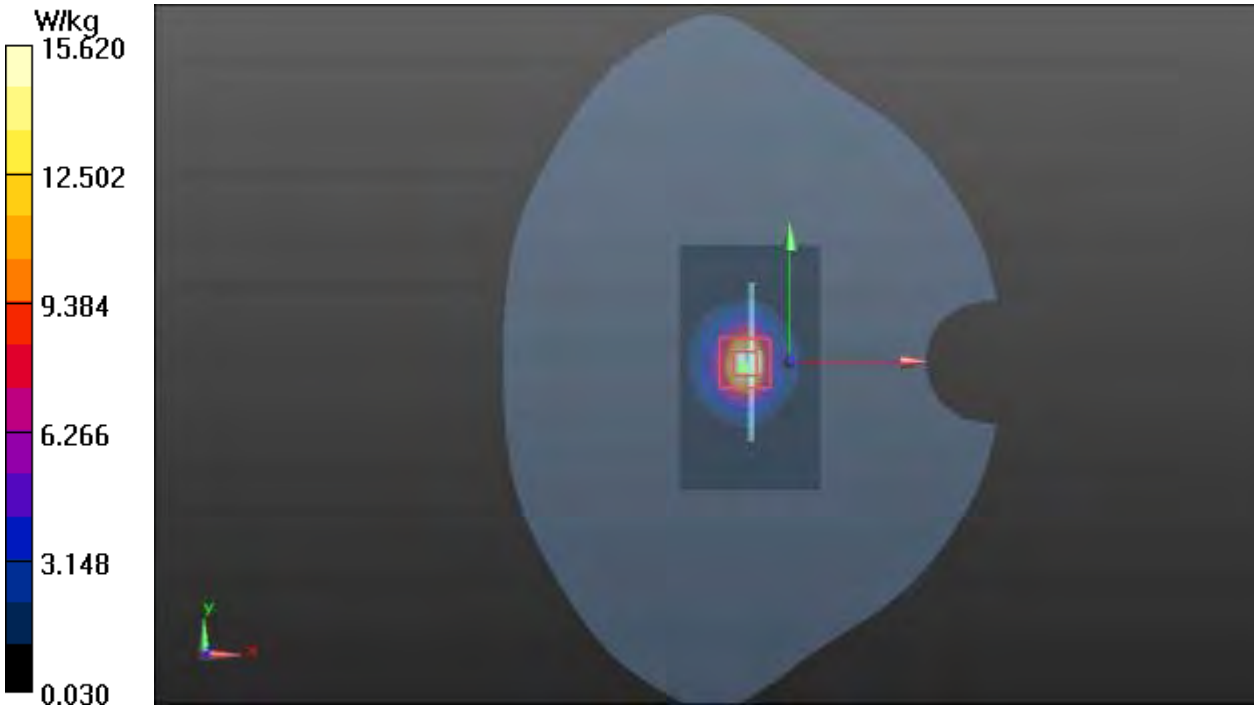
Peak SAR (extrapolated) = 31.858 W/kg

SAR(1 g) = 13.9 W/kg; SAR(10 g) = 6.08 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 44.6%

Maximum value of SAR (measured) = 15.615 W/kg



Plot 17 System Performance Check at 2600 MHz TSL

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1025

Date: 2022/7/5

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

Medium parameters used: f = 2600 MHz; σ = 1.98 S/m; ε_r = 39.0; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.25, 7.25, 7.25); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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 (interpolated) = 17.7 W/kg

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

Reference Value = 74 V/m; Power Drift = -0.0027 dB

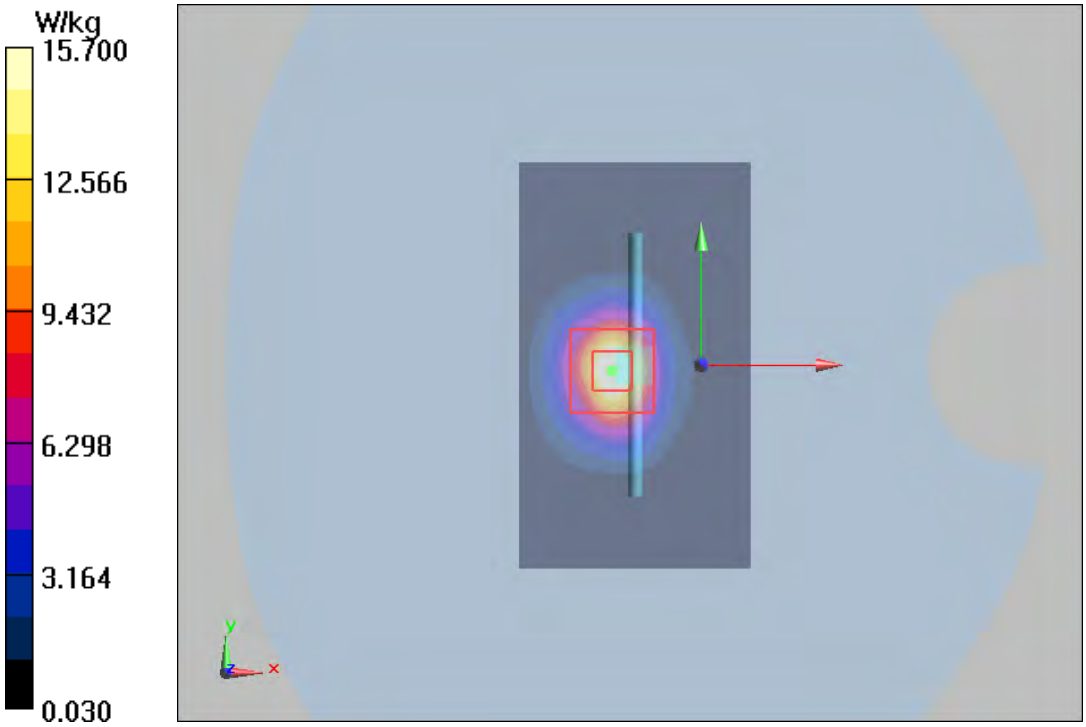
Peak SAR (extrapolated) = 28.5 W/kg

SAR(1 g) = 13.85 W/kg; SAR(10 g) = 5.99 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 44.3%

Maximum value of SAR (measured) = 15.7 W/kg



Variant 1& Variant 2

Plot 18 System Performance Check at 750 MHz TSL

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

Date: 2022/12/1

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

Medium parameters used: f = 750 MHz; σ = 0.88 S/m; ε_r = 42.3; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.63, 9.63, 9.63); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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) = 2.29 W/kg

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

Reference Value = 50.653 V/m; Power Drift = -0.08 dB

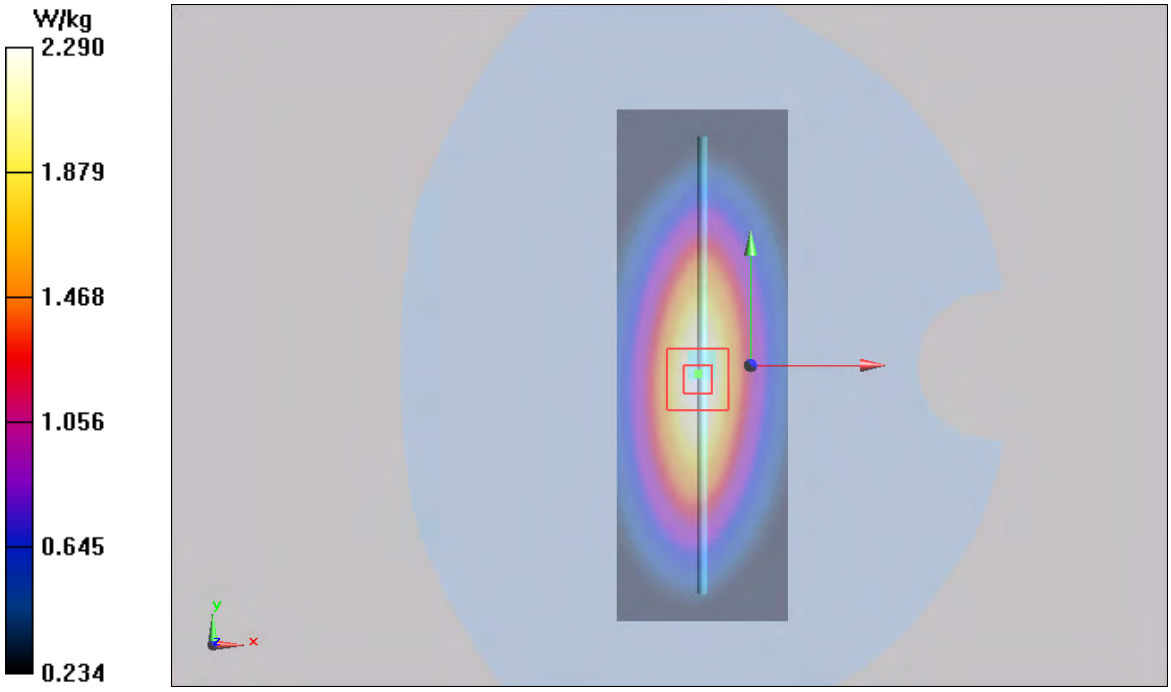
Peak SAR (extrapolated) = 3.16 W/kg

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

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

Ratio of SAR at M2 to SAR at M1 = 68.7%

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



Plot 19 System Performance Check at 835 MHz TSL

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

Date: 2022/12/2

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

Medium parameters used: f = 835 MHz; σ = 0.88 S/m; ε_r = 41.4; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.34, 9.34, 9.34); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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) = 2.64 W/kg

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

Reference Value = 54.4 V/m; Power Drift = -0.076 dB

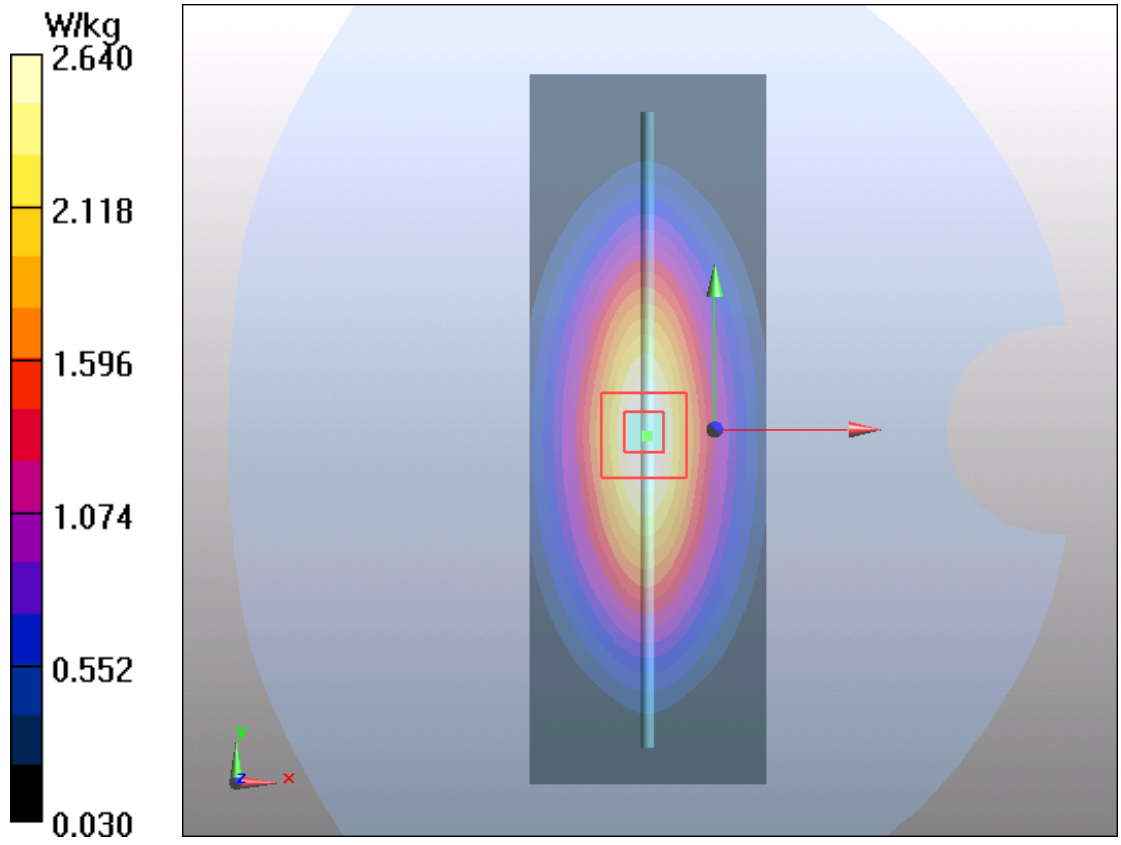
Peak SAR (extrapolated) = 3.67 W/kg

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 20 System Performance Check at 1750 MHz TSL

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

Date: 2022/12/3

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

Medium parameters used: f = 1750 MHz; σ = 1.34 S/m; ε_r = 40.2; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(8.25, 8.25, 8.25); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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) = 9.78 W/kg

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

Reference Value = 80 V/m; Power Drift = 0.075 dB

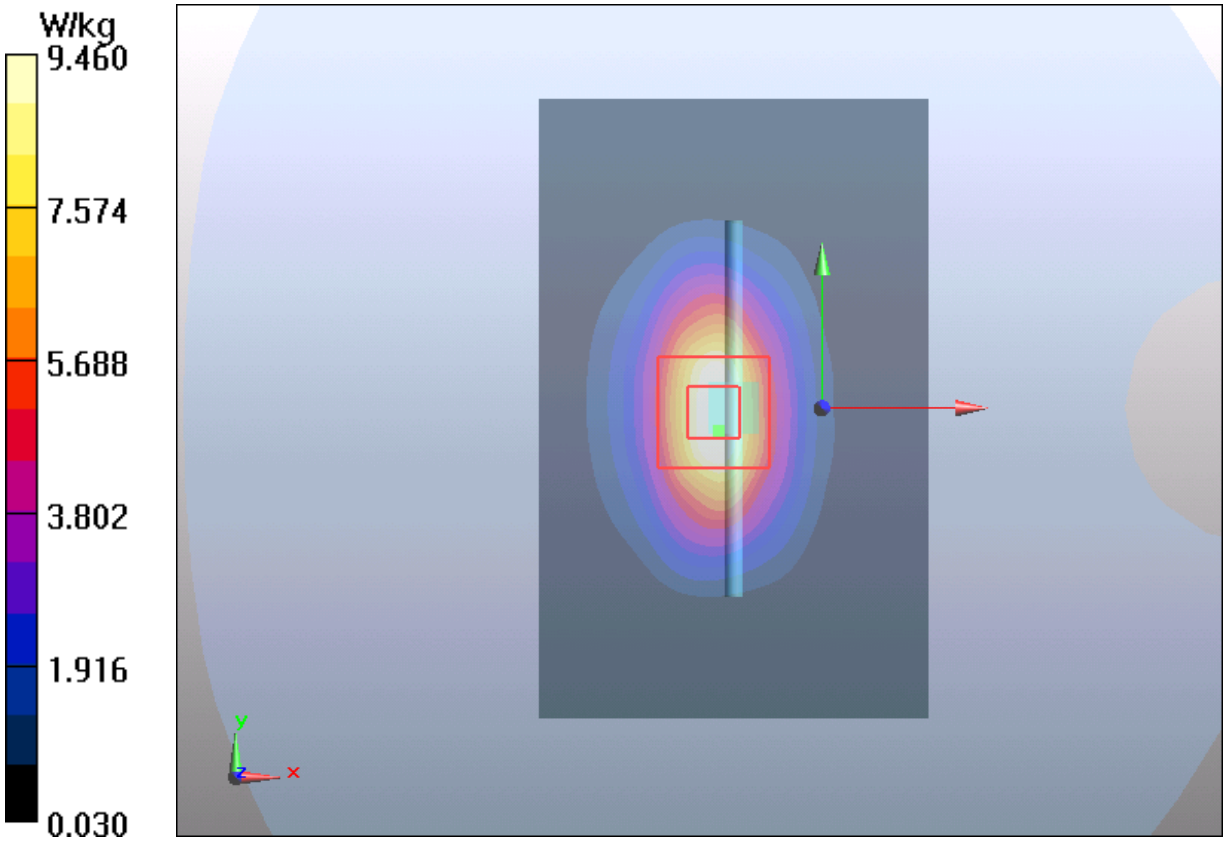
Peak SAR (extrapolated) = 15.5 W/kg

SAR(1 g) = 8.95 W/kg; SAR(10 g) = 4.5 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 21 System Performance Check at 1900 MHz TSL

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

Date: 2022/12/4

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

Medium parameters used: f = 1900 MHz; σ = 1.41 S/m; ε_r = 40.1; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.84, 7.84, 7.84); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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) = 11.3 W/kg

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

Reference Value = 85.5 V/m; Power Drift = 0.028 dB

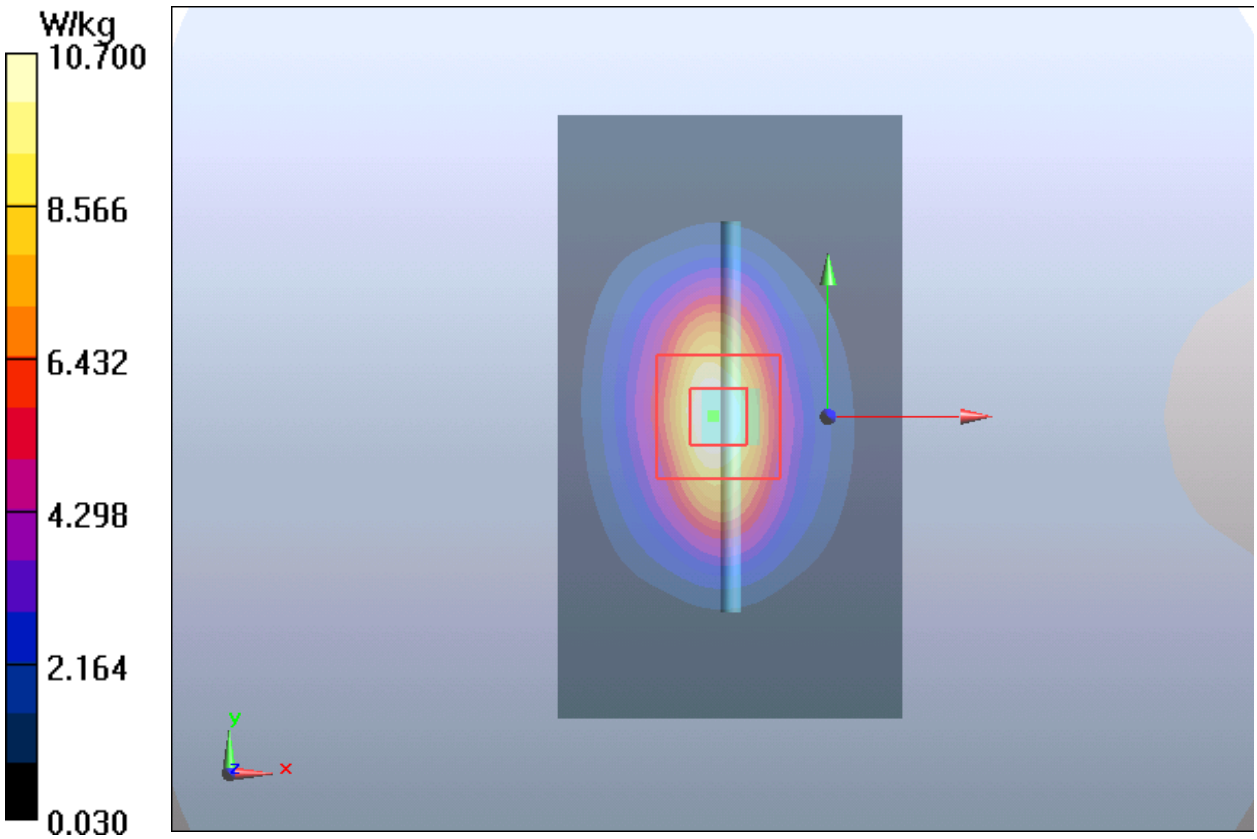
Peak SAR (extrapolated) = 17.8 W/kg

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

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

Ratio of SAR at M2 to SAR at M1 = 51.9%

Maximum value of SAR (measured) = 10.7 W/kg



Plot 22 System Performance Check at 2450 MHz TSL

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

Date: 2022/12/5

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

Medium parameters used: f = 2450 MHz; σ = 1.81 S/m; ε_r = 38.6; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.46, 7.46, 7.46); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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) = 18.2 W/kg

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

Reference Value = 88.8 V/m; Power Drift = 0.075 dB

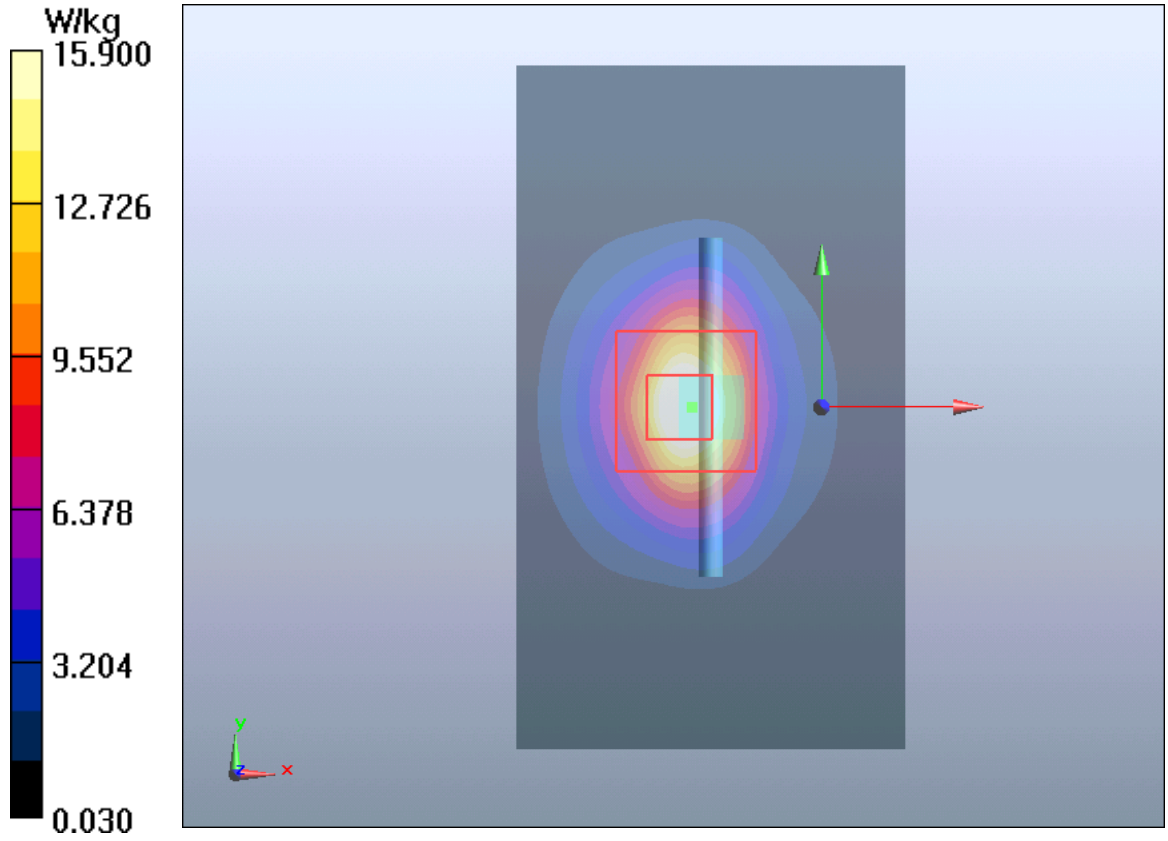
Peak SAR (extrapolated) = 30 W/kg

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) = 15.9 W/kg



Plot 23 System Performance Check at 2600 MHz TSL

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

Date: 2022/12/5

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

Medium parameters used: f = 2600 MHz; σ = 2.01 S/m; ε_r = 38.2; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.27, 7.27, 7.27); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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) = 17.439 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

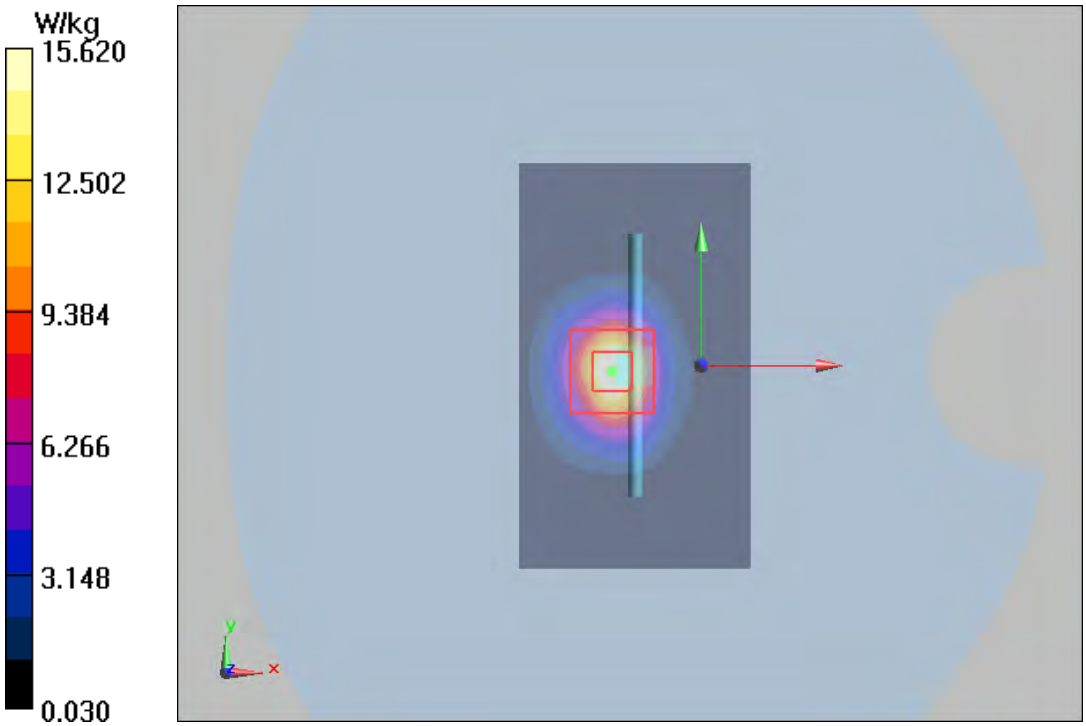
Peak SAR (extrapolated) = 31.858 W/kg

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%

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



ANNEX C: Highest Graph Results

Plot 24 GSM 850 Right Cheek Middle

Date: 2022/6/25

Communication System: UID 0, GSM (0); Frequency: 836.6 MHz;Duty Cycle: 1:8.30

Medium parameters used: f = 837 MHz; σ = 0.953 S/m; ε_r = 39.762; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.30, 9.30, 9.30); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 0.531 W/kg

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

Reference Value = 16.29 V/m; Power Drift = 0.065 dB

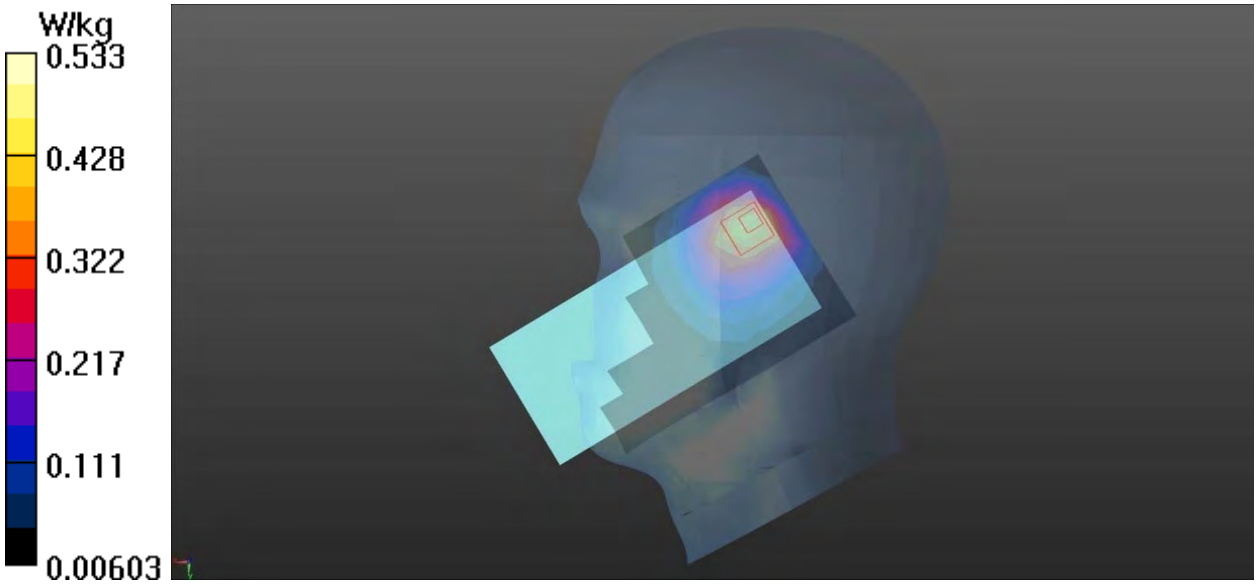
Peak SAR (extrapolated) = 0.862 W/kg

SAR(1 g) = 0.512 W/kg; SAR(10 g) = 0.246 W/kg

Smallest distance from peaks to all points 3 dB below = 13.5 mm

Ratio of SAR at M2 to SAR at M1 =44.3%

Maximum value of SAR (measured) = 0.533 W/kg

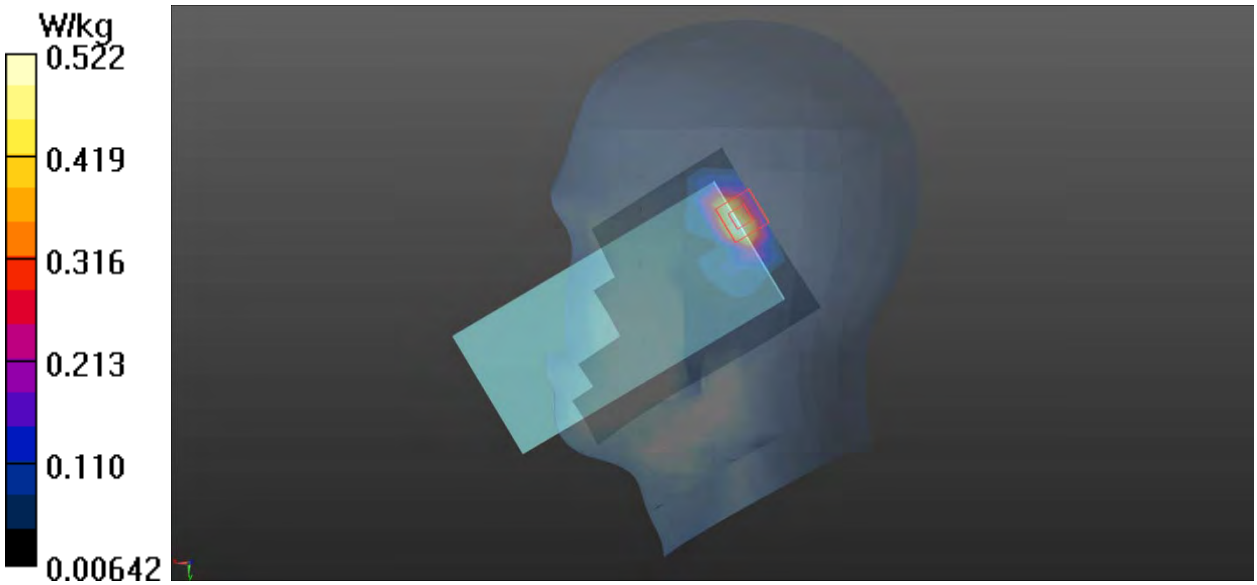


Plot 25 GSM 1900 Right Tilt Middle

Date: 2022/6/23
Communication System: UID 0, GSM (0); Frequency: 1880 MHz;Duty Cycle: 1:8.30
Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.88, 7.88, 7.88); Calibrated: 2021/8/12
Electronics: DAE4 SN1692; Calibrated: 2021/10/4
Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Tilt Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.468 W/kg

Right Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.88 V/m; Power Drift = 0.062 dB
Peak SAR (extrapolated) = 1.03 W/kg
SAR(1 g) = 0.322 W/kg; SAR(10 g) = 0.172 W/kg
Smallest distance from peaks to all points 3 dB below = 12.4 mm
Ratio of SAR at M2 to SAR at M1 =41.8%
Maximum value of SAR (measured) = 0.522 W/kg



Plot 26 WCDMA Band II Right Tilt Middle

Date: 2022/6/21

Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.88, 7.88, 7.88); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

Right Tilt Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.805 W/kg

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

Reference Value = 19.53 V/m; Power Drift = 0.052 dB

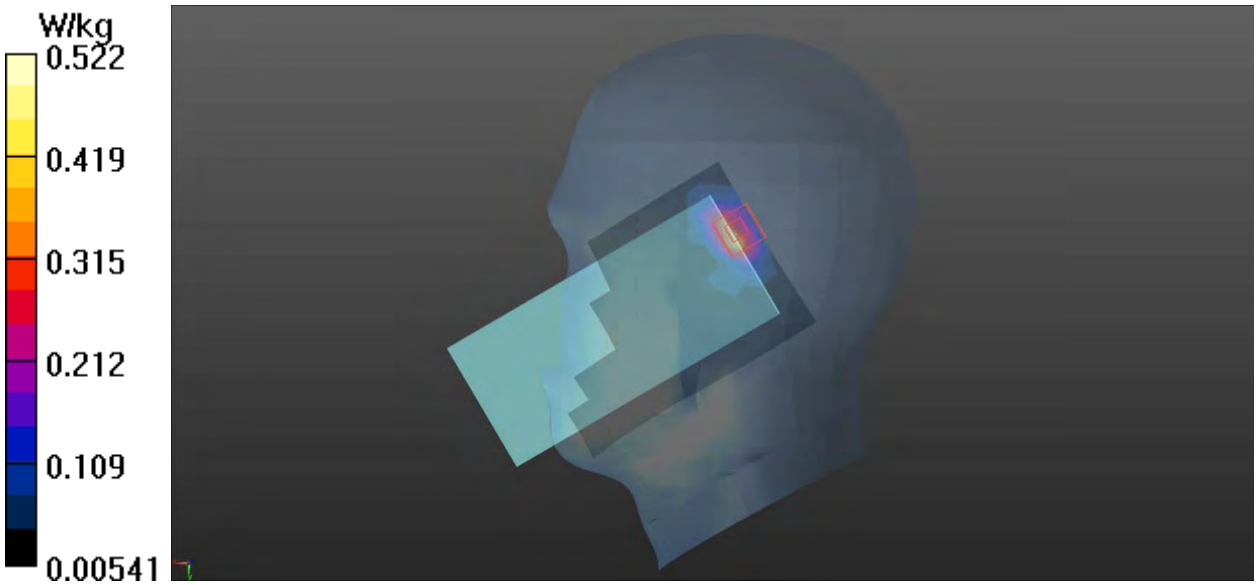
Peak SAR (extrapolated) = 1.07 W/kg

SAR(1 g) = 0.322 W/kg; SAR(10 g) = 0.185 W/kg

Smallest distance from peaks to all points 3 dB below = 12.4mm

Ratio of SAR at M2 to SAR at M1 = 34.8%

Maximum value of SAR (measured) = 0.522 W/kg

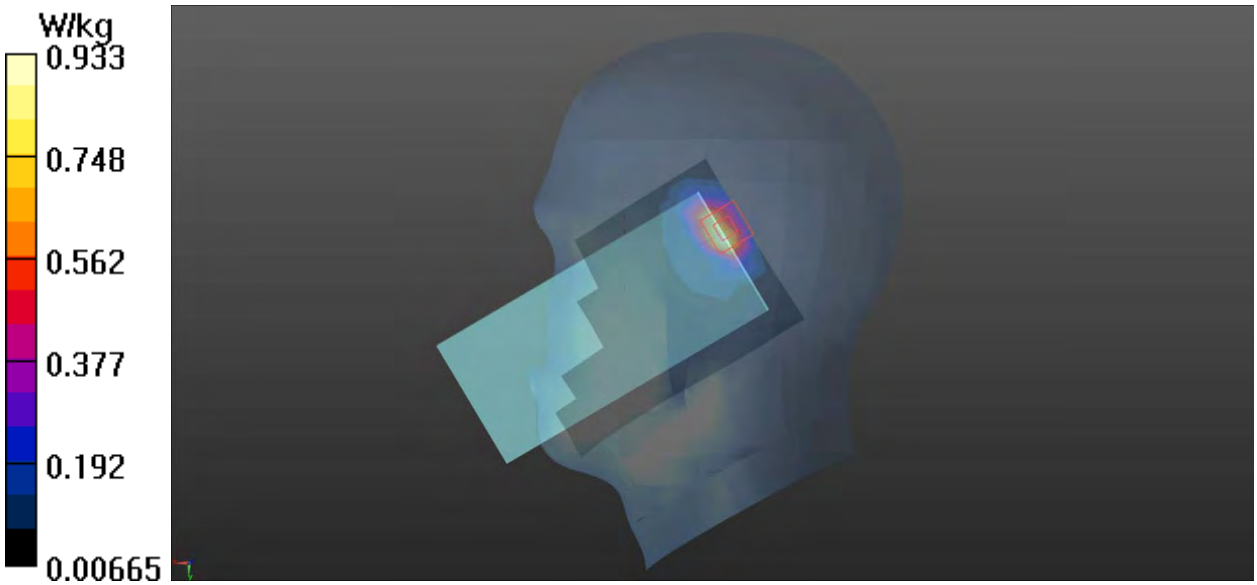


Plot 27 WCDMA Band IV Right Tilt Middle

Date: 2022/6/29
Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1733 MHz; σ = 1.312 S/m; ε_r = 39.365; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(8.22, 8.22, 8.22); Calibrated: 2021/8/12
Electronics: DAE4 SN1692; Calibrated: 2021/10/4
Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Tilt Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.926 W/kg

Right Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.05 V/m; Power Drift = 0.036 dB
Peak SAR (extrapolated) = 2.00 W/kg
SAR(1 g) = 0.645 W/kg; SAR(10 g) = 0.355 W/kg
Smallest distance from peaks to all points 3 dB below = 13.4 mm
Ratio of SAR at M2 to SAR at M1 = 43.1%
Maximum value of SAR (measured) = 0.933 W/kg



Plot 28 WCDMA Band V Right Cheek Middle

Date: 2022/6/25

Communication System: UID 0, WCDMA (0); Frequency: 836.6 MHz;Duty Cycle: 1:1

Medium parameters used: f = 837 MHz; σ = 0.953 S/m; ε_r = 39.762; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.30, 9.30, 9.30); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 0.819 W/kg

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

Reference Value = 13.78 V/m; Power Drift = 0.023 dB

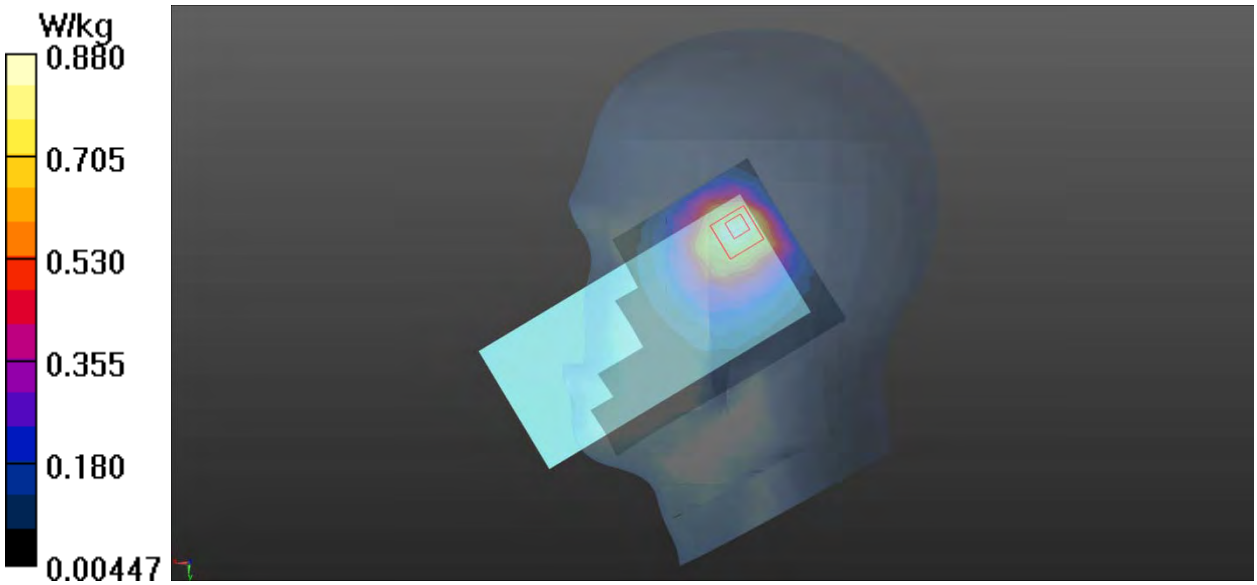
Peak SAR (extrapolated) = 1.21 W/kg

SAR(1 g) = 0.734 W/kg; SAR(10 g) = 0.489 W/kg

Smallest distance from peaks to all points 3 dB below = 15.2mm

Ratio of SAR at M2 to SAR at M1 = 42.8%

Maximum value of SAR (measured) = 0.880 W/kg



Plot 29 LTE Band 2 50%RB Right Tilt Middle

Date: 2022/6/21

Communication System: UID 0, LTE (0); Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.88, 7.88, 7.88); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

Right Tilt Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.601 W/kg

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

Reference Value = 14.41 V/m; Power Drift = 0.026 dB

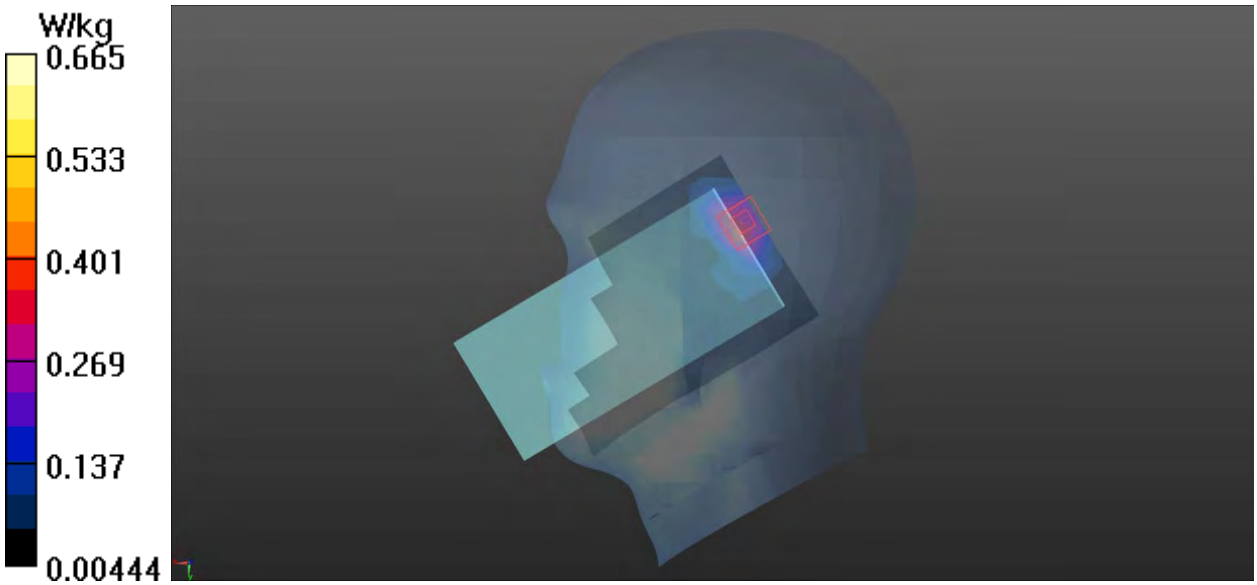
Peak SAR (extrapolated) = 1.16 W/kg

SAR(1 g) = 0.544 W/kg; SAR(10 g) = 0.237 W/kg

Smallest distance from peaks to all points 3 dB below = 13.4 mm

Ratio of SAR at M2 to SAR at M1 = 42.1

Maximum value of SAR (measured) = 0.665 W/kg



Plot 30 LTE Band 4 50%RB Right Tilt Low

Date: 2022/6/29

Communication System: UID 0, LTE (0); Frequency: 1720 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1720 MHz; σ = 1.303 S/m; ε_r = 39.467; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(8.22, 8.22, 8.22); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 0.610 W/kg

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

Reference Value = 15.76 V/m; Power Drift = 0.022 dB

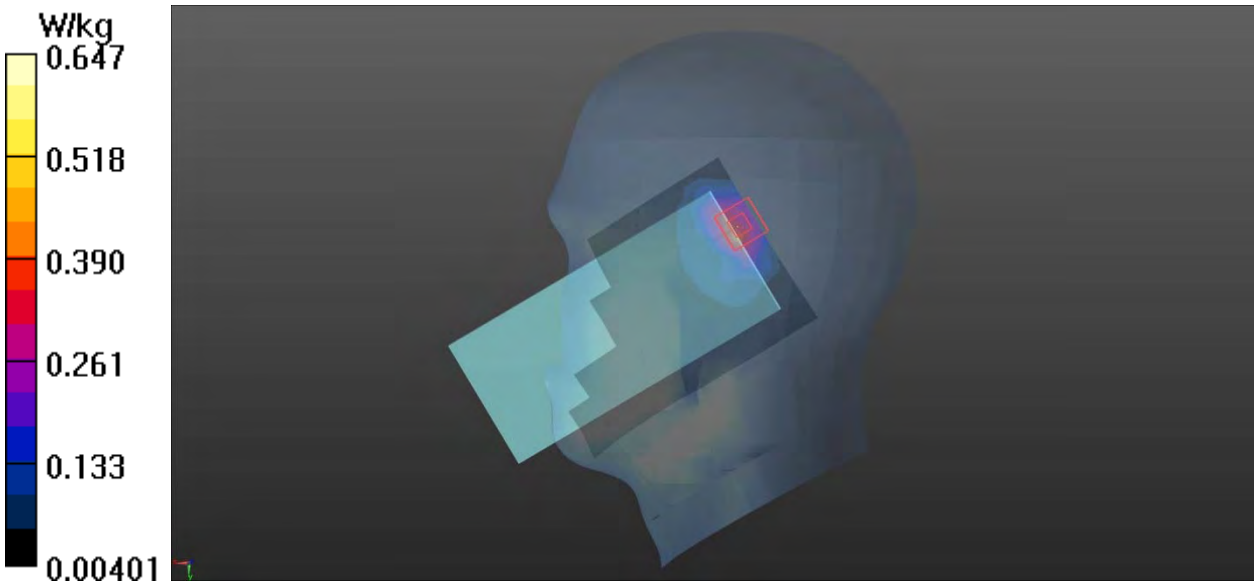
Peak SAR (extrapolated) = 1.08 W/kg

SAR(1 g) = 0.544 W/kg; SAR(10 g) = 0.245 W/kg

Smallest distance from peaks to all points 3 dB below = 14.8 mm

Ratio of SAR at M2 to SAR at M1 = 57.1%

Maximum value of SAR (measured) = 0.647 W/kg



Plot 31 LTE Band 5 50%RB Right Cheek High

Date: 2022/6/25

Communication System: UID 0, LTE (0); Frequency: 844MHz;Duty Cycle: 1:1

Medium parameters used: f = 844MHz; σ = 0.946 S/m; ε_r = 39.678; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.30, 9.30, 9.30); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

Right Cheek High /Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 17.93 V/m; Power Drift = 0.030 dB

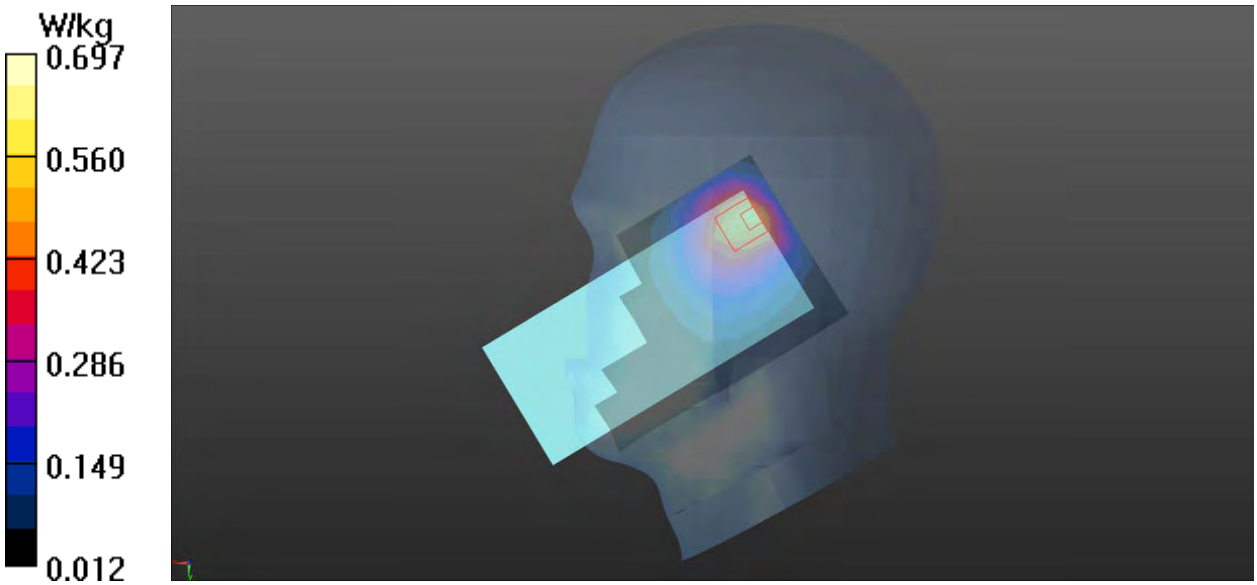
Peak SAR (extrapolated) = 1.10 W/kg

SAR(1 g) = 0.622 W/kg; SAR(10 g) = 0.384 W/kg

Smallest distance from peaks to all points 3 dB below = 12.4 mm

Ratio of SAR at M2 to SAR at M1 = 45.8%

Maximum value of SAR (measured) = 0.697 W/kg



Plot 32 LTE Band 7 1RB Right Tilt Middle

Date: 2022/6/30

Communication System: UID 0, LTE (0); Frequency: 2535 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2535 MHz; σ = 1.94 S/m; ε_r = 37.31; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.25, 7.25, 7.25); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 0.967 W/kg

Right Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.827 V/m; Power Drift = -0.140 dB

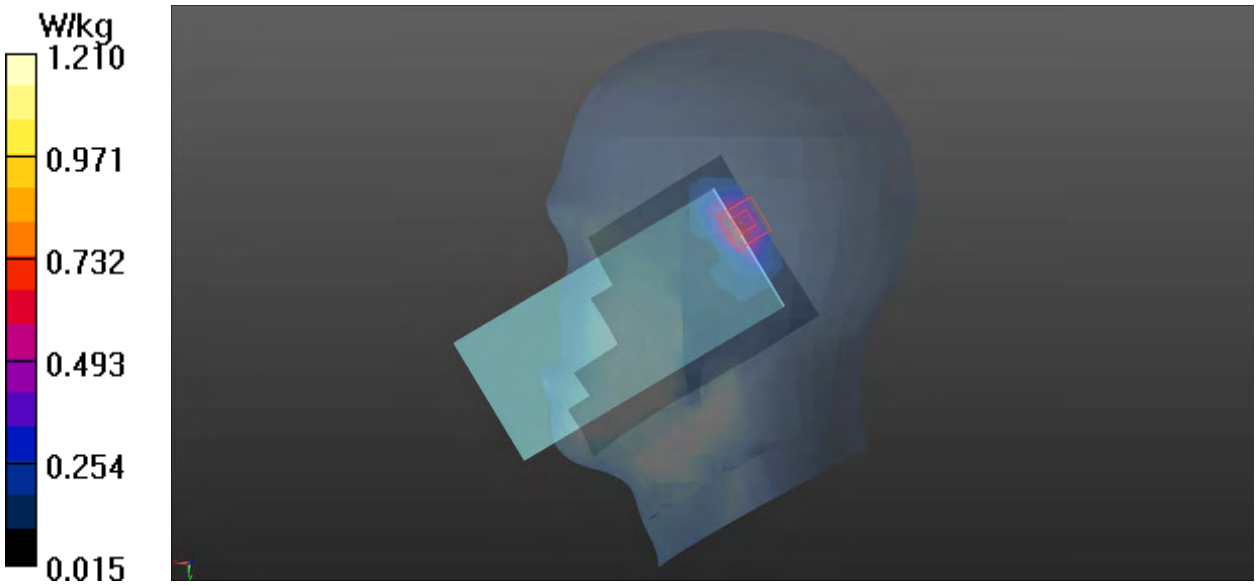
Peak SAR (extrapolated) = 2.23 W/kg

SAR(1 g) = 0.922 W/kg; SAR(10 g) = 0.374 W/kg

Smallest distance from peaks to all points 3 dB below = 13.5 mm

Ratio of SAR at M2 to SAR at M1 = 47.2%

Maximum value of SAR (measured) = 1.21 W/kg



Plot 33 LTE Band 13 1RB Right Cheek Middle

Date: 2022/12/1

Communication System: UID 0, LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1

Medium parameters used: f = 782 MHz; σ = 0.921 S/m; ε_r = 41.805; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.63, 9.63, 9.63); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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) = 0.794 W/kg

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

Reference Value = 25.27 V/m; Power Drift = 0.025 dB

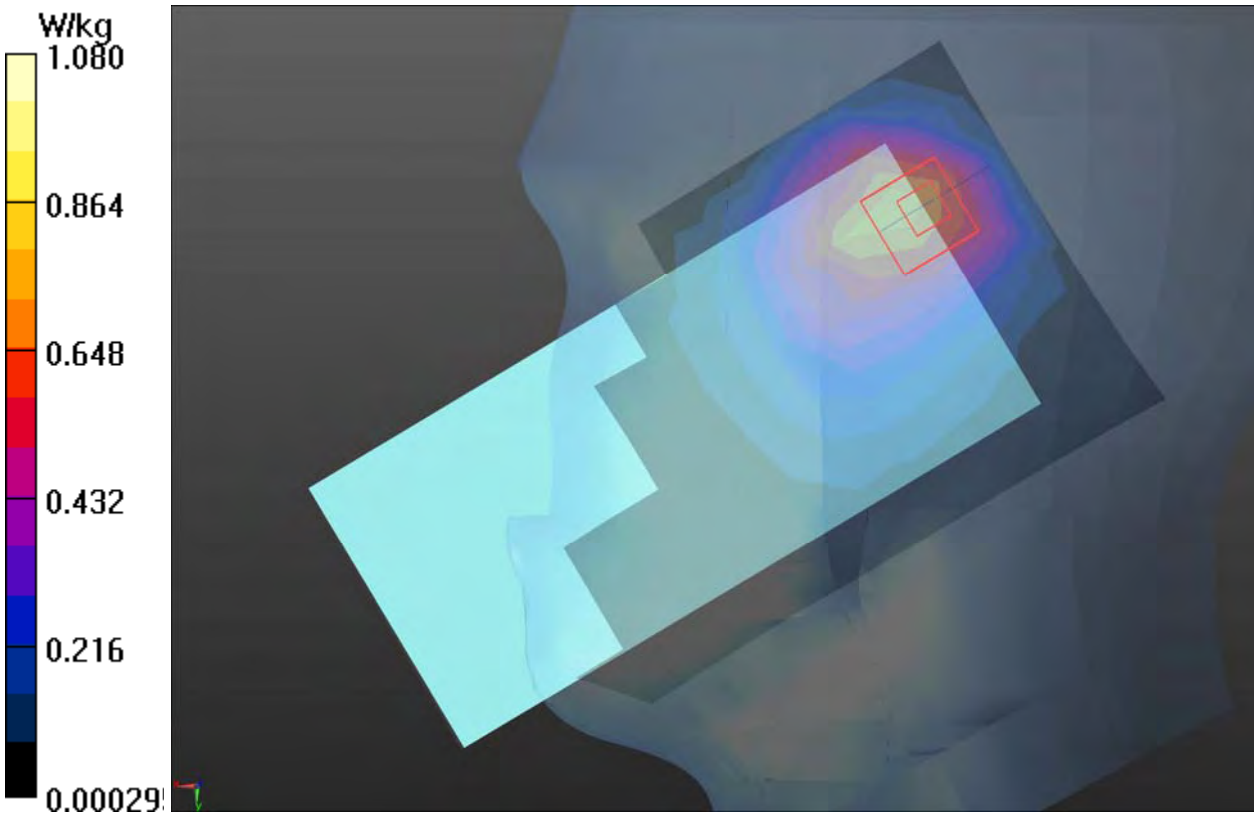
Peak SAR (extrapolated) = 1.38 W/kg

SAR(1 g) = 0.704 W/kg; SAR(10 g) = 0.475 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 43.6%

Maximum value of SAR (measured) = 1.08 W/kg



Plot 34 LTE Band 26 1RB Right Cheek Low

Date: 2022/12/2

Communication System: UID 0, LTE (0); Frequency: 821.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 821.5 MHz; σ = 0.933 S/m; ε_r = 41.904; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.34, 9.34, 9.34); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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) = 0.822 W/kg

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

Reference Value = 25.43 V/m; Power Drift = 0.015 dB

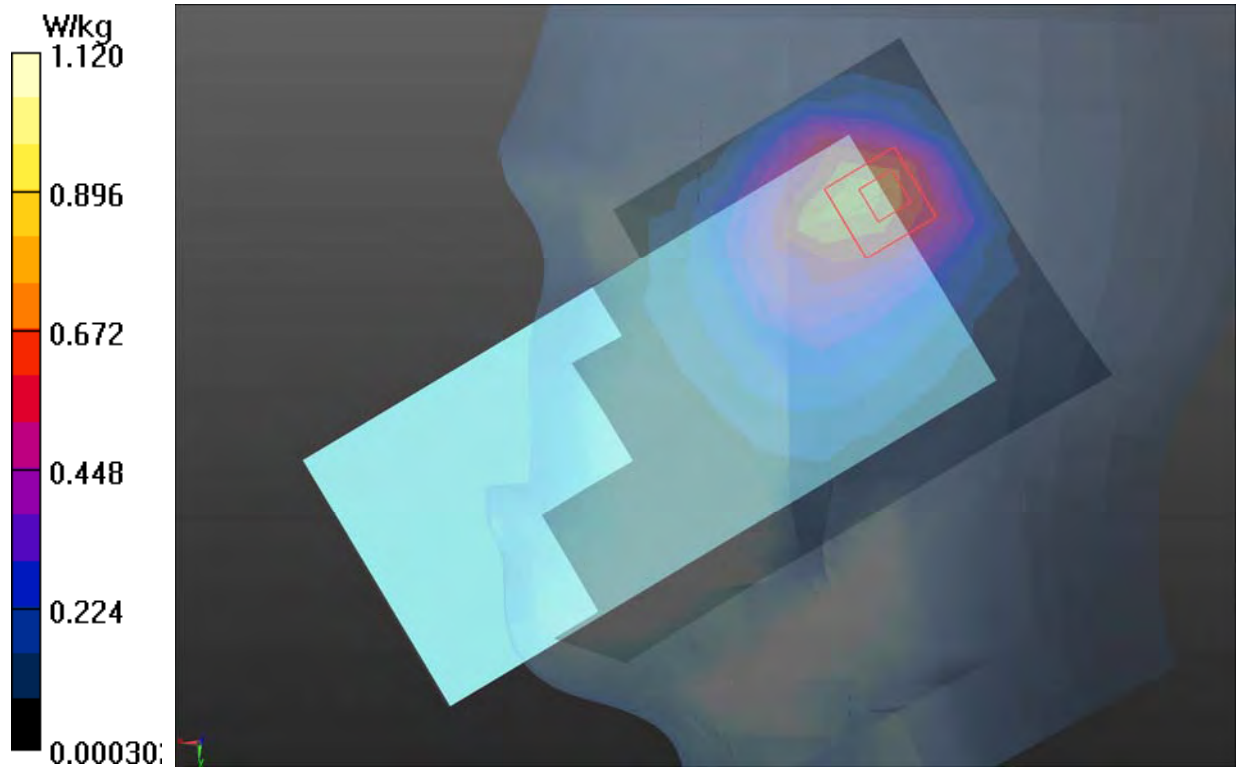
Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 0.592 W/kg; SAR(10 g) = 0.397 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 43.2%

Maximum value of SAR (measured) = 1.12 W/kg



Plot 35 LTE Band 38 50%RB Right Tilt Low

Date: 2022/6/30

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

Medium parameters used: f = 2580 MHz; σ = 1.995 S/m; ε_r = 37.164; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.25, 7.25, 7.25); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 0.794 W/kg

Right Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.220 V/m; Power Drift = 0.033 dB

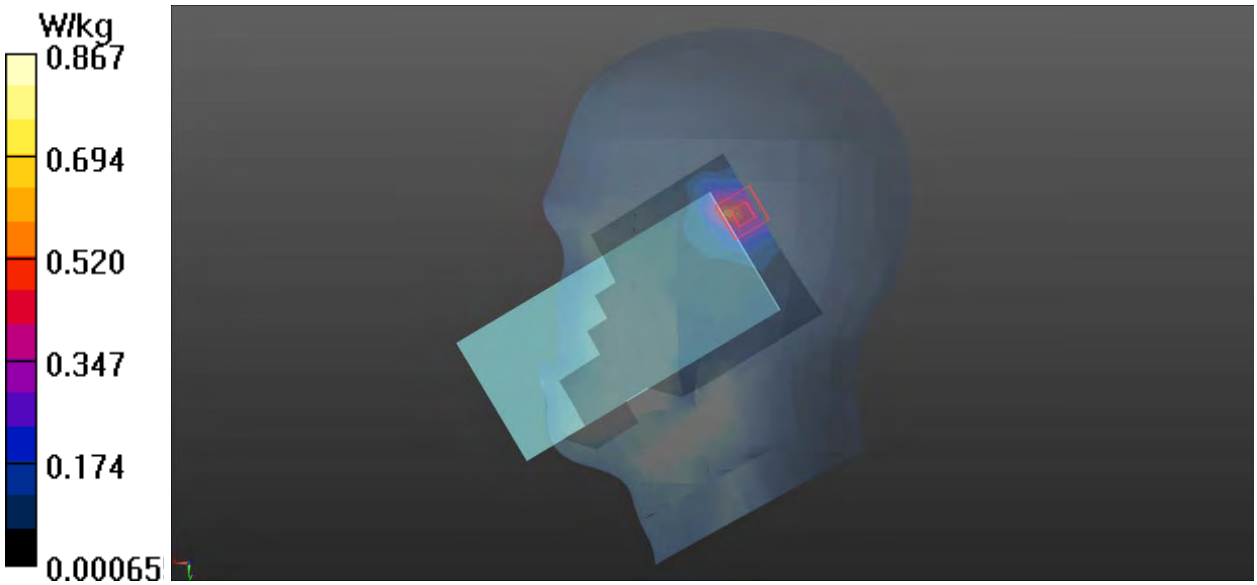
Peak SAR (extrapolated) = 1.90 W/kg

SAR(1 g) = 0.786 W/kg; SAR(10 g) = 0.312 W/kg

Smallest distance from peaks to all points 3 dB below = 13.4mm

Ratio of SAR at M2 to SAR at M1 =42.6%

Maximum value of SAR (measured) = 0.867 W/kg



Plot 36 LTE Band 41 50%RB Right Tilt Middle

Date: 2022/7/1

Communication System: UID 0, LTE (0); Frequency: 2593 MHz;Duty Cycle: 1:1.58

Medium parameters used: f = 2593 MHz; σ = 1.984 S/m; ε_r = 37.196; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Right Section

DASY5 Configuration:

Probe: EX3DV4 - SN3677; ConvF(7.25, 7.25, 7.25); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 0.982 W/kg

Right Tilt Middle /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.721 V/m; Power Drift = 0.150 dB

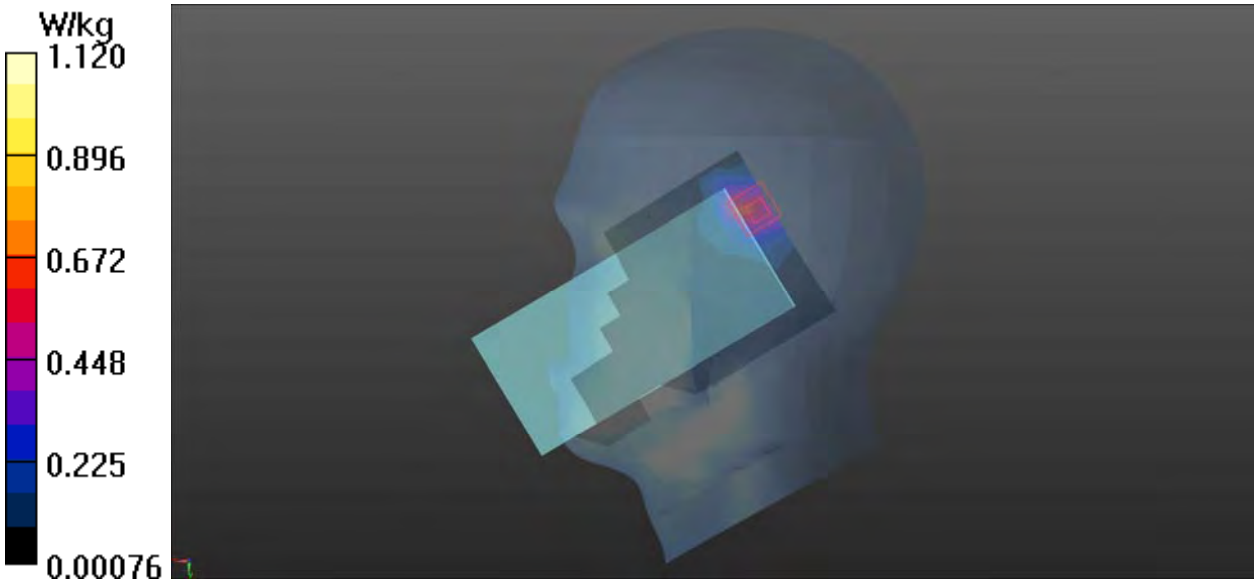
Peak SAR (extrapolated) = 2.28 W/kg

SAR(1 g) = 0.932 W/kg; SAR(10 g) = 0.374 W/kg

Smallest distance from peaks to all points 3 dB below = 12.4 mm

Ratio of SAR at M2 to SAR at M1 = 41.2%

Maximum value of SAR (measured) = 1.12 W/kg

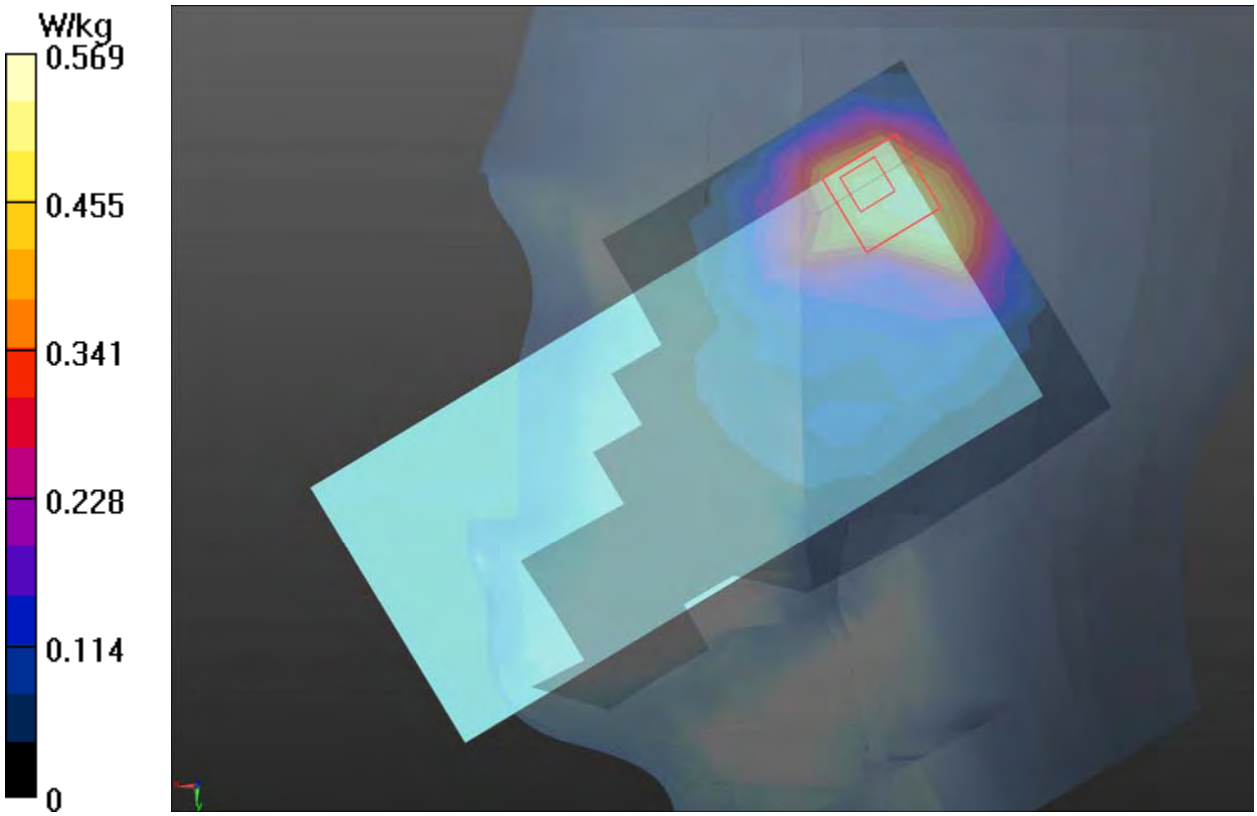


Plot 37 LTE Band 66 50%RB Right Cheek Middle

Date: 2022/12/3
Communication System: UID 0, LTE (0); Frequency: 1745 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1745 MHz; σ = 1.323 S/m; ε_r = 39.378; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(8.25, 8.25, 8.25); Calibrated: 2022/7/8
Electronics: DAE4 SN1291; Calibrated: 2022/3/24
Phantom: SAM 2; Type: QD 000 P40 CD;
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) = 0.533 W/kg

Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.99 V/m; Power Drift =-0.02 dB
Peak SAR (extrapolated) = 0.942 W/kg
SAR(1 g) = 0.400 W/kg; SAR(10 g) = 0.185 W/kg
Smallest distance from peaks to all points 3 dB below = 12.3 mm
Ratio of SAR at M2 to SAR at M1 = 58.5%
Maximum value of SAR (measured) = 0.569 W/kg



Plot 38 802.11b Left Cheek Low

Date: 2022/12/5

Communication System: UID 0, 802.11b (0); Frequency: 2412 MHz;Duty Cycle: 1:1.02

Medium parameters used: f = 2412 MHz; σ = 1.801 S/m; ε_r = 37.737; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.46, 7.46, 7.46); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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

Left Cheek Low/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.563 W/kg

Left Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.940 V/m; Power Drift = 0.032 dB

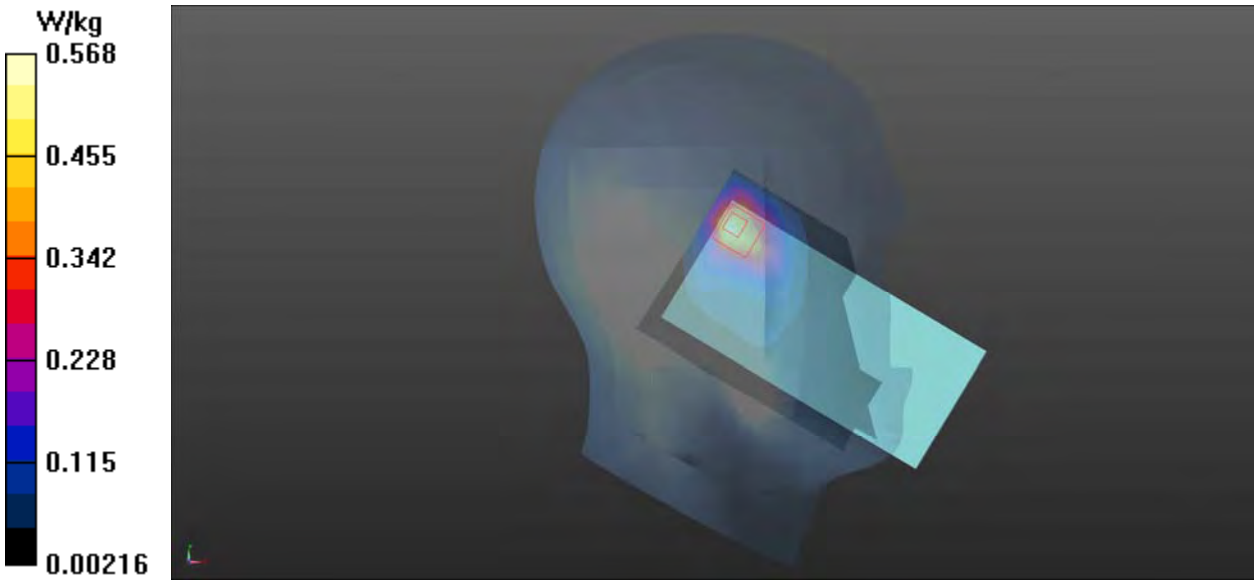
Peak SAR (extrapolated) = 1.15 W/kg

SAR(1 g) = 0.561 W/kg; SAR(10 g) = 0.284 W/kg

Smallest distance from peaks to all points 3 dB below = 12.7 mm

Ratio of SAR at M2 to SAR at M1 = 51.9%

Maximum value of SAR (measured) = 0.568 W/kg



Plot 39 Bluetooth Left Cheek Low

Date: 2022/12/5

Communication System: UID 0, BT (0); Frequency: 2402 MHz;Duty Cycle: 1:1.32

Medium parameters used: f = 2402 MHz; σ = 1.789 S/m; ε_r = 37.77; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.46, 7.46, 7.46); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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

Left Cheek Low/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.069 W/kg

Left Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.927 V/m; Power Drift = 0.06 dB

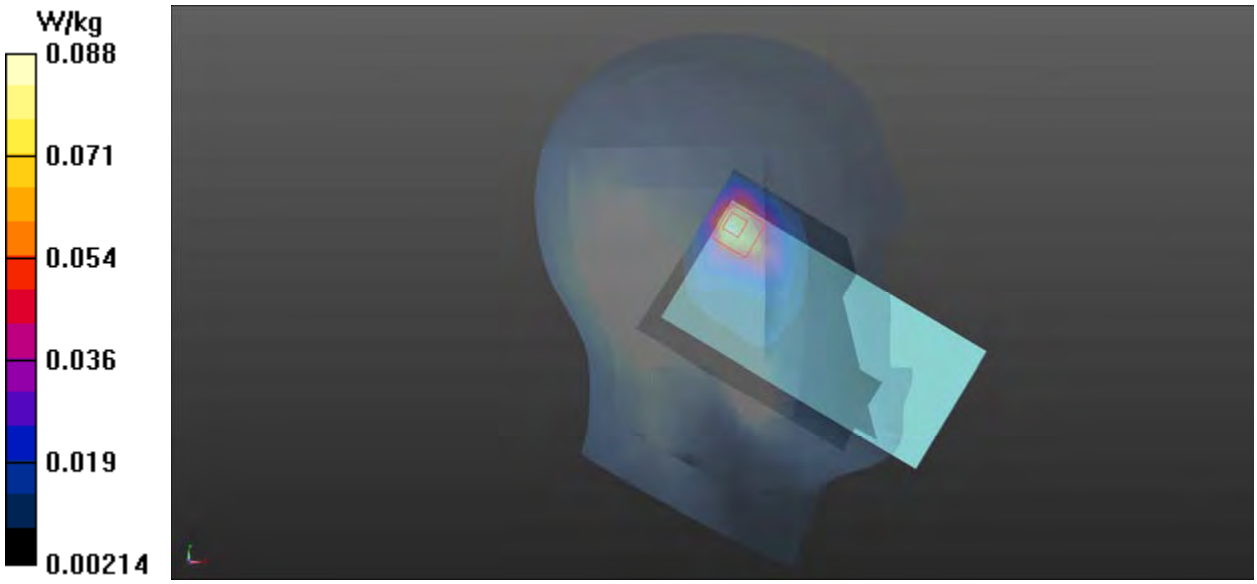
Peak SAR (extrapolated) = 0.14 W/kg

SAR(1 g) = 0.068 W/kg; SAR(10 g) = 0.038 W/kg

Smallest distance from peaks to all points 3 dB below = 14.2 mm

Ratio of SAR at M2 to SAR at M1 =56.9%

Maximum value of SAR (measured) = 0.088 W/kg



Plot 40 GSM 850 Back Side Middle (Distance 15mm)

Date: 2022/6/26

Communication System: UID 0, GSM (0); Frequency: 836.6 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 836.6 MHz; σ = 0.953 S/m; ε_r = 39.762; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.30, 9.30, 9.30); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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=15mm, dy=15mm

Maximum value of SAR (measured) = 0.239 W/kg

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

Reference Value = 12.86 V/m; Power Drift = 0.00 dB

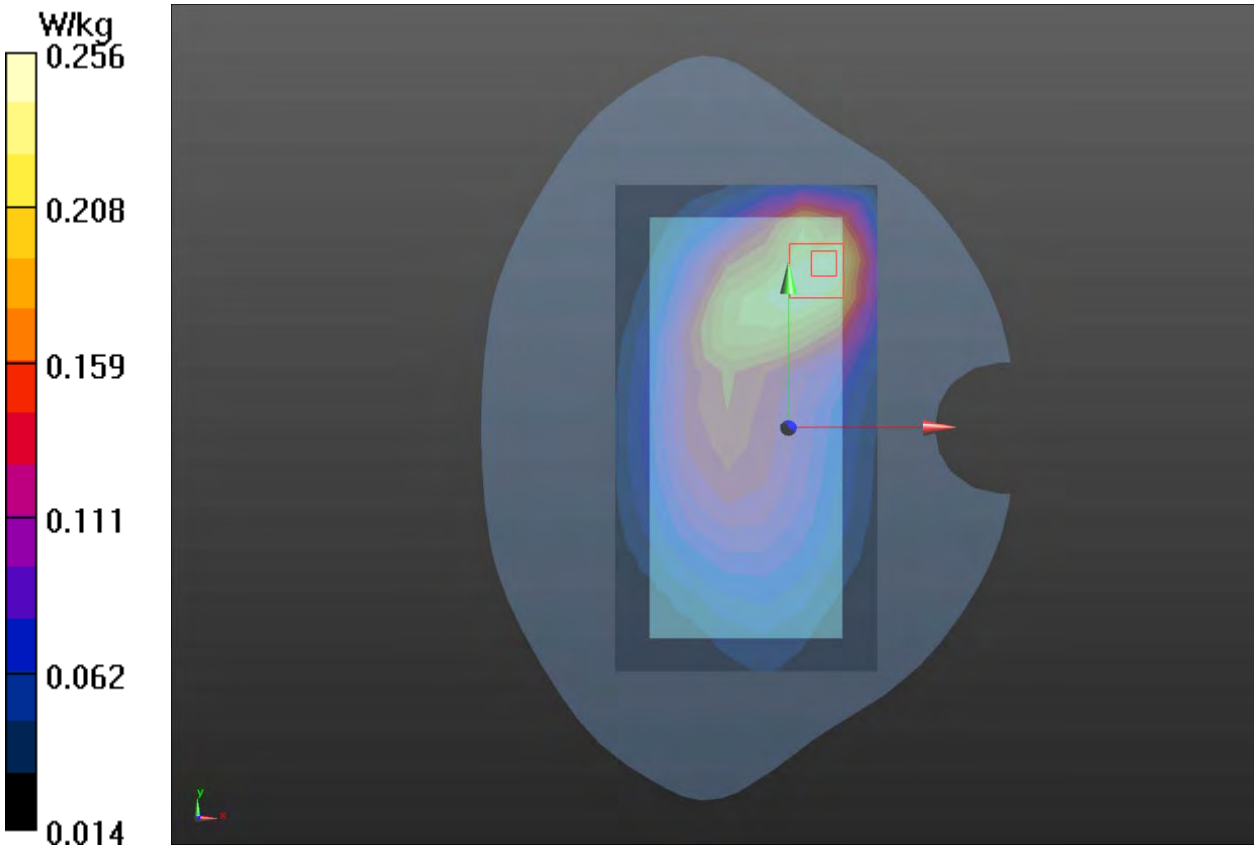
Peak SAR (extrapolated) = 0.362 W/kg

SAR(1 g) = 0.238 W/kg; SAR(10 g) = 0.157 W/kg

Smallest distance from peaks to all points 3 dB below = 14.8 mm

Ratio of SAR at M2 to SAR at M1 = 56.8%

Maximum value of SAR (measured) = 0.256 W/kg



Plot 41 GSM 1900 Back Side Middle (Distance 15mm)

Date: 2022/12/4

Communication System: UID 0, GSM (0); Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.84, 7.84, 7.84); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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

Back Side Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.308 W/kg

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

Reference Value = 5.167 V/m; Power Drift = 0.025 dB

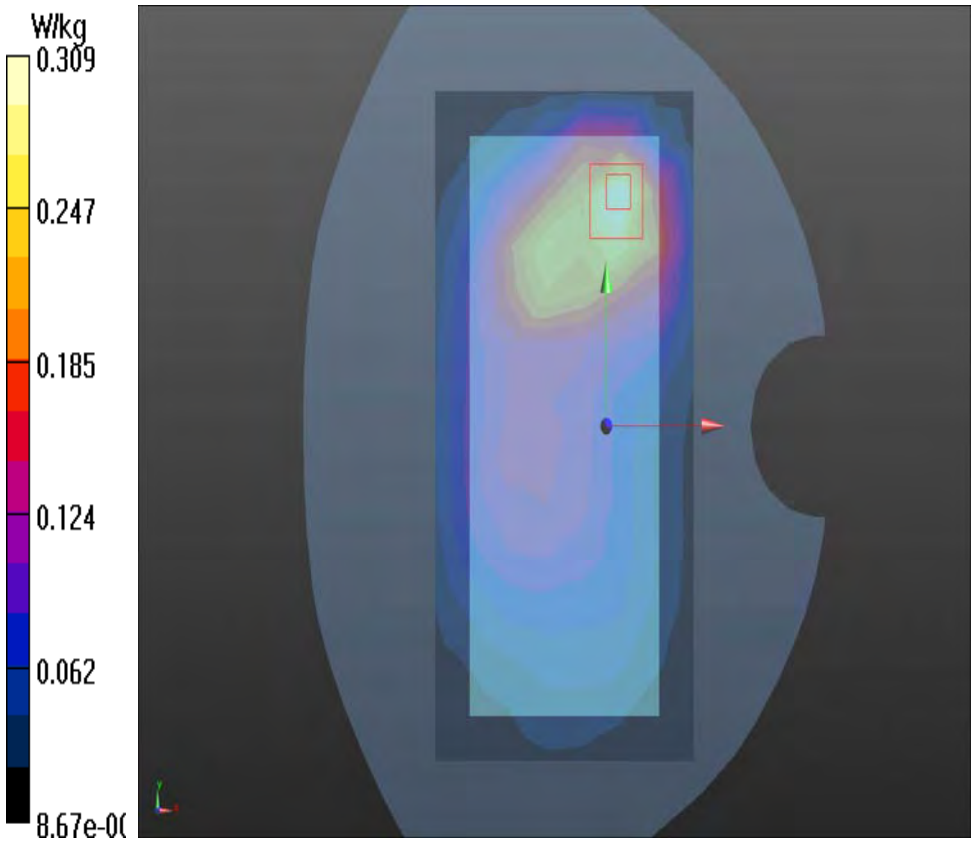
Peak SAR (extrapolated) = 0.618 W/kg

SAR(1 g) = 0.306 W/kg; SAR(10 g) = 0.163 W/kg

Smallest distance from peaks to all points 3 dB below = 12.8 mm

Ratio of SAR at M2 to SAR at M1 = 45%

Maximum value of SAR (measured) = 0.309 W/kg



Plot 42 WCDMA V Back Side Middle (Distance 15mm)

Date: 2022/12/2

Communication System: UID 0, WCDMA (0); Frequency: 836.6 MHz;Duty Cycle: 1:1

Medium parameters used: f = 836.6 MHz; σ = 0.953 S/m; ε_r = 39.762; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.34, 9.34, 9.34); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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

Back Side Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.311 W/kg

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

Reference Value = 5.884 V/m; Power Drift = 0.030 dB

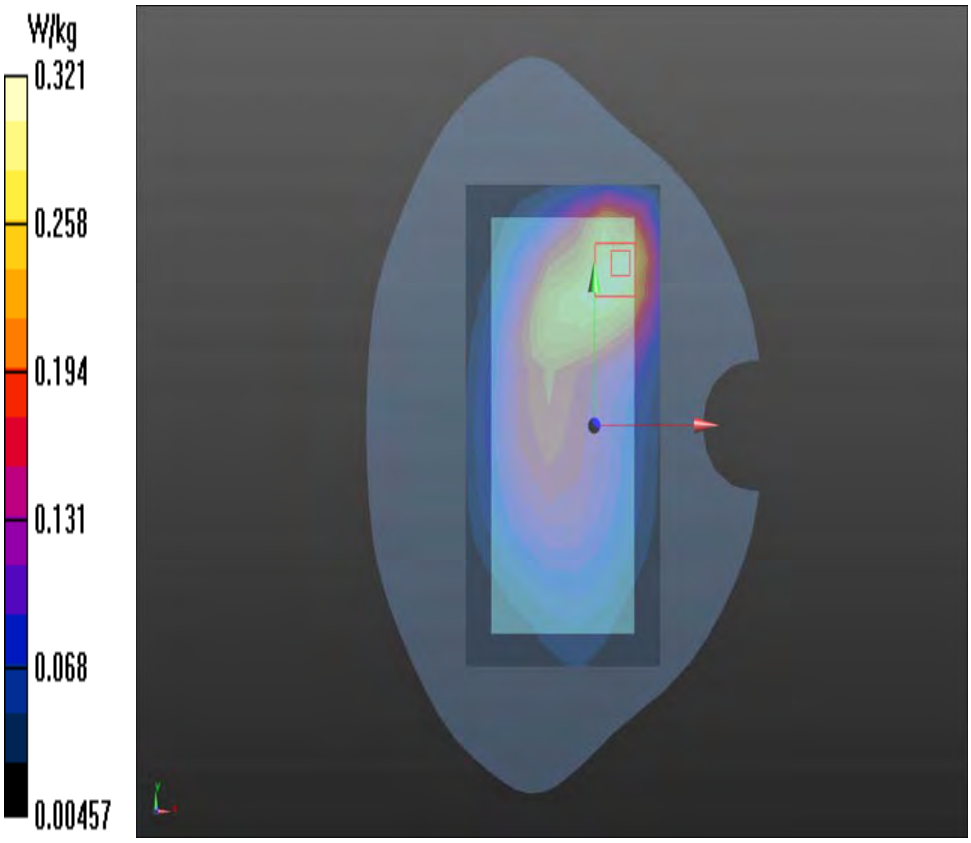
Peak SAR (extrapolated) = 0.526 W/kg

SAR(1 g) = 0.282 W/kg; SAR(10 g) = 0.182 W/kg

Smallest distance from peaks to all points 3 dB below = 15.2 mm

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

Maximum value of SAR (measured) = 0.321 W/kg



Plot 43 LTE Band 4 1RB Back Side Low (Distance 15mm)

Date: 2022/6/27

Communication System: UID 0, LTE (0); Frequency: 1720 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1720 MHz; σ = 1.303 S/m; ε_r = 39.467; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(8.22, 8.22, 8.22); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 0.643 W/kg

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

Reference Value = 9.234 V/m; Power Drift = 0.022 dB

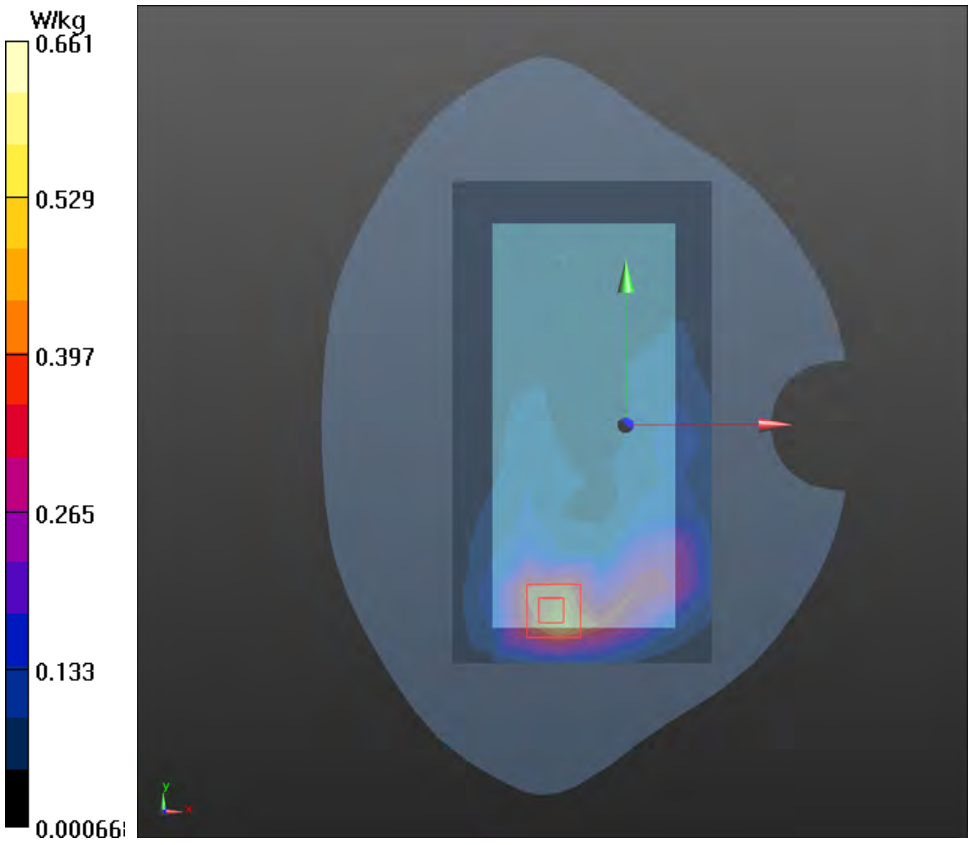
Peak SAR (extrapolated) = 0.927 W/kg

SAR(1 g) = 0.632 W/kg; SAR(10 g) = 0.344 W/kg

Smallest distance from peaks to all points 3 dB below = 13.8mm

Ratio of SAR at M2 to SAR at M1 = 53.4%

Maximum value of SAR (measured) = 0.661 W/kg



Plot 44 LTE Band 7 50%RB Back Side High (Distance 15mm)

Date: 2022/12/5

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

Medium parameters used: f = 2560 MHz; σ = 1.971 S/m; ε_r = 37.231; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.27, 7.27, 7.27); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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

Back Side High/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.915 W/kg

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

Reference Value = 4.432 V/m; Power Drift = 0.15 dB

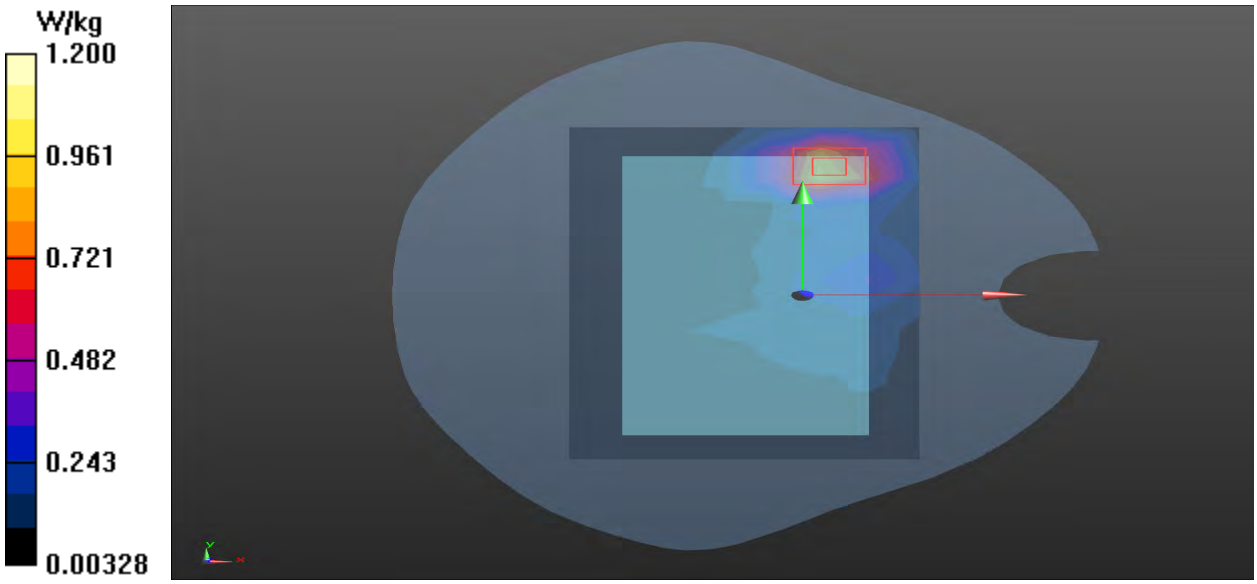
Peak SAR (extrapolated) = 2.09 W/kg

SAR(1 g) = 0.827 W/kg; SAR(10 g) = 0.388 W/kg

Smallest distance from peaks to all points 3 dB below = 12.4mm

Ratio of SAR at M2 to SAR at M1 = 45.9%

Maximum value of SAR (measured) = 1.20 W/kg

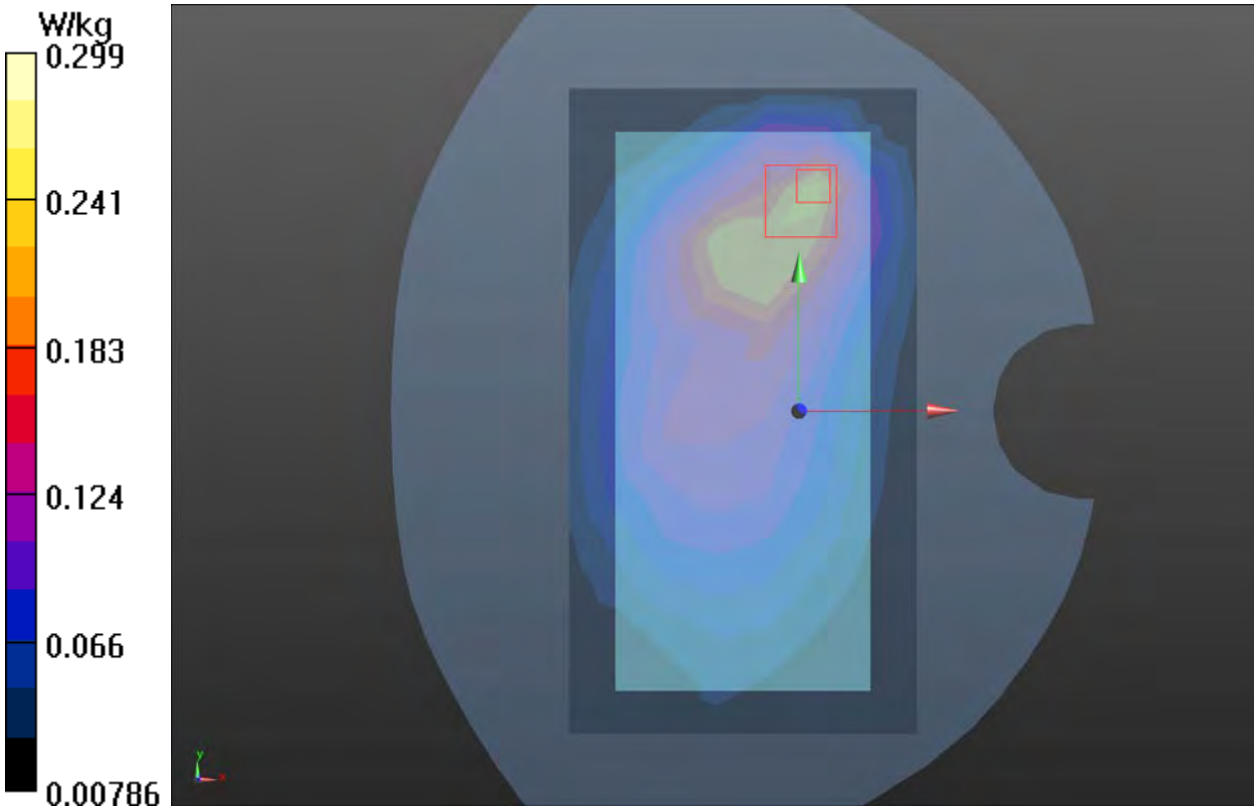


Plot 45 LTE Band 13 1RB Back Side Middle (Distance 15mm)

Date: 2022/12/1
Communication System: UID 0, LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used: f = 782 MHz; σ = 0.921 S/m; ε_r = 41.805; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.63, 9.63, 9.63); Calibrated: 2022/7/8
Electronics: DAE4 SN1291; Calibrated: 2022/3/24
Phantom: SAM 2; Type: QD 000 P40 CD;
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.280 W/kg

Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.90 V/m; Power Drift = 0.035 dB
Peak SAR (extrapolated) = 0.465 W/kg
SAR (1 g) = 0.266 W/kg; SAR(10 g) = 0.176 W/kg
Smallest distance from peaks to all points 3 dB below = 12.5 mm
Ratio of SAR at M2 to SAR at M1 = 59.5%
Maximum value of SAR (measured) = 0.299 W/kg



Plot 46 LTE Band 26 1RB Back Side High (Distance 15mm)

Date: 2022/12/2

Communication System: UID 0, LTE (0); Frequency: 841.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 841.5 MHz; σ = 0.941 S/m; ε_r = 41.844; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.34, 9.34, 9.34); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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

Back Side High/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.287 W/kg

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

Reference Value = 14.22 V/m; Power Drift = 0.03 dB

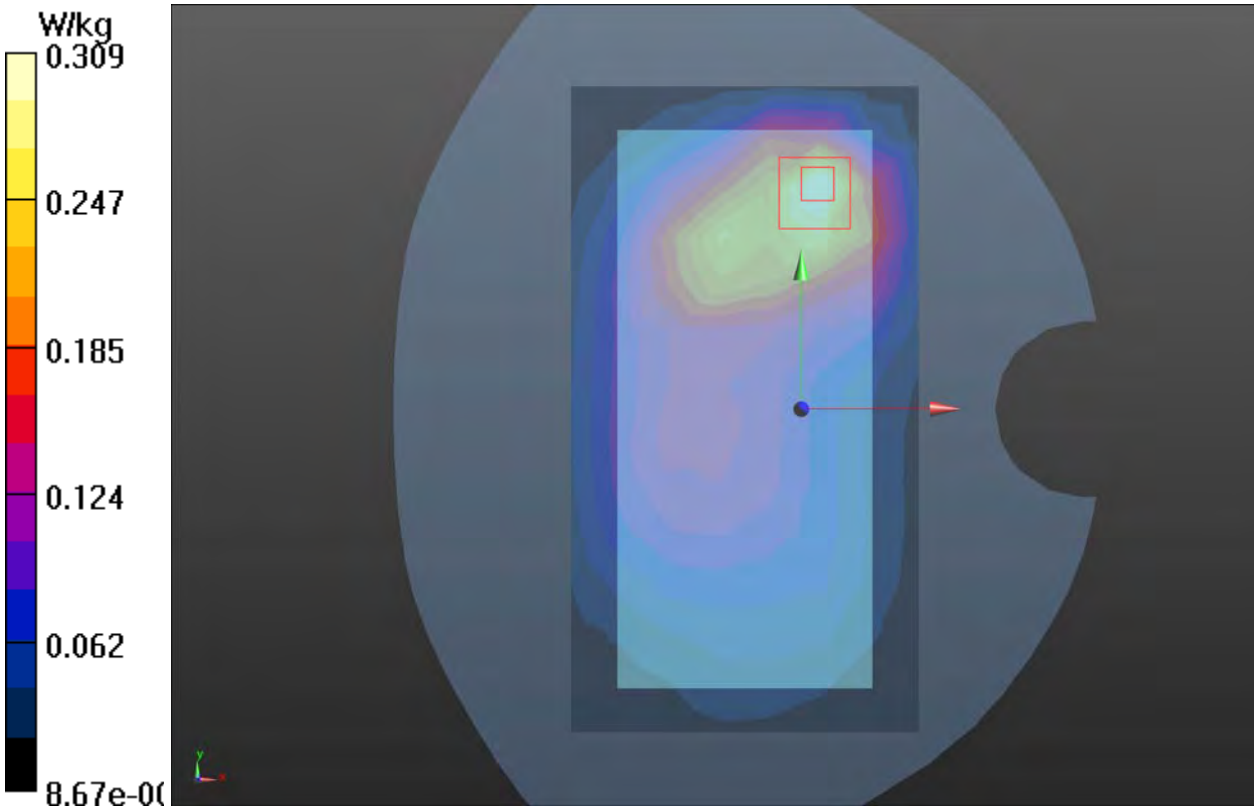
Peak SAR (extrapolated) = 0.630 W/kg

SAR(1 g) = 0.265 W/kg; SAR(10 g) = 0.171 W/kg

Smallest distance from peaks to all points 3 dB below = 11.5 mm

Ratio of SAR at M2 to SAR at M1 = 60.1%

Maximum value of SAR (measured) = 0.309 W/kg



Plot 47 LTE Band 38 1RB Back Side High (Distance 15mm)

Date: 2022/12/5

Communication System: UID 0, LTE (0); Frequency: 2610 MHz;Duty Cycle: 1:1.58

Medium parameters used: f = 2610 MHz; σ = 2.027 S/m; ε_r = 37.056; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.27, 7.27, 7.27); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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

Back Side High/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.637 W/kg

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

Reference Value = 3.045 V/m; Power Drift = 0.039 dB

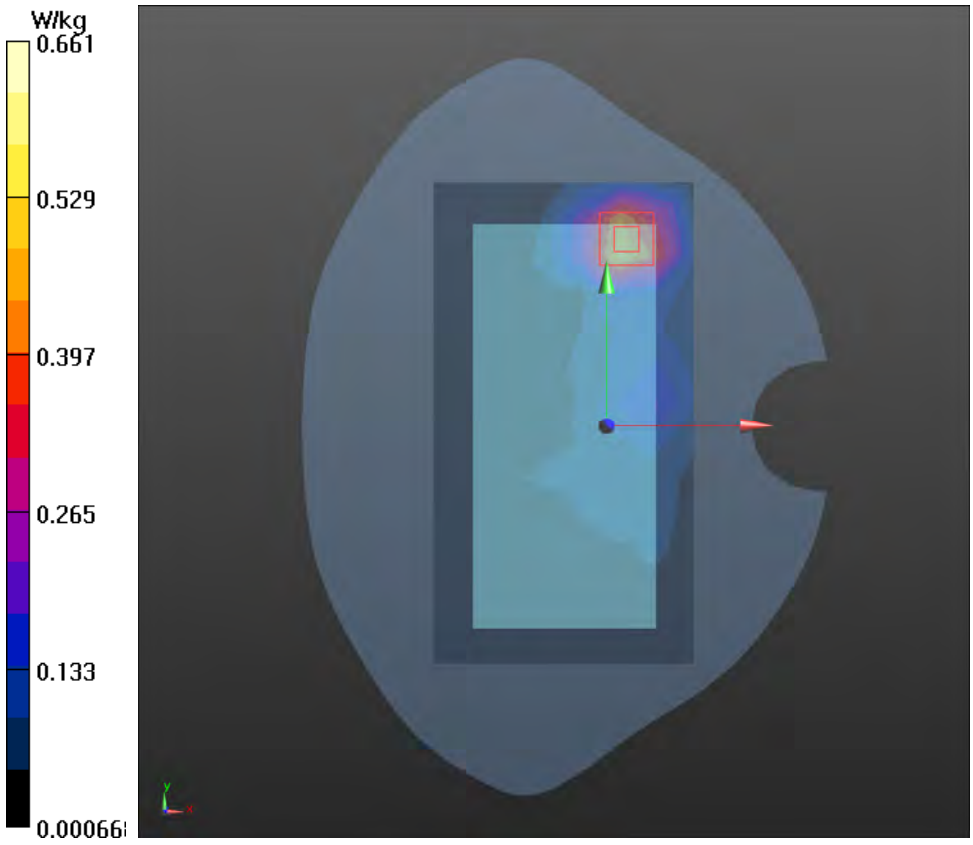
Peak SAR (extrapolated) = 0.954 W/kg

SAR(1 g) = 0.592 W/kg; SAR(10 g) = 0.276 W/kg

Smallest distance from peaks to all points 3 dB below = 14.5 mm

Ratio of SAR at M2 to SAR at M1 = 55.6%

Maximum value of SAR (measured) = 0.661 W/kg



Plot 48 LTE Band 41 1RB Back Side High (Distance 15mm)

Date: 2022/12/5

Communication System: UID 0, LTE (0); Frequency: 2680 MHz;Duty Cycle: 1:1.58

Medium parameters used: f = 2680 MHz; σ = 2.063 S/m; ε_r = 36.918; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.27, 7.27, 7.27); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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

Back Side High/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.415 W/kg

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

Reference Value = 2.360 V/m; Power Drift = 0.02 dB

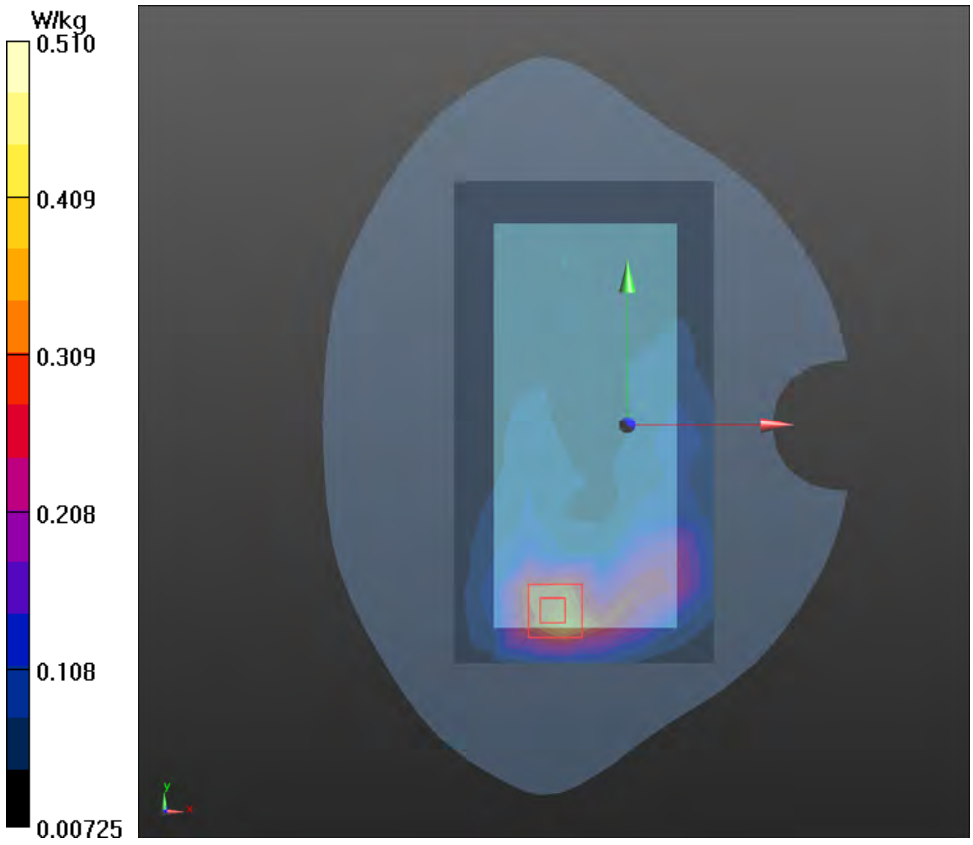
Peak SAR (extrapolated) = 0.846 W/kg

SAR(1 g) = 0.392 W/kg; SAR(10 g) = 0.200 W/kg

Smallest distance from peaks to all points 3 dB below = 14.8 mm

Ratio of SAR at M2 to SAR at M1 = 69.5%

Maximum value of SAR (measured) = 0.510 W/kg

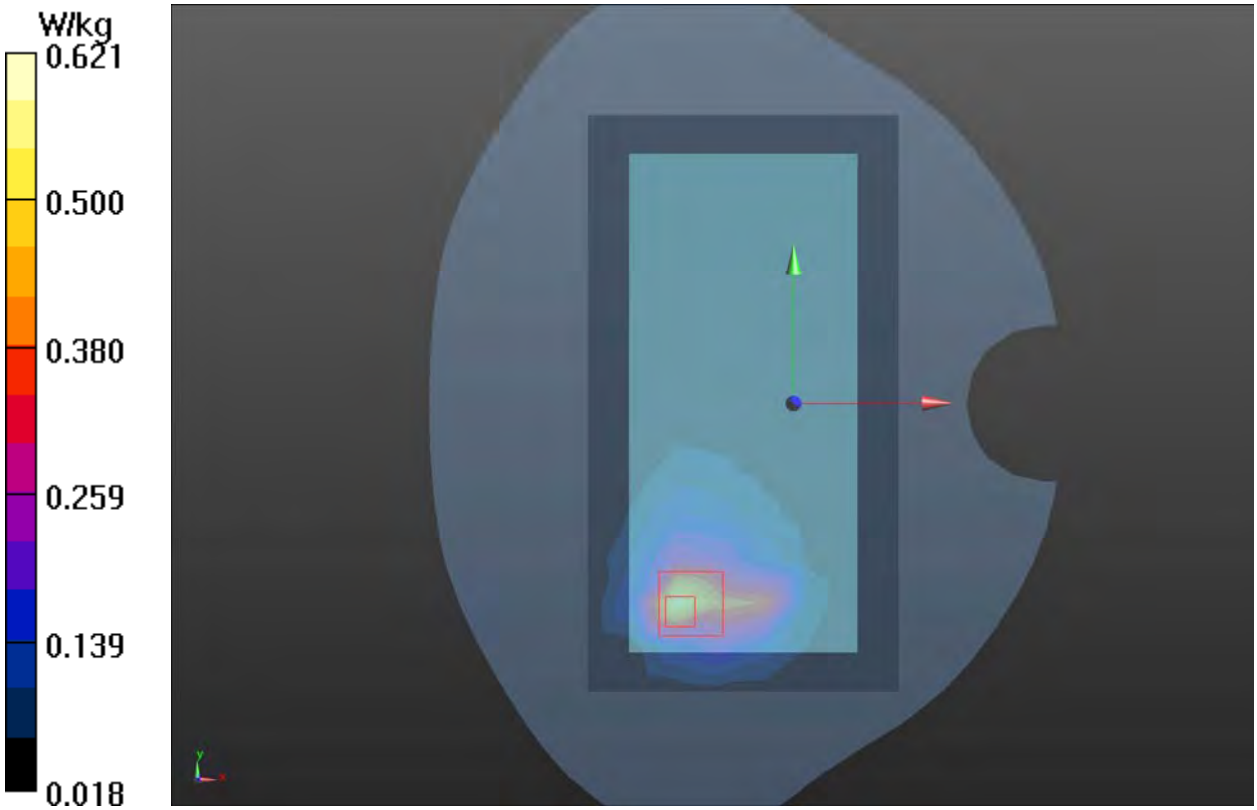


Plot 49 LTE Band 66 1RB Back Side High (Distance 15mm)

Date: 2022/12/3
Communication System: UID 0, LTE (0); Frequency: 1770 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1770 MHz; σ = 1.329 S/m; ε_r = 39.321; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(8.25, 8.25, 8.25); Calibrated: 2022/7/8
Electronics: DAE4 SN1291; Calibrated: 2022/3/24
Phantom: SAM 2; Type: QD 000 P40 CD;
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side High/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.589 W/kg

Back Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.831 V/m; Power Drift = -0.036 dB
Peak SAR (extrapolated) = 0.985 W/kg
SAR(1 g) = 0.562 W/kg; SAR(10 g) = 0.303 W/kg
Smallest distance from peaks to all points 3 dB below = 9.4 mm
Ratio of SAR at M2 to SAR at M1 = 40.9%
Maximum value of SAR (measured) = 0.621 W/kg



Plot 50 802.11b Back Side Low (Distance 15mm)

Date: 2022/6/28

Communication System: UID 0, 802.11b (0); Frequency: 2412 MHz;Duty Cycle: 1:1.02

Medium parameters used: f = 2412 MHz; σ = 1.801 S/m; ε_r = 37.737; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.50, 7.50, 7.50); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

Back Side Low/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.158 W/kg

Back Side Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.475 V/m; Power Drift = 0.021 dB

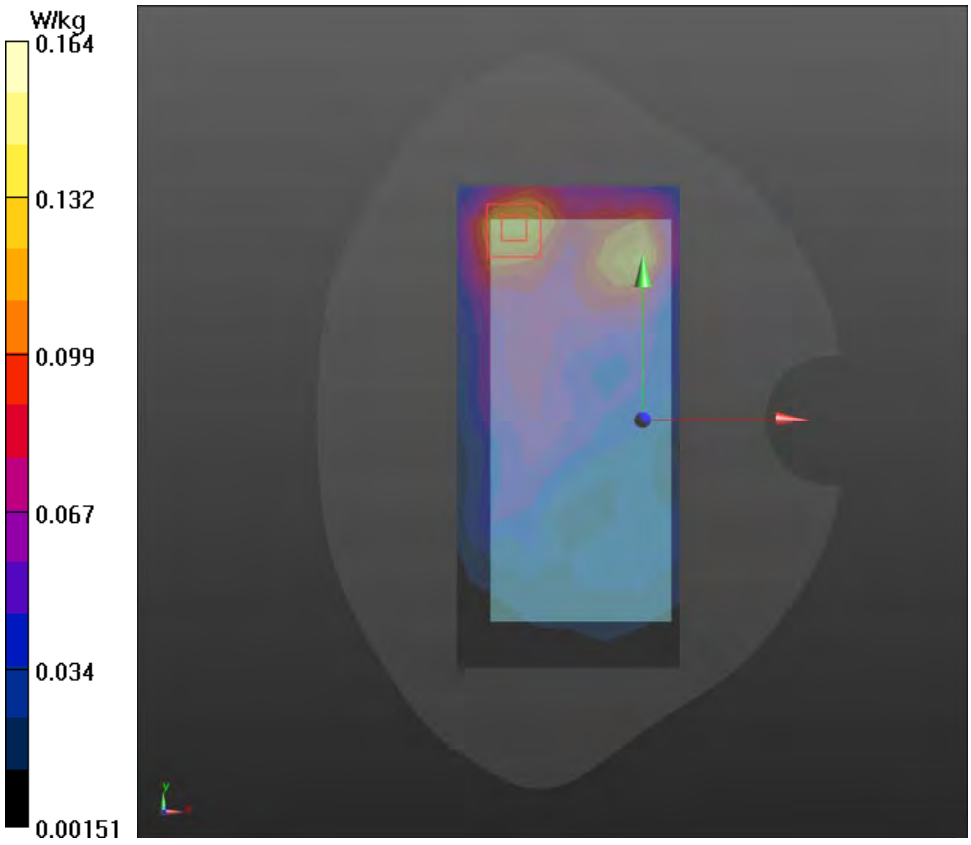
Peak SAR (extrapolated) = 0.246 W/kg

SAR(1 g) = 0.154 W/kg; SAR(10 g) = 0.085 W/kg

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

Ratio of SAR at M2 to SAR at M1 =52.4%

Maximum value of SAR (measured) = 0.164 W/kg



Plot 51 GSM 850 GPRS (3Txslots) Back Side Middle (Distance 10mm)

Date: 2022/6/26

Communication System: UID 0, GPRS 3TX (0); Frequency: 836.6 MHz;Duty Cycle: 1:2.77

Medium parameters used: f = 836.6 MHz; σ = 0.953 S/m; ε_r = 39.762; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.30, 9.30, 9.30); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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=15mm, dy=15mm

Maximum value of SAR (measured) = 0.585 W/kg

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

Reference Value = 17.96 V/m; Power Drift =0.011 dB

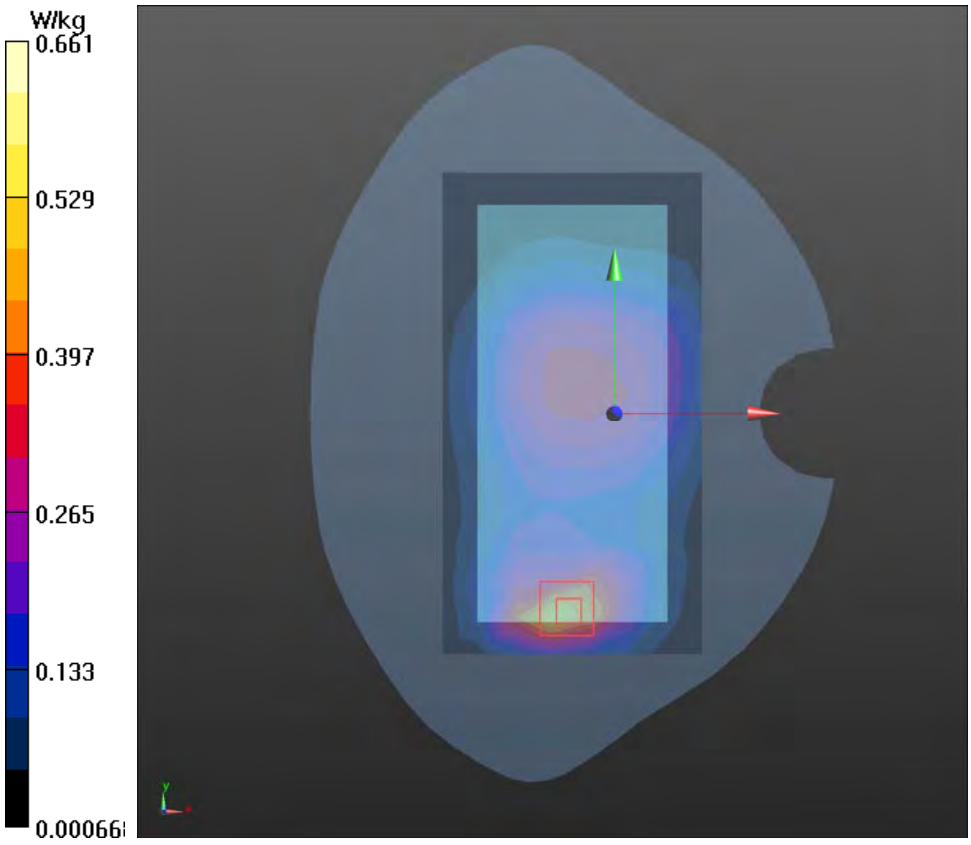
Peak SAR (extrapolated) = 0.799 W/kg

SAR(1 g) = 0.582W/kg; SAR(10 g) = 0.344 W/kg

Smallest distance from peaks to all points 3 dB below = 18.1 mm

Ratio of SAR at M2 to SAR at M1 = 31.9%

Maximum value of SAR (measured) = 0.661 W/kg



Plot 52 GSM 1900 GPRS (4Txslots) Top Edge Middle (Distance 10mm)

Date: 2022/6/23

Communication System: UID 0, GPRS 4TX (0); Frequency: 1880 MHz;Duty Cycle: 1:2.07

Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.88, 7.88, 7.88); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

Top Edge Middle/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.498 W/kg

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

Reference Value = 12.53 V/m; Power Drift = 0.16 dB

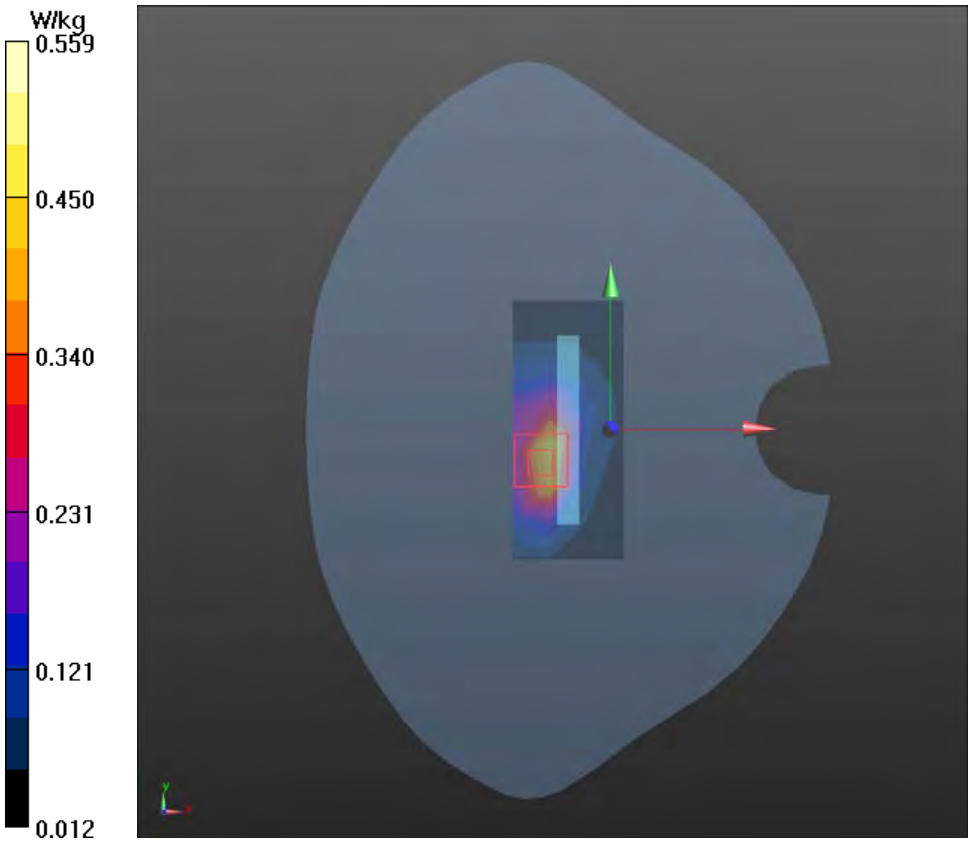
Peak SAR (extrapolated) = 0.869 W/kg

SAR(1 g) = 0.495 W/kg; SAR(10 g) = 0.258 W/kg

Smallest distance from peaks to all points 3 dB below = 13.4mm

Ratio of SAR at M2 to SAR at M1 =44.5%

Maximum value of SAR (measured) = 0.559 W/kg



Plot 53 WCDMA Band II Bottom Edge Low (Distance 10mm)

Date: 2022/6/22

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

Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.4 S/m; ε_r = 39.04; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.88, 7.88, 7.88); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

Bottom Edge Low/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.711 W/kg

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

Reference Value = 17.62 V/m; Power Drift = 0.073 dB

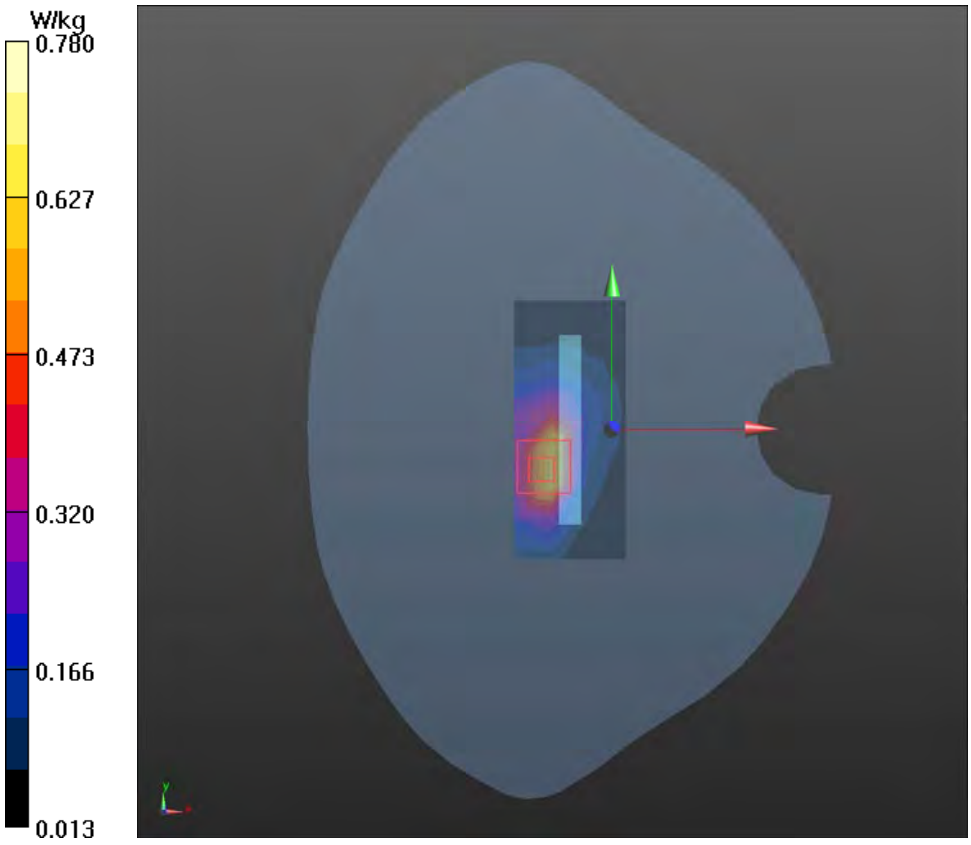
Peak SAR (extrapolated) = 1.23 W/kg

SAR(1 g) = 0.756 W/kg; SAR(10 g) = 0.405 W/kg

Smallest distance from peaks to all points 3 dB below = 13.9 mm

Ratio of SAR at M2 to SAR at M1 = 66.1%

Maximum value of SAR (measured) = 0.780 W/kg



Plot 54 WCDMA Band IV Top Edge Middle (Distance 10mm)

Date: 2022/6/27

Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1732.6 MHz; σ = 1.312 S/m; ε_r = 39.365; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(8.22, 8.22, 8.22); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

Top Edge Middle/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.980 W/kg

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

Reference Value = 18.05 V/m; Power Drift = 0.113 dB

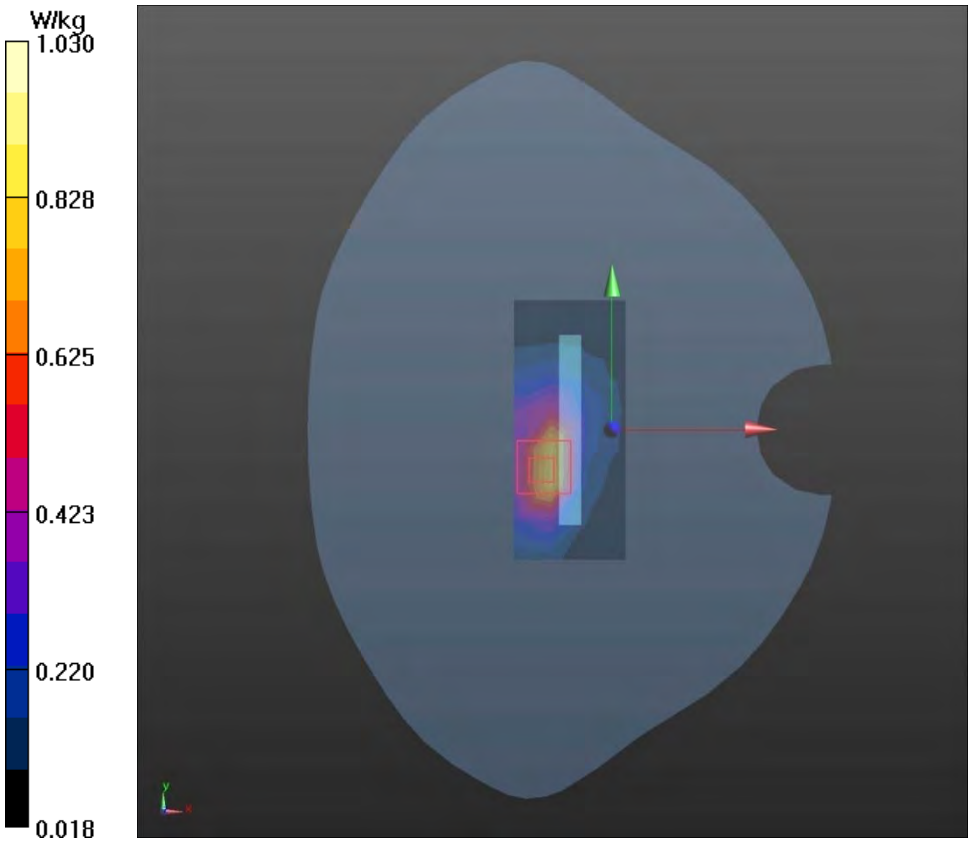
Peak SAR (extrapolated) = 1.62 W/kg

SAR(1 g) = 0.978 W/kg; SAR(10 g) = 0.488 W/kg

Smallest distance from peaks to all points 3 dB below = 14.5 mm

Ratio of SAR at M2 to SAR at M1 = 31.2%

Maximum value of SAR (measured) = 1.03 W/kg



Plot 55 WCDMA Band V Top Edge Middle (Distance 10mm)

Date: 2022/12/2

Communication System: UID 0, WCDMA (0); Frequency: 836.6 MHz;Duty Cycle: 1:1

Medium parameters used: f = 836.6 MHz; σ = 0.953 S/m; ε_r = 39.762; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.34, 9.34, 9.34); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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

Top Edge Middle/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.468 W/kg

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

Reference Value = 14.08 V/m; Power Drift = -0.03 dB

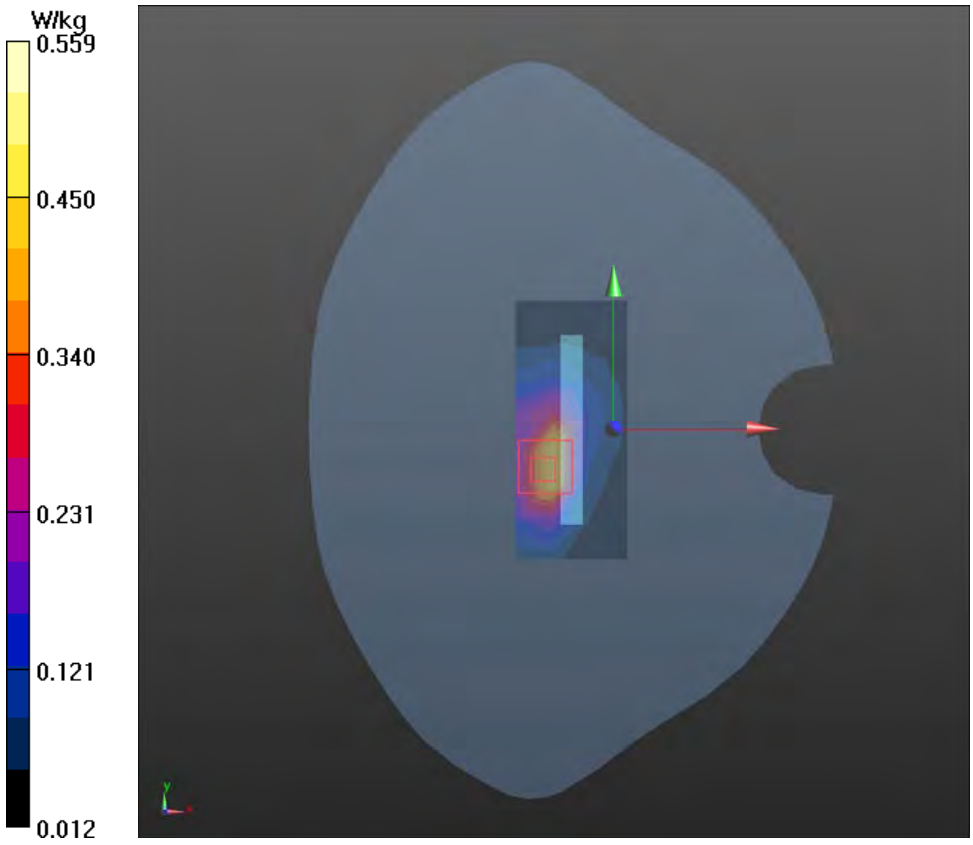
Peak SAR (extrapolated) = 0.999 W/kg

SAR(1 g) = 0.428 W/kg; SAR(10 g) = 0.240 W/kg

Smallest distance from peaks to all points 3 dB below = 14.6 mm

Ratio of SAR at M2 to SAR at M1 = 39.6%

Maximum value of SAR (measured) = 0.559 W/kg



Plot 56 LTE Band 2 50%RB Bottom Edge Middle (Distance 10mm)

Date: 2022/6/22

Communication System: UID 0, LTE (0); Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.88, 7.88, 7.88); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

Bottom Edge Middle/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.742 W/kg

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

Reference Value = 19.83 V/m; Power Drift = 0.022 dB

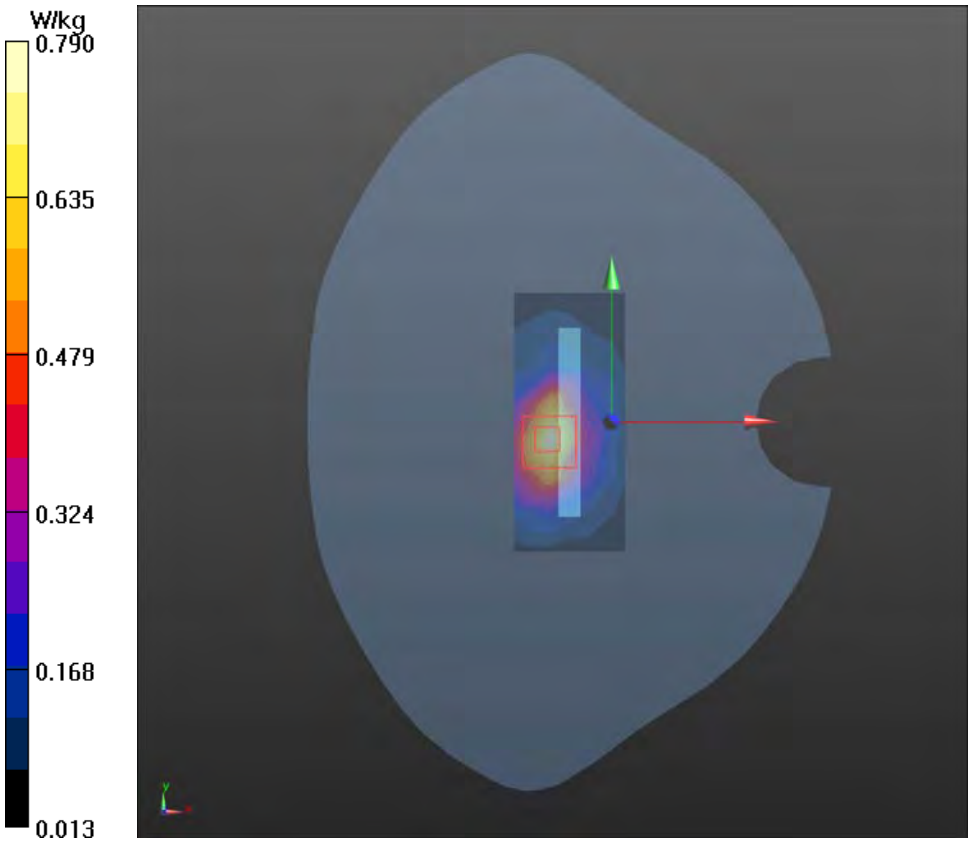
Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.744 W/kg; SAR(10 g) = 0.402 W/kg

Smallest distance from peaks to all points 3 dB below = 11.5 mm

Ratio of SAR at M2 to SAR at M1 = 42.8%

Maximum value of SAR (measured) = 0.790 W/kg



Plot 57 LTE Band 4 1RB Top Edge High (Distance 10mm)

Date: 2022/6/27

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

Medium parameters used: f = 1745 MHz; σ = 1.323 S/m; ε_r = 39.378; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(8.22, 8.22, 8.22); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

Top Edge High/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.961 W/kg

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

Reference Value = 18.09 V/m; Power Drift = 0.021 dB

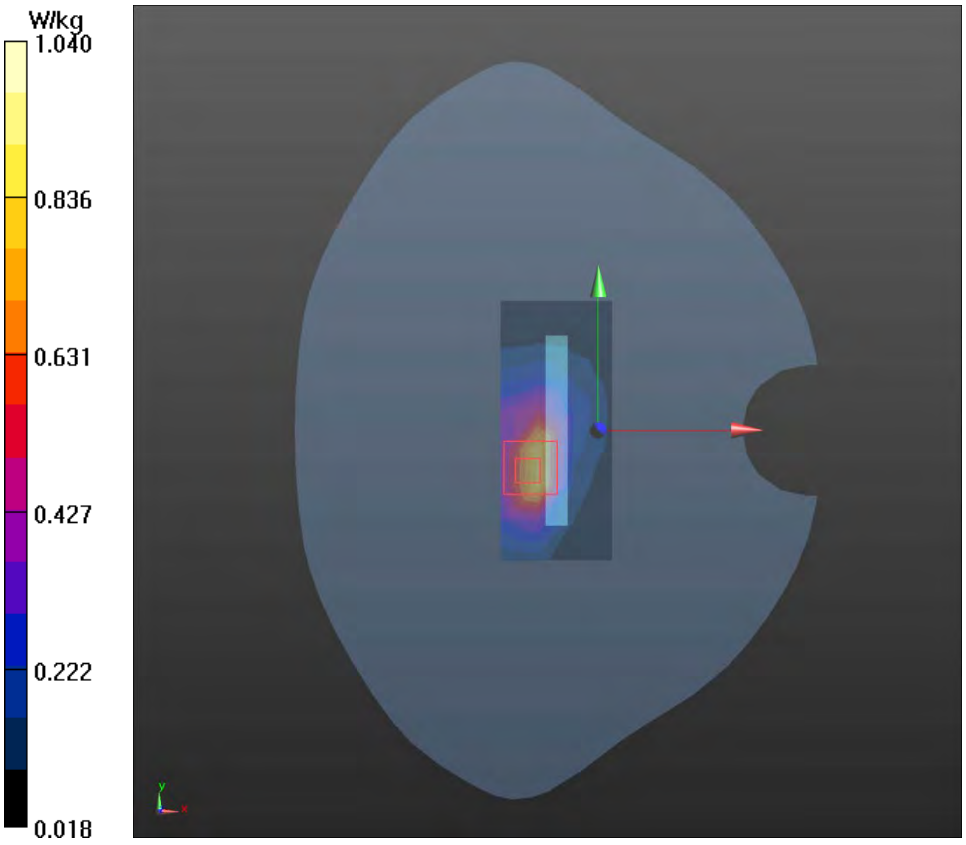
Peak SAR (extrapolated) = 1.64 W/kg

SAR(1 g) = 0.944 W/kg; SAR(10 g) = 0.482 W/kg

Smallest distance from peaks to all points 3 dB below = 17.2 mm

Ratio of SAR at M2 to SAR at M1 = 36.4%

Maximum value of SAR (measured) = 1.04 W/kg



Plot 58 LTE Band 5 1RB Front Side High (Distance 10mm)

Date: 2022/6/26

Communication System: UID 0, LTE (0); Frequency: 844 MHz;Duty Cycle: 1:1

Medium parameters used: f = 844 MHz; σ = 0.958 S/m; ε_r = 39.728; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.30, 9.30, 9.30); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 0.615 W/kg

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

Reference Value = 16.25 V/m; Power Drift =0.041 dB

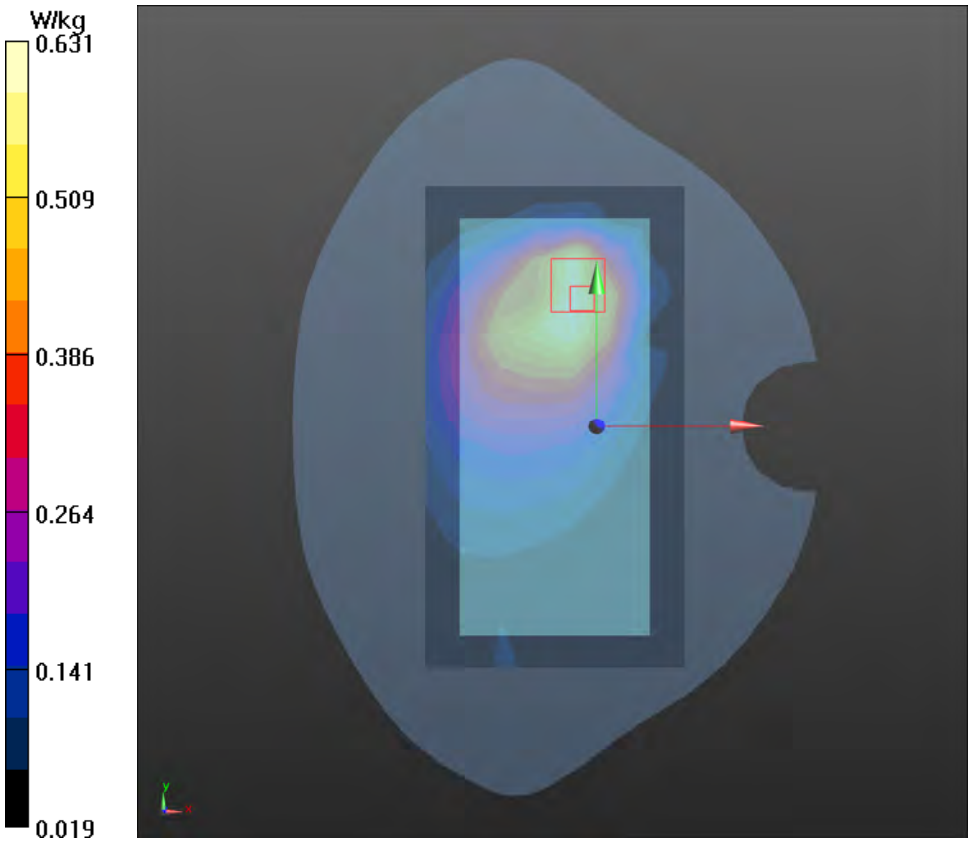
Peak SAR (extrapolated) = 0.969 W/kg

SAR(1 g) = 0.495 W/kg; SAR(10 g) = 0.265 W/kg

Smallest distance from peaks to all points 3 dB below = 13.1 mm

Ratio of SAR at M2 to SAR at M1 = 58.7%

Maximum value of SAR (measured) = 0.631 W/kg



Plot 59 LTE Band 7 1RB Front Side High (Distance 10mm)

Date: 2022/7/2

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

Medium parameters used: f = 2560 MHz; σ = 1.971 S/m; ε_r = 37.231; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.25, 7.25, 7.25); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 0.926 W/kg

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

Reference Value = 10.67 V/m; Power Drift =-0.09 dB

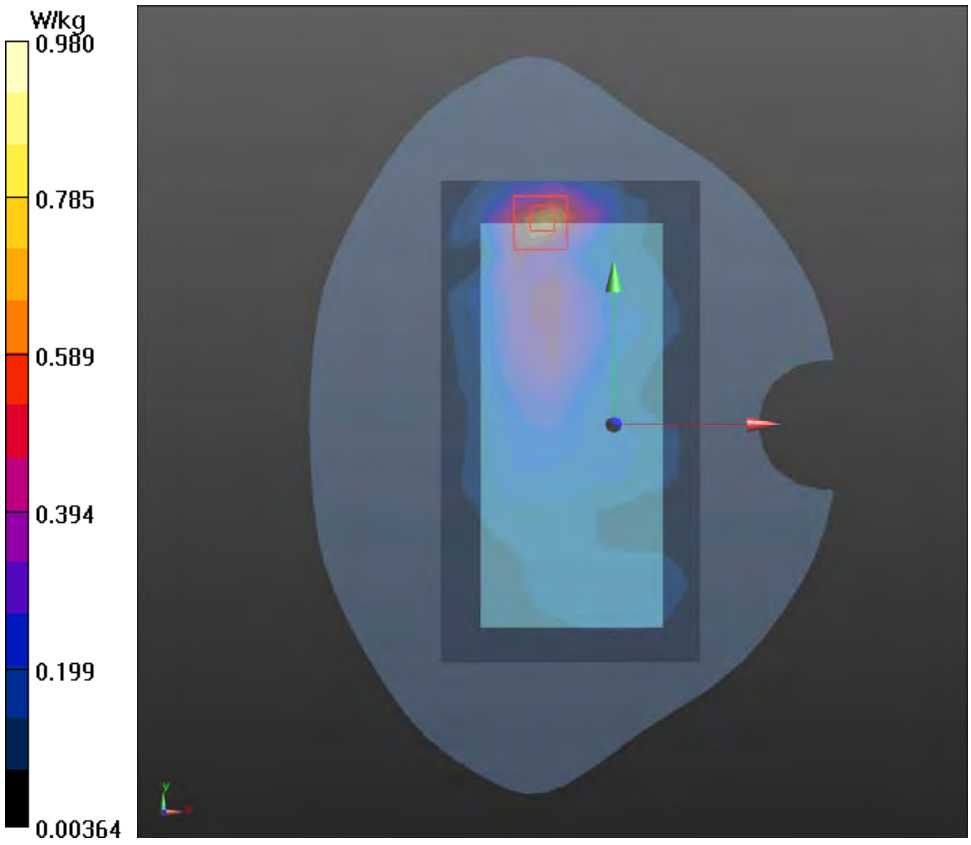
Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 0.895 W/kg; SAR(10 g) = 0.439 W/kg

Smallest distance from peaks to all points 3 dB below =12.4mm

Ratio of SAR at M2 to SAR at M1 = 54.2%

Maximum value of SAR (measured) = 0.980 W/kg

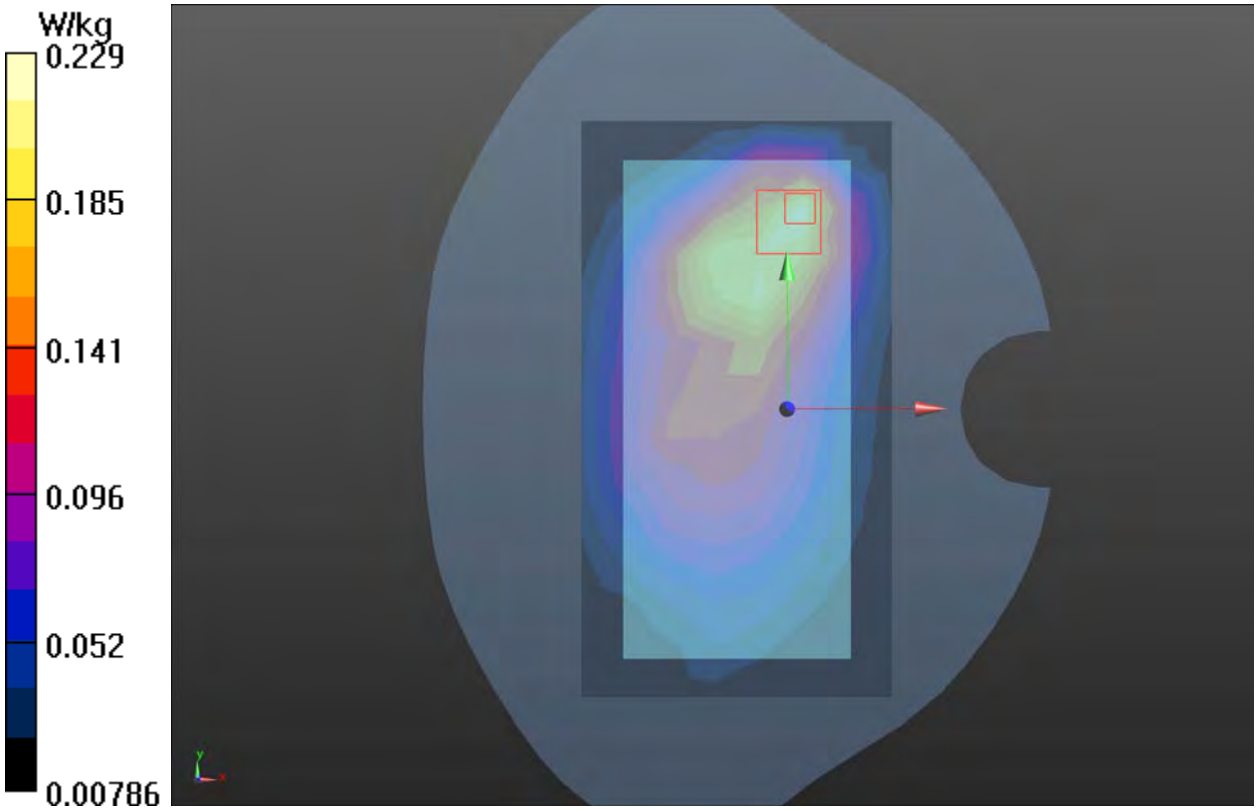


Plot 60 LTE Band 13 50%RB Back Side Middle (Distance 10mm)

Date: 2022/12/1
Communication System: UID 0, LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used: f = 782 MHz; σ = 0.921 S/m; ε_r = 41.805; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.63, 9.63, 9.63); Calibrated: 2022/7/8
Electronics: DAE4 SN1291; Calibrated: 2022/3/24
Phantom: SAM 2; Type: QD 000 P40 CD;
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.220 W/kg

Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.90 V/m; Power Drift = 0.012 dB
Peak SAR (extrapolated) = 0.365 W/kg
SAR(1 g) = 0.211 W/kg; SAR(10 g) = 0.135 W/kg
Smallest distance from peaks to all points 3 dB below = 12.5 mm
Ratio of SAR at M2 to SAR at M1 = 59.5%
Maximum value of SAR (measured) = 0.229 W/kg



Plot 61 LTE Band 26 1RB Back Side High (Distance 10mm)

Date: 2022/12/2

Communication System: UID 0, LTE (0); Frequency: 841.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 841.5 MHz; σ = 0.941 S/m; ε_r = 41.844; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.34, 9.34, 9.34); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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

Back Side High/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.407 W/kg

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

Reference Value = 14.22 V/m; Power Drift = 0.05 dB

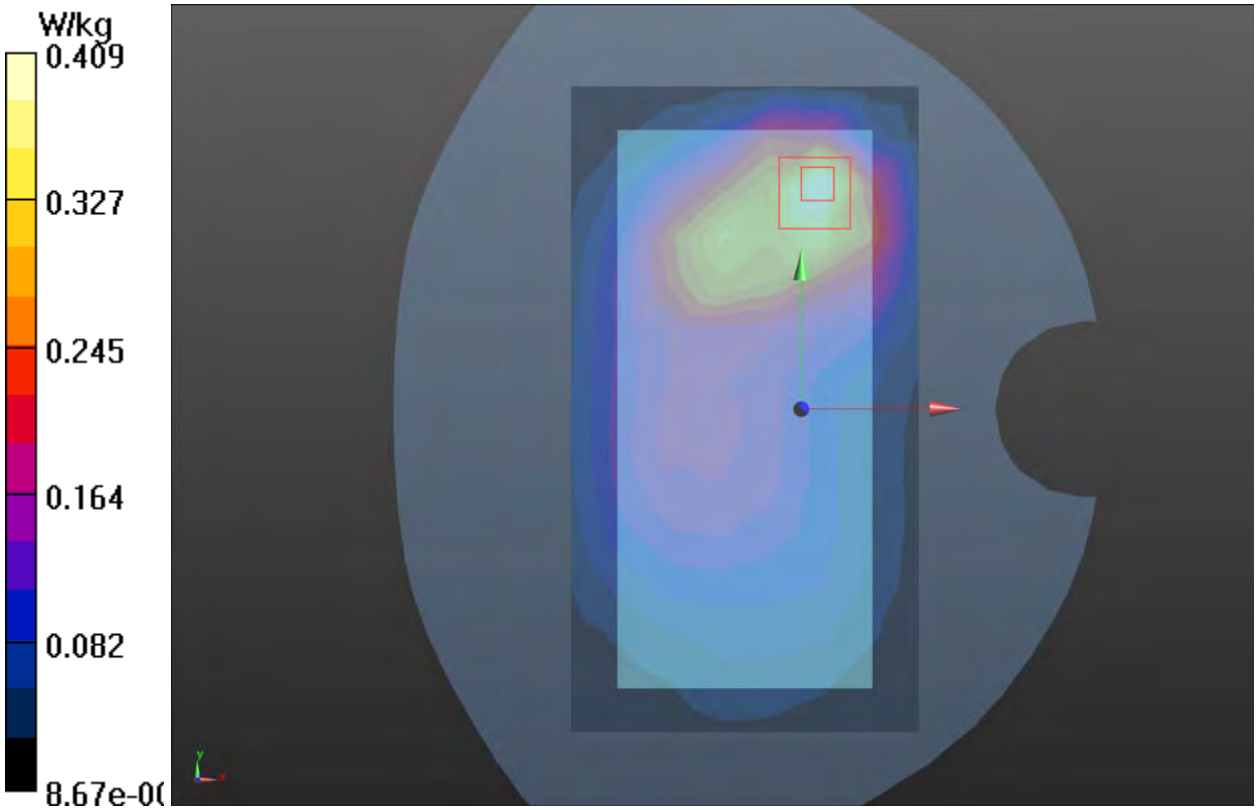
Peak SAR (extrapolated) = 0.630 W/kg

SAR(1 g) = 0.394 W/kg; SAR(10 g) = 0.231 W/kg

Smallest distance from peaks to all points 3 dB below = 11.5 mm

Ratio of SAR at M2 to SAR at M1 = 60.1%

Maximum value of SAR (measured) = 0.409 W/kg



Plot 62 LTE Band 38 1RB Top Edge High (Distance 10mm)

Date: 2022/7/2

Communication System: UID 0, LTE (0); Frequency: 2610 MHz;Duty Cycle: 1:1.58

Medium parameters used: f = 2610 MHz; σ = 2.027 S/m; ε_r = 37.056; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.25, 7.25, 7.25); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

Top Edge High/Area Scan (5x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.821 W/kg

Top Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.660 V/m; Power Drift = 0.15 dB

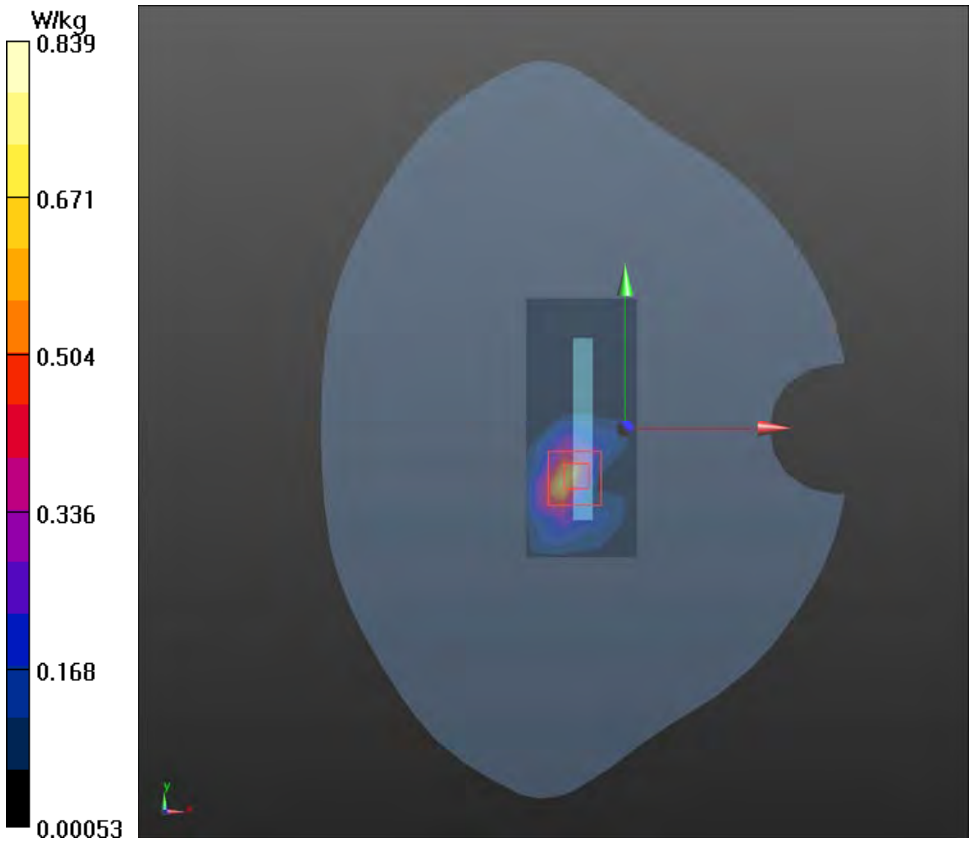
Peak SAR (extrapolated) = 1.86 W/kg

SAR(1 g) = 0.814 W/kg; SAR(10 g) = 0.339 W/kg

Smallest distance from peaks to all points 3 dB below = 13.2 mm

Ratio of SAR at M2 to SAR at M1 =52.1%

Maximum value of SAR (measured) = 0.839 W/kg



Plot 63 LTE Band 41 50%RB Top Edge High (Distance 10mm)

Date: 2022/7/3

Communication System: UID 0, LTE (0); Frequency: 2593 MHz;Duty Cycle: 1:1.58

Medium parameters used: f = 2593 MHz; σ = 1.984 S/m; ε_r = 37.196; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.25, 7.25, 7.25); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

Top Edge High/Area Scan (5x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.854 W/kg

Top Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.247 V/m; Power Drift = 0.087 dB

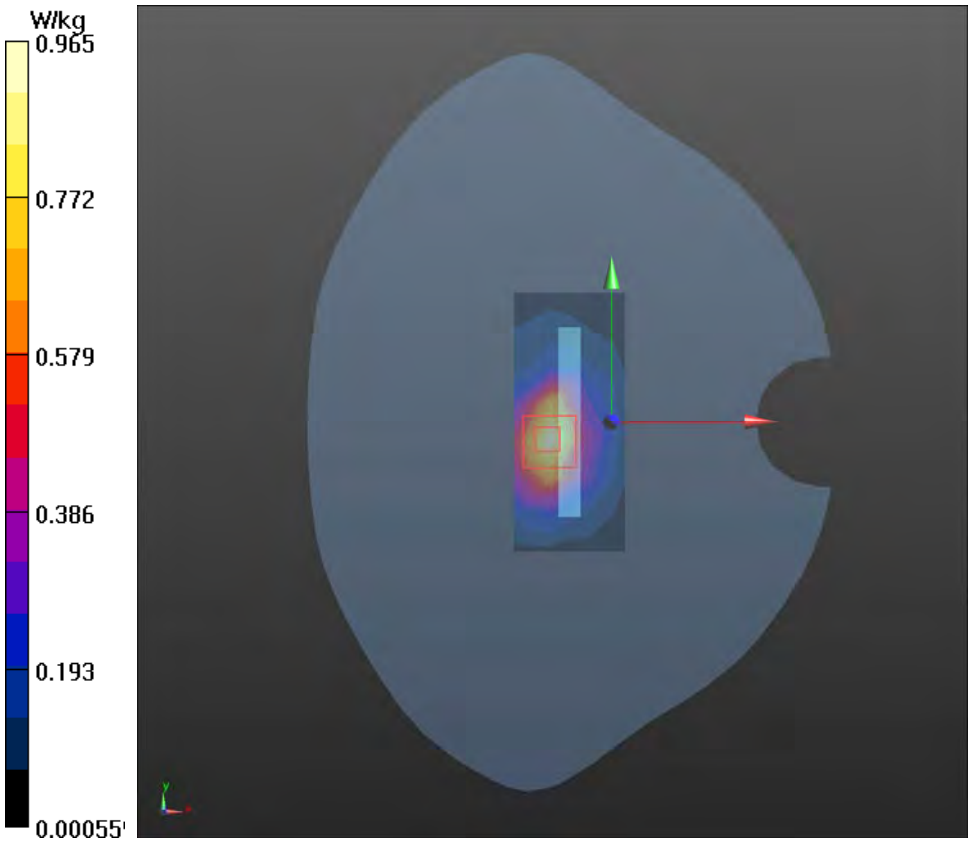
Peak SAR (extrapolated) = 1.91 W/kg

SAR(1 g) = 0.878 W/kg; SAR(10 g) = 0.386 W/kg

Smallest distance from peaks to all points 3 dB below = 12.4 mm

Ratio of SAR at M2 to SAR at M1 =52.1%

Maximum value of SAR (measured) = 0.965 W/kg

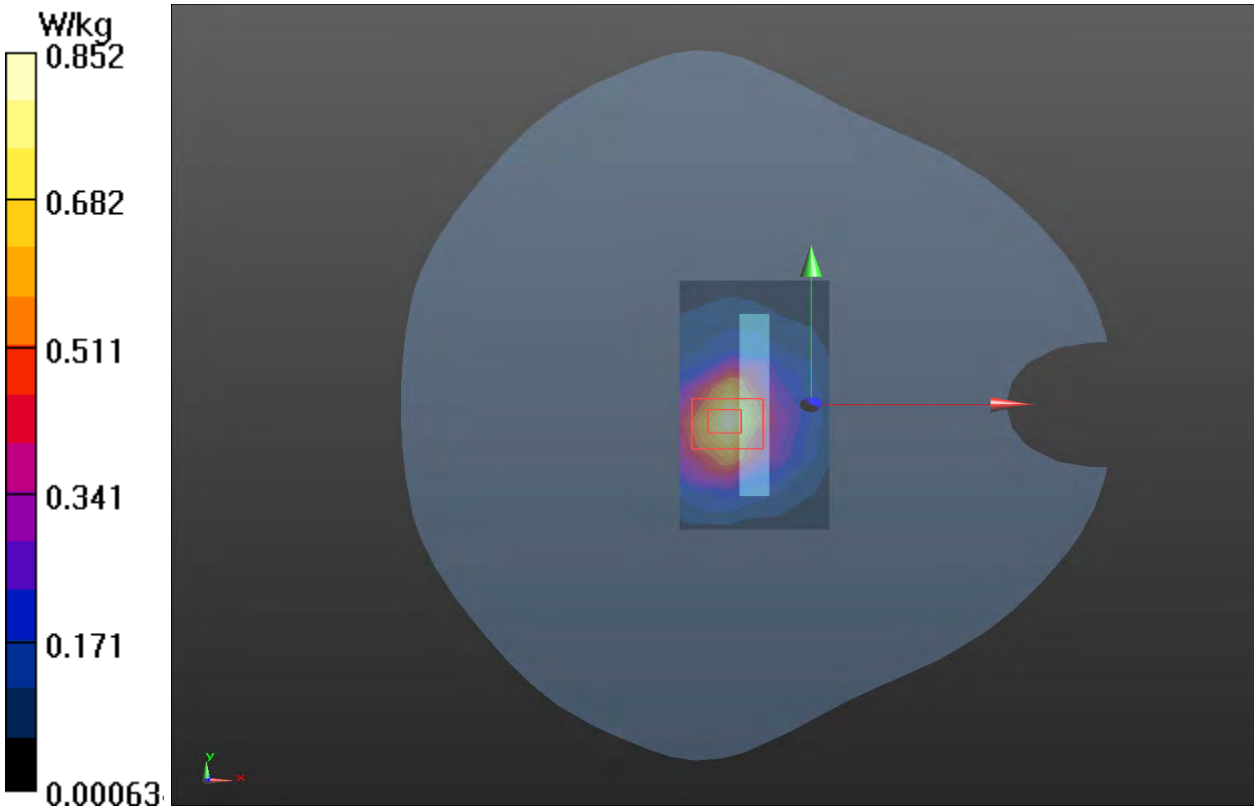


Plot 64 LTE Band 66 1RB Top Edge Middle (Distance 10mm)

Date: 2022/12/3
Communication System: UID 0, LTE (0); Frequency: 1745 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1745 MHz; σ = 1.311 S/m; ε_r = 39.407; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(8.25, 8.25, 8.25); Calibrated: 2022/7/8
Electronics: DAE4 SN1291; Calibrated: 2022/3/24
Phantom: SAM 2; Type: QD 000 P40 CD;
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Top Edge Middle/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.851 W/kg

Top Edge Middle /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.73 V/m; Power Drift = 0.048 dB
Peak SAR (extrapolated) = 1.52 W/kg
SAR(1 g) = 0.843 W/kg; SAR(10 g) = 0.419 W/kg
Smallest distance from peaks to all points 3 dB below = 9.4 mm
Ratio of SAR at M2 to SAR at M1 = 49.5%
Maximum value of SAR (measured) = 0.852 W/kg



Plot 65 802.11b Back Side Low (Distance 10mm)

Date: 2022/6/28

Communication System: UID 0, 802.11b (0); Frequency: 2412 MHz;Duty Cycle: 1:1.02

Medium parameters used: f = 2412 MHz; σ = 1.801 S/m; ε_r = 37.737; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.50, 7.50, 7.50); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

Back Side Low/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.274 W/kg

Back Side Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.335 V/m; Power Drift = 0.011 dB

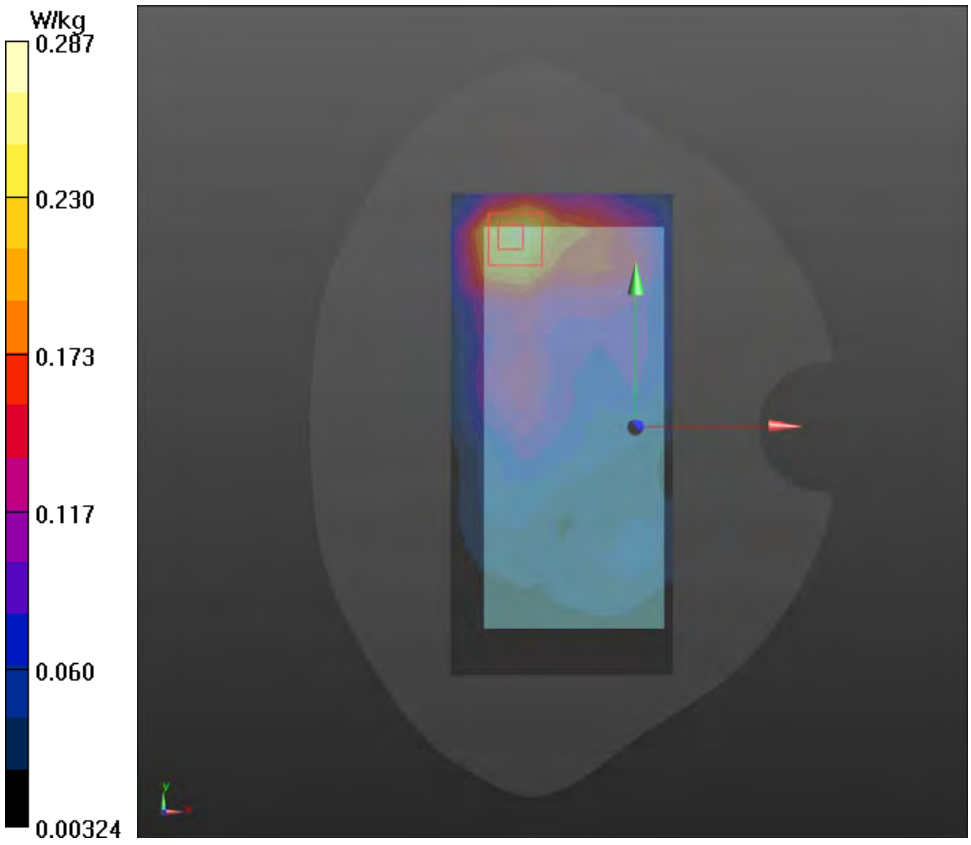
Peak SAR (extrapolated) = 0.511 W/kg

SAR(1 g) = 0.256 W/kg; SAR(10 g) = 0.125 W/kg

Smallest distance from peaks to all points 3 dB below = 15.4mm

Ratio of SAR at M2 to SAR at M1 = 42.1%

Maximum value of SAR (measured) = 0.287 W/kg



Plot 66 Bluetooth Back Side Low (Distance 10mm)

Date: 2022/12/5

Communication System: UID 0, BT (0); Frequency: 2402 MHz;Duty Cycle: 1:1.32

Medium parameters used: f = 2402 MHz; σ = 1.789 S/m; ε_r = 37.77; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.46, 7.46, 7.46); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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

Back Side Low/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.030 W/kg

Back Side Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=2mm, dy=2mm, dz=5mm

Reference Value = 1.539 V/m; Power Drift = 0.095 dB

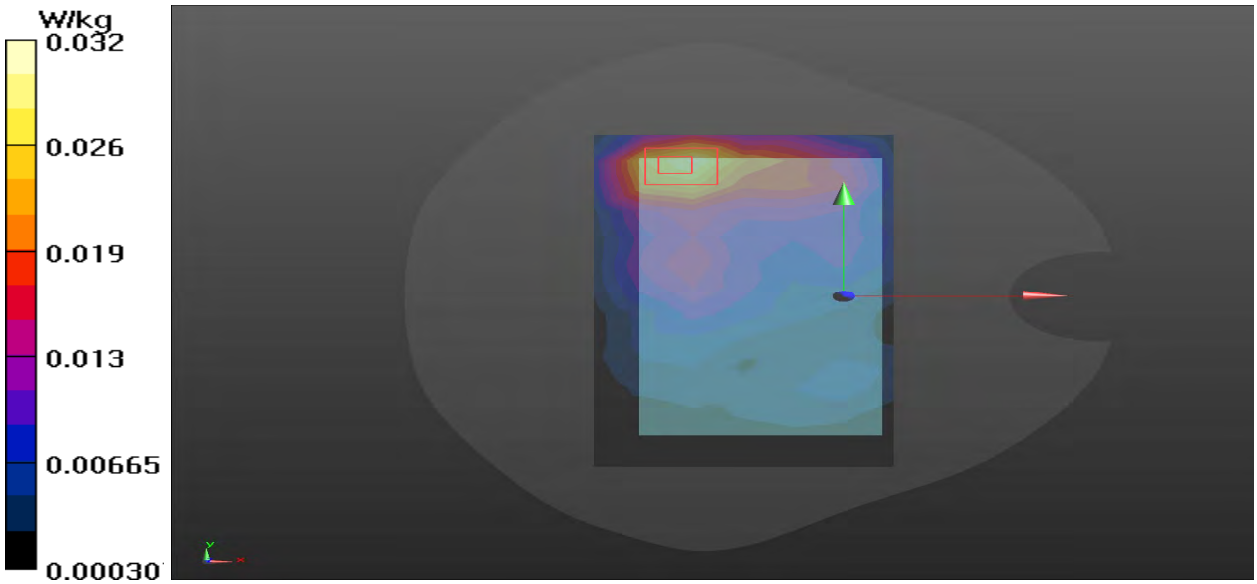
Peak SAR (extrapolated) = 0.051 W/kg

SAR(1 g) = 0.026 W/kg; SAR(10 g) = 0.013 W/kg

Smallest distance from peaks to all points 3 dB below = 9.8 mm

Ratio of SAR at M2 to SAR at M1 = 42.1%

Maximum value of SAR (measured) = 0.032 W/kg

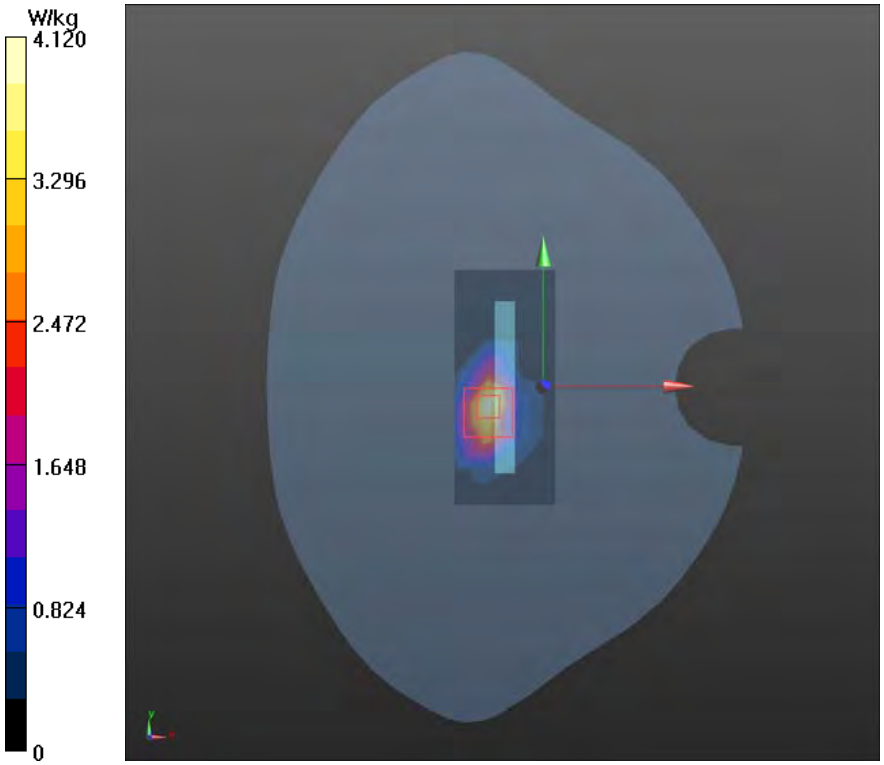


Plot 67 WCDMA Band II Bottom Edge Low (Distance 0mm)

Date: 2022/6/22
Communication System: UID 0, WCDMA (0); Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.4 S/m; ε_r = 39.04; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.88, 7.88, 7.88); Calibrated: 2021/8/12
Electronics: DAE4 SN1692; Calibrated: 2021/10/4
Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666
Smallest distance from peaks to all points 3 dB below = 15.2 mm
Ratio of SAR at M2 to SAR at M1 = 56.7%
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Low/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 4.02 W/kg

Bottom Edge Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.04 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 9.0 W/kg
SAR(1 g) = 4.01 W/kg; SAR(10 g) = 1.88 W/kg
Smallest distance from peaks to all points 3 dB below = 15.2 mm
Ratio of SAR at M2 to SAR at M1 = 56.7%
Maximum value of SAR (measured) = 4.12 W/kg

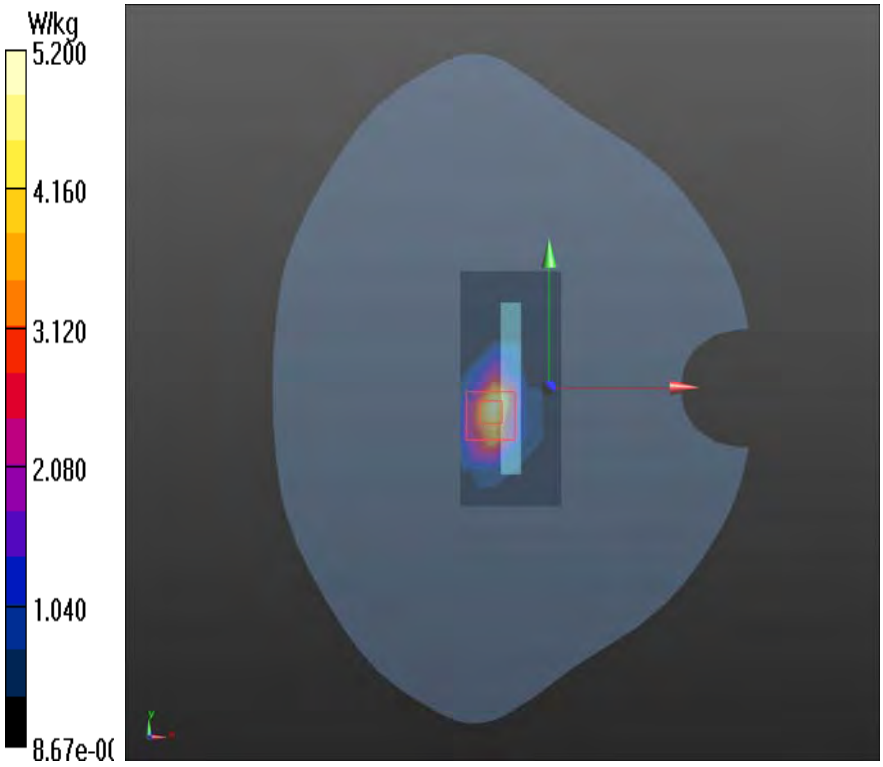


Plot 68 WCDMA Band IV Bottom Edge Middle (Distance 0mm)

Date: 2022/6/24
Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1732.6 MHz; σ = 1.312 S/m; ε_r = 39.365; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(8.22, 8.22, 8.22); Calibrated: 2021/8/12
Electronics: DAE4 SN1692; Calibrated: 2021/10/4
Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Middle/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 4.75 W/kg

Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 49.77 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 8.3 W/kg
SAR(1 g) = 4.45 W/kg; SAR(10 g) = 2.02 W/kg
Smallest distance from peaks to all points 3 dB below = 13.5 mm
Ratio of SAR at M2 to SAR at M1 = 33.5%
Maximum value of SAR (measured) = 5.2 W/kg



Plot 69 LTE Band 2 1RB Bottom Edge Low (Distance 0mm)

Date: 2022/6/22

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

Medium parameters used: f = 1860 MHz; σ = 1.407 S/m; ε_r = 39.071; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.88, 7.88, 7.88); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

Bottom Edge Low/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 4.03 W/kg

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

Reference Value = 61.57 V/m; Power Drift = 0.047 dB

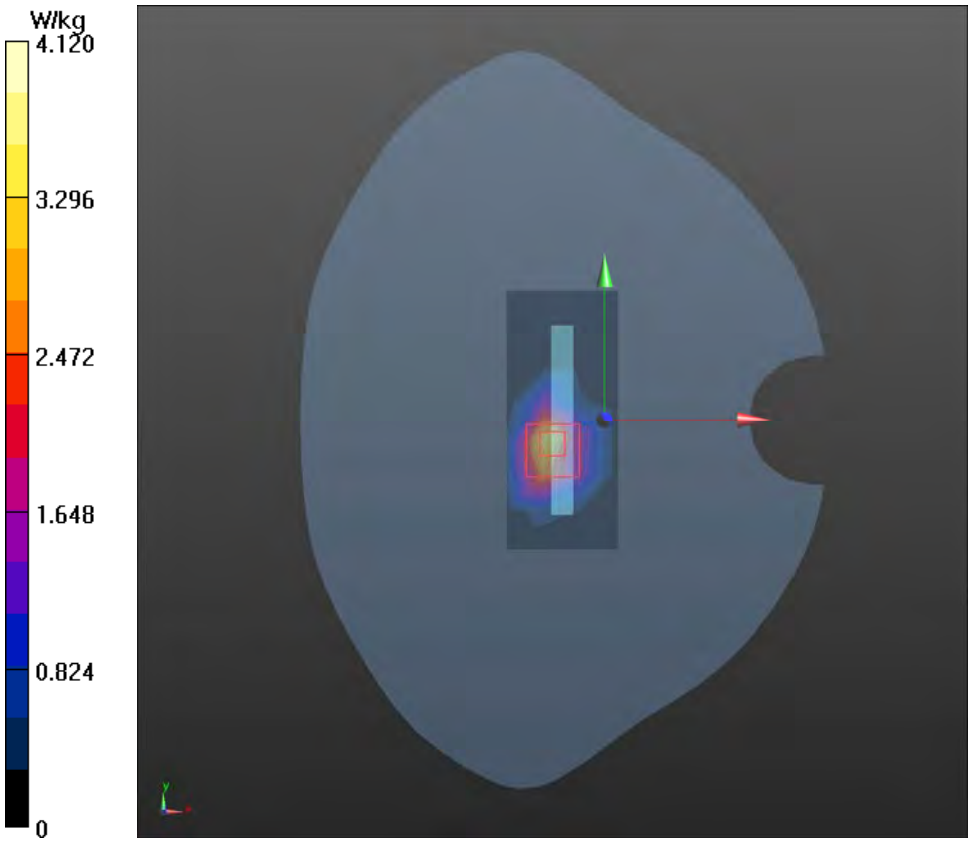
Peak SAR (extrapolated) = 6.7 W/kg

SAR(1 g) = 3.98 W/kg; SAR(10 g) = 1.84 W/kg

Smallest distance from peaks to all points 3 dB below = 14.8 mm

Ratio of SAR at M2 to SAR at M1 = 55.1%

Maximum value of SAR (measured) = 4.12 W/kg



Plot 70 LTE Band 4 1RB Bottom Edge Middle (Distance 0mm)

Date: 2022/6/24

Communication System: UID 0, LTE (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.313 S/m; ε_r = 39.384; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(8.22, 8.22, 8.22); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

Bottom Edge Middle/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 4.64 W/kg

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

Reference Value = 69.43 V/m; Power Drift = -0.027 dB

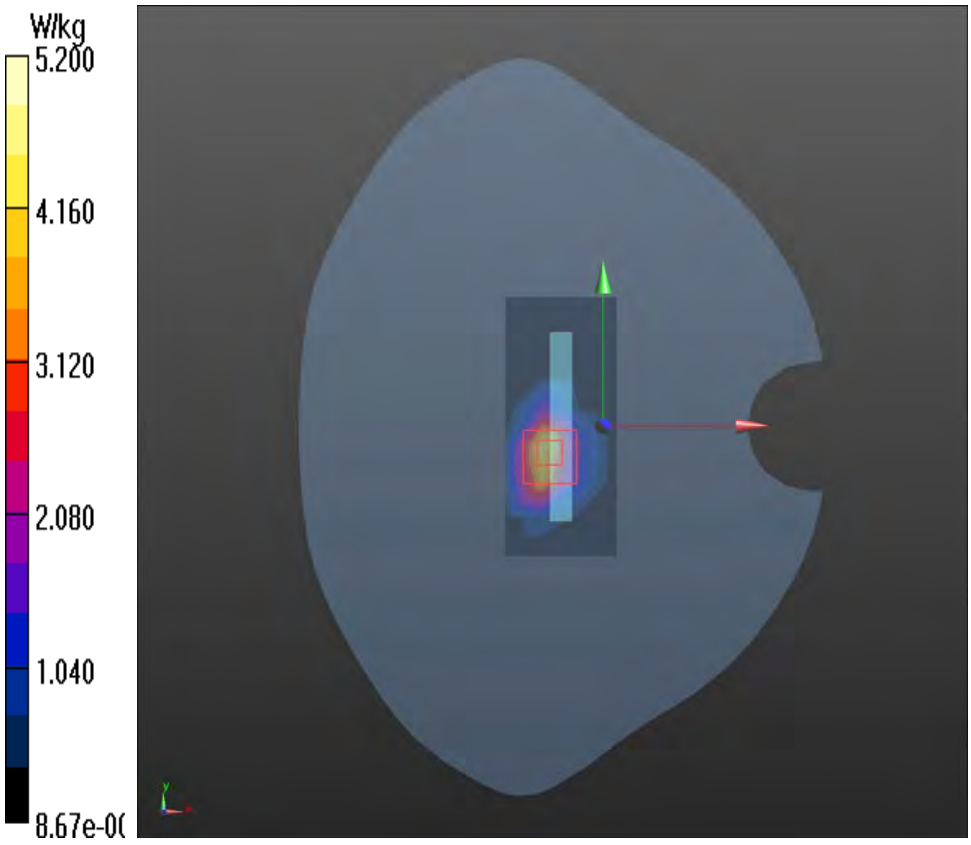
Peak SAR (extrapolated) = 7.9 W/kg

SAR(1 g) = 3.86 W/kg; SAR(10 g) = 1.76 W/kg

Smallest distance from peaks to all points 3 dB below = 13.7mm

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

Maximum value of SAR (measured) = 5.2 W/kg



Plot 71 LTE Band 7 1RB Top Edge High (Distance 0mm)

Date: 2022/7/4

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

Medium parameters used: f = 2560 MHz; σ = 1.971 S/m; ε_r = 37.231; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.25, 7.25, 7.25); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

Top Edge High/Area Scan (5x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 3.73 W/kg

Top Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.58 V/m; Power Drift = 0.027 dB

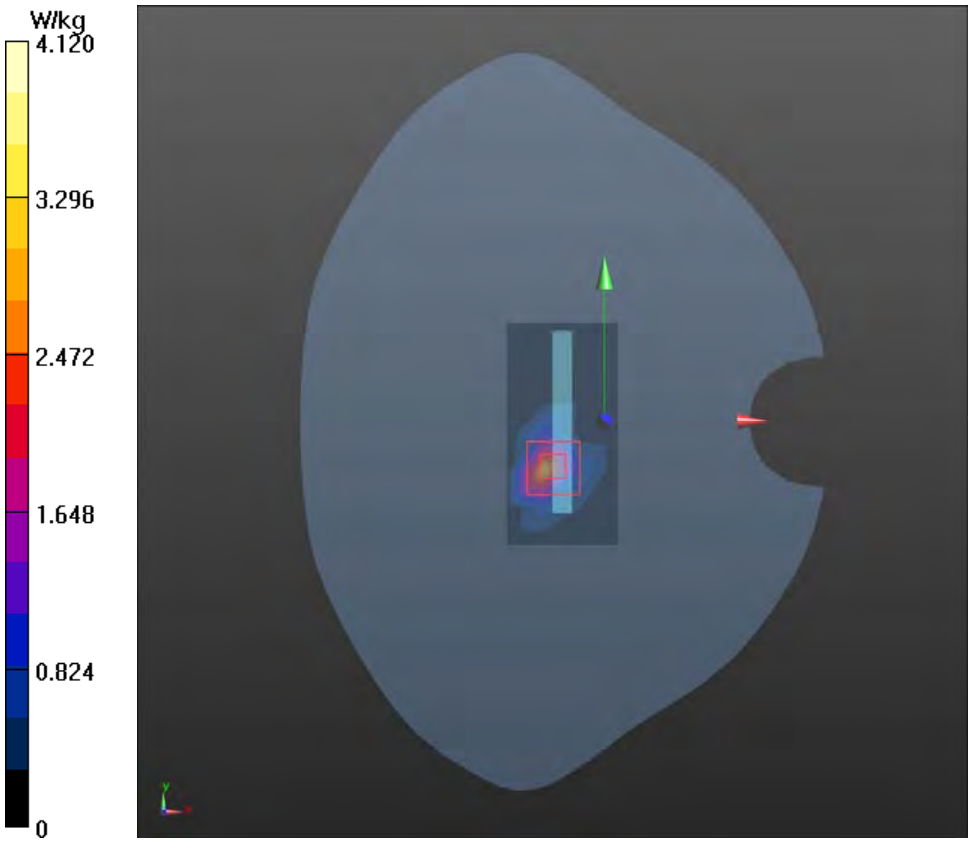
Peak SAR (extrapolated) = 9.26 W/kg

SAR(1 g) = 3.09 W/kg; SAR(10 g) = 1.26 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 64.1%

Maximum value of SAR (measured) = 4.12 W/kg



Plot 72 LTE Band 38 1RB Top Edge High (Distance 0mm)

Date: 2022/7/4

Communication System: UID 0, LTE (0); Frequency: 2610 MHz;Duty Cycle: 1:1.58

Medium parameters used: f = 2610 MHz; σ = 2.027 S/m; ε_r = 37.056; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.25, 7.25, 7.25); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

Top Edge High/Area Scan (5x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 3.25 W/kg

Top Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.30 V/m; Power Drift = 0.04 dB

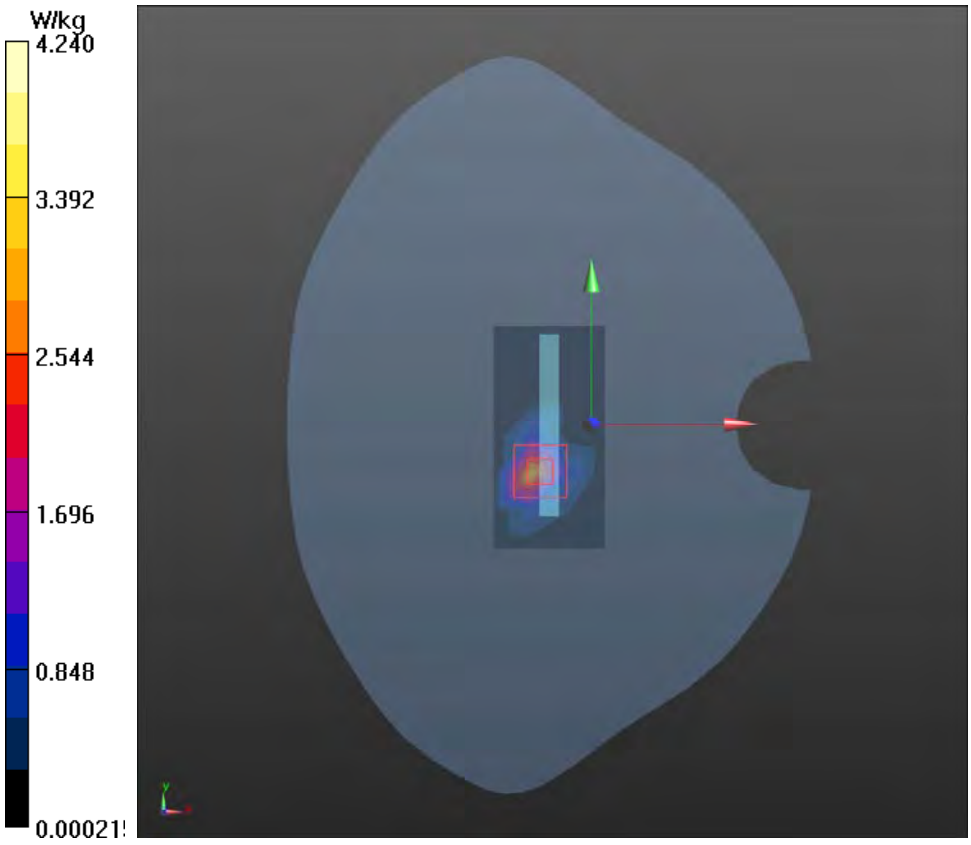
Peak SAR (extrapolated) = 9.85 W/kg

SAR(1 g) = 3.5 W/kg; SAR(10 g) = 1.2 W/kg

Smallest distance from peaks to all points 3 dB below = 12.5 mm

Ratio of SAR at M2 to SAR at M1 = 51.4%

Maximum value of SAR (measured) = 4.24 W/kg



Plot 73 LTE Band 41 1RB Top Edge High (Distance 0mm)

Date: 2022/12/5

Communication System: UID 0, LTE (0); Frequency: 2593 MHz;Duty Cycle: 1:1.58

Medium parameters used: f = 2593 MHz; σ = 2.063 S/m; ε_r = 36.918; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.27, 7.27, 7.27); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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

Top Edge High/Area Scan (5x9x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 3.82 W/kg

Top Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.57 V/m; Power Drift = 0.05 dB

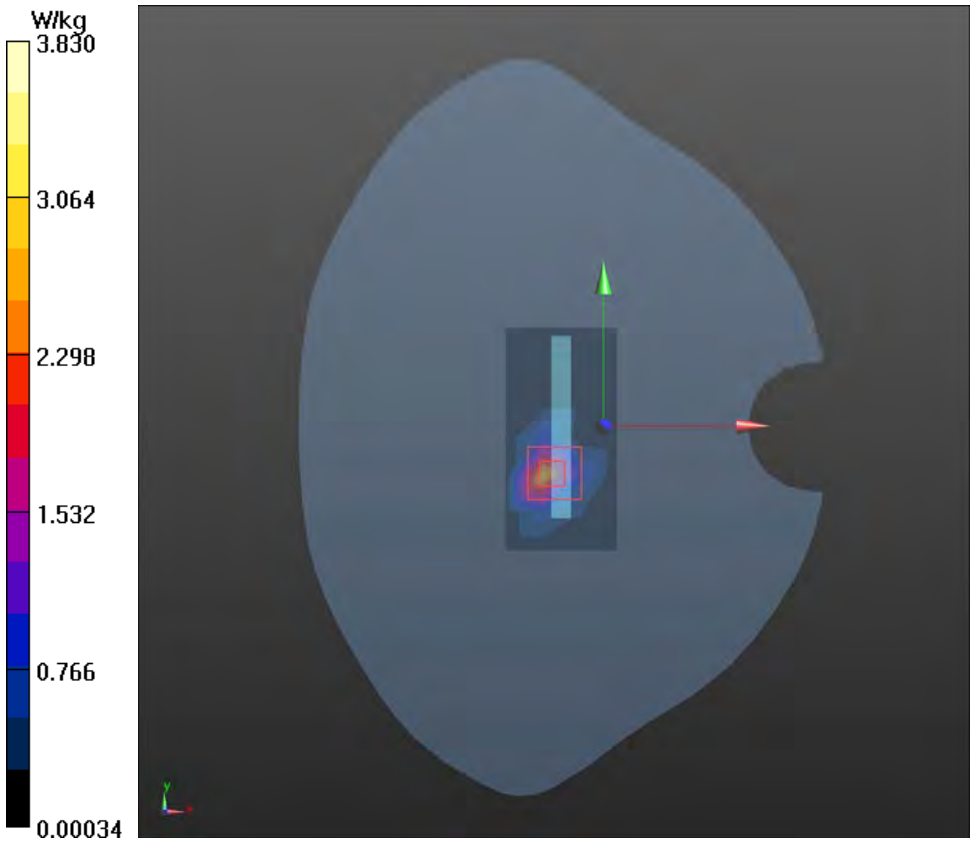
Peak SAR (extrapolated) = 9.49 W/kg

SAR(1 g) = 3.39 W/kg; SAR(10 g) = 1.28 W/kg

Smallest distance from peaks to all points 3 dB below = 17.4 mm

Ratio of SAR at M2 to SAR at M1 = 55.2%

Maximum value of SAR (measured) = 3.83 W/kg



Plot 74 WCDMA Band II Front Side Middle (Distance 10mm)

Date: 2022/6/30

Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.88, 7.88, 7.88); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

Front Side Middle/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.486 W/kg

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

Reference Value = 7.596 V/m; Power Drift = 0.043 dB

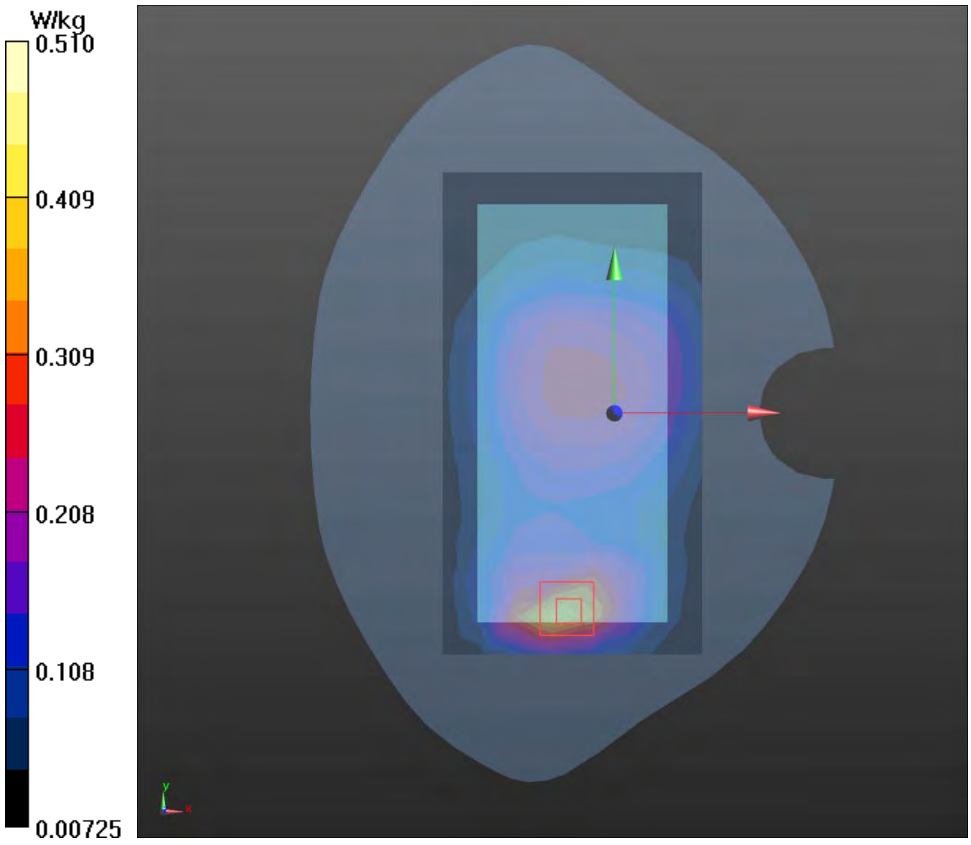
Peak SAR (extrapolated) = 0.711 W/kg

SAR(1 g) = 0.476 W/kg; SAR(10 g) = 0.279 W/kg

Smallest distance from peaks to all points 3 dB below = 12.6mm

Ratio of SAR at M2 to SAR at M1 = 54.2%

Maximum value of SAR (measured) = 0.510 W/kg



Plot 75 WCDMA Band IV Front Side Middle (Distance 10mm)

Date: 2022/6/29

Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1732.6 MHz; σ = 1.312 S/m; ε_r = 39.365; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(8.22, 8.22, 8.22); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

Front Side Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.717 W/kg

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

Reference Value = 10.48 V/m; Power Drift = -0.1 dB

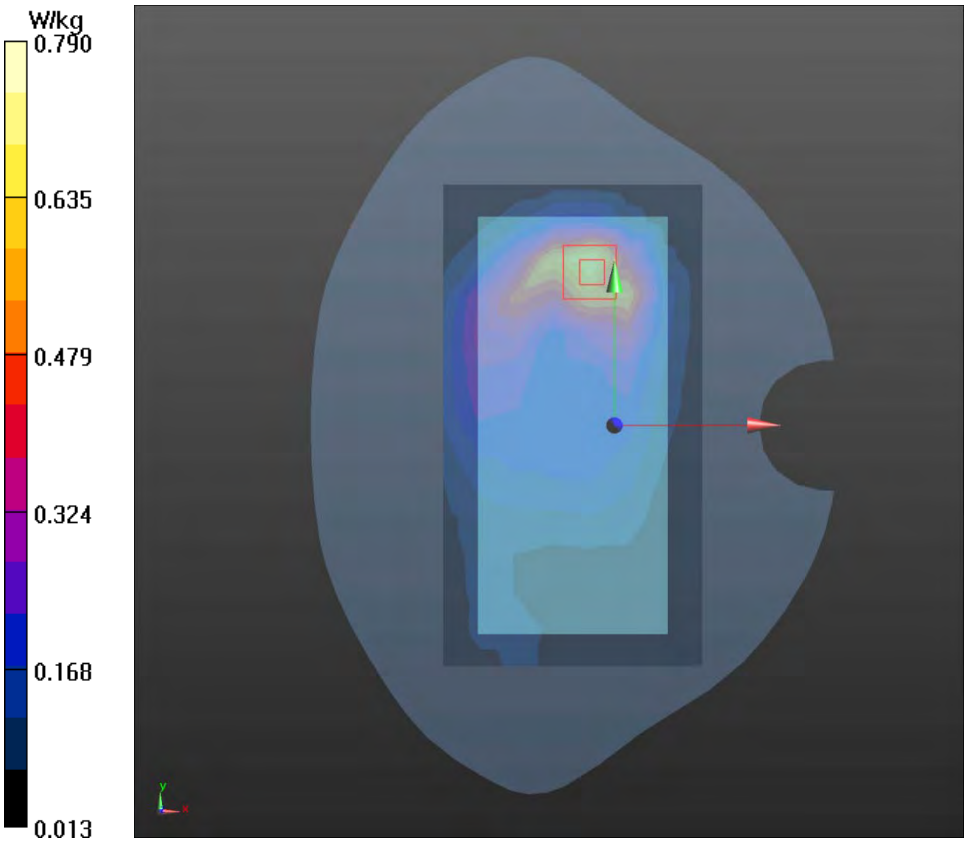
Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.684 W/kg; SAR(10 g) = 0.359 W/kg

Smallest distance from peaks to all points 3 dB below = 15.4 mm

Ratio of SAR at M2 to SAR at M1 = 62.1%

Maximum value of SAR (measured) = 0.790 W/kg



Plot 76 LTE Band 2 1RB Front Side High (Distance 10mm)

Date: 2022/6/21

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

Medium parameters used: f = 1900 MHz; σ = 1.434 S/m; ε_r = 38.861; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.88, 7.88, 7.88); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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
dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.51 W/kg

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

Reference Value = 11.04 V/m; Power Drift = 0.012 dB

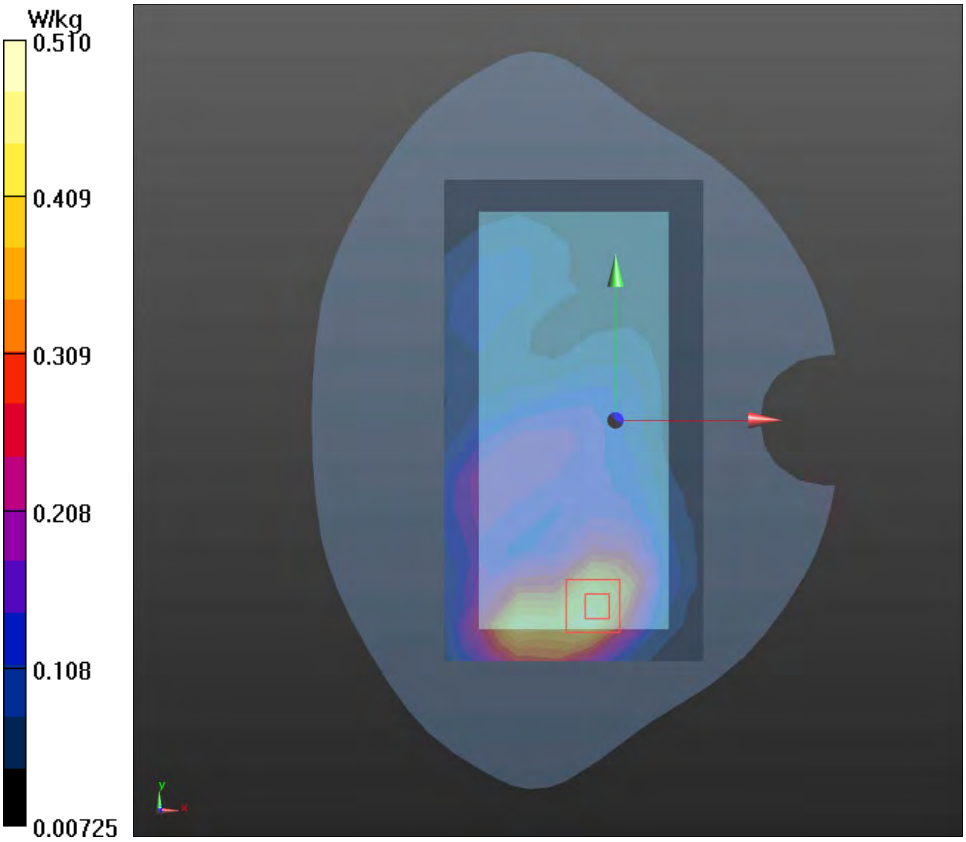
Peak SAR (extrapolated) = 0.798 W/kg

SAR(1 g) = 0.509 W/kg; SAR(10 g) = 0.299 W/kg

Smallest distance from peaks to all points 3 dB below = 15.9 mm

Ratio of SAR at M2 to SAR at M1 = 54.1%

Maximum value of SAR (measured) = 0.51W/kg



Plot 77 LTE Band 5 1RB Front Side High (Distance 10mm)

Date: 2022/6/25

Communication System: UID 0, LTE (0); Frequency: 844 MHz;Duty Cycle: 1:1

Medium parameters used: f = 844 MHz; σ = 0.958 S/m; ε_r = 39.728; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.30, 9.30, 9.30); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; 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) = 0.615 W/kg

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

Reference Value = 16.25 V/m; Power Drift = -0.101 dB

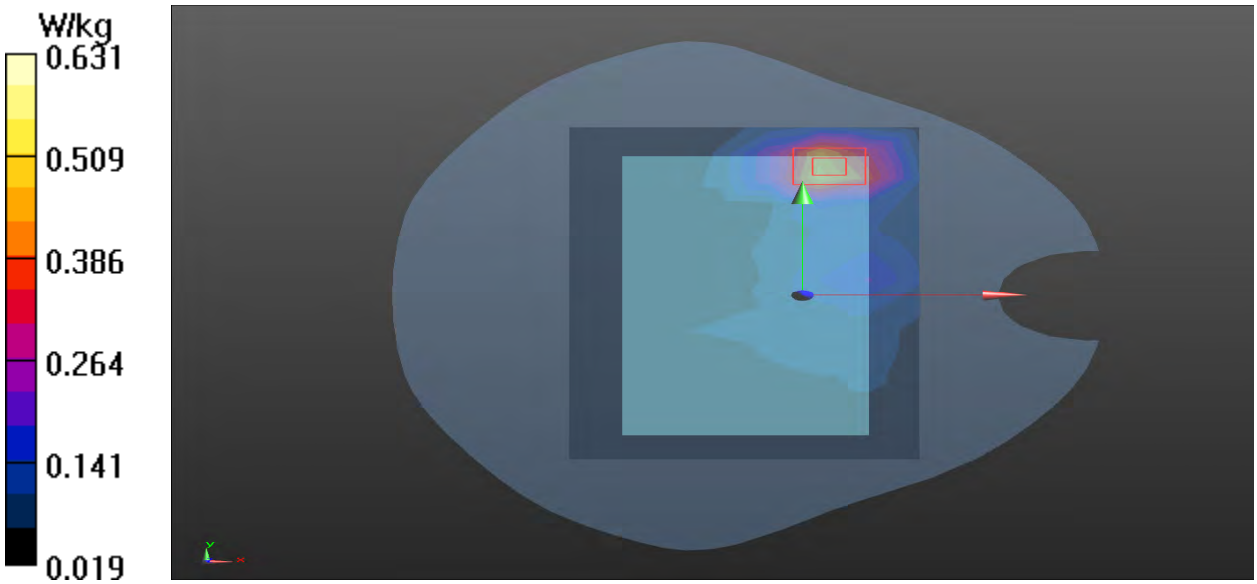
Peak SAR (extrapolated) = 0.969 W/kg

SAR(1 g) = 0.471 W/kg; SAR(10 g) = 0.245 W/kg

Smallest distance from peaks to all points 3 dB below =14.2 mm

Ratio of SAR at M2 to SAR at M1 = 35.1%

Maximum value of SAR (measured) = 0.631 W/kg



Plot 78 LTE Band 26 1RB Front Side High (Distance 10mm)

Date: 2022/12/2

Communication System: UID 0, LTE (0); Frequency: 841.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 841.5 MHz; σ = 0.941 S/m; ε_r = 41.844; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.34, 9.34, 9.34); Calibrated: 2022/7/8

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

Phantom: SAM 2; Type: QD 000 P40 CD;

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) = 0.282 W/kg

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

Reference Value = 14.22 V/m; Power Drift = 0.051 dB

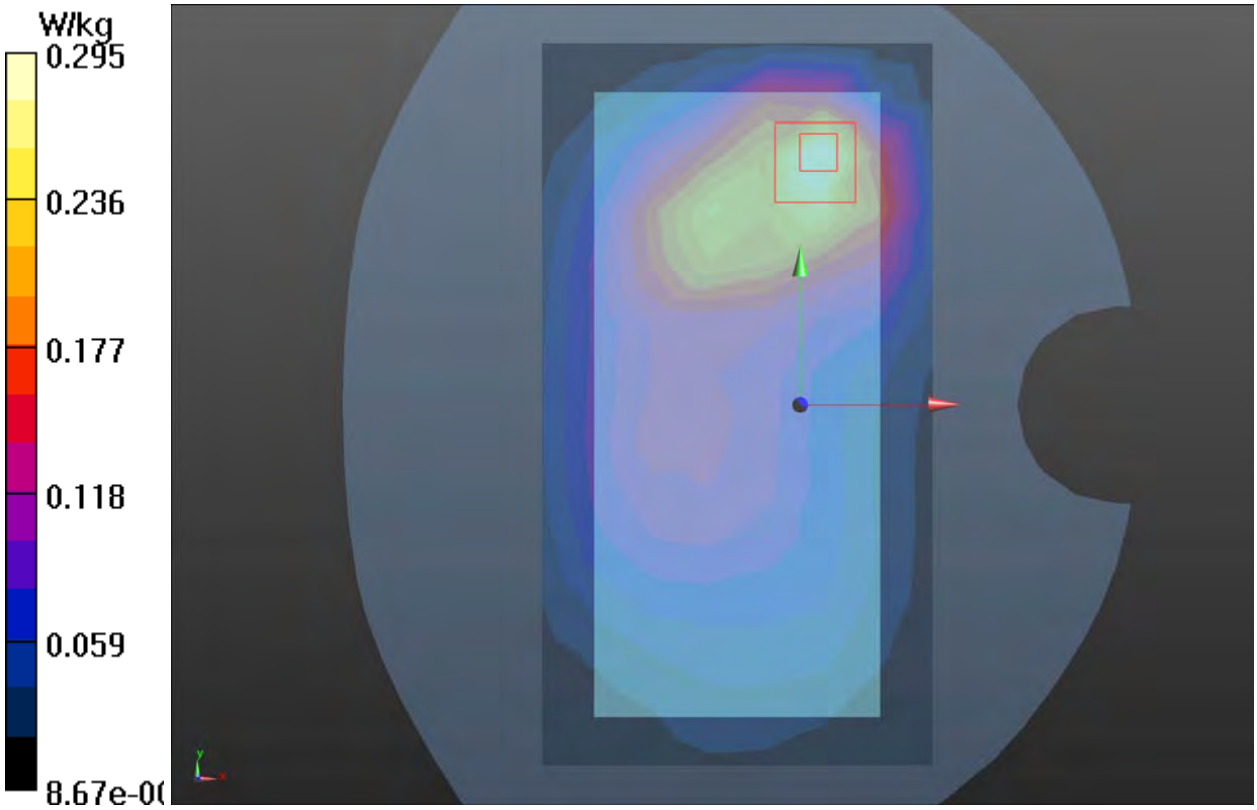
Peak SAR (extrapolated) = 0.530 W/kg

SAR(1 g) = 0.272 W/kg; SAR(10 g) = 0.178 W/kg

Smallest distance from peaks to all points 3 dB below = 9.5 mm

Ratio of SAR at M2 to SAR at M1 = 50.1%

Maximum value of SAR (measured) = 0.295 W/kg



Plot 79 LTE Band 41 1RB Front Side Middle (Distance 10mm)

Date: 2022/7/1

Communication System: UID 0, LTE (0); Frequency: 2593MHz;Duty Cycle: 1:1.58

Medium parameters used: f = 2593MHz; σ = 2.063 S/m; ε_r = 36.918; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.25, 7.25, 7.25); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

Front Side Middle/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.505 W/kg

Front Side Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.360 V/m; Power Drift = 0.06 dB

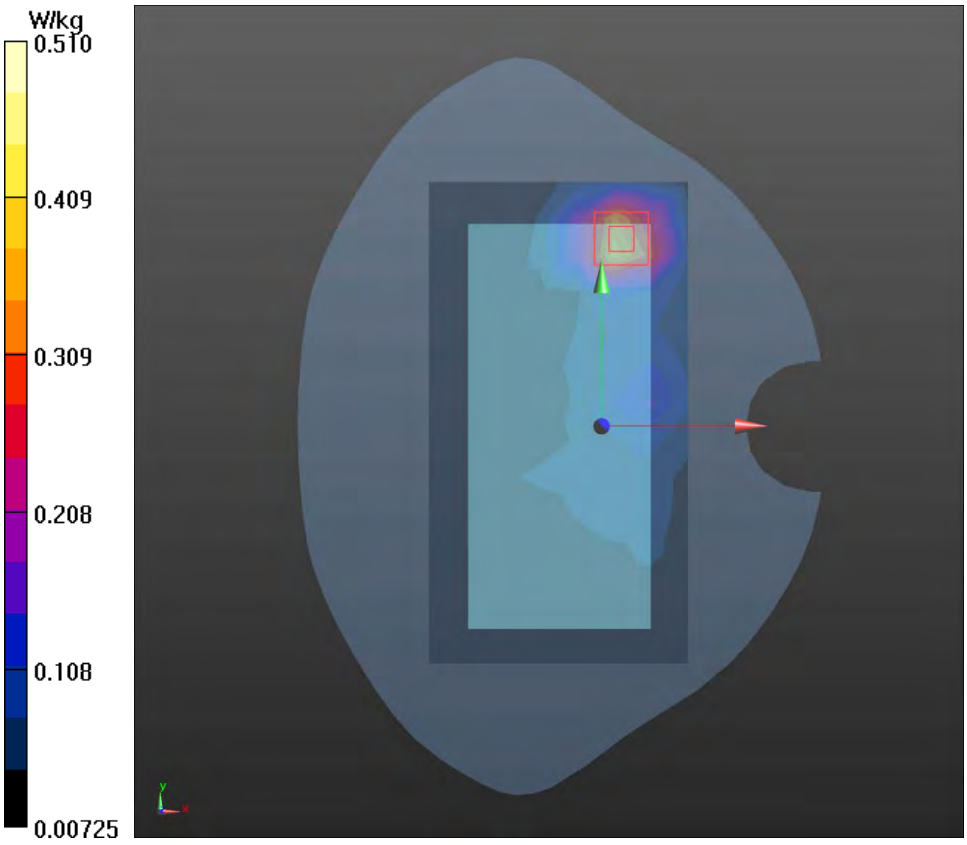
Peak SAR (extrapolated) = 1.46 W/kg

SAR(1 g) = 0.497 W/kg; SAR(10 g) = 0.245 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 43.1%

Maximum value of SAR (measured) = 0.510 W/kg



ANNEX D: Probe Calibration Certificate (SN: 3677)

In Collaboration with
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校准
CALIBRATION
CNAS L0570

Client TA(Shanghai) Certificate No: Z21-60285

CALIBRATION CERTIFICATE

Object	EX3DV4 - SN : 3677
Calibration Procedure(s)	FF-Z11-004-02 Calibration Procedures for Dosimetric E-field Probes
Calibration date:	August 12, 2021

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	101919	15-Jun-21(CTTL, No.J21X04466)	Jun-22
Power sensor NRP-Z91	101547	15-Jun-21(CTTL, No.J21X04466)	Jun-22
Power sensor NRP-Z91	101548	15-Jun-21(CTTL, No.J21X04466)	Jun-22
Reference 10dBAttenuator	18N50W-10dB	10-Feb-20(CTTL, No.J20X00525)	Feb-22
Reference 20dBAttenuator	18N50W-20dB	10-Feb-20(CTTL, No.J20X00526)	Feb-22
Reference Probe EX3DV4	SN 3617	27-Jan-21(SPEAG, No.EX3-3617_Jan21)	Jan-22
DAE4	SN 1556	15-Jan-21(SPEAG, No.DAE4-1556_Jan21)	Jan-22
Secondary Standards	**ID #**	**Cal Date(Calibrated by, Certificate No.)**	**Scheduled Calibration**
SignalGenerator MG3700A	6201052605	16-Jun-21(CTTL, No.J21X04467)	Jun-22
Network Analyzer E5071C	MY46110673	21-Jan-21(CTTL, No.J20X00515)	Jan-22

	Name	Function	Signature
Calibrated by:	Yu Zongying	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: August 14, 2021

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: Z21-60285 Page 1 of 9

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Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A,B,C,D	modulation dependent linearization parameters
Polarization Φ	Φ rotation around probe axis
Polarization θ	θ rotation around an axis that is in the plane normal to probe axis (at measurement center), i θ=0 is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013

b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016

c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010

d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- *NORMx,y,z:* Assessed for E-field polarization θ=0 (f≤900MHz in TEM-cell; f>1800MHz: waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not effect the E^2-field uncertainty inside TSL (see below ConvF).
- *NORM(f)x,y,z = NORMx,y,z* frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- *DCPx,y,z:* DCP are numerical linearization parameters assessed based on the data of power sweep (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics.
- *Ax,y,z; Bx,y,z; Cx,y,z;VRx,y,z:*A,B,C are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- *ConvF and Boundary Effect Parameters:* Assessed in flat phantom using E-field (or Temperature Transfer Standard for f≤800MHz) and inside waveguide using analytical field distributions based on power measurements for f >800MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty valued are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from±50MHz to±100MHz.
- *Spherical isotropy (3D deviation from isotropy):* in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset:* The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- *Connector Angle:* The angle is assessed using the information gained by determining the *NORMx* (no uncertainty required).

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DASY/EASY – Parameters of Probe: EX3DV4 – SN:3677

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (*k*=2)
Norm(μV/(V/m)²)[A]	0.41	0.46	0.40	±10.0%
DCP(mV)[B]	99.3	101.9	101.5	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	C	D dB	VR mV	Unc[E] (*k*=2)
0	CW	X	0.0	0.0	1.0	0.00	158.2	±2.0%
		Y	0.0	0.0	1.0		170.4	
		Z	0.0	0.0	1.0		156.9	

The reported uncertainty of measurement is stated as the standard uncertainty of Measurement multiplied by the coverage factor *k*=2, which for a normal distribution Corresponds to a coverage probability of approximately 95%.

[A] The uncertainties of Norm X, Y, Z do not affect the E^2-field uncertainty inside TSL (see Page 4).
[B] Numerical linearization parameter: uncertainty not required.
[E] Uncertainly is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

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DASY/EASY – Parameters of Probe: EX3DV4 – SN:3677

Calibration Parameter Determined in Head Tissue Simulating Media

f [MHz][C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha[G]	Depth[G] (mm)	Unct. (k=2)
750	41.9	0.89	9.64	9.64	9.64	0.40	0.80	±12.1%
835	41.5	0.90	9.30	9.30	9.30	0.16	1.29	±12.1%
1750	40.1	1.37	8.22	8.22	8.22	0.24	1.00	±12.1%
1900	40.0	1.40	7.88	7.88	7.88	0.24	1.10	±12.1%
2000	40.0	1.40	7.96	7.96	7.96	0.21	1.17	±12.1%
2300	39.5	1.67	7.67	7.67	7.67	0.66	0.68	±12.1%
2450	39.2	1.80	7.50	7.50	7.50	0.66	0.70	±12.1%
2600	39.0	1.96	7.25	7.25	7.25	0.62	0.73	±12.1%
3300	38.2	2.71	7.00	7.00	7.00	0.45	0.94	±13.3%
3500	37.9	2.91	6.92	6.92	6.92	0.45	0.98	±13.3%
3700	37.7	3.12	6.71	6.71	6.71	0.45	1.04	±13.3%
3900	37.5	3.32	6.62	6.62	6.62	0.40	1.25	±13.3%
4100	37.2	3.53	6.66	6.66	6.66	0.30	1.38	±13.3%
4400	36.9	3.84	6.43	6.43	6.43	0.35	1.35	±13.3%
4600	36.7	4.04	6.35	6.35	6.35	0.50	1.13	±13.3%
4800	36.4	4.25	6.30	6.30	6.30	0.45	1.25	±13.3%
4950	36.3	4.40	6.13	6.13	6.13	0.45	1.25	±13.3%
5250	35.9	4.71	5.45	5.45	5.45	0.50	1.30	±13.3%
5600	35.5	5.07	5.00	5.00	5.00	0.60	1.15	±13.3%
5750	35.4	5.22	5.04	5.04	5.04	0.55	1.26	±13.3%

[C] Frequency validity above 300 MHz of ±100MHz only applies for DASY v4.4 and higher (Page 2), else it is restricted to ±50MHz. The uncertainty is the RSS of ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

[F] At frequency below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ±10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ±5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for the frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

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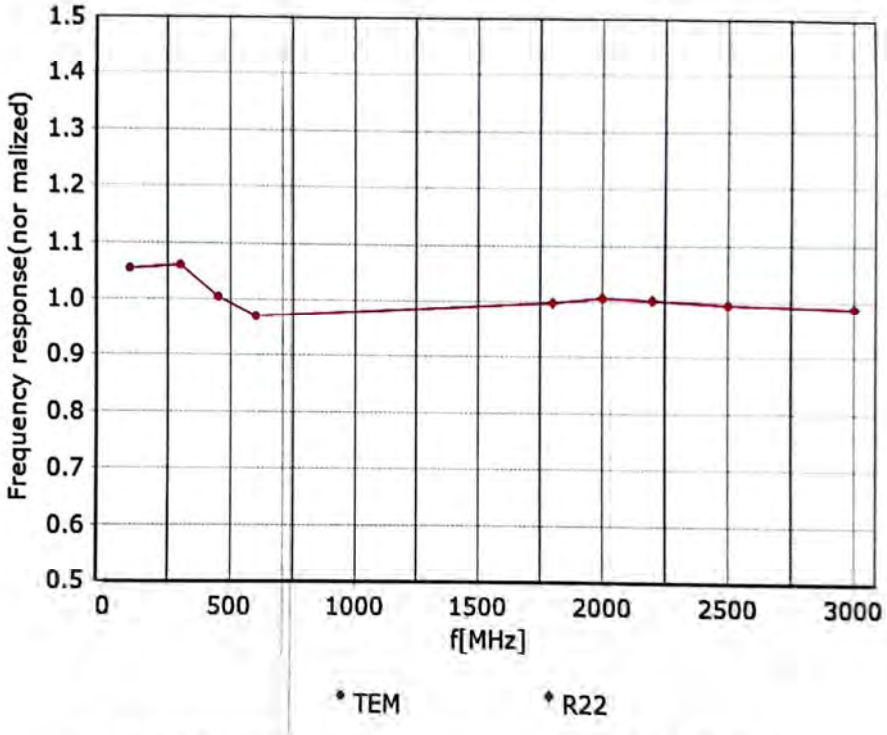
Frequency Response of E-Field
(TEM-Cell: ifi110 EXX, Waveguide: R22)



Uncertainty of Frequency Response of E-field: ±7.4% (*k*=2)

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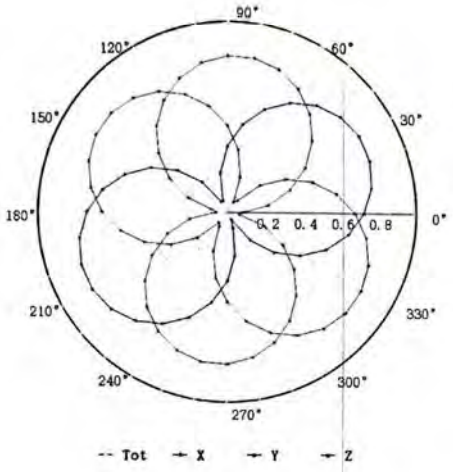
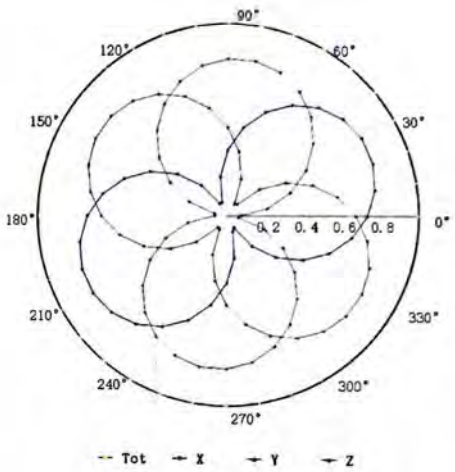
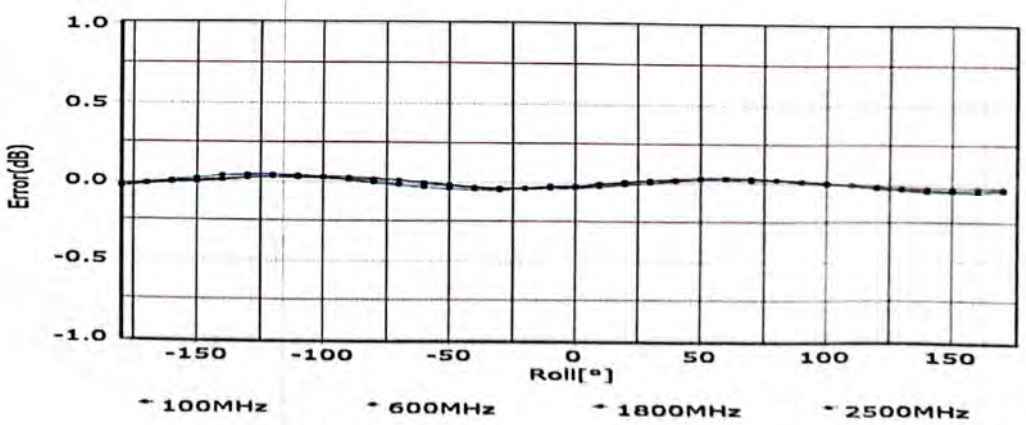
Receiving Pattern (Φ), θ=0°

f=600 MHz, TEM



f=1800 MHz, R22





Uncertainty of Axial Isotropy Assessment: ±1.2% (*k*=2)

Certificate No:Z21-60285 Page 6 of 9

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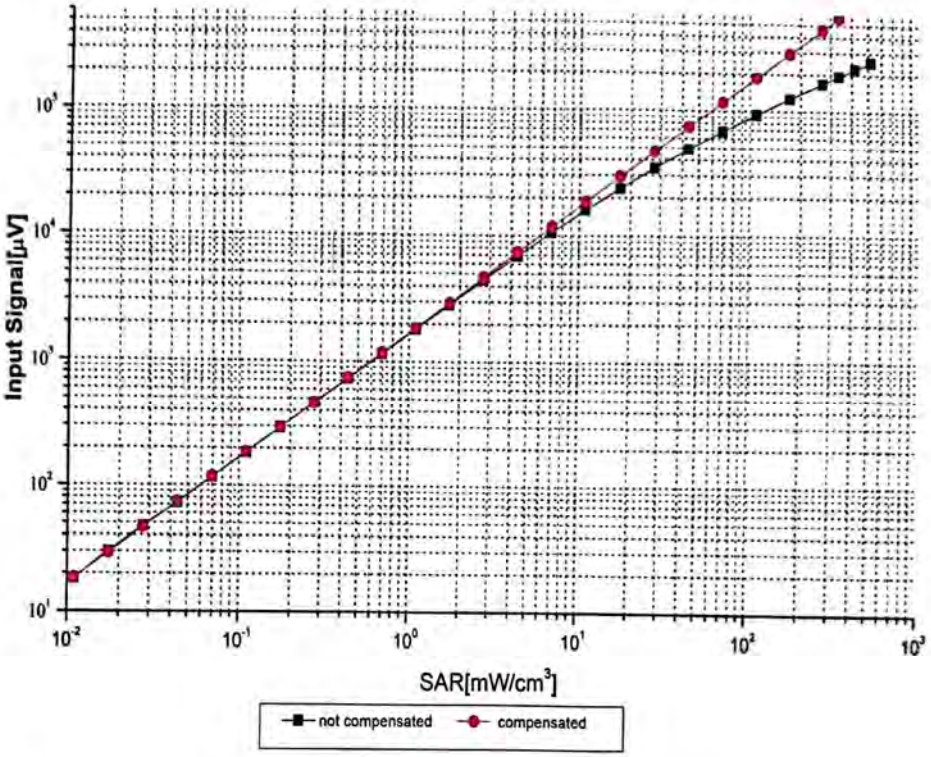
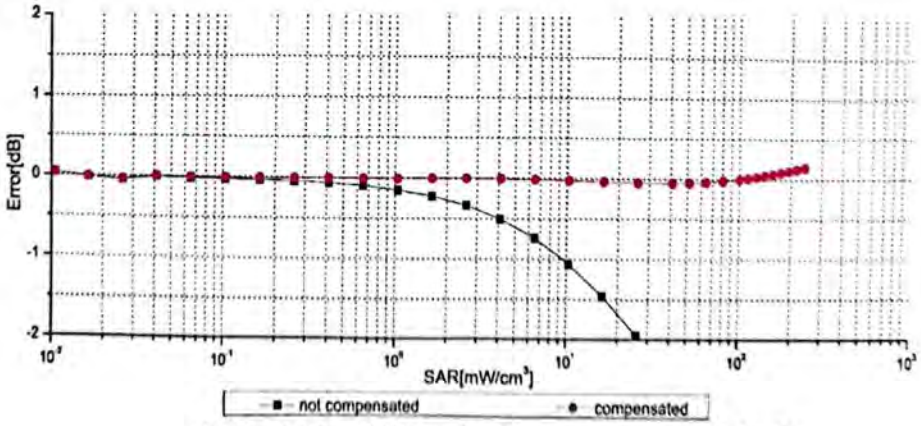
Dynamic Range f(SAR$_{head}$)
(TEM cell, f = 900 MHz)





Uncertainty of Linearity Assessment: ±0.9% (*k*=2)

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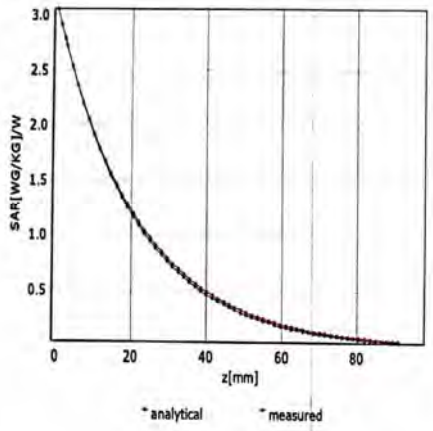
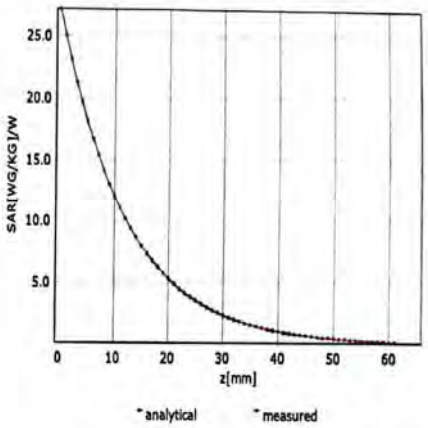
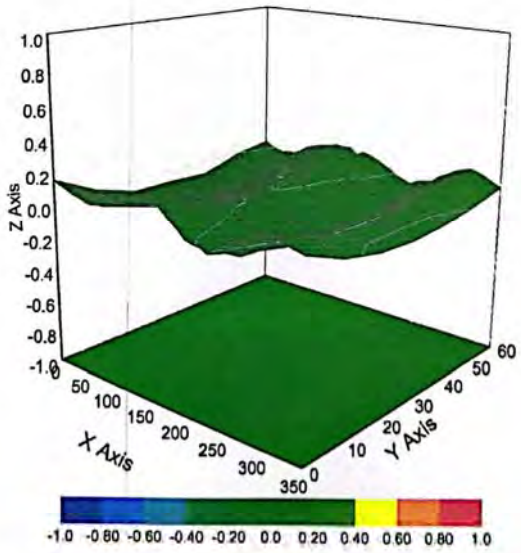
Conversion Factor Assessment

f=750 MHz,WGLS R9(H_convF) **f=1750 MHz,WGLS R22(H_convF)**





Deviation from Isotropy in Liquid



Uncertainty of Spherical Isotropy Assessment: ±3.2% (*k*=2)

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DASY/EASY – Parameters of Probe: EX3DV4 – SN:3677

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	117.4
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disable
Probe Overall Length	337mm
Probe Body Diameter	10mm
Tip Length	9mm
Tip Diameter	2.5mm
Probe Tip to Sensor X Calibration Point	1mm
Probe Tip to Sensor Y Calibration Point	1mm
Probe Tip to Sensor Z Calibration Point	1mm
Recommended Measurement Distance from Surface	1.4mm

ANNEX E: Probe Calibration Certificate (SN: 7543)

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Client TA(Shanghai) Certificate No: Z21-60417

CALIBRATION CERTIFICATE

Object EX3DV4 - SN : 7543

Calibration Procedure(s) FF-Z11-004-02
Calibration Procedures for Dosimetric E-field Probes

Calibration date: December 28, 2021

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	101919	15-Jun-21(CTTL, No.J21X04466)	Jun-22
Power sensor NRP-Z91	101547	15-Jun-21(CTTL, No.J21X04466)	Jun-22
Power sensor NRP-Z91	101548	15-Jun-21(CTTL, No.J21X04466)	Jun-22
Reference 10dBAttenuator	18N50W-10dB	10-Feb-20(CTTL, No.J20X00525)	Feb-22
Reference 20dBAttenuator	18N50W-20dB	10-Feb-20(CTTL, No.J20X00526)	Feb-22
Reference Probe EX3DV4	SN 3617	27-Jan-21(SPEAG, No.EX3-3617_Jan21)	Jan-22
DAE4	SN 1555	20-Aug-21(SPEAG, No.DAE4-1555_Aug21/2)	Aug-22
Secondary Standards	**ID #**	**Cal Date(Calibrated by, Certificate No.)**	**Scheduled Calibration**
SignalGenerator MG3700A	6201052605	16-Jun-21(CTTL, No.J21X04467)	Jun-22
Network Analyzer E5071C	MY46110673	21-Jan-21(CTTL, No.J20X00515)	Jan-22

	Name	Function	Signature
Calibrated by:	Yu Zongying	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: December 30, 2021

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: Z21-60417 Page 1 of 9

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Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A,B,C,D	modulation dependent linearization parameters
Polarization Φ	Φ rotation around probe axis
Polarization θ	θ rotation around an axis that is in the plane normal to probe axis (at measurement center), i θ=0 is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices Measurement Techniques", June 2013

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d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- *NORMx,y,z:* Assessed for E-field polarization θ=0 (f≤900MHz in TEM-cell; f>1800MHz: waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not effect the E^2-field uncertainty inside TSL (see below ConvF).
- *NORM(f)x,y,z = NORMx,y,z* frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- *DCPx,y,z:* DCP are numerical linearization parameters assessed based on the data of power sweep (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics.
- *Ax,y,z; Bx,y,z; Cx,y,z;VRx,y,z:*A,B,C are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- *ConvF and Boundary Effect Parameters:* Assessed in flat phantom using E-field (or Temperature Transfer Standard for f≤800MHz) and inside waveguide using analytical field distributions based on power measurements for f >800MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty valued are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from±50MHz to±100MHz.
- *Spherical Isotropy (3D deviation from isotropy):* in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset:* The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- *Connector Angle:* The angle is assessed using the information gained by determining the *NORMx* (no uncertainty required).

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DASY/EASY – Parameters of Probe: EX3DV4 – SN:7543

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (*k*=2)
Norm(μV/(V/m)²)[A]	0.62	0.69	0.55	±10.0%
DCP(mV)[B]	100.4	104.2	102.3	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	C	D dB	VR mV	Unc[E] (*k*=2)
0	CW	X	0.0	0.0	1.0	0.00	197.2	±2.7%
		Y	0.0	0.0	1.0		206.6	
		Z	0.0	0.0	1.0		180.8	

The reported uncertainty of measurement is stated as the standard uncertainty of Measurement multiplied by the coverage factor *k*=2, which for a normal distribution Corresponds to a coverage probability of approximately 95%.

[A] The uncertainties of Norm X, Y, Z do not affect the E²-field uncertainty inside TSL (see Page 4).
[B] Numerical linearization parameter: uncertainty not required.
[E] Uncertainly is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

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DASY/EASY – Parameters of Probe: EX3DV4 – SN:7543

Calibration Parameter Determined in Head Tissue Simulating Media

f [MHz]C	Relative Permittivity F	Conductivity (S/m) F	ConvF X	ConvF Y	ConvF Z	Alpha G	Depth G (mm)	Unct. (k=2)
750	41.9	0.89	10.27	10.27	10.27	0.17	1.26	±12.1%
835	41.5	0.90	9.89	9.89	9.89	0.14	1.62	±12.1%
1750	40.1	1.37	8.42	8.42	8.42	0.28	0.95	±12.1%
1900	40.0	1.40	8.20	8.20	8.20	0.28	1.03	±12.1%
2000	40.0	1.40	8.23	8.23	8.23	0.26	1.08	±12.1%
2300	39.5	1.67	7.68	7.68	7.68	0.62	0.70	±12.1%
2450	39.2	1.80	7.49	7.49	7.49	0.68	0.69	±12.1%
2600	39.0	1.96	7.24	7.24	7.24	0.50	0.81	±12.1%
3300	38.2	2.71	6.94	6.94	6.94	0.41	1.05	±13.3%
3500	37.9	2.91	6.79	6.79	6.79	0.43	1.03	±13.3%
3700	37.7	3.12	6.51	6.51	6.51	0.44	1.01	±13.3%
3900	37.5	3.32	6.40	6.40	6.40	0.35	1.35	±13.3%
4100	37.2	3.53	6.49	6.49	6.49	0.40	1.15	±13.3%
4400	36.9	3.84	6.32	6.32	6.32	0.35	1.35	±13.3%
4600	36.7	4.04	6.22	6.22	6.22	0.45	1.20	±13.3%
4800	36.4	4.25	6.16	6.16	6.16	0.45	1.20	±13.3%
4950	36.3	4.40	5.95	5.95	5.95	0.45	1.25	±13.3%
5250	35.9	4.71	5.44	5.44	5.44	0.45	1.25	±13.3%
5600	35.5	5.07	4.81	4.81	4.81	0.55	1.20	±13.3%
5750	35.4	5.22	4.94	4.94	4.94	0.55	1.25	±13.3%

C Frequency validity above 300 MHz of ±100MHz only applies for DASY v4.4 and higher (Page 2), else it is restricted to ±50MHz. The uncertainty is the RSS of ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

F At frequency below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ±10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ±5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for the frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary

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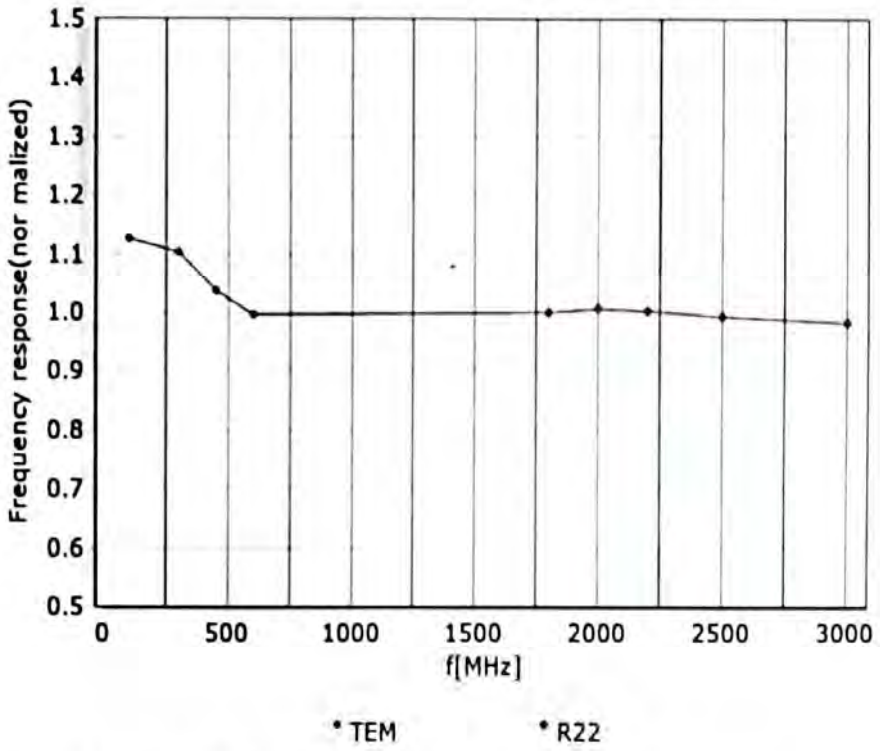
Frequency Response of E-Field
(TEM-Cell: ifi110 EXX, Waveguide: R22)



Uncertainty of Frequency Response of E-field: ±7.4% (*k*=2)

Certificate No:Z21-60417 Page 5 of 9

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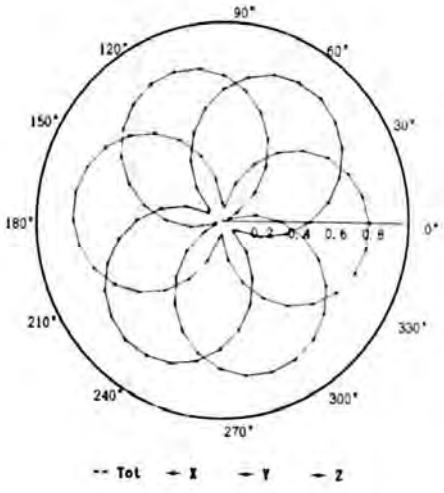
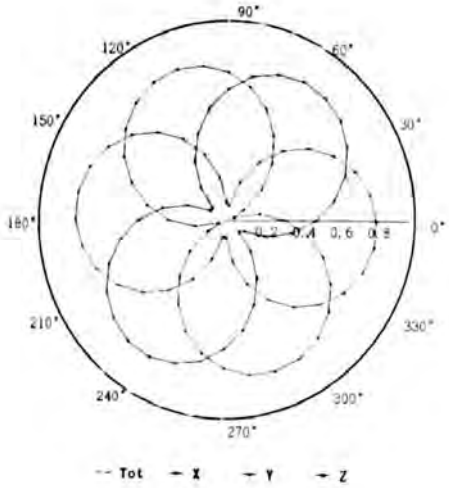
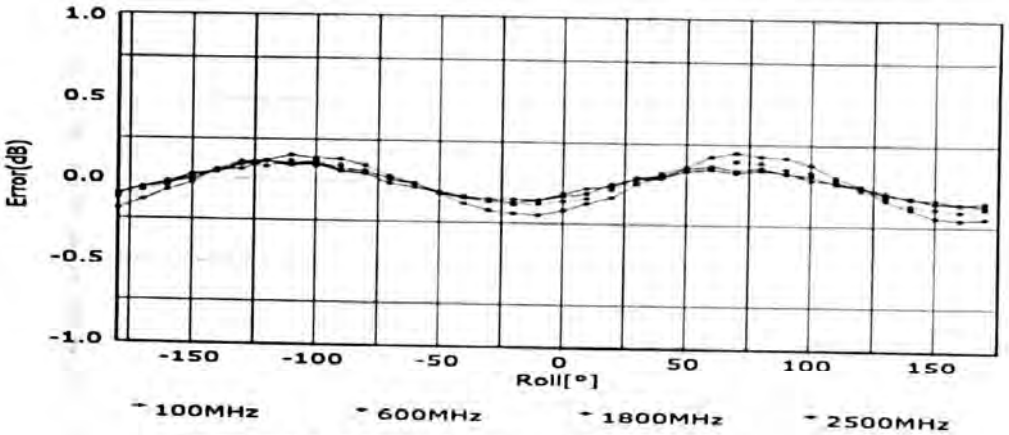
Receiving Pattern (Φ), θ=0°

f=600 MHz, TEM



f=1800 MHz, R22





Uncertainty of Axial Isotropy Assessment: ±1.2% (*k*=2)

Certificate No:Z21-60417 Page 6 of 9

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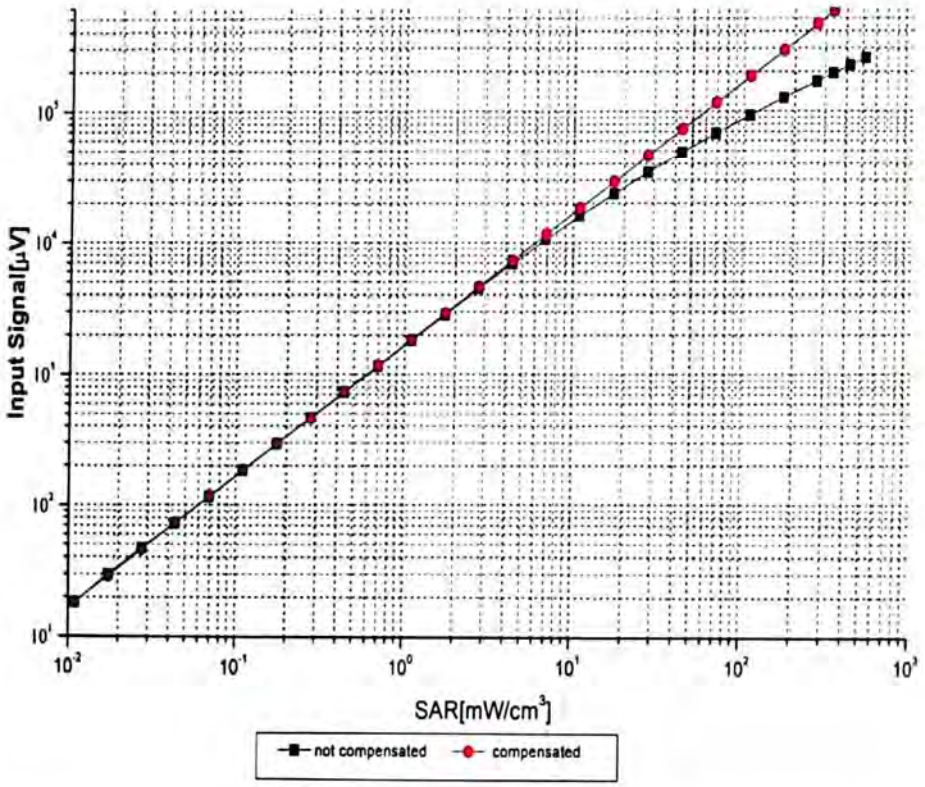
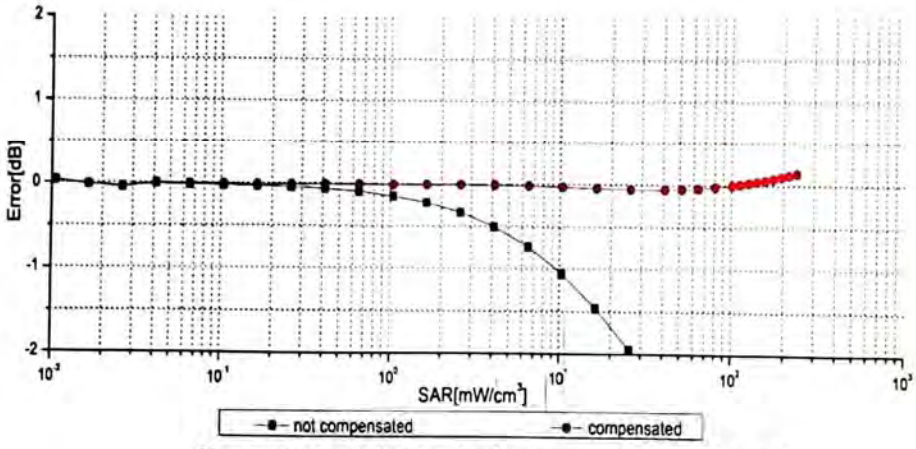
Dynamic Range f(SAR$_{head}$)
(TEM cell, f = 900 MHz)





Uncertainty of Linearity Assessment: ±0.9% (k=2)

Certificate No:Z21-60417 Page 7 of 9

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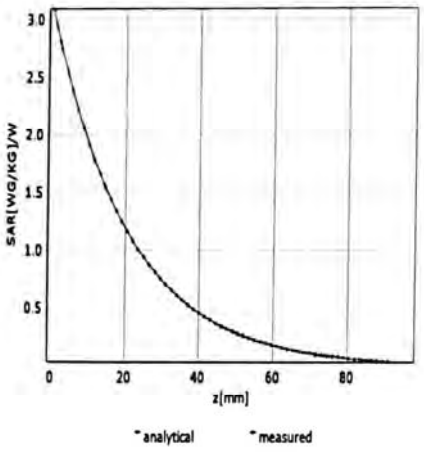
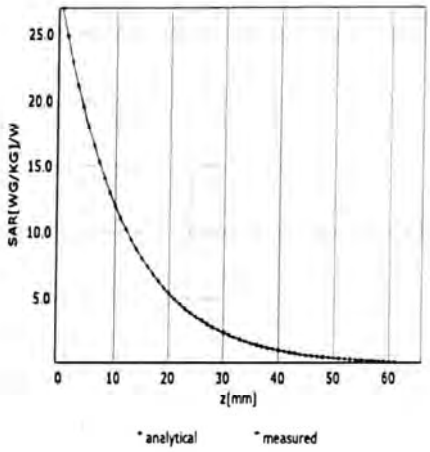
Conversion Factor Assessment

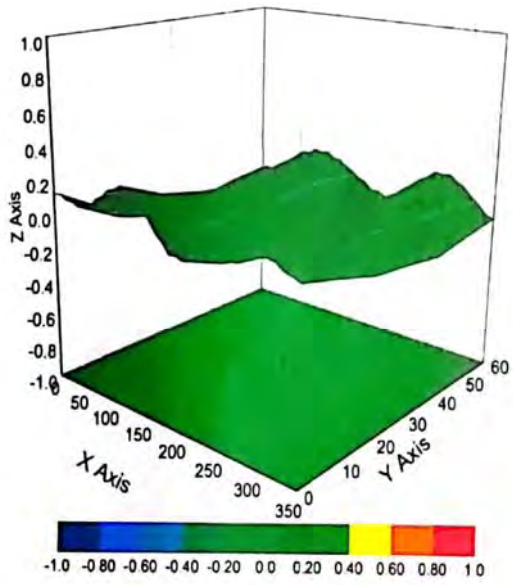
f=750 MHz,WGLS R9(H_convF)



f=1750 MHz,WGLS R22(H_convF)



Deviation from Isotropy in Liquid



Uncertainty of Spherical Isotropy Assessment: ±3.2% (k=2)

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DASY/EASY – Parameters of Probe: EX3DV4 – SN:7543

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	50.7
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disable
Probe Overall Length	337mm
Probe Body Diameter	10mm
Tip Length	9mm
Tip Diameter	2.5mm
Probe Tip to Sensor X Calibration Point	1mm
Probe Tip to Sensor Y Calibration Point	1mm
Probe Tip to Sensor Z Calibration Point	1mm
Recommended Measurement Distance from Surface	1.4mm

ANNEX F: Probe Calibration Certificate (SN: 3677)

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CALIBRATION CNAS L0570

Client TA(Shanghai) Certificate No: Z22-60223

CALIBRATION CERTIFICATE

Object EX3DV4 - SN : 3677

Calibration Procedure(s) FF-Z11-004-02
Calibration Procedures for Dosimetric E-field Probes

Calibration date: July 08, 2022

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	101919	14-Jun-22(CTTL, No.J22X04181)	Jun-23
Power sensor NRP-Z91	101547	14-Jun-22(CTTL, No.J22X04181)	Jun-23
Power sensor NRP-Z91	101548	14-Jun-22(CTTL, No.J22X04181)	Jun-23
Reference 10dBAttenuator	18N50W-10dB	20-Jan-21(CTTL, No.J21X00486)	Jan-23
Reference 20dBAttenuator	18N50W-20dB	20-Jan-21(CTTL, No.J21X00485)	Jan-23
Reference Probe EX3DV4	SN 7464	26-Jan-22(SPEAG, No.EX3-7464_Jan22)	Jan-23
DAE4	SN 1555	20-Aug-21(SPEAG, No.DAE4-1555_Aug21/2)	Aug-22

Secondary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
SignalGenerator MG3700A	6201052605	14-Jun-22(CTTL, No.J22X04182)	Jun-23
Network Analyzer E5071C	MY46110673	14-Jan-22(CTTL, No.J22X00406)	Jan-23

	Name	Function	Signature
Calibrated by:	Yu Zongying	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: July 20, 2022

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- *NORM(f)x,y,z = NORMx,y,z* frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
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- *Spherical isotropy (3D deviation from isotropy):* in a field of low gradients realized using a flat phantom exposed by a patch antenna.
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DASY/EASY – Parameters of Probe: EX3DV4 – SN: 3677

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm(μV/(V/m)²)[A]	0.42	0.46	0.41	±10.0%
DCP(mV)[B]	100.5	102.7	102.8	

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dB√μV	C	D dB	VR mV	Max Dev.	Max Unc[E] (k=2)
0	CW	X	0.0	0.0	1.0	0.00	150.8	±2.2%	±4.7%
		Y	0.0	0.0	1.0		161.2		
		Z	0.0	0.0	1.0		150.4		
10352-AAA	Pulse Waveform (200Hz, 10%)	X	1.64	60.07	6.04		60	±4.8%	±9.6%
		Y	1.81	60.93	6.48	10.00	60		
		Z	1.71	60.22	6.24		60		
10353-AAA	Pulse Waveform (200Hz, 20%)	X	1.21	60.00	5.26		80	±2.9%	±9.6%
		Y	1.14	60.00	5.34	6.99	80		
		Z	1.24	60.00	5.39		80		
10354-AAA	Pulse Waveform (200Hz, 40%)	X	0.78	60.00	4.62		95	±1.6%	±9.6%
		Y	0.74	60.00	4.64	3.98	95		
		Z	0.80	60.00	4.79		95		
10355-AAA	Pulse Waveform (200Hz, 60%)	X	0.51	60.00	3.94		120	±1.4%	±9.6%
		Y	0.47	60.00	4.02	2.22	120		
		Z	0.51	60.00	4.20		120		
10387-AAA	QPSK Waveform, 1 MHz	X	1.24	63.61	12.00		150	±3.1%	±9.6%
		Y	1.42	66.07	13.87	1.00	150		
		Z	1.27	65.09	12.91		150		
10388-AAA	QPSK Waveform, 10 MHz	X	1.77	65.04	13.47		150	±1.5%	±9.6%
		Y	1.97	67.16	15.01	0.00	150		
		Z	1.81	66.06	14.28		150		
10396-AAA	64-QAM Waveform, 100 kHz	X	2.27	67.24	17.73		150	±0.9%	±9.6%
		Y	2.50	69.43	19.12	3.01	150		
		Z	2.22	67.67	18.11		150		
10414-AAA	WLAN CCDF, 64-QAM, 40MHz	X	4.59	65.39	15.13		150	±3.7%	±9.6%
		Y	4.67	65.83	15.53	0.00	150		
		Z	4.55	65.64	15.34		150		

Note: For details on UID parameters see Appendix

The reported uncertainty of measurement is stated as the standard uncertainty of Measurement multiplied by the coverage factor k=2, which for a normal distribution Corresponds to a coverage probability of approximately 95%.

[A] The uncertainties of Norm X, Y, Z do not affect the E²-field uncertainty inside TSL (see Page 5).
[B] Numerical linearization parameter: uncertainty not required.
[E] Uncertainly is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

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DASY/EASY – Parameters of Probe: EX3DV4 – SN: 3677

Sensor Model Parameters

	C1 fF	C2 fF	α V^{-1}	T1 $ms.V^{-2}$	T2 $ms.V^{-1}$	T3 ms	T4 V^{-2}	T5 V^{-1}	T6
X	31.29	236.58	35.88	18.80	0.00	4.90	0.00	0.26	1.02
Y	31.84	237.52	35.33	17.20	0.00	4.90	0.23	0.24	1.02
Z	27.77	207.22	35.23	19.61	0.00	4.90	0.18	0.18	1.02

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	117.3
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disable
Probe Overall Length	337mm
Probe Body Diameter	10mm
Tip Length	9mm
Tip Diameter	2.5mm
Probe Tip to Sensor X Calibration Point	1mm
Probe Tip to Sensor Y Calibration Point	1mm
Probe Tip to Sensor Z Calibration Point	1mm
Recommended Measurement Distance from Surface	1.4mm

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DASY/EASY – Parameters of Probe: EX3DV4 – SN:3677

Calibration Parameter Determined in Head Tissue Simulating Media

f [MHz][C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha[G]	Depth[G] (mm)	Unct. (k=2)
750	41.9	0.89	9.63	9.63	9.63	0.15	1.35	±12.1%
835	41.5	0.90	9.34	9.34	9.34	0.14	1.46	±12.1%
1750	40.1	1.37	8.25	8.25	8.25	0.26	1.06	±12.1%
1900	40.0	1.40	7.84	7.84	7.84	0.27	1.05	±12.1%
2000	40.0	1.40	7.92	7.92	7.92	0.21	1.27	±12.1%
2300	39.5	1.67	7.76	7.76	7.76	0.65	0.67	±12.1%
2450	39.2	1.80	7.46	7.46	7.46	0.64	0.70	±12.1%
2600	39.0	1.96	7.27	7.27	7.27	0.65	0.68	±12.1%
3300	38.2	2.71	7.02	7.02	7.02	0.45	0.92	±13.3%
3500	37.9	2.91	6.90	6.90	6.90	0.44	0.96	±13.3%
3700	37.7	3.12	6.64	6.64	6.64	0.44	1.01	±13.3%
3900	37.5	3.32	6.58	6.58	6.58	0.40	1.25	±13.3%
4100	37.2	3.53	6.60	6.60	6.60	0.40	1.15	±13.3%
4400	36.9	3.84	6.40	6.40	6.40	0.40	1.25	±13.3%
4600	36.7	4.04	6.31	6.31	6.31	0.45	1.25	±13.3%
4800	36.4	4.25	6.26	6.26	6.26	0.50	1.20	±13.3%
4950	36.3	4.40	6.03	6.03	6.03	0.45	1.30	±13.3%
5250	35.9	4.71	5.48	5.48	5.48	0.50	1.20	±13.3%
5600	35.5	5.07	4.97	4.97	4.97	0.50	1.30	±13.3%
5750	35.4	5.22	5.00	5.00	5.00	0.50	1.32	±13.3%

[C] Frequency validity above 300 MHz of ±100MHz only applies for DASY v4.4 and higher (Page 2), else it is restricted to ±50MHz. The uncertainty is the RSS of ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

[F] At frequency below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ±10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ±5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for the frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

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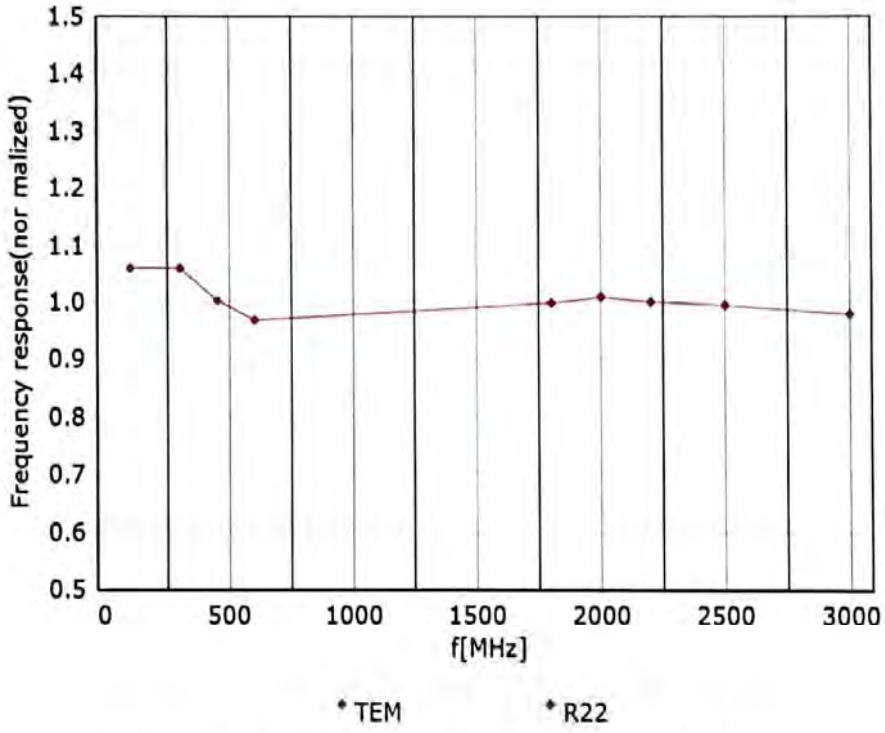
Frequency Response of E-Field
(TEM-Cell: ifi110 EXX, Waveguide: R22)



Uncertainty of Frequency Response of E-field: ±7.4% (*k*=2)

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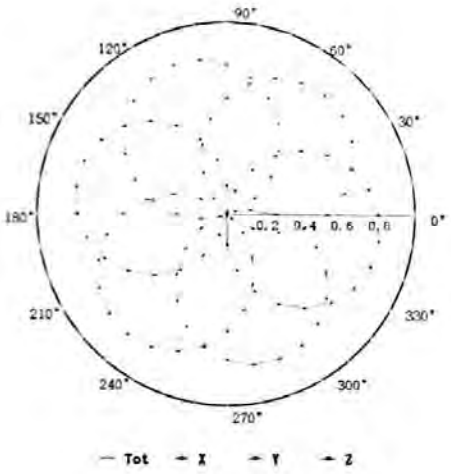
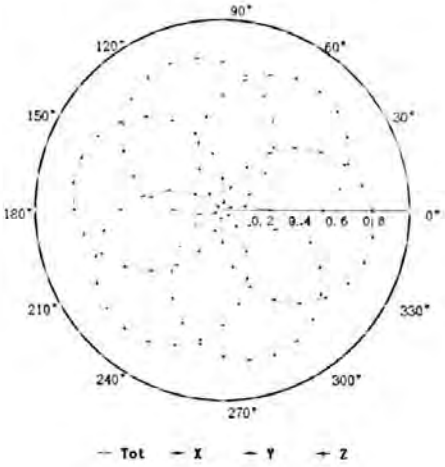
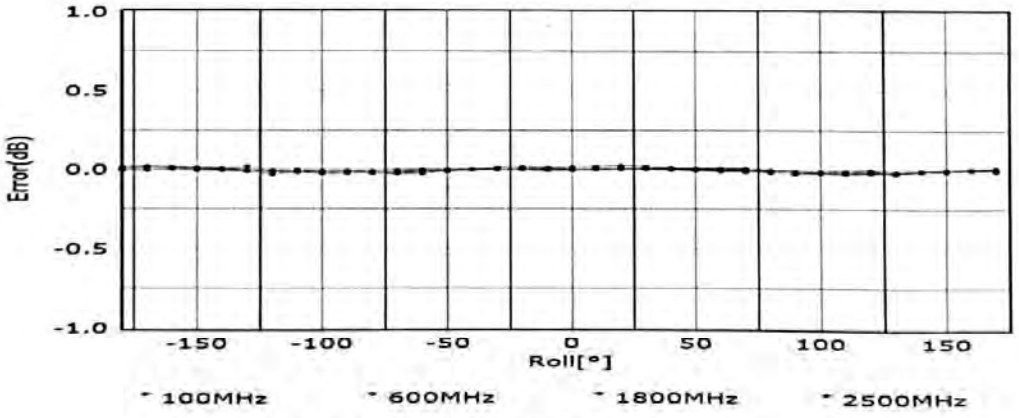
Receiving Pattern (Φ), θ=0°

f=600 MHz, TEM



f=1800 MHz, R22





Uncertainty of Axial Isotropy Assessment: ±1.2% (*k*=2)

Certificate No:Z22-60223 Page 7 of 22

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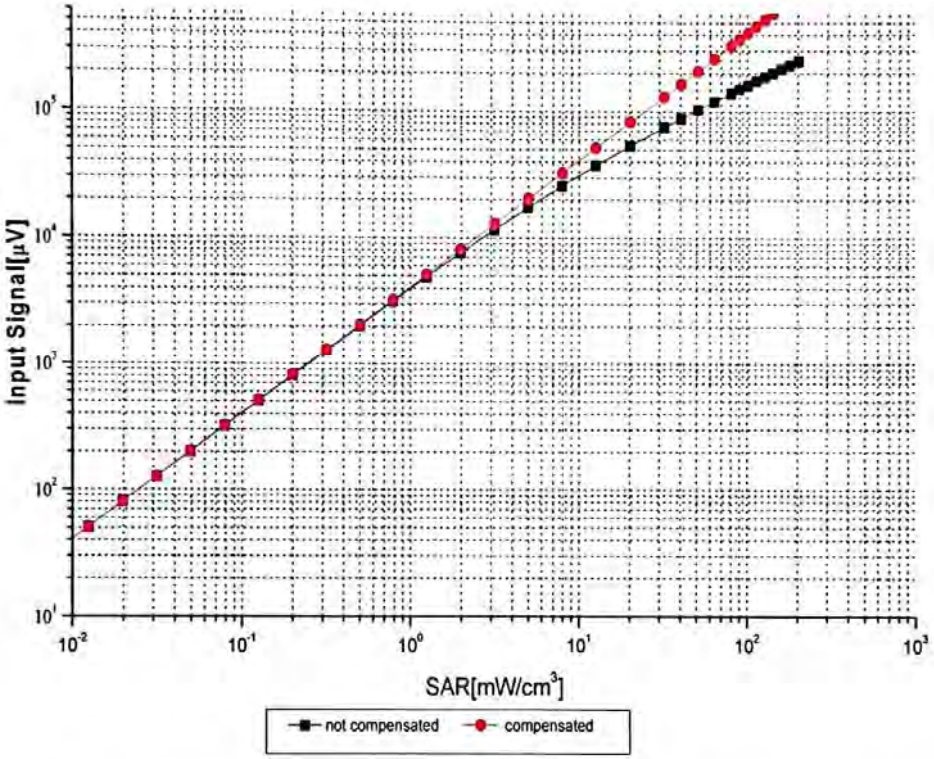
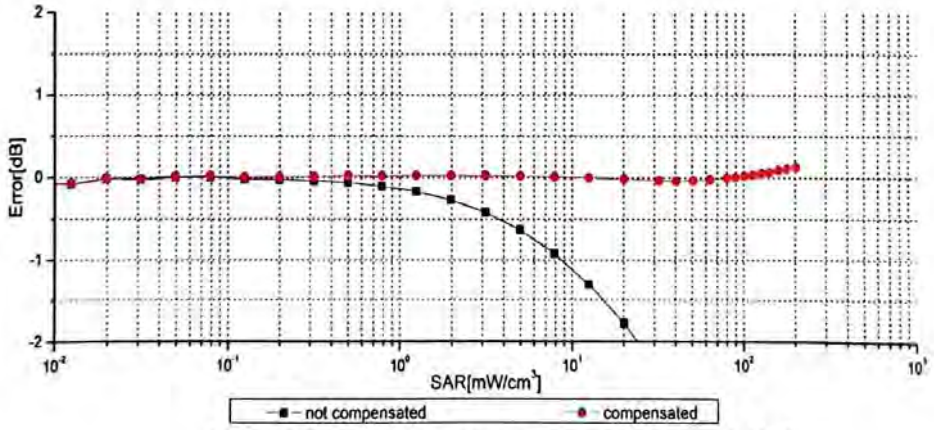
Dynamic Range f(SAR$_{head}$)
(TEM cell, f = 900 MHz)





Uncertainty of Linearity Assessment: ±0.9% (*k*=2)

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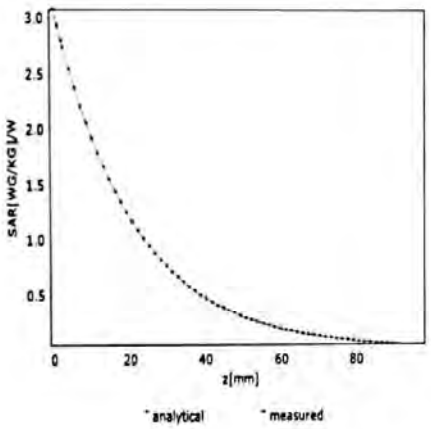
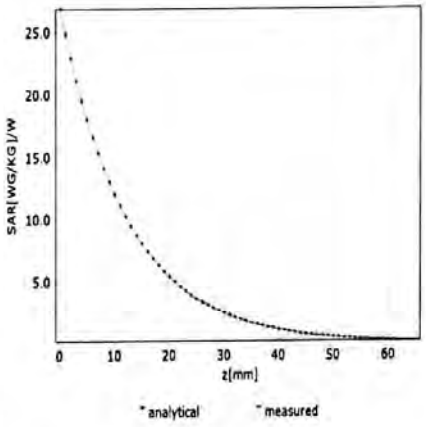
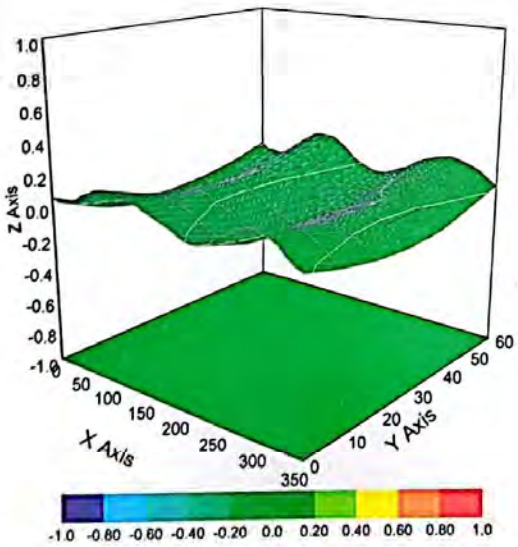
Conversion Factor Assessment

f=750 MHz,WGLS R9(H_convF) **f=1750 MHz,WGLS R22(H_convF)**





Deviation from Isotropy in Liquid



Uncertainty of Spherical Isotropy Assessment: ±3.2% (*k*=2)

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Appendix: Modulation Calibration Parameters

UID	Rev	Communication System Name	Group	PAR (dB)	UncE (k=2)
0		CW	CW	0.00	± 4.7 %
10010	CAA	SAR Validation (Square, 100ms, 10ms)	Test	10.00	± 9.6 %
10011	CAB	UMTS-FDD (WCDMA)	WCDMA	2.91	± 9.6 %
10012	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	± 9.6 %
10013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	9.46	± 9.6 %
10021	DAC	GSM-FDD (TDMA, GMSK)	GSM	9.39	± 9.6 %
10023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.57	± 9.6 %
10024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	6.56	± 9.6 %
10025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	± 9.6 %
10026	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	9.55	± 9.6 %
10027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	GSM	4.80	± 9.6 %
10028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	3.55	± 9.6 %
10029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	GSM	7.78	± 9.6 %
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	± 9.6 %
10031	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Bluetooth	1.87	± 9.6 %
10032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.16	± 9.6 %
10033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	7.74	± 9.6 %
10034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	4.53	± 9.6 %
10035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	3.83	± 9.6 %
10036	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	8.01	± 9.6 %
10037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	± 9.6 %
10038	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.10	± 9.6 %
10039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.57	± 9.6 %
10042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	± 9.6 %
10044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	± 9.6 %
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	± 9.6 %
10049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	10.79	± 9.6 %
10056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	TD-SCDMA	11.01	± 9.6 %
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	± 9.6 %
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	± 9.6 %
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	± 9.6 %
10061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	± 9.6 %
10062	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	± 9.6 %
10063	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	± 9.6 %
10064	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	± 9.6 %
10065	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	± 9.6 %
10066	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	± 9.6 %
10067	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	± 9.6 %
10068	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	± 9.6 %
10069	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	WLAN	10.56	± 9.6 %
10071	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	± 9.6 %
10072	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.62	± 9.6 %
10073	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	WLAN	9.94	± 9.6 %
10074	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.30	± 9.6 %
10075	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.77	± 9.6 %
10076	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	WLAN	10.94	± 9.6 %
10077	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	WLAN	11.00	± 9.6 %
10081	CAB	CDMA2000 (1xRTT, RC3)	CDMA2000	3.97	± 9.6 %
10082	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	AMPS	4.77	± 9.6 %
10090	DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	± 9.6 %
10097	CAC	UMTS-FDD (HSDPA)	WCDMA	3.98	± 9.6 %
10098	DAC	UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	± 9.6 %
10099	CAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	± 9.6 %
10100	CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5.67	± 9.6 %
10101	CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %

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10102	CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10103	DAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10104	CAE	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	± 9.6 %
10105	CAE	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	± 9.6 %
10108	CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	± 9.6 %
10109	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10110	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10111	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	± 9.6 %
10112	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.59	± 9.6 %
10113	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	± 9.6 %
10114	CAG	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10115	CAG	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	± 9.6 %
10116	CAG	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	± 9.6 %
10117	CAG	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	± 9.6 %
10118	CAD	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	± 9.6 %
10119	CAD	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	± 9.6 %
10140	CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10141	CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	± 9.6 %
10142	CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10143	CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	± 9.6 %
10144	CAC	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	± 9.6 %
10145	CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	± 9.6 %
10146	CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	± 9.6 %
10147	CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	± 9.6 %
10149	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %
10150	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10151	CAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	± 9.6 %
10152	CAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10153	CAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.05	± 9.6 %
10154	CAF	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10155	CAF	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10156	CAF	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	± 9.6 %
10157	CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10158	CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.62	± 9.6 %
10159	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	± 9.6 %
10160	CAG	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	± 9.6 %
10161	CAG	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10162	CAG	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	± 9.6 %
10166	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	± 9.6 %
10167	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	± 9.6 %
10168	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	± 9.6 %
10169	CAG	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10170	CAG	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10171	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	± 9.6 %
10172	CAE	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10173	CAE	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10174	CAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10175	CAF	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10176	CAF	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10177	CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10178	CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10179	AAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10180	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10181	CAG	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10182	CAG	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10183	CAG	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10184	CAG	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10185	CAI	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	± 9.6 %
10186	CAG	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %