SAR Report

Applicant	:	i-Waylink Inc.
Product Type	:	Mobile Computer
Trade Name	:	iMotion or
Model Number	:	MC401
Applicable Standard	:	ANSI/IEEE C95.1 / IEEE Std. 1528-2013 47 CFR Part §2.1093 KDB 447498 D01 / KDB 865664 D01 / KDB 865664 D02 KDB 648474 D04 / KDB 248227 D01 / KDB 941225 D01 KDB 941225 D05 / KDB 941225 D06
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Issued by

Approved By : Kris Pan

(Kris Pan)

A Test Lab Techno Corp.
No. 140-1, Changan Street, Bade District,
Taoyuan City 33465, Taiwan (R.O.C.)
Tel：+886-3-2710188 / Fax：+886-3-2710190

Taiwan Accreditation Foundation accreditation number: 1330
Test Firm MRA designation number: TW0010

Note:

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Revision History

Rev.	Issued Date	Revisions	Revised By
00	Jun. 29, 2020	Initial Issue	Nicole Chu
01	Jul. 30, 2020	P06 Revised LTE 41	Nicole Chu
02	Jul. 31, 2020	P78 Revised 7.9.1 simultaneously transmitting P107 Revised 12.2 Hot-spot mode P186~187 Revised Appendix B	Nicole Chu

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1. General Information

1.1 Reference Applicable Standard

Standard	Description	Version
ANSI/IEEE C95.1	American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 300 KHz to 100 GHz, New York.	1992
IEEE 1528	Specific Absorption Rate (SAR) in the Human Head From Wireless Communications Devices: Measurement Techniques.	2013
47 CFR Part §2.1093	Radiofrequency radiation exposure evaluation: portable devices.	-
KDB 447498 D01	RF exposure procedures and equipment authorization policies for mobile and portable devices	v06
KDB 865664 D01	SAR measurement requirement for 100 MHz to 6 GHz.	v01r04
KDB 865664 D02	RF exposure compliance reporting and documentation considerations.	v01r02
KDB 648474 D04	SAR evaluation considerations for Wireless Handsets	v01r03
KDB 248227 D01	SAR guidance for IEEE 802.11 (Wi-Fi) transmitters	v02r02
KDB 941225 D01	3G SAR Procedures	v03r01
KDB 941225 D05	SAR for LTE Devices	v02r05
KDB 941225 D06	Hotspot Mode SAR	v02r01

1.2 Test Site Environment

Items	Required (IEEE 1528-2013)	Actual
Temperature (°C)	18-25	21-23

2. Summary of Maximum Reported SAR Value

Equipment Class	Mode	Highest Reported		
		Head standalone SAR 1 g(W/kg)	Hotspot standalone SAR 1 g(W/kg)	Extremity standalone SAR10 g (W/kg)
Licensed	GPRS 850	0.36	0.63	0.63
	GPRS 1900	0.14	0.70	0.55
	WCDMA Band II	0.18	0.57	0.51
	WCDMA Band V	0.19	0.25	0.28
	LTE Band 2	0.08	0.44	0.39
	LTE Band 4	0.11	0.39	0.33
	LTE Band 5	0.15	0.21	0.21
	LTE Band 7	0.11	**1.14**	0.50
	LTE Band 12 / 17	0.07	0.07	0.08
	LTE Band 38	0.04	0.69	0.42
	LTE Band 41	0.05	0.70	0.42
DTS	WLAN 2.4 GHz Ant-0	0.16	0.31	0.18
	WLAN 2.4 GHz Ant-1	0.01	0.02	0.01
U-NII	WLAN 5 GHz Ant-0	0.07	0.20	0.18
	WLAN 5 GHz Ant-1	0.06	0.61	0.20
DSS	Bluetooth Ant-0	0.03	0.05	0.03
Highest Simultaneous Transmission Positions		Head standalone SAR 1 g(W/kg)	Hotspot standalone SAR 1 g(W/kg)	Extremity standalone SAR10 g (W/kg)
Right-Cheek		0.50	-	-
Side 4		-	1.44	-
Back		-	-	1.24

NOTE: 1. The test procedures, as described in American National Standards, Institute ANSI/IEEE C95.1 were employed and they specify the maximum exposure limit (SAR1g 1.6 W/kg for Head & Body, SAR10g 4.0 W/kg for Extremity) of tissue for portable devices being used within 20 cm between user and EUT in the uncontrolled environment. A description of the product and operating configuration, detailed summary of the test results, methodology and procedures used in the equipment used are included within this test report.

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

3. Description of Equipment under Test (EUT)

Applicant	i-Waylink Inc. 6F., N0. 288, Sec. 6, Civic Blvd., Xinyi Dist., Taipei City 110, Taiwan	
Manufacture	i-Waylink Inc. 6F., N0. 288, Sec. 6, Civic Blvd., Xinyi Dist., Taipei City 110, Taiwan	
Product Type	Mobile Computer	
Trade Name	iMotion or	
Model Number	MC401	
IMEI No.	IMEI 1: 359783089817300, IMEI 2: 359783089817306	
FCC ID	SPYMC401	
RF Function	Operate Bands	Operate Frequency (MHz)
	GSM/GPRS/EGPRS 850	824.2 - 848.8
	GSM/GPRS/EGPRS 1900	1850.2 - 1909.8
	WCDMA(RMC 12.2K) / HSDPA / HSUPA Band II	1852.4 - 1907.6
	WCDMA (RMC 12.2K) / HSDPA / HSUPA Band V	826.4 - 846.6
	LTE Band 2 (BW 1.4, 3, 5, 10, 15, 20 MHz)	1850 – 1910
	LTE Band 4 (BW 1.4, 3, 5, 10, 15, 20 MHz)	1710 – 1755
	LTE Band 5 (BW 1.4, 3, 5, 10 MHz)	824 – 849
	LTE Band 7 (BW 5, 10, 15, 20 MHz)	2500 – 2570
	LTE Band 12 (BW 1.4, 3, 5, 10 MHz)	699 – 716
	LTE Band 17 (BW 5, 10 MHz)	704 – 716
	LTE Band 38 (BW 5, 10, 15, 20 MHz)	2570 – 2620
	LTE Band 41 (BW 5, 10, 15, 20 MHz)	2496 – 2690
	IEEE 802.11b / 802.11g / 802.11n 2.4 GHz 20 MHz	2412 - 2462
	IEEE 802.11n 2.4 GHz 40 MHz	2422 - 2452
	IEEE 802.11a	5180 - 5825
	IEEE 802.11ac / 802.11n 5 GHz 20 MHz	5180 - 5825
	IEEE 802.11ac / 802.11n 5 GHz 40 MHz	5190 - 5795
	IEEE 802.11ac 80 MHz	5210 - 5775
	Bluetooth BR/EDR	2402 - 2480
	Bluetooth LE	2402 - 2480
Antenna Type	Internal Antenna	
Battery	Standard	
	Trade Name: Zhongshan Tianmao Battery Co., Ltd. Model: MC401 Extended Battery Spec: DC 3.8V / 5400mAh	
	Trade Name: Zhongshan Tianmao Battery Co., Ltd. Model: MC401 Standard Battery Spec: DC 3.8V / 2700mAh	
Device Category	Portable Device	
Application Type	Certification	

Note:The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

4. Introduction

The A Test Lab Techno Corp. has performed measurements of the maximum potential exposure to the user.The test procedures, as described in American National Standards, Institute C95.1-1992〔1〕were employed and they specify the maximum exposure limit of 1.6 W/kg as averaged over any 1 gram of tissue for portable devices being used within 20 cm between user and EUT in the uncontrolled environment. A description of the product and operating configuration, detailed summary of the test results, methodology and procedures used in the equipment used are included within this test report.

4.1 SAR Definition

Specific Absorption Rate (SAR) is defined as the time derivative (rate) of the incremental energy (dw) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below :

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

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

SAR measurement can be related to the electrical field in the tissue by

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

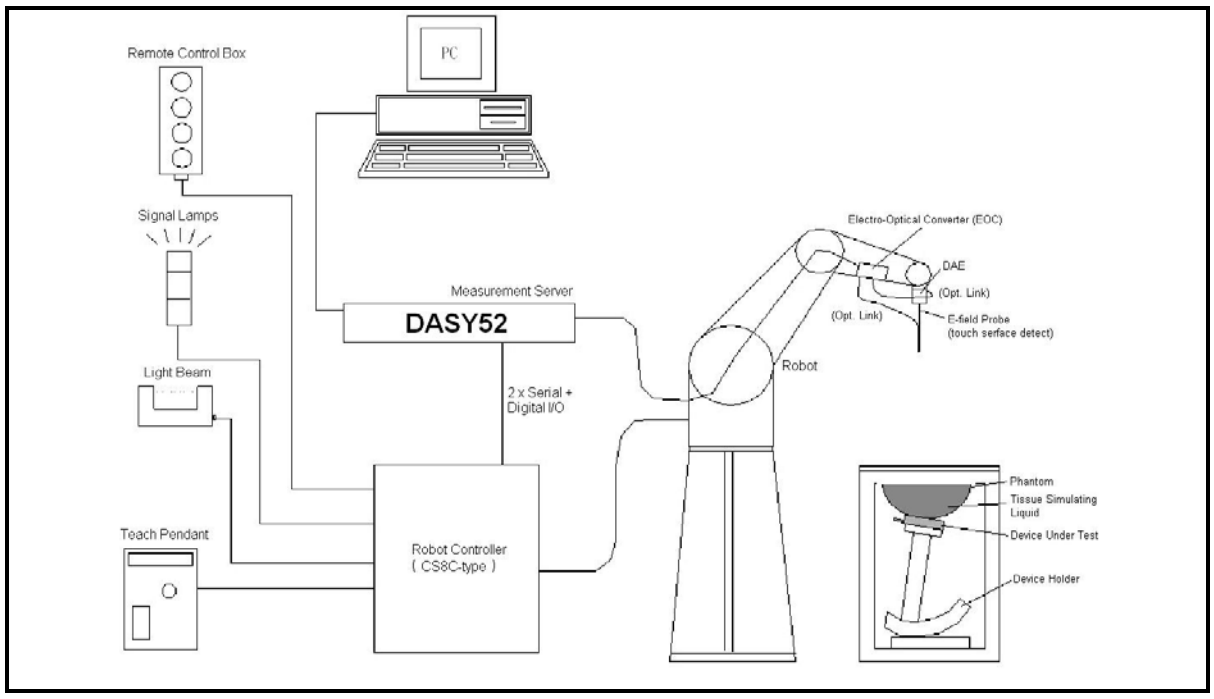
Where：

σ = conductivity of the tissue (S/m)

ρ = mass density of the tissue (kg/m3)

E = RMS electric field strength (V/m)

5. SAR Measurement Setup



The DASY52 system for performing compliance tests consists of the following items:

1. A standard high precision 6-axis robot (Stäubli TX family) with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
2. A dosimetric probe, i.e., an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
3. 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.
4. 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.
5. A probe alignment unit which improves the (absolute) accuracy of the probe positioning.
6. A computer operating Windows 7 or Windows 8.
7. DASY52 software.
8. Remote controls with teach pendant and additional circuitry for robot safety such as warning lamps, etc.
9. The SAM twin phantom enabling testing left-hand and right-hand usage.
10. The device holder for handheld mobile phones.
11. Tissue simulating liquid mixed according to the given recipes.
12. Validation dipole kits allowing validating the proper functioning of the system.

5.1 DASY E-Field Probe System

The SAR measurements were conducted with the dosimetric probe (manufactured by SPEAG), designed in the classical triangular configuration〔3〕and optimized for dosimetric evaluation. The probes is constructed using the thick film technique; with printed resistive lines on ceramic substrates. The probe is equipped with an optical multi-fiber line ending at the front of the probe tip. It is connected to the EOC box on the robot arm and provides an automatic detection of the phantom surface. Half of the fibers are connected to a pulsed infrared transmitter, the other half to a synchronized receiver. As the probe approaches the surface, the reflection from the surface produces a coupling from the transmitting to the receiving fibers. This reflection increases first during the approach, reaches maximum and then decreases. If the probe is flatly touching the surface, the coupling is zero. The distance of the coupling maximum to the surface is independent of the surface reflectivity and largely independent of the surface to probe angle. The DASY software reads the reflection during a software approach and looks for the maximum using a 2nd order fitting. The approach is stopped when reaching the maximum.

5.1.1 E-Field Probe Specification

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	±0.3 dB in brain tissue (rotation around probe axis) ±0.5 dB in brain tissue (rotation normal probe axis)
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
Calibration	ISO/IEC 17025 calibration service available

EX3DV4 E-Field Probe

Probe setup on robot

5.2 Data Acquisition Electronic (DAE) System

Model	DAE4	
Construction	Signal amplifier, multiplexer, A/D converter and control logic. Serial optical link for communication with DASY embedded system (fully remote controlled). Two step probe touch detector for mechanical surface detection and emergency robot stop.	
Measurement Range	-100 to +300 mV (16 bit resolution and two range settings: 4 mV, 400 mV)	
Input Offset Voltage	< 5 µV (with auto zero)	
Input Bias Current	< 50 fA	
Dimensions	60 x 60 x 68 mm	

5.3 Robot

Positioner	Stäubli Unimation Corp.	
Robot Model	TX90XL	
Number of Axes	6	
Norminal Load	5 kg	
Reach	1450 mm	
Repeatability	± 0.035 mm	

5.4 Measurement Server

Processor	Stäubli Unimation Corp.	
I/O-board	TX90XL	
Number of Axes	Link to DAE4 16-bit A/D converter for surface detection system Digital I/O interface Serial link to robot Direct emergency stop output for robot	

5.5 Device Holder

The DASY device holder is constructed of low-loss POM material having the following dielectric parameters: relative permittivity ε=3 and loss tangent δ=0.02. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.

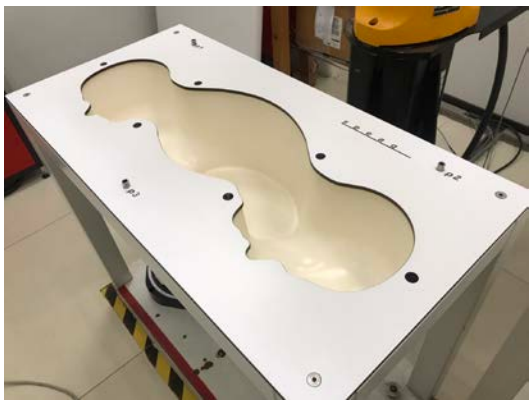
	
Device Holder 1	Device Holder 2

5.6 Phantom - SAM v4.0

The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528 and IEC 62209-1. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points with the robot.

Shell Thickness	2 ±0.2 mm
Filling Volume	Approx. 25 liters
Dimensions	1000x500 mm (LxW)

Table 1. Specification of SAM v4.0



6. Tissue Simulating Liquids

IEEE SCC-34/SC-2 in 1528 recommended Tissue Dielectric Parameters

The head tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 in 1528 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in human head. Other head and body tissue parameters that have not been specified in 1528 are derived from the tissue dielectric parameters computed from the 4-Cole-Cole equation and extrapolated according to the head parameter specified in 1528.

Target Frequency	Head		Body	
(MHz)	εr	σ (S/m)	εr	σ (S/m)
150	52.3	0.76	61.9	0.80
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800 - 2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0	2.73
5800	35.3	5.27	48.2	6.00
(εr = relative permittivity, σ = conductivity and ρ = 1000 kg/m3)				

Table 2. Tissue dielectric parameters for head and body phantoms

6.1 The composition of the tissue simulating liquid

Ingredients (% by weight)	Frequency (MHz)												Frequency (GHz)	
	750		835		1750		1900		2450		2600		5 GHz	
Tissue Type	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Water	39.28	51.30	41.45	52.40	54.50	40.20	54.90	40.40	62.70	73.20	60.30	71.40	65.5	78.6
Salt (NaCl)	1.47	1.42	1.45	1.50	0.17	0.49	0.18	0.50	0.50	0.10	0.60	0.20	0.00	0.00
Sugar	58.15	46.18	56.00	45.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HEC	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bactericide	0.10	0.10	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Triton X-100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.2	10.7
DGBE	0.00	0.00	0.00	0.00	45.33	59.31	44.92	59.10	36.80	26.70	39.10	28.40	0.00	0.00
Dielectric Constant	41.88	54.60	42.54	56.10	40.10	53.60	39.90	54.00	39.80	52.50	39.80	52.50	35.1~ 36.2	47.9~ 49.3
Conductivity (S/m)	0.90	0.97	0.91	0.95	1.39	1.49	1.42	1.45	1.88	1.78	1.88	1.78	4.45~ 5.48	5.07~ 6.23
Diethylene Glycol Mono-hexlether	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.3	10.7

6.2 Liquid Parameters

1. The dielectric parameters of the liquids were verified prior to the SAR evaluation using an DAKS 3.5 Probe Kit.
2. The SAR testing with IEC tissue parameters as an alternative option to FCC Head and body parameters. We used head TSL for body SAR tests. There are some limitations though:

(a) The mixing and matching of head TSL and body TSL for body SAR testing in a single application are not permitted. For example, we cannot start testing body SAR with head TSL and then switch to testing Body SAR with Body TSL.

(b) The TSL used for body SAR testing can be changed via a Permissive Change. However, if the body SAR increases and the original Body SAR was > 1.2 W/kg, additional SAR measurements may be required.

Tissue Temp (°C)	Liquid Type	Frequency (MHz)	Cond.	Perm.	target Cond.	target Perm.	σ (Delta) (%)	εr (Delta) (%)	Limit (%)	Date
			σ	εr	σ	εr				
22.8	Head	2580	1.96	39.484	1.94	39.03	0.89	1.16	±5	Mar. 05, 2020
22.8	Head	2595	1.98	39.431	1.95	39.01	1.23	1.08	±5	Mar. 05, 2020
22.8	Head	2610	2.00	39.387	1.97	38.99	1.51	1.02	±5	Mar. 05, 2020
22.8	Head	2506	1.86	39.686	1.86	39.13	0.24	1.42	±5	Mar. 05, 2020
22.8	Head	2549.5	1.92	39.615	1.90	39.06	0.68	1.42	±5	Mar. 05, 2020
22.8	Head	2593	1.98	39.436	1.95	39.01	1.18	1.09	±5	Mar. 05, 2020

Tissue Temp (°C)	Liquid Type	Frequency (MHz)	Cond.	Perm.	target Cond.	target Perm.	σ (Delta) (%)	εr (Delta) (%)	Limit (%)	Date
			σ	εr	σ	εr				
22.8	Head	2636.5	2.032	39.302	2.00	38.95	1.60	0.90	±5	Mar. 05, 2020
22.8	Head	2680	2.09	39.160	2.05	38.90	1.87	0.67	±5	Mar. 05, 2020
22.1	Head	2580	1.96	39.567	1.94	39.03	1.23	1.38	±5	Mar. 13, 2020
22.1	Head	2595	1.99	39.514	1.95	39.01	1.59	1.29	±5	Mar. 13, 2020
22.1	Head	2610	2.01	39.470	1.97	38.99	1.86	1.23	±5	Mar. 13, 2020
22.1	Head	2506	1.87	39.770	1.86	39.13	0.59	1.63	±5	Mar. 13, 2020
22.1	Head	2549.5	1.92	39.699	1.90	39.06	1.05	1.64	±5	Mar. 13, 2020
22.1	Head	2593	1.98	39.519	1.95	39.01	1.54	1.30	±5	Mar. 13, 2020
22.1	Head	2636.5	2.04	39.386	2.00	38.95	1.95	1.12	±5	Mar. 13, 2020
22.1	Head	2680	2.09	39.243	2.05	38.90	2.21	0.88	±5	Mar. 13, 2020
22.1	Head	2510	1.88	39.766	1.86	39.12	0.70	1.65	±5	Mar. 13, 2020
22.1	Head	2535	1.91	39.736	1.89	39.09	0.85	1.65	±5	Mar. 13, 2020
22.1	Head	2560	1.94	39.657	1.92	39.05	0.99	1.55	±5	Mar. 13, 2020
22.5	Head	1860	1.42	40.192	1.40	40.00	1.60	0.48	±5	Mar. 16, 2020
22.5	Head	1880	1.44	40.109	1.40	40.00	2.85	0.27	±5	Mar. 16, 2020
22.5	Head	1900	1.46	40.054	1.40	40.00	4.11	0.13	±5	Mar. 16, 2020
22.5	Head	1852.4	1.42	40.228	1.40	40.00	1.09	0.57	±5	Mar. 16, 2020
22.5	Head	1880	1.44	40.109	1.40	40.00	2.85	0.27	±5	Mar. 16, 2020
22.5	Head	1907.6	1.46	40.035	1.40	40.00	4.54	0.09	±5	Mar. 16, 2020
22.5	Head	1850.2	1.41	40.238	1.40	40.00	0.94	0.59	±5	Mar. 16, 2020
22.5	Head	1880	1.44	40.109	1.40	40.00	2.85	0.27	±5	Mar. 16, 2020
22.5	Head	1909.8	1.47	40.029	1.40	40.00	4.67	0.07	±5	Mar. 16, 2020
22.4	Head	1720	1.30	40.646	1.36	40.15	-4.09	1.23	±5	Mar. 17, 2020
22.4	Head	1732.5	1.31	40.613	1.36	40.13	-3.83	1.20	±5	Mar. 17, 2020
22.4	Head	1745	1.32	40.573	1.37	40.11	-3.52	1.15	±5	Mar. 17, 2020
22.6	Head	1860	1.42	40.124	1.40	40.00	1.22	0.31	±5	Mar. 18, 2020
22.6	Head	1880	1.43	40.041	1.40	40.00	2.47	0.10	±5	Mar. 18, 2020
22.6	Head	1900	1.45	39.986	1.40	40.00	3.72	-0.04	±5	Mar. 18, 2020
22.6	Head	1852.4	1.41	40.160	1.40	40.00	0.71	0.40	±5	Mar. 18, 2020
22.6	Head	1880	1.43	40.041	1.40	40.00	2.47	0.10	±5	Mar. 18, 2020
22.6	Head	1907.6	1.46	39.967	1.40	40.00	4.15	-0.08	±5	Mar. 18, 2020
22.6	Head	1850.2	1.41	40.170	1.40	40.00	0.56	0.43	±5	Mar. 18, 2020

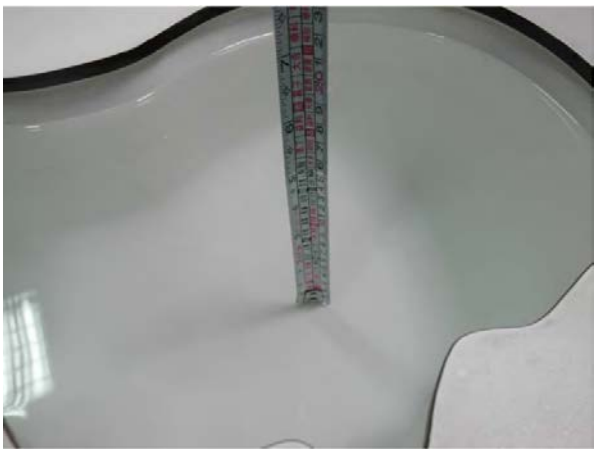
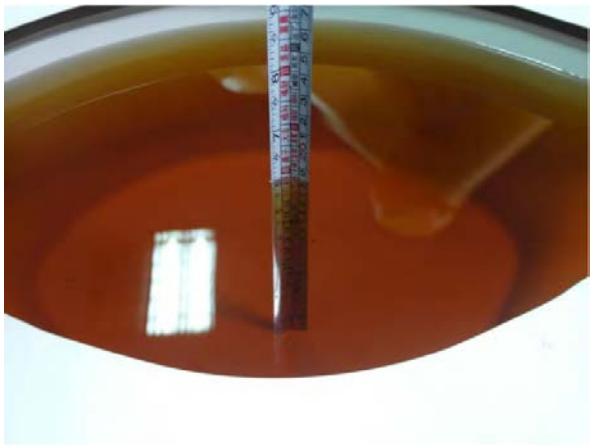
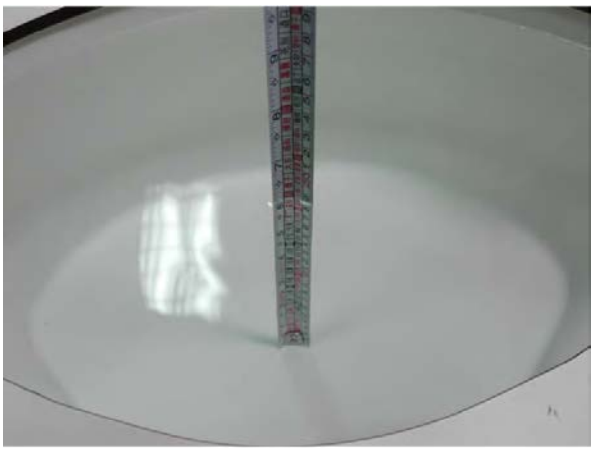
Tissue Temp (°C)	Liquid Type	Frequency (MHz)	Cond.	Perm.	target Cond.	target Perm.	σ (Delta) (%)	εr (Delta) (%)	Limit (%)	Date
			σ	εr	σ	εr				
22.6	Head	1880	1.43	40.041	1.40	40.00	2.47	0.10	±5	Mar. 18, 2020
22.6	Head	1909.8	1.46	39.961	1.40	40.00	4.28	-0.10	±5	Mar. 18, 2020
22.9	Head	704	0.86	42.681	0.89	42.15	-3.53	1.26	±5	Mar. 19, 2020
22.9	Head	707.5	0.86	42.629	0.89	42.13	-3.12	1.18	±5	Mar. 19, 2020
22.9	Head	711	0.86	42.578	0.89	42.11	-2.73	1.11	±5	Mar. 19, 2020
22.9	Head	709	0.86	42.606	0.89	42.12	-2.95	1.15	±5	Mar. 19, 2020
22.9	Head	710	0.86	42.592	0.89	42.11	-2.84	1.15	±5	Mar. 19, 2020
22.9	Head	711	0.86	42.578	0.89	42.11	-2.73	1.11	±5	Mar. 19, 2020
22.7	Head	829	0.90	42.149	0.90	41.53	0.55	1.49	±5	Mar. 20, 2020
22.7	Head	836.5	0.91	42.047	0.90	41.50	1.01	1.32	±5	Mar. 20, 2020
22.7	Head	844	0.92	41.935	0.91	41.50	0.89	1.05	±5	Mar. 20, 2020
22.7	Head	826.4	0.90	42.178	0.90	41.54	0.27	1.54	±5	Mar. 20, 2020
22.7	Head	836.4	0.91	42.049	0.90	41.50	0.99	1.32	±5	Mar. 20, 2020
22.7	Head	846.6	0.92	41.900	0.91	41.50	0.91	0.96	±5	Mar. 20, 2020
22.7	Head	824.2	0.90	42.201	0.90	41.55	0.04	1.57	±5	Mar. 20, 2020
22.7	Head	836.6	0.91	42.047	0.90	41.50	1.01	1.32	±5	Mar. 20, 2020
22.7	Head	848.8	0.92	41.871	0.91	41.50	0.78	0.89	±5	Mar. 20, 2020
22.3	Head	829	0.90	42.102	0.90	41.53	0.35	1.38	±5	Mar. 23, 2020
22.3	Head	836.5	0.91	42.000	0.90	41.50	0.81	1.20	±5	Mar. 23, 2020
22.3	Head	844	0.92	41.888	0.91	41.50	0.69	0.93	±5	Mar. 23, 2020
22.3	Head	826.4	0.90	42.131	0.90	41.54	0.08	1.42	±5	Mar. 23, 2020
22.3	Head	836.4	0.91	42.002	0.90	41.50	0.79	1.21	±5	Mar. 23, 2020
22.3	Head	846.6	0.92	41.854	0.91	41.50	0.71	0.85	±5	Mar. 23, 2020
22.3	Head	824.2	0.90	42.154	0.90	41.55	-0.16	1.45	±5	Mar. 23, 2020
22.3	Head	836.6	0.91	42.000	0.90	41.50	0.81	1.20	±5	Mar. 23, 2020
22.3	Head	848.8	0.92	41.824	0.91	41.50	0.58	0.78	±5	Mar. 23, 2020
22.5	Head	2510	1.87	39.658	1.86	39.12	0.10	1.38	±5	Apr. 06, 2020
22.5	Head	2535	1.90	39.628	1.89	39.09	0.32	1.38	±5	Apr. 06, 2020
22.5	Head	2560	1.92	39.550	1.92	39.05	0.41	1.28	±5	Apr. 06, 2020
22.7	Head	2308	1.63	40.303	1.67	39.44	-2.72	2.19	±5	Apr. 07, 2020
22.7	Head	2390	1.72	39.980	1.75	39.30	-1.71	1.73	±5	Apr. 07, 2020
22.7	Head	2472	1.81	39.718	1.82	39.17	-0.50	1.40	±5	Apr. 07, 2020
22.4	Head	2308	1.62	40.229	1.67	39.44	-3.03	2.00	±5	Apr. 08, 2020

Tissue Temp (°C)	Liquid Type	Frequency (MHz)	Cond.	Perm.	target Cond.	target Perm.	σ (Delta) (%)	εr (Delta) (%)	Limit (%)	Date
			σ	εr	σ	εr				
22.4	Head	2390	1.71	39.906	1.75	39.30	-2.01	1.54	±5	Apr. 08, 2020
22.4	Head	2472	1.81	39.644	1.82	39.17	-0.80	1.21	±5	Apr. 08, 2020
22.5	Head	2412	1.76	40.127	1.77	39.27	-0.11	2.18	±5	Apr. 13, 2020
22.5	Head	2437	1.79	40.052	1.79	39.22	0.28	2.12	±5	Apr. 13, 2020
22.5	Head	2462	1.82	39.988	1.81	39.18	0.55	2.06	±5	Apr. 13, 2020
22.6	Head	5260	4.63	36.253	4.72	35.94	-1.89	0.87	±5	Apr. 22, 2020
22.6	Head	5270	4.64	36.223	4.73	35.93	-1.96	0.82	±5	Apr. 22, 2020
22.6	Head	5280	4.65	36.197	4.74	35.92	-1.93	0.77	±5	Apr. 22, 2020
22.6	Head	5290	4.66	36.187	4.75	35.91	-1.84	0.77	±5	Apr. 22, 2020
22.6	Head	5300	4.68	36.159	4.76	35.90	-1.78	0.72	±5	Apr. 22, 2020
22.6	Head	5310	4.70	36.152	4.77	35.89	-1.54	0.73	±5	Apr. 22, 2020
22.6	Head	5320	4.71	36.184	4.78	35.88	-1.41	0.85	±5	Apr. 22, 2020
22.6	Head	5500	4.90	35.965	4.97	35.65	-1.28	0.88	±5	Apr. 22, 2020
22.6	Head	5510	4.91	35.951	4.98	35.64	-1.30	0.87	±5	Apr. 22, 2020
22.6	Head	5530	4.92	35.895	5.00	35.61	-1.47	0.80	±5	Apr. 22, 2020
22.6	Head	5550	4.94	35.847	5.02	35.58	-1.49	0.75	±5	Apr. 22, 2020
22.6	Head	5570	4.96	35.780	5.04	35.55	-1.60	0.65	±5	Apr. 22, 2020
22.6	Head	5580	4.97	35.751	5.05	35.53	-1.64	0.62	±5	Apr. 22, 2020
22.6	Head	5610	5.00	35.634	5.08	35.49	-1.56	0.41	±5	Apr. 22, 2020
22.6	Head	5620	5.02	35.611	5.09	35.48	-1.34	0.37	±5	Apr. 22, 2020
22.6	Head	5630	5.04	35.563	5.10	35.47	-1.20	0.26	±5	Apr. 22, 2020
22.6	Head	5660	5.13	35.442	5.13	35.44	-0.09	0.01	±5	Apr. 22, 2020
22.6	Head	5670	5.16	35.404	5.14	35.43	0.31	-0.07	±5	Apr. 22, 2020
22.6	Head	5690	5.21	35.344	5.16	35.41	0.89	-0.19	±5	Apr. 22, 2020
22.6	Head	5700	5.23	35.317	5.17	35.40	1.14	-0.23	±5	Apr. 22, 2020
22.6	Head	5710	5.24	35.304	5.18	35.39	1.21	-0.24	±5	Apr. 22, 2020
22.6	Head	5720	5.25	35.304	5.19	35.38	1.20	-0.21	±5	Apr. 22, 2020
22.6	Head	5745	5.26	35.335	5.22	35.36	0.86	-0.07	±5	Apr. 22, 2020
22.6	Head	5755	5.25	35.354	5.23	35.35	0.56	0.01	±5	Apr. 22, 2020
22.6	Head	5775	5.23	35.373	5.25	35.33	-0.25	0.12	±5	Apr. 22, 2020
22.6	Head	5785	5.21	35.360	5.26	35.32	-0.81	0.11	±5	Apr. 22, 2020
22.6	Head	5795	5.20	35.340	5.27	35.31	-1.16	0.09	±5	Apr. 22, 2020
22.6	Head	5825	5.20	35.231	5.30	35.28	-1.81	-0.14	±5	Apr. 22, 2020

Tissue Temp (°C)	Liquid Type	Frequency (MHz)	Cond.	Perm.	target Cond.	target Perm.	σ (Delta) (%)	εr (Delta) (%)	Limit (%)	Date
			σ	εr	σ	εr				
22.4	Head	5260	4.65	36.376	4.72	35.94	-1.52	1.21	±5	Apr. 23, 2020
22.4	Head	5270	4.65	36.346	4.73	35.93	-1.59	1.16	±5	Apr. 23, 2020
22.4	Head	5280	4.67	36.320	4.74	35.92	-1.56	1.11	±5	Apr. 23, 2020
22.4	Head	5290	4.68	36.310	4.75	35.91	-1.47	1.11	±5	Apr. 23, 2020
22.4	Head	5300	4.69	36.282	4.76	35.90	-1.41	1.06	±5	Apr. 23, 2020
22.4	Head	5310	4.71	36.275	4.77	35.89	-1.18	1.07	±5	Apr. 23, 2020
22.4	Head	5320	4.73	36.307	4.78	35.88	-1.04	1.19	±5	Apr. 23, 2020
22.4	Head	5500	4.92	36.088	4.97	35.65	-0.92	1.23	±5	Apr. 23, 2020
22.4	Head	5510	4.93	36.074	4.98	35.64	-0.94	1.22	±5	Apr. 23, 2020
22.4	Head	5530	4.94	36.018	5.00	35.61	-1.10	1.15	±5	Apr. 23, 2020
22.4	Head	5550	4.96	35.970	5.02	35.58	-1.12	1.10	±5	Apr. 23, 2020
22.4	Head	5570	4.98	35.903	5.04	35.55	-1.24	0.99	±5	Apr. 23, 2020
22.4	Head	5580	4.98	35.874	5.05	35.53	-1.28	0.97	±5	Apr. 23, 2020
22.4	Head	5610	5.02	35.757	5.08	35.49	-1.20	0.75	±5	Apr. 23, 2020
22.4	Head	5620	5.04	35.734	5.09	35.48	-0.98	0.71	±5	Apr. 23, 2020
22.4	Head	5630	5.06	35.686	5.10	35.47	-0.84	0.61	±5	Apr. 23, 2020
22.4	Head	5660	5.14	35.565	5.13	35.44	0.27	0.35	±5	Apr. 23, 2020
22.4	Head	5670	5.17	35.527	5.14	35.43	0.67	0.27	±5	Apr. 23, 2020
22.4	Head	5690	5.22	35.467	5.16	35.41	1.25	0.16	±5	Apr. 23, 2020
22.4	Head	5700	5.25	35.440	5.17	35.40	1.50	0.11	±5	Apr. 23, 2020
22.4	Head	5710	5.26	35.427	5.18	35.39	1.57	0.10	±5	Apr. 23, 2020
22.4	Head	5720	5.27	35.427	5.19	35.38	1.56	0.13	±5	Apr. 23, 2020
22.4	Head	5745	5.28	35.458	5.22	35.36	1.23	0.28	±5	Apr. 23, 2020
22.4	Head	5755	5.27	35.477	5.23	35.35	0.92	0.36	±5	Apr. 23, 2020
22.4	Head	5775	5.25	35.496	5.25	35.33	0.11	0.47	±5	Apr. 23, 2020
22.4	Head	5785	5.23	35.483	5.26	35.32	-0.45	0.46	±5	Apr. 23, 2020
22.4	Head	5795	5.22	35.463	5.27	35.31	-0.80	0.43	±5	Apr. 23, 2020
22.4	Head	5825	5.22	35.354	5.30	35.28	-1.45	0.21	±5	Apr. 23, 2020

6.3 Liquid Depth

According to KDB865664 ,the depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm with ≤ ± 0.5 cm variation for SAR measurements ≤ 3 GHz and ≥ 10.0 cm with ≤ ± 0.5 cm variation for measurements > 3 GHz.

	
Liquid Height for Head SAR (Low Freq.)	Liquid Height for Head SAR (High Freq.)
	
Liquid Height for Body SAR (Low Freq.)	Liquid Height for Body SAR (High Freq.)

7. SAR Testing with RF Transmitters

7.1 SAR Testing with GSM / GPRS / EGPRS

<General requirements>

1. The following procedures may be considered for each frequency band to determine SAR test reduction for devices operating in GSM/GPRS/EDGE modes to demonstrate RF exposure compliance. GSM voice mode transmits with 1 time slot.
2. GPRS and EDGE may transmit up to 4 time slots in the 8 time-slot frame according to the multislot class implemented in a device.
3. The SAR test reduction procedures for GSM/(E)GPRS devices may be considered in conjunction with the applicable SAR test reduction provisions in KDB Publication 447498 D01.
4. 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.
5. 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.
6. The GMSK and 8-PSK EDGE configurations are considered separately for SAR compliance. The 3G SAR test reduction procedure is applied to 8-PSK EDGE with GMSK GPRS/EDGE as the primary mode.

<Setup >

Configure the basestation to support GMSK and 8PSK call respectively, and set timeslot transmission for GMSK GSM/GPRS and 8PSK EDGE. Measure and record power outputs for both modulations, that test is applicable.

7.2 SAR Testing with WCDMA

<General requirements>

1. The default test configuration is to measure SAR with an established radio link between the handset and a communication test set using a 12.2 kbps RMC (reference measurement channel) configured in Test Loop Mode 1.
2. SAR must be measured according to these maximum output conditions and requirements in KDB Publication 447498 D01.
3. **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”.
4. **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 handset with 12.2 kbps RMC as the primary mode.

<Setup >

The following tests were completed according to the test requirements outlined in section 5.2 of the 3GPP TS34.121-1 specification. The DUT supports power Class 3, which has a nominal maximum output power of 24 dBm (+1.7/-3.7).

- Step1: set a Test Mode 1 loop back with a 12.2 kbps Reference Measurement Channel (RMC).
- Step 2: set and send continuously up power control commands to the device.
- Step 3: measure the power at the device antenna connector using the power meter with average detector and test SAR.

7.3 SAR Testing with LTE

<General requirements>

1. 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.
2. 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.
3. When the highest reported SAR for 1 RB and 50% RB allocation are > 0.8 W/kg, SAR is measured for the highest output power channel in 100%RB.
4. 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.
5. The procedures required for 1 RB allocation are applied to measure the SAR for QPSK with 50% RB allocation.
6. 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 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.
7. 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.
8. According to 5.3 of KDB 941225 D05, that about the test reduction for other channel bandwidth, if 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, then SAR need to test.
9. When a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing; therefore, the requirement for H, M, and L channels may not fully apply.

<FDD Setup >

All SAR measurements for LTE were performed using the Anritsu MT8820C. A closed loop power control setting allowed the UE to transmit at the maximum output power during the SAR measurements.Configure the basestation to support LTE tests in respect to the 3GPP 36.521-1,and set ch , RB allocation number ,RB allocation offset , and send continuously Up power control commands to the device.

MPR was enabled for this device. A-MPR was disabled for all SAR test measurements.

<TDD Setup >

All SAR measurements for LTE were performed using the Anritsu MT8820C. A closed loop power control setting allowed the UE to transmit at the maximum output power during the SAR measurements.Configure the basestation to support LTE tests in respect to the 3GPP 36.521-1,and set ch , TDD mode , RB allocation number ,RB allocation offset , and send continuously Up power control commands to the device.

MPR was enabled for this device. A-MPR was disabled for all SAR test measurements.

For 3GPP table 4.2.1 as below, support configurations and worst-case UpPTS information into the table.

3GPP Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS).

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink			EUT Support Special subframe	Worst case UpPTS
	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×Ts	2192×Ts	2560×Ts	7680×Ts	2192×Ts	2560×Ts	□	□
1	19760×Ts			20480×Ts			□	□
2	21952×Ts			23040×Ts			□	□
3	24144×Ts			25600×Ts			■	□
4	26336×Ts			7680×Ts	4384×Ts	5120×Ts	■	□
5	6592×Ts	4384×Ts	5120×Ts	20480×Ts			□	□
6	19760×Ts			23040×Ts			□	□
7	21952×Ts			12800×Ts			■	■
8	24144×Ts			-	-	-	□	□
9	13168×Ts			-	-	-	□	□
Duty cycle$_{(maximum)}$								43.33 %

The EUT only supports the 40 % case, which is Table 4.2.2, configuration #1 below.

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

<Maximum power reduction (MPR) >

Identify the LTE voice/data requirements in each operating mode and exposure condition with respect to head and body test configurations, antenna locations, handset flip-cover or slide positions, antenna diversity conditions etc.

The voice and data transmission:

- ◆ Data only device.

Identify if Maximum Power Reduction (MPR) is optional or mandatory, i.e. built-in by design:

- ◆ Maximum Power Reduction (MPR) is mandatory, i.e. built-in by design.
- ◆ A-MPR (additional MPR) must be disabled
- ◆ A-MPR was disabled during testing.

Maximum Power Reduction (MPR) for Power Class 3							
Channel bandwidth / Transmission bandwidth configuration (RB)							
Modulation	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20MHz	MPR (dB)
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

7.4 LTE Frequency range and channel bandwidth

Channel bandwidth support:

Band	BW (MHz)					
	1.4	3	5	10	15	20
LTE Band 2	V	V	V	V	V	V
LTE Band 4	V	V	V	V	V	V
LTE Band 5	V	V	V	V	---	---
LTE Band 7	---	---	V	V	V	V
LTE Band 12	V	V	V	V	---	---
LTE Band 17	---	---	V	V	---	---
LTE Band 38	---	---	V	V	V	V
LTE Band 41	---	---	V	V	V	V

LTE Band	Bandwidth (MHz)	Test Frequency ID	N_{UL}	Frequency of Uplink (MHz)
LTE Band 2	1.4	Low Range	18607	1850.7
		Mid Range	18900	1880.0
		High Range	19193	1909.3
	3	Low Range	18615	1851.5
		Mid Range	18900	1880.0
		High Range	19185	1908.5
	5	Low Range	18625	1852.5
		Mid Range	18900	1880.0
		High Range	19175	1907.5
	10	Low Range	18650	1855.0
		Mid Range	18900	1880.0
		High Range	19150	1905.0
	15	Low Range	18675	1857.5
		Mid Range	18900	1880.0
		High Range	19125	1902.5
	20	Low Range	18700	1860.0
		Mid Range	18900	1880.0
		High Range	19100	1900.0

LTE Band	Bandwidth (MHz)	Test Frequency ID	N_{UL}	Frequency of Uplink (MHz)
LTE Band 4	1.4	Low Range	19957	1710.7
		Mid Range	20175	1732.5
		High Range	20393	1754.3
	3	Low Range	19965	1711.5
		Mid Range	20175	1732.5
		High Range	20385	1753.5
	5	Low Range	19975	1712.5
		Mid Range	20175	1732.5
		High Range	20375	1752.5
	10	Low Range	20000	1715.0
		Mid Range	20175	1732.5
		High Range	20350	1750.0
	15	Low Range	20025	1717.5
		Mid Range	20175	1732.5
		High Range	20325	1747.5
	20	Low Range	20050	1720.0
		Mid Range	20175	1732.5
		High Range	20300	1745.0
LTE Band 5	1.4	Low Range	20407	824.7
		Mid Range	20525	836.5
		High Range	20643	848.3
	3	Low Range	20415	825.5
		Mid Range	20525	836.5
		High Range	20635	847.5
	5	Low Range	20425	826.5
		Mid Range	20525	836.5
		High Range	20625	846.5
	10	Low Range	20450	829.0
		Mid Range	20525	836.5
		High Range	20600	844.0

LTE Band	Bandwidth (MHz)	Test Frequency ID	N_{UL}	Frequency of Uplink (MHz)
LTE Band 7	5	Low Range	20775	2502.5
		Mid Range	21100	2535.0
		High Range	21425	2567.5
	10	Low Range	20800	2505.0
		Mid Range	21100	2535.0
		High Range	21400	2565.0
	15	Low Range	20825	2507.5
		Mid Range	21100	2535.0
		High Range	21375	2562.5
	20	Low Range	20850	2510.0
		Mid Range	21100	2535.0
		High Range	21350	2560.0
LTE Band 12	1.4	Low Range	23017	699.7
		Mid Range	23095	707.5
		High Range	23173	715.3
	3	Low Range	23025	700.5
		Mid Range	23095	707.5
		High Range	23165	714.5
	5	Low Range	23035	701.5
		Mid Range	23095	707.5
		High Range	23155	713.5
	10	Low Range	23060	704.0
		Mid Range	23095	707.5
		High Range	23130	711.0
LTE Band 17	5	Low Range	23755	706.5
		Mid Range	23790	710.0
		High Range	23825	713.5
	10	Low Range	23780	709.0
		Mid Range	23790	710.0
		High Range	23800	711.0
LTE Band 38	5	Low Range	37775	2572.5
		Mid Range	38000	2595.0
		High Range	38225	2617.5
	10	Low Range	37800	2575.0
		Mid Range	38000	2595.0
		High Range	38200	2615.0
	15	Low Range	37825	2577.5
		Mid Range	38000	2595.0
		High Range	38175	2612.5
	20	Low Range	37850	2580.0
		Mid Range	38000	2595.0
		High Range	38150	2610.0

LTE Band	Bandwidth (MHz)	Test Frequency ID	N_{UL}	Frequency of Uplink (MHz)
LTE Band 41	5	Low Range	39675	2498.5
		Mid Range	40620	2593.0
		High Range	41565	2687.5
	10	Low Range	39700	2501.0
		Mid Range	40620	2593.0
		High Range	41540	2685.0
	15	Low Range	39725	2503.5
		Mid Range	40620	2593.0
		High Range	41515	2682.5
	20	Low Range	39750	2506.0
		Mid Range	40620	2593.0
		High Range	41490	2680.0

7.5 SAR Testing with 802.11 Wi-Fi

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.

- When the specified maximum output power is the same for both UNII 1 and UNII 2A, begin SAR measurements in UNII 2A with the channel with the highest measured output power. If the reported SAR for UNII 2A is ≤ 1.2 W/kg, SAR is not required for UNII 1; otherwise treat the remaining bands separately and test them independently for SAR.
- When the specified maximum output power is different between UNII 1 and UNII 2A, begin SAR with the band that has the higher specified maximum output. If the highest reported SAR for the band with the highest specified power is ≤ 1.2 W/kg, testing for the band with the lower specified output power is not required; otherwise test the remaining bands independently for SAR.

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.

7.6 Conducted Power

< GSM / GPRS / EGPRS >

Band	Modulation	Test Mode	CH	Frequency (MHz)	Source-Time Avg (dBm)		Avg burst (dBm)	
					Conducted power	Tune-up power	Burst Average	Tune-up power
GSM 850	GMSK	1Down1Up Duty factor 1/8	Lowest	824.2	24.15	24.47	33.18	33.50
			Middle	836.6	24.47	24.97	33.50	34.00
			Highest	848.8	24.41	24.47	33.44	33.50
GPRS 850 Multi Class :12 Max Up:4 Max Down:4 Sum:5	GMSK	4Down1Up Duty factor 1/8	Lowest	824.2	23.99	24.47	33.02	33.50
			Middle	836.6	24.28	24.47	33.31	33.50
			Highest	848.8	24.21	24.47	33.24	33.50
		3Down2Up Duty factor 2/8	Lowest	824.2	26.81	26.98	32.83	33.00
			Middle	836.6	27.04	27.48	33.06	33.50
			Highest	848.8	27.09	27.48	33.11	33.50
		2Down3Up Duty factor 3/8	Lowest	824.2	28.42	28.74	32.68	33.00
			Middle	836.6	28.68	28.74	32.94	33.00
			Highest	848.8	28.62	28.74	32.88	33.00
		1Down4Up Duty factor 4/8	Lowest	824.2	29.52	29.99	32.53	33.00
			Middle	836.6	29.70	29.99	32.71	33.00
			Highest	848.8	29.67	29.99	32.68	33.00
EGPRS 850 Multi Class :12 Max Up:4 Max Down:4 Sum:5	8PSK	4Down1Up Duty factor 1/8	Lowest	824.2	18.72	18.97	27.75	28.00
			Middle	836.6	18.31	18.47	27.34	27.50
			Highest	848.8	18.48	18.97	27.51	28.00
		3Down2Up Duty factor 2/8	Lowest	824.2	21.52	21.98	27.54	28.00
			Middle	836.6	21.26	21.48	27.28	27.50
			Highest	848.8	21.29	21.48	27.31	27.50
		2Down3Up Duty factor 3/8	Lowest	824.2	23.05	23.24	27.31	27.50
			Middle	836.6	22.91	23.24	27.17	27.50
			Highest	848.8	22.82	23.24	27.08	27.50
		1Down4Up Duty factor 4/8	Lowest	824.2	24.07	24.49	27.08	27.50
			Middle	836.6	23.93	23.99	26.94	27.00
			Highest	848.8	23.85	23.99	26.86	27.00

Note: 1. Time Average power slot duty cycle factor calculate:

1up: Average burst power+10*LOG(1/8)

2up: Average burst power+10*LOG(2/8)

3up: Average burst power+10*LOG(3/8)

4up: Average burst power+10*LOG(4/8)

Band	Modulation	Data Rate	CH	Frequency (MHz)	Source-Time Avg (dBm)		Avg burst (dBm)	
					Conducted power	Tune-up power	Burst Average	Tune-up power
GSM 1900	GMSK	1Down1Up Duty factor 1/8	Lowest	1850.2	21.04	21.47	30.07	30.50
			Middle	1880.0	21.34	21.47	30.37	30.50
			Highest	1909.8	21.39	21.47	30.42	30.50
GPRS 1900 Multi Class :12 Max Up:4 Max Down:4 Sum:5	GMSK	4Down1Up Duty factor 1/8	Lowest	1850.2	20.81	20.97	29.84	30.00
			Middle	1880.0	21.16	21.47	30.19	30.50
			Highest	1909.8	21.08	21.47	30.11	30.50
		3Down2Up Duty factor 2/8	Lowest	1850.2	23.62	23.98	29.64	30.00
			Middle	1880.0	23.84	23.98	29.86	30.00
			Highest	1909.8	23.89	23.98	29.91	30.00
		2Down3Up Duty factor 3/8	Lowest	1850.2	25.25	25.74	29.51	30.00
			Middle	1880.0	25.43	25.74	29.69	30.00
			Highest	1909.8	25.38	25.74	29.64	30.00
		1Down4Up Duty factor 4/8	Lowest	1850.2	26.28	26.49	29.29	29.50
			Middle	1880.0	26.40	26.49	29.41	29.50
			Highest	1909.8	26.37	26.49	29.38	29.50
EGPRS 1900 Multi Class :12 Max Up:4 Max Down:4 Sum:5	8PSK	4Down1Up Duty factor 1/8	Lowest	1850.2	16.88	16.97	25.91	26.00
			Middle	1880.0	17.00	17.47	26.03	26.50
			Highest	1909.8	17.12	17.47	26.15	26.50
		3Down2Up Duty factor 2/8	Lowest	1850.2	19.66	19.98	25.68	26.00
			Middle	1880.0	19.82	19.98	25.84	26.00
			Highest	1909.8	19.89	19.98	25.91	26.00
		2Down3Up Duty factor 3/8	Lowest	1850.2	21.18	21.24	25.44	25.50
			Middle	1880.0	21.40	21.74	25.66	26.00
			Highest	1909.8	21.36	21.74	25.62	26.00
		1Down4Up Duty factor 4/8	Lowest	1850.2	22.20	22.49	25.21	25.50
			Middle	1880.0	22.38	22.49	25.39	25.50
			Highest	1909.8	22.41	22.49	25.42	25.50

Note: 1. Time Average power slot duty cycle factor calculate:

1up: Average burst power+10*LOG(1/8)

2up: Average burst power+10*LOG(2/8)

3up: Average burst power+10*LOG(3/8)

4up: Average burst power+10*LOG(4/8)

< WCDMA / HSDPA / HSUPA >

Band	Modulation	Sub-test	CH	Frequency (MHz)	Average (dBm)	
					Conducted power	Tune-up power
WCDMA Band II (RMC12.2K)	QPSK	---	Lowest	1852.4	**23.66**	24.00
			Middle	1880.0	23.56	24.00
			Highest	1907.6	23.54	24.00
HSDPA Band II	QPSK	1	Lowest	1852.4	22.96	23.00
			Middle	1880.0	22.84	23.00
			Highest	1907.6	22.82	23.00
		2	Lowest	1852.4	22.28	22.50
			Middle	1880.0	22.18	22.50
			Highest	1907.6	22.21	22.50
		3	Lowest	1852.4	22.32	22.50
			Middle	1880.0	22.17	22.50
			Highest	1907.6	22.19	22.50
		4	Lowest	1852.4	22.72	23.00
			Middle	1880.0	22.66	23.00
			Highest	1907.6	22.58	23.00
HSUPA Band II	QPSK	1	Lowest	1852.4	22.32	22.50
			Middle	1880.0	22.18	22.50
			Highest	1907.6	22.26	22.50
		2	Lowest	1852.4	20.34	20.50
			Middle	1880.0	20.26	20.50
			Highest	1907.6	20.20	20.50
		3	Lowest	1852.4	21.35	21.50
			Middle	1880.0	21.06	21.50
			Highest	1907.6	21.18	21.50
		4	Lowest	1852.4	20.27	20.50
			Middle	1880.0	20.15	20.50
			Highest	1907.6	20.16	20.50
		5	Lowest	1852.4	22.05	22.50
			Middle	1880.0	22.01	22.50
			Highest	1907.6	22.17	22.50

Band	Modulation	Sub-test	CH	Frequency (MHz)	Average (dBm)	
					Conducted power	Tune-up power
WCDMA Band V (RMC12.2K)	QPSK	---	Lowest	826.4	22.94	23.00
			Middle	836.6	23.02	23.50
			Highest	846.6	22.92	23.00
HSDPA Band V	QPSK	1	Lowest	826.4	22.18	22.50
			Middle	836.6	22.21	22.50
			Highest	846.6	22.16	22.50
		2	Lowest	826.4	21.62	22.00
			Middle	836.6	21.74	22.00
			Highest	846.6	21.57	22.00
		3	Lowest	826.4	21.65	22.00
			Middle	836.6	21.68	22.00
			Highest	846.6	21.62	22.00
		4	Lowest	826.4	22.08	22.50
			Middle	836.6	22.09	22.50
			Highest	846.6	21.96	22.00
HSUPA Band V	QPSK	1	Lowest	826.4	21.51	22.00
			Middle	836.6	21.53	22.00
			Highest	846.6	21.59	22.00
		2	Lowest	826.4	19.45	19.50
			Middle	836.6	19.56	20.00
			Highest	846.6	19.57	20.00
		3	Lowest	826.4	20.55	21.00
			Middle	836.6	20.43	20.50
			Highest	846.6	20.54	21.00
		4	Lowest	826.4	19.44	19.50
			Middle	836.6	19.50	20.00
			Highest	846.6	19.47	19.50
		5	Lowest	826.4	21.38	21.50
			Middle	836.6	21.35	21.50
			Highest	846.6	21.37	21.50

< LTE >

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 2	1.4 MHz	QPSK	18607	1850.7	1	0	22.79	23.00
					1	2	22.83	23.00
					1	5	22.72	23.00
					3	0	22.79	23.00
					3	1	22.84	23.00
					3	3	22.82	23.00
					6	0	21.84	22.00
			18900	1880.0	1	0	22.80	23.00
					1	2	22.87	23.00
					1	5	22.78	23.00
					3	0	22.82	23.00
					3	1	22.86	23.00
					3	3	22.84	23.00
					6	0	21.85	22.00
			19193	1909.3	1	0	22.78	23.00
					1	2	22.85	23.00
					1	5	22.77	23.00
					3	0	22.81	23.00
					3	1	22.85	23.00
					3	3	22.83	23.00
					6	0	21.87	22.00
		16QAM	18607	1850.7	1	0	22.14	22.50
					1	2	22.20	22.50
					1	5	22.11	22.50
					3	0	21.99	22.00
					3	1	22.06	22.50
					3	3	22.01	22.50
					6	0	20.97	21.00
			18900	1880.0	1	0	22.18	22.50
					1	2	22.30	22.50
					1	5	22.13	22.50
					3	0	22.05	22.50
					3	1	22.11	22.50
					3	3	22.04	22.50
					6	0	21.05	21.50
			19193	1909.3	1	0	22.16	22.50
					1	2	22.18	22.50
					1	5	22.14	22.50
					3	0	22.08	22.50
					3	1	22.06	22.50
					3	3	22.05	22.50
					6	0	21.03	21.50

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 2	3 MHz	QPSK	18615	1851.5	1	0	22.74	23.00
					1	7	22.87	23.00
					1	14	22.74	23.00
					8	0	21.79	22.00
					8	3	21.85	22.00
					8	7	21.79	22.00
					15	0	21.82	22.00
			18900	1880.0	1	0	22.80	23.00
					1	7	22.92	23.00
					1	14	22.75	23.00
					8	0	21.87	22.00
					8	3	21.89	22.00
					8	7	21.86	22.00
					15	0	21.84	22.00
			19185	1908.5	1	0	22.81	23.00
					1	7	22.91	23.00
					1	14	22.78	23.00
					8	0	21.83	22.00
					8	3	21.87	22.00
					8	7	21.84	22.00
					15	0	21.88	22.00
		16QAM	18615	1851.5	1	0	22.07	22.50
					1	7	22.20	22.50
					1	14	22.09	22.50
					8	0	20.94	21.00
					8	3	20.98	21.00
					8	7	20.94	21.00
					15	0	20.89	21.00
			18900	1880.0	1	0	22.13	22.50
					1	7	22.30	22.50
					1	14	22.19	22.50
					8	0	21.07	21.50
					8	3	21.10	21.50
					8	7	21.09	21.50
					15	0	20.94	21.00
			19185	1908.5	1	0	22.13	22.50
					1	7	22.28	22.50
					1	14	22.17	22.50
					8	0	21.03	21.50
					8	3	21.07	21.50
					8	7	21.05	21.50
					15	0	21.00	21.50

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 2	5 MHz	QPSK	18625	1852.5	1	0	22.71	23.00
					1	12	22.73	23.00
					1	24	22.69	23.00
					12	0	21.80	22.00
					12	6	21.79	22.00
					12	13	21.76	22.00
					25	0	21.75	22.00
			18900	1880.0	1	0	22.75	23.00
					1	12	22.79	23.00
					1	24	22.73	23.00
					12	0	21.86	22.00
					12	6	21.86	22.00
					12	13	21.82	22.00
					25	0	21.80	22.00
			19175	1907.5	1	0	22.74	23.00
					1	12	22.78	23.00
					1	24	22.75	23.00
					12	0	21.83	22.00
					12	6	21.88	22.00
					12	13	21.81	22.00
					25	0	21.81	22.00
		16QAM	18625	1852.5	1	0	22.00	22.50
					1	12	22.04	22.50
					1	24	21.92	22.00
					12	0	20.90	21.00
					12	6	20.89	21.00
					12	13	20.86	21.00
					25	0	20.85	21.00
			18900	1880.0	1	0	22.12	22.50
					1	12	22.14	22.50
					1	24	22.15	22.50
					12	0	21.05	21.50
					12	6	21.05	21.50
					12	13	20.98	21.00
					25	0	20.95	21.00
			19175	1907.5	1	0	21.97	22.00
					1	12	22.09	22.50
					1	24	22.06	22.50
					12	0	21.00	21.50
					12	6	21.06	21.50
					12	11	21.01	21.50
					25	0	20.94	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 2	10 MHz	QPSK	18650	1855.0	1	0	22.76	23.00
					1	24	22.64	23.00
					1	49	22.68	23.00
					25	0	21.73	22.00
					25	12	21.75	22.00
					25	25	21.72	22.00
					50	0	21.71	22.00
			18900	1880.0	1	0	22.82	23.00
					1	24	22.74	23.00
					1	49	22.77	23.00
					25	0	21.78	22.00
					25	12	21.80	22.00
					25	25	21.76	22.00
					50	0	21.76	22.00
			19150	1905.0	1	0	22.72	23.00
					1	24	22.73	23.00
					1	49	22.71	23.00
					25	0	21.81	22.00
					25	12	21.81	22.00
					25	25	21.79	22.00
					50	0	21.78	22.00
		16QAM	18650	1855.0	1	0	22.06	22.50
					1	24	21.92	22.00
					1	49	21.95	22.00
					25	0	20.82	21.00
					25	12	20.82	21.00
					25	25	20.79	21.00
					50	0	20.79	21.00
			18900	1880.0	1	0	22.12	22.50
					1	24	22.15	22.50
					1	49	22.22	22.50
					25	0	20.92	21.00
					25	12	20.92	21.00
					25	25	20.88	21.00
					50	0	20.90	21.00
			19150	1905.0	1	0	22.00	22.50
					1	24	22.00	22.50
					1	49	22.04	22.50
					25	0	20.89	21.00
					25	12	20.91	21.00
					25	25	20.87	21.00
					50	0	20.92	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 2	15 MHz	QPSK	18675	1857.5	1	0	22.62	23.00
					1	37	22.62	23.00
					1	74	22.55	23.00
					36	0	21.68	22.00
					36	19	21.75	22.00
					36	39	21.69	22.00
					75	0	21.71	22.00
			18900	1880	1	0	22.69	23.00
					1	37	22.73	23.00
					1	74	22.70	23.00
					36	0	21.81	22.00
					36	19	21.83	22.00
					36	39	21.79	22.00
					75	0	21.79	22.00
			19125	1902.5	1	0	22.69	23.00
					1	37	22.71	23.00
					1	74	22.66	23.00
					36	0	21.75	22.00
					36	19	21.81	22.00
					36	39	21.79	22.00
					75	0	21.79	22.00
		16QAM	18675	1857.5	1	0	21.97	22.00
					1	37	21.88	22.00
					1	74	21.83	22.00
					36	0	20.77	21.00
					36	19	20.80	21.00
					36	39	20.72	21.00
					75	0	20.77	21.00
			18900	1880	1	0	21.96	22.00
					1	37	22.07	22.50
					1	74	22.07	22.50
					36	0	20.91	21.00
					36	19	20.97	21.00
					36	39	20.92	21.00
					75	0	20.90	21.00
			19125	1902.5	1	0	22.05	22.50
					1	37	21.94	22.00
					1	74	22.03	22.50
					36	0	20.89	21.00
					36	19	20.89	21.00
					36	39	20.89	21.00
					75	0	20.88	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 2	20 MHz	QPSK	18700	1860	1	0	22.66	23.00
					1	49	22.59	23.00
					1	99	22.63	23.00
					50	0	21.71	22.00
					50	25	21.70	22.00
					50	50	21.76	22.00
					100	0	21.82	22.00
			18900	1880	1	0	22.72	23.00
					1	49	22.71	23.00
					1	99	22.69	23.00
					50	0	21.75	22.00
					50	25	21.77	22.00
					50	50	21.74	22.00
					100	0	21.74	22.00
			19100	1900	1	0	22.58	23.00
					1	49	22.67	23.00
					1	99	22.65	23.00
					50	0	21.68	22.00
					50	25	21.79	22.00
					50	50	21.76	22.00
					100	0	21.68	22.00
		16QAM	18700	1860	1	0	21.95	22.00
					1	49	21.83	22.00
					1	99	21.91	22.00
					50	0	20.79	21.00
					50	25	20.81	21.00
					50	50	20.84	21.00
					100	0	20.84	21.00
			18900	1880	1	0	21.99	22.00
					1	49	22.10	22.50
					1	99	22.13	22.50
					50	0	20.89	21.00
					50	25	20.94	21.00
					50	50	20.91	21.00
					100	0	20.91	21.00
			19100	1900	1	0	21.95	22.00
					1	49	21.93	22.00
					1	99	21.97	22.00
					50	0	20.78	21.00
					50	25	20.85	21.00
					50	50	20.87	21.00
					100	0	20.79	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 4	1.4 MHz	QPSK	19957	1710.7	1	0	22.62	23.00
					1	2	22.70	23.00
					1	5	22.62	23.00
					3	0	22.67	23.00
					3	1	22.72	23.00
					3	3	22.70	23.00
					6	0	21.67	22.00
			20175	1732.5	1	0	22.61	23.00
					1	2	22.65	23.00
					1	5	22.56	23.00
					3	0	22.62	23.00
					3	1	22.63	23.00
					3	3	22.64	23.00
					6	0	21.60	22.00
			20393	1754.3	1	0	22.60	23.00
					1	2	22.71	23.00
					1	5	22.63	23.00
					3	0	22.68	23.00
					3	1	22.68	23.00
					3	3	22.66	23.00
					6	0	21.64	22.00
		16QAM	19957	1710.7	1	0	22.01	22.50
					1	2	22.06	22.50
					1	5	21.97	22.00
					3	0	21.89	22.00
					3	1	21.95	22.00
					3	3	21.89	22.00
					6	0	20.86	21.00
			20175	1732.5	1	0	22.04	22.50
					1	2	22.12	22.50
					1	5	22.01	22.50
					3	0	21.91	22.00
					3	1	21.98	22.00
					3	3	21.92	22.00
					6	0	20.81	21.00
			20393	1754.3	1	0	22.00	22.50
					1	2	22.07	22.50
					1	5	22.00	22.50
					3	0	21.87	22.00
					3	1	21.93	22.00
					3	3	21.88	22.00
					6	0	20.84	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 4	3 MHz	QPSK	19965	1711.5	1	0	22.68	23.00
					1	7	22.78	23.00
					1	14	22.63	23.00
					8	0	21.71	22.00
					8	3	21.77	22.00
					8	7	21.71	22.00
					15	0	21.73	22.00
			20175	1732.5	1	0	22.62	23.00
					1	7	22.75	23.00
					1	14	22.62	23.00
					8	0	21.66	22.00
					8	3	21.68	22.00
					8	7	21.65	22.00
					15	0	21.65	22.00
			20385	1753.5	1	0	22.64	23.00
					1	7	22.76	23.00
					1	14	22.65	23.00
					8	0	21.70	22.00
					8	3	21.74	22.00
					8	7	21.69	22.00
					15	0	21.69	22.00
		16QAM	19965	1711.5	1	0	22.05	22.50
					1	7	22.16	22.50
					1	14	22.04	22.50
					8	0	20.89	21.00
					8	3	20.93	21.00
					8	7	20.90	21.00
					15	0	20.84	21.00
			20175	1732.5	1	0	22.12	22.50
					1	7	22.13	22.50
					1	14	22.07	22.50
					8	0	20.89	21.00
					8	3	20.91	21.00
					8	7	20.90	21.00
					15	0	20.76	21.00
			20385	1753.5	1	0	21.95	22.00
					1	7	22.08	22.50
					1	14	22.00	22.50
					8	0	20.90	21.00
					8	3	20.93	21.00
					8	7	20.86	21.00
					15	0	20.78	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 4	5 MHz	QPSK	19975	1712.5	1	0	22.70	23.00
					1	12	22.68	23.00
					1	24	22.66	23.00
					12	0	21.74	22.00
					12	6	21.73	22.00
					12	13	21.73	22.00
					25	0	21.73	22.00
			20175	1732.5	1	0	22.64	23.00
					1	12	22.64	23.00
					1	24	22.63	23.00
					12	0	21.68	22.00
					12	6	21.73	22.00
					12	13	21.68	22.00
					25	0	21.65	22.00
			20375	1752.5	1	0	22.69	23.00
					1	12	22.68	23.00
					1	24	22.63	23.00
					12	0	21.72	22.00
					12	6	21.75	22.00
					12	13	21.69	22.00
					25	0	21.71	22.00
		16QAM	19975	1712.5	1	0	22.06	22.50
					1	12	22.08	22.50
					1	24	22.05	22.50
					12	0	20.89	21.00
					12	6	20.92	21.00
					12	13	20.88	21.00
					25	0	20.84	21.00
			20175	1732.5	1	0	22.14	22.50
					1	12	22.14	22.50
					1	24	22.03	22.50
					12	0	20.91	21.00
					12	6	20.94	21.00
					12	13	20.86	21.00
					25	0	20.81	21.00
			20375	1752.5	1	0	22.02	22.50
					1	12	22.06	22.50
					1	24	22.02	22.50
					12	0	20.88	21.00
					12	6	20.93	21.00
					12	11	20.89	21.00
					25	0	20.82	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 4	10 MHz	QPSK	20000	1715.0	1	0	22.68	23.00
					1	24	22.69	23.00
					1	49	22.65	23.00
					25	0	21.70	22.00
					25	12	21.74	22.00
					25	25	21.69	22.00
					50	0	21.71	22.00
			20175	1732.5	1	0	22.69	23.00
					1	24	22.68	23.00
					1	49	22.62	23.00
					25	0	21.68	22.00
					25	12	21.70	22.00
					25	25	21.65	22.00
					50	0	21.65	22.00
			20350	1750.0	1	0	22.73	23.00
					1	24	22.71	23.00
					1	49	22.63	23.00
					25	0	21.74	22.00
					25	12	21.74	22.00
					25	25	21.69	22.00
					50	0	21.72	22.00
		16QAM	20000	1715.0	1	0	22.09	22.50
					1	24	22.11	22.50
					1	49	22.01	22.50
					25	0	20.84	21.00
					25	12	20.84	21.00
					25	25	20.82	21.00
					50	0	20.82	21.00
			20175	1732.5	1	0	22.14	22.50
					1	24	22.14	22.50
					1	49	22.08	22.50
					25	0	20.85	21.00
					25	12	20.83	21.00
					25	25	20.77	21.00
					50	0	20.77	21.00
			20350	1750.0	1	0	22.09	22.50
					1	24	22.05	22.50
					1	49	22.04	22.50
					25	0	20.88	21.00
					25	12	20.87	21.00
					25	25	20.84	21.00
					50	0	20.85	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 4	15 MHz	QPSK	20025	1717.5	1	0	22.72	23.00
					1	37	22.71	23.00
					1	74	22.67	23.00
					36	0	21.70	22.00
					36	19	21.73	22.00
					36	39	21.74	22.00
					75	0	21.75	22.00
			20175	1732.5	1	0	22.73	23.00
					1	37	22.70	23.00
					1	74	22.57	23.00
					36	0	21.70	22.00
					36	19	21.75	22.00
					36	39	21.67	22.00
					75	0	21.67	22.00
			20325	1747.5	1	0	22.67	23.00
					1	37	22.71	23.00
					1	74	22.39	22.50
					36	0	21.63	22.00
					36	19	21.78	22.00
					36	39	21.73	22.00
					75	0	21.65	22.00
		16QAM	20025	1717.5	1	0	22.11	22.50
					1	37	22.13	22.50
					1	74	22.11	22.50
					36	0	20.86	21.00
					36	19	20.89	21.00
					36	39	20.89	21.00
					75	0	20.86	21.00
			20175	1732.5	1	0	22.19	22.50
					1	37	22.18	22.50
					1	74	22.00	22.50
					36	0	20.89	21.00
					36	19	20.89	21.00
					36	39	20.81	21.00
					75	0	20.81	21.00
			20325	1747.5	1	0	22.09	22.50
					1	37	22.02	22.50
					1	74	21.70	22.00
					36	0	20.81	21.00
					36	19	20.91	21.00
					36	39	20.85	21.00
					75	0	20.80	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 4	20 MHz	QPSK	20050	1720.0	1	0	22.71	23.00
					1	49	22.67	23.00
					1	99	22.65	23.00
					50	0	21.74	22.00
					50	25	21.74	22.00
					50	50	21.67	22.00
					100	0	21.71	22.00
			20175	1732.5	1	0	22.70	23.00
					1	49	22.67	23.00
					1	99	22.70	23.00
					50	0	21.67	22.00
					50	25	21.69	22.00
					50	50	21.62	22.00
					100	0	21.67	22.00
			20300	1745.0	1	0	22.65	23.00
					1	49	22.69	23.00
					1	99	22.13	22.50
					50	0	21.66	22.00
					50	25	21.68	22.00
					50	50	21.71	22.00
					100	0	21.64	22.00
		16QAM	20050	1720.0	1	0	22.01	22.50
					1	49	22.09	22.50
					1	99	22.01	22.50
					50	0	20.86	21.00
					50	25	20.89	21.00
					50	50	20.80	21.00
					100	0	20.83	21.00
			20175	1732.5	1	0	22.12	22.50
					1	49	22.18	22.50
					1	99	22.11	22.50
					50	0	20.84	21.00
					50	25	20.85	21.00
					50	50	20.74	21.00
					100	0	20.85	21.00
			20300	1745.0	1	0	22.12	22.50
					1	49	22.08	22.50
					1	99	21.47	21.50
					50	0	20.77	21.00
					50	25	20.79	21.00
					50	50	20.83	21.00
					100	0	20.81	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 5	1.4 MHz	QPSK	20407	824.7	1	0	22.35	22.50
					1	2	22.40	22.50
					1	5	22.31	22.50
					3	0	22.42	22.50
					3	1	22.44	22.50
					3	3	22.40	22.50
					6	0	21.36	21.50
			20525	836.5	1	0	22.41	22.50
					1	2	22.47	22.50
					1	5	22.38	22.50
					3	0	22.45	22.50
					3	1	22.49	22.50
					3	3	22.44	22.50
					6	0	21.44	21.50
			20643	848.3	1	0	22.51	23.00
					1	2	22.59	23.00
					1	5	22.52	23.00
					3	0	22.56	23.00
					3	1	22.60	23.00
					3	3	22.58	23.00
					6	0	21.57	22.00
		16QAM	20407	824.7	1	0	21.72	22.00
					1	2	21.79	22.00
					1	5	21.65	22.00
					3	0	21.62	22.00
					3	1	21.62	22.00
					3	3	21.62	22.00
					6	0	20.69	21.00
			20525	836.5	1	0	21.73	22.00
					1	2	21.81	22.00
					1	5	21.75	22.00
					3	0	21.64	22.00
					3	1	21.67	22.00
					3	3	21.68	22.00
					6	0	20.57	21.00
			20643	848.3	1	0	21.86	22.00
					1	2	21.91	22.00
					1	5	21.86	22.00
					3	0	21.73	22.00
					3	1	21.77	22.00
					3	3	21.73	22.00
					6	0	20.68	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 5	3 MHz	QPSK	20415	825.5	1	0	22.38	22.50
					1	7	22.48	22.50
					1	14	22.39	22.50
					8	0	21.40	21.50
					8	3	21.44	21.50
					8	7	21.42	21.50
					15	0	21.40	21.50
			20525	836.5	1	0	22.46	22.50
					1	7	22.56	23.00
					1	14	22.44	22.50
					8	0	21.50	22.00
					8	3	21.53	22.00
					8	7	21.47	21.50
					15	0	21.51	22.00
			20635	847.5	1	0	22.60	23.00
					1	7	22.67	23.00
					1	14	22.57	23.00
					8	0	21.60	22.00
					8	3	21.66	22.00
					8	7	21.61	22.00
					15	0	21.61	22.00
		16QAM	20415	825.5	1	0	21.68	22.00
					1	7	21.84	22.00
					1	14	21.69	22.00
					8	0	20.54	21.00
					8	3	20.56	21.00
					8	7	20.50	21.00
					15	0	20.47	20.50
			20525	836.5	1	0	21.72	22.00
					1	7	21.92	22.00
					1	14	21.81	22.00
					8	0	20.60	21.00
					8	3	20.63	21.00
					8	7	20.64	21.00
					15	0	20.53	21.00
			20635	847.5	1	0	21.86	22.00
					1	7	21.98	22.00
					1	14	21.86	22.00
					8	0	20.68	21.00
					8	3	20.73	21.00
					8	7	20.71	21.00
					15	0	20.63	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 5	5 MHz	QPSK	20425	826.5	1	0	22.40	22.50
					1	12	22.36	22.50
					1	24	22.46	22.50
					12	0	21.38	21.50
					12	6	21.57	22.00
					12	13	21.52	22.00
					25	0	21.55	22.00
			20525	836.5	1	0	22.47	22.50
					1	12	22.46	22.50
					1	24	22.45	22.50
					12	0	21.50	22.00
					12	6	21.53	22.00
					12	13	21.50	22.00
					25	0	21.50	22.00
			20625	846.5	1	0	22.57	23.00
					1	12	22.58	23.00
					1	24	22.57	23.00
					12	0	21.62	22.00
					12	6	21.67	22.00
					12	13	21.61	22.00
					25	0	21.62	22.00
		16QAM	20425	826.5	1	0	21.72	22.00
					1	12	21.73	22.00
					1	24	21.75	22.00
					12	0	20.49	20.50
					12	6	20.63	21.00
					12	13	20.60	21.00
					25	0	20.58	21.00
			20525	836.5	1	0	21.76	22.00
					1	12	21.76	22.00
					1	24	21.75	22.00
					12	0	20.58	21.00
					12	6	20.61	21.00
					12	13	20.61	21.00
					25	0	20.56	21.00
			20625	846.5	1	0	22.01	22.50
					1	12	21.92	22.00
					1	24	21.87	22.00
					12	0	20.71	21.00
					12	6	20.74	21.00
					12	11	20.70	21.00
					25	0	20.68	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 5	10 MHz	QPSK	20450	829.0	1	0	22.38	22.50
					1	24	22.43	22.50
					1	49	22.52	23.00
					25	0	21.48	21.50
					25	12	21.52	22.00
					25	25	21.60	22.00
					50	0	21.47	21.50
			20525	836.5	1	0	22.37	22.50
					1	24	22.43	22.50
					1	49	22.45	22.50
					25	0	21.50	22.00
					25	12	21.52	22.00
					25	25	21.47	21.50
					50	0	21.51	22.00
			20600	844.0	1	0	22.52	23.00
					1	24	22.61	23.00
					1	49	22.54	23.00
					25	0	21.54	22.00
					25	12	21.65	22.00
					25	25	21.63	22.00
					50	0	21.49	21.50
		16QAM	20450	829.0	1	0	21.73	22.00
					1	24	21.72	22.00
					1	49	21.75	22.00
					25	0	20.58	21.00
					25	12	20.57	21.00
					25	25	20.62	21.00
					50	0	20.51	21.00
			20525	836.5	1	0	21.64	22.00
					1	24	21.78	22.00
					1	49	21.87	22.00
					25	0	20.56	21.00
					25	12	20.57	21.00
					25	25	20.56	21.00
					50	0	20.58	21.00
			20600	844.0	1	0	21.95	22.00
					1	24	22.00	22.50
					1	49	21.87	22.00
					25	0	20.66	21.00
					25	12	20.76	21.00
					25	25	20.71	21.00
					50	0	20.61	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 7	5 MHz	QPSK	20775	2502.5	1	0	20.39	20.50
					1	12	20.44	20.50
					1	24	20.49	20.50
					12	0	19.80	20.00
					12	6	19.51	20.00
					12	13	19.53	20.00
					25	0	19.51	20.00
			21100	2535.0	1	0	21.49	21.50
					1	12	21.47	21.50
					1	24	21.42	21.50
					12	0	20.59	21.00
					12	6	20.56	21.00
					12	13	20.52	21.00
					25	0	20.59	21.00
			21425	2567.5	1	0	20.49	20.50
					1	12	20.64	21.00
					1	24	20.76	21.00
					12	0	19.59	20.00
					12	6	19.68	20.00
					12	13	19.76	20.00
					25	0	19.65	20.00
		16QAM	20775	2502.5	1	0	19.68	20.00
					1	12	19.68	20.00
					1	24	19.72	20.00
					12	0	18.53	19.00
					12	6	18.57	19.00
					12	13	18.59	19.00
					25	0	18.54	19.00
			21100	2535.0	1	0	20.84	21.00
					1	12	20.82	21.00
					1	24	20.74	21.00
					12	0	19.68	20.00
					12	6	19.65	20.00
					12	13	19.62	20.00
					25	0	19.67	20.00
			21425	2567.5	1	0	19.76	20.00
					1	12	19.88	20.00
					1	24	20.04	20.50
					12	0	18.67	19.00
					12	6	18.75	19.00
					12	11	18.84	19.00
					25	0	18.71	19.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 7	10 MHz	QPSK	20800	2505.0	1	0	20.36	20.50
					1	24	20.46	20.50
					1	49	20.72	21.00
					25	0	19.50	20.00
					25	12	19.58	20.00
					25	25	19.68	20.00
					50	0	19.60	20.00
			21100	2535.0	1	0	21.45	21.50
					1	24	21.46	21.50
					1	49	21.33	21.50
					25	0	20.66	21.00
					25	12	20.58	21.00
					25	25	20.49	20.50
					50	0	20.58	21.00
			21400	2565.0	1	0	20.27	20.50
					1	24	20.46	20.50
					1	49	20.77	21.00
					25	0	19.44	19.50
					25	12	19.55	20.00
					25	25	19.69	20.00
					50	0	19.53	20.00
		16QAM	20800	2505.0	1	0	19.60	20.00
					1	24	19.73	20.00
					1	49	20.06	20.50
					25	0	18.52	19.00
					25	12	18.63	19.00
					25	25	18.71	19.00
					50	0	18.63	19.00
			21100	2535.0	1	0	20.85	21.00
					1	24	20.80	21.00
					1	49	20.66	21.00
					25	0	19.71	20.00
					25	12	19.64	20.00
					25	25	19.53	20.00
					50	0	19.66	20.00
			21400	2565.0	1	0	19.59	20.00
					1	24	19.75	20.00
					1	49	20.06	20.50
					25	0	18.51	19.00
					25	12	18.65	19.00
					25	25	18.73	19.00
					50	0	18.59	19.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 7	15 MHz	QPSK	20825	2507.5	1	0	20.37	20.50
					1	37	20.60	21.00
					1	74	21.07	21.50
					36	0	19.50	20.00
					36	19	19.71	20.00
					36	39	19.91	20.00
					75	0	19.69	20.00
			21100	2535.0	1	0	21.43	21.50
					1	37	21.48	21.50
					1	74	21.17	21.50
					36	0	20.63	21.00
					36	19	20.59	21.00
					36	39	20.42	20.50
					75	0	20.52	21.00
			21375	2562.5	1	0	20.33	20.50
					1	37	20.39	20.50
					1	74	20.76	21.00
					36	0	19.47	19.50
					36	19	19.50	20.00
					36	39	19.58	20.00
					75	0	19.56	20.00
		16QAM	20825	2507.5	1	0	19.58	20.00
					1	37	19.86	20.00
					1	74	20.36	20.50
					36	0	18.55	19.00
					36	19	18.74	19.00
					36	39	18.96	19.00
					75	0	18.73	19.00
			21100	2535.0	1	0	20.83	21.00
					1	37	20.78	21.00
					1	74	20.44	20.50
					36	0	19.69	20.00
					36	19	19.67	20.00
					36	39	19.48	19.50
					75	0	19.59	20.00
			21375	2562.5	1	0	19.67	20.00
					1	37	19.73	20.00
					1	74	20.10	20.50
					36	0	18.54	19.00
					36	19	18.57	19.00
					36	39	18.66	19.00
					75	0	18.63	19.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 7	20 MHz	QPSK	20850	2510.0	1	0	21.01	21.50
					1	49	21.23	21.50
					1	99	21.08	21.50
					50	0	19.72	20.00
					50	25	19.68	20.00
					50	50	19.65	20.00
					100	0	19.77	20.00
			21100	2535.0	1	0	21.16	21.50
					1	49	21.17	21.50
					1	99	20.71	21.00
					50	0	19.62	20.00
					50	25	19.55	20.00
					50	50	19.35	19.50
					100	0	19.89	20.00
			21350	2560.0	1	0	21.01	21.50
					1	49	21.00	21.50
					1	99	21.12	21.50
					50	0	19.44	19.50
					50	25	19.54	20.00
					50	50	19.54	20.00
					100	0	19.54	20.00
		16QAM	20850	2510.0	1	0	19.59	20.00
					1	49	19.96	20.00
					1	99	20.46	20.50
					50	0	18.65	19.00
					50	25	18.89	19.00
					50	50	19.11	19.50
					100	0	18.83	19.00
			21100	2535.0	1	0	20.72	21.00
					1	49	20.78	21.00
					1	99	20.21	20.50
					50	0	19.69	20.00
					50	25	19.63	20.00
					50	50	19.43	19.50
					100	0	19.55	20.00
			21350	2560.0	1	0	19.73	20.00
					1	49	19.60	20.00
					1	99	20.00	20.50
					50	0	18.52	19.00
					50	25	18.61	19.00
					50	50	18.60	19.00
					100	0	18.62	19.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 12	1.4 MHz	QPSK	23017	699.7	1	0	22.63	23.00
					1	2	22.70	23.00
					1	5	22.67	23.00
					3	0	22.69	23.00
					3	1	22.72	23.00
					3	3	22.68	23.00
					6	0	21.66	22.00
			23095	707.5	1	0	22.58	23.00
					1	2	22.64	23.00
					1	5	22.58	23.00
					3	0	22.60	23.00
					3	1	22.66	23.00
					3	3	22.62	23.00
					6	0	21.61	22.00
			23173	715.3	1	0	22.50	23.00
					1	2	22.56	23.00
					1	5	22.48	22.50
					3	0	22.52	23.00
					3	1	22.57	23.00
					3	3	22.52	23.00
					6	0	21.52	22.00
		16QAM	23017	699.7	1	0	21.93	22.00
					1	2	22.03	22.50
					1	5	21.95	22.00
					3	0	21.82	22.00
					3	1	21.91	22.00
					3	3	21.85	22.00
					6	0	20.79	21.00
			23095	707.5	1	0	21.72	22.00
					1	2	21.77	22.00
					1	5	21.73	22.00
					3	0	21.64	22.00
					3	1	21.69	22.00
					3	3	21.64	22.00
					6	0	20.66	21.00
			23173	715.3	1	0	21.71	22.00
					1	2	21.80	22.00
					1	5	21.69	22.00
					3	0	21.63	22.00
					3	1	21.70	22.00
					3	3	21.64	22.00
					6	0	20.64	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 12	3 MHz	QPSK	23025	700.5	1	0	22.68	23.00
					1	7	22.79	23.00
					1	14	22.70	23.00
					8	0	21.69	22.00
					8	3	21.75	22.00
					8	7	21.71	22.00
					15	0	21.73	22.00
			23095	707.5	1	0	22.60	23.00
					1	7	22.69	23.00
					1	14	22.62	23.00
					8	0	21.64	22.00
					8	3	21.70	22.00
					8	7	21.63	22.00
					15	0	21.68	22.00
			23165	714.5	1	0	22.56	23.00
					1	7	22.66	23.00
					1	14	22.55	23.00
					8	0	21.54	22.00
					8	3	21.60	22.00
					8	7	21.57	22.00
					15	0	21.59	22.00
		16QAM	23025	700.5	1	0	22.00	22.50
					1	7	22.16	22.50
					1	14	22.03	22.50
					8	0	20.83	21.00
					8	3	20.87	21.00
					8	7	20.82	21.00
					15	0	20.81	21.00
			23095	707.5	1	0	21.80	22.00
					1	7	21.84	22.00
					1	14	21.78	22.00
					8	0	20.63	21.00
					8	3	20.65	21.00
					8	7	20.63	21.00
					15	0	20.70	21.00
			23165	714.5	1	0	21.88	22.00
					1	7	21.95	22.00
					1	14	21.76	22.00
					8	0	20.69	21.00
					8	3	20.71	21.00
					8	7	20.64	21.00
					15	0	20.62	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 12	5 MHz	QPSK	23035	701.5	1	0	22.68	23.00
					1	12	22.69	23.00
					1	24	22.67	23.00
					12	0	21.69	22.00
					12	6	21.75	22.00
					12	13	21.69	22.00
					25	0	21.71	22.00
			23095	707.5	1	0	22.60	23.00
					1	12	22.64	23.00
					1	24	22.61	23.00
					12	0	21.65	22.00
					12	6	21.66	22.00
					12	13	21.63	22.00
					25	0	21.67	22.00
			23155	713.5	1	0	22.55	23.00
					1	12	22.56	23.00
					1	24	22.57	23.00
					12	0	21.57	22.00
					12	6	21.65	22.00
					12	13	21.58	22.00
					25	0	21.61	22.00
		16QAM	23035	701.5	1	0	21.98	22.00
					1	12	21.99	22.00
					1	24	21.92	22.00
					12	0	20.78	21.00
					12	6	20.87	21.00
					12	13	20.79	21.00
					25	0	20.76	21.00
			23095	707.5	1	0	21.78	22.00
					1	12	21.76	22.00
					1	24	21.81	22.00
					12	0	20.67	21.00
					12	6	20.68	21.00
					12	13	20.66	21.00
					25	0	20.68	21.00
			23155	713.5	1	0	21.87	22.00
					1	12	21.91	22.00
					1	24	21.78	22.00
					12	0	20.68	21.00
					12	6	20.74	21.00
					12	11	20.72	21.00
					25	0	20.66	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 12	10 MHz	QPSK	23060	704.0	1	0	22.67	23.00
					1	24	22.64	23.00
					1	49	22.65	23.00
					25	0	21.69	22.00
					25	12	21.74	22.00
					25	25	21.71	22.00
					50	0	21.70	22.00
			23095	707.5	1	0	22.61	23.00
					1	24	22.57	23.00
					1	49	22.61	23.00
					25	0	21.67	22.00
					25	12	21.68	22.00
					25	25	21.67	22.00
					50	0	21.67	22.00
			23130	711.0	1	0	22.57	23.00
					1	24	22.60	23.00
					1	49	22.58	23.00
					25	0	21.63	22.00
					25	12	21.64	22.00
					25	25	21.63	22.00
					50	0	21.63	22.00
		16QAM	23060	704.0	1	0	21.94	22.00
					1	24	21.94	22.00
					1	49	21.82	22.00
					25	0	20.75	21.00
					25	12	20.75	21.00
					25	25	20.70	21.00
					50	0	20.72	21.00
			23095	707.5	1	0	21.88	22.00
					1	24	21.74	22.00
					1	49	21.96	22.00
					25	0	20.68	21.00
					25	12	20.69	21.00
					25	25	20.70	21.00
					50	0	20.71	21.00
			23130	711.0	1	0	21.67	22.00
					1	24	21.85	22.00
					1	49	21.83	22.00
					25	0	20.63	21.00
					25	12	20.70	21.00
					25	25	20.67	21.00
					50	0	20.66	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 17	5 MHz	QPSK	23755	706.5	1	0	22.52	23.00
					1	12	22.57	23.00
					1	24	22.52	23.00
					12	0	21.55	22.00
					12	6	21.59	22.00
					12	13	21.58	22.00
					25	0	21.61	22.00
			23790	710.0	1	0	22.48	22.50
					1	12	22.63	23.00
					1	24	22.61	23.00
					12	0	21.62	22.00
					12	6	21.67	22.00
					12	13	21.63	22.00
					25	0	21.67	22.00
			23825	713.5	1	0	22.64	23.00
					1	12	22.67	23.00
					1	24	22.66	23.00
					12	0	21.72	22.00
					12	6	21.71	22.00
					12	13	21.74	22.00
					25	0	21.70	22.00
		16QAM	23755	706.5	1	0	21.75	22.00
					1	12	21.68	22.00
					1	24	21.65	22.00
					12	0	20.59	21.00
					12	6	20.59	21.00
					12	13	20.57	21.00
					25	0	20.60	21.00
			23790	710.0	1	0	21.61	22.00
					1	12	21.84	22.00
					1	24	21.94	22.00
					12	0	20.66	21.00
					12	6	20.73	21.00
					12	13	20.75	21.00
					25	0	20.68	21.00
			23825	713.5	1	0	21.96	22.00
					1	12	22.04	22.50
					1	24	21.95	22.00
					12	0	20.84	21.00
					12	6	20.84	21.00
					12	11	20.79	21.00
					25	0	20.79	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 17	10 MHz	QPSK	23780	709.0	1	0	22.47	22.50
					1	24	22.49	22.50
					1	49	22.60	23.00
					25	0	21.56	22.00
					25	12	21.71	22.00
					25	25	21.67	22.00
					50	0	21.67	22.00
			23790	710.0	1	0	22.48	22.50
					1	24	22.58	23.00
					1	49	22.58	23.00
					25	0	21.66	22.00
					25	12	21.68	22.00
					25	25	21.66	22.00
					50	0	21.65	22.00
			23800	711.0	1	0	22.46	22.50
					1	24	22.59	23.00
					1	49	22.58	23.00
					25	0	21.62	22.00
					25	12	21.65	22.00
					25	25	21.66	22.00
					50	0	21.63	22.00
		16QAM	23780	709.0	1	0	21.69	22.00
					1	24	21.66	22.00
					1	49	21.97	22.00
					25	0	20.57	21.00
					25	12	20.71	21.00
					25	25	20.74	21.00
					50	0	20.71	21.00
			23790	710.0	1	0	21.62	22.00
					1	24	21.81	22.00
					1	49	21.92	22.00
					25	0	20.67	21.00
					25	12	20.71	21.00
					25	25	20.74	21.00
					50	0	20.70	21.00
			23800	711.0	1	0	21.58	22.00
					1	24	21.87	22.00
					1	49	21.85	22.00
					25	0	20.66	21.00
					25	12	20.73	21.00
					25	25	20.70	21.00
					50	0	20.70	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 38	5 MHz	QPSK	37775	2572.5	1	0	22.54	23.00
					1	12	22.55	23.00
					1	24	22.50	23.00
					12	0	21.64	22.00
					12	6	21.65	22.00
					12	13	21.62	22.00
					25	0	21.62	22.00
			38000	2595.0	1	0	22.76	23.00
					1	12	22.82	23.00
					1	24	22.76	23.00
					12	0	21.86	22.00
					12	6	21.89	22.00
					12	13	21.87	22.00
					25	0	21.84	22.00
			38225	2617.5	1	0	22.75	23.00
					1	12	22.79	23.00
					1	24	22.76	23.00
					12	0	21.86	22.00
					12	6	21.87	22.00
					12	13	21.88	22.00
					25	0	21.85	22.00
		16QAM	37775	2572.5	1	0	21.75	22.00
					1	12	21.79	22.00
					1	24	21.79	22.00
					12	0	20.65	21.00
					12	6	20.72	21.00
					12	13	20.68	21.00
					25	0	20.57	21.00
			38000	2595.0	1	0	21.97	22.00
					1	12	21.97	22.00
					1	24	21.97	22.00
					12	0	20.87	21.00
					12	6	20.91	21.00
					12	13	20.89	21.00
					25	0	20.81	21.00
			38225	2617.5	1	0	21.94	22.00
					1	12	21.94	22.00
					1	24	21.95	22.00
					12	0	20.85	21.00
					12	6	20.92	21.00
					12	11	20.88	21.00
					25	0	20.81	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 38	10 MHz	QPSK	37800	2575.0	1	0	22.56	23.00
					1	24	22.53	23.00
					1	49	22.52	23.00
					25	0	21.60	22.00
					25	12	21.66	22.00
					25	25	21.59	22.00
					50	0	21.63	22.00
			38000	2595.0	1	0	22.81	23.00
					1	24	22.80	23.00
					1	49	22.77	23.00
					25	0	21.87	22.00
					25	12	21.89	22.00
					25	25	21.84	22.00
					50	0	21.85	22.00
			38200	2615.0	1	0	22.74	23.00
					1	24	22.80	23.00
					1	49	22.77	23.00
					25	0	21.82	22.00
					25	12	21.88	22.00
					25	25	21.85	22.00
					50	0	21.88	22.00
		16QAM	37800	2575.0	1	0	21.78	22.00
					1	24	21.78	22.00
					1	49	21.77	22.00
					25	0	20.60	21.00
					25	12	20.63	21.00
					25	25	20.58	21.00
					50	0	20.66	21.00
			38000	2595.0	1	0	22.00	22.50
					1	24	22.01	22.50
					1	49	21.96	22.00
					25	0	20.82	21.00
					25	12	20.85	21.00
					25	25	20.82	21.00
					50	0	20.91	21.00
			38200	2615.0	1	0	21.97	22.00
					1	24	21.95	22.00
					1	49	21.97	22.00
					25	0	20.78	21.00
					25	12	20.82	21.00
					25	25	20.82	21.00
					50	0	20.86	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 38	15 MHz	QPSK	37825	2577.5	1	0	22.57	23.00
					1	37	22.48	22.50
					1	74	22.53	23.00
					36	0	21.59	22.00
					36	19	21.62	22.00
					36	39	21.58	22.00
					75	0	21.64	22.00
			38000	2595.0	1	0	22.79	23.00
					1	37	22.77	23.00
					1	74	22.75	23.00
					36	0	21.85	22.00
					36	19	21.81	22.00
					36	39	21.78	22.00
					75	0	21.81	22.00
			38175	2612.5	1	0	22.73	23.00
					1	37	22.71	23.00
					1	74	22.73	23.00
					36	0	21.79	22.00
					36	19	21.82	22.00
					36	39	21.75	22.00
					75	0	21.81	22.00
		16QAM	37825	2577.5	1	0	21.80	22.00
					1	37	21.74	22.00
					1	74	21.77	22.00
					36	0	20.68	21.00
					36	19	20.68	21.00
					36	39	20.61	21.00
					75	0	20.66	21.00
			38000	2595.0	1	0	22.02	22.50
					1	37	21.95	22.00
					1	74	21.97	22.00
					36	0	20.83	21.00
					36	19	20.85	21.00
					36	39	20.81	21.00
					75	0	20.88	21.00
			38175	2612.5	1	0	22.00	22.50
					1	37	21.92	22.00
					1	74	21.94	22.00
					36	0	20.87	21.00
					36	19	20.86	21.00
					36	39	20.80	21.00
					75	0	20.85	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 38	20 MHz	QPSK	37850	2580.0	1	0	22.60	23.00
					1	49	22.54	23.00
					1	99	22.45	22.50
					50	0	21.67	22.00
					50	25	21.70	22.00
					50	50	21.58	22.00
					100	0	21.65	22.00
			38000	2595.0	1	0	22.78	23.00
					1	49	22.72	23.00
					1	99	22.67	23.00
					50	0	21.89	22.00
					50	25	21.90	22.00
					50	50	21.87	22.00
					100	0	21.87	22.00
			38150	2610.0	1	0	22.71	23.00
					1	49	22.67	23.00
					1	99	22.66	23.00
					50	0	21.80	22.00
					50	25	21.85	22.00
					50	50	21.81	22.00
					100	0	21.79	22.00
		16QAM	37850	2580.0	1	0	21.84	22.00
					1	49	21.76	22.00
					1	99	21.70	22.00
					50	0	20.75	21.00
					50	25	20.73	21.00
					50	50	20.68	21.00
					100	0	20.73	21.00
			38000	2595.0	1	0	22.02	22.50
					1	49	21.92	22.00
					1	99	21.92	22.00
					50	0	20.93	21.00
					50	25	20.91	21.00
					50	50	20.90	21.00
					100	0	20.92	21.00
			38150	2610.0	1	0	21.97	22.00
					1	49	21.92	22.00
					1	99	21.88	22.00
					50	0	20.89	21.00
					50	25	20.88	21.00
					50	50	20.87	21.00
					100	0	20.89	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 41	5 MHz	QPSK	39675	2498.5	1	0	22.42	22.50
					1	12	22.45	22.50
					1	24	22.46	22.50
					12	0	21.47	21.50
					12	6	21.54	22.00
					12	13	21.49	21.50
					25	0	21.51	22.00
			39715	2502.5	1	0	22.53	23.00
					1	12	22.51	23.00
					1	24	22.42	22.50
					12	0	21.57	22.00
					12	6	21.53	22.00
					12	13	21.67	22.00
					25	0	21.53	22.00
			40148	2545.8	1	0	22.42	22.50
					1	12	22.40	22.50
					1	24	22.24	22.50
					12	0	21.51	22.00
					12	6	21.54	22.00
					12	13	21.48	21.50
					25	0	21.37	21.50
			40620	2593.0	1	0	22.26	22.50
					1	12	22.31	22.50
					1	24	22.32	22.50
					12	0	21.34	21.50
					12	6	21.37	21.50
					12	13	21.39	21.50
					25	0	21.33	21.50
			41093	2640.3	1	0	22.31	22.50
					1	12	22.34	22.50
					1	24	22.33	22.50
					12	0	21.43	21.50
					12	6	21.50	22.00
					12	13	21.58	22.00
					25	0	21.44	21.50
			41565	2687.5	1	0	22.21	22.50
					1	12	22.24	22.50
					1	24	22.19	22.50
					12	0	21.27	21.50
					12	6	21.29	21.50
					12	13	21.25	21.50
					25	0	21.29	21.50

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 41	5 MHz	16QAM	39675	2498.5	1	0	21.59	22.00
					1	12	21.63	22.00
					1	24	21.62	22.00
					12	0	20.51	21.00
					12	6	20.53	21.00
					12	13	20.52	21.00
					25	0	20.51	21.00
			39715	2502.5	1	0	21.66	22.00
					1	12	21.64	22.00
					1	24	21.73	22.00
					12	0	20.52	21.00
					12	6	20.66	21.00
					12	13	20.62	21.00
					25	0	20.62	21.00
			40148	2545.8	1	0	21.59	22.00
					1	12	21.69	22.00
					1	24	21.63	22.00
					12	0	20.64	21.00
					12	6	20.59	21.00
					12	13	20.53	21.00
					25	0	20.47	20.50
			40620	2593.0	1	0	21.60	22.00
					1	12	21.62	22.00
					1	24	21.67	22.00
					12	0	20.45	20.50
					12	6	20.48	20.50
					12	13	20.49	20.50
					25	0	20.40	20.50
			41093	2640.3	1	0	21.83	22.00
					1	12	21.73	22.00
					1	24	21.73	22.00
					12	0	20.68	21.00
					12	6	20.56	21.00
					12	13	20.64	21.00
					25	0	20.73	21.00
			41565	2687.5	1	0	21.54	22.00
					1	12	21.51	22.00
					1	24	21.56	22.00
					12	0	20.60	21.00
					12	6	20.64	21.00
					12	11	20.57	21.00
					25	0	20.54	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 41	10 MHz	QPSK	39700	2501.0	1	0	22.46	22.50
					1	24	22.50	23.00
					1	49	22.46	22.50
					25	0	21.51	22.00
					25	12	21.51	22.00
					25	25	21.53	22.00
					50	0	21.51	22.00
			39740	2505.0	1	0	22.38	22.50
					1	24	22.50	23.00
					1	49	22.56	23.00
					25	0	21.58	22.00
					25	12	21.59	22.00
					25	25	21.53	22.00
					50	0	21.53	22.00
			40160	2547.0	1	0	22.40	22.50
					1	24	22.32	22.50
					1	49	22.39	22.50
					25	0	21.55	22.00
					25	12	21.41	21.50
					25	25	21.41	21.50
					50	0	21.36	21.50
			40620	2593.0	1	0	22.29	22.50
					1	24	22.31	22.50
					1	49	22.39	22.50
					25	0	21.38	21.50
					25	12	21.38	21.50
					25	25	21.41	21.50
					50	0	21.38	21.50
			41080	2639.0	1	0	22.33	22.50
					1	24	22.49	22.50
					1	49	22.57	23.00
					25	0	21.63	22.00
					25	12	21.47	21.50
					25	25	21.53	22.00
					50	0	21.50	22.00
			41540	2685.0	1	0	22.76	23.00
					1	24	22.26	22.50
					1	49	22.64	23.00
					25	0	21.52	22.00
					25	12	21.40	21.50
					25	25	21.48	21.50
					50	0	21.50	22.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 41	10 MHz	16QAM	39700	2501.0	1	0	21.64	22.00
					1	24	21.64	22.00
					1	49	21.68	22.00
					25	0	20.45	20.50
					25	12	20.46	20.50
					25	25	20.48	20.50
					50	0	20.53	21.00
			39740	2505.0	1	0	21.72	22.00
					1	24	21.62	22.00
					1	49	21.60	22.00
					25	0	20.58	21.00
					25	12	20.58	21.00
					25	25	20.60	21.00
					50	0	20.59	21.00
			40160	2547.0	1	0	21.69	22.00
					1	24	21.71	22.00
					1	49	21.59	22.00
					25	0	20.63	21.00
					25	12	20.50	21.00
					25	25	20.49	20.50
					50	0	20.51	21.00
			40620	2593.0	1	0	21.59	22.00
					1	24	21.65	22.00
					1	49	21.67	22.00
					25	0	20.40	20.50
					25	12	20.40	20.50
					25	25	20.43	20.50
					50	0	20.47	20.50
			41080	2639.0	1	0	21.89	22.00
					1	24	21.77	22.00
					1	49	21.75	22.00
					25	0	20.80	21.00
					25	12	20.74	21.00
					25	25	20.79	21.00
					50	0	20.74	21.00
			41540	2685.0	1	0	22.17	22.50
					1	24	21.54	22.00
					1	49	22.16	22.50
					25	0	20.55	21.00
					25	12	20.42	20.50
					25	25	20.50	21.00
					50	0	20.57	21.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 41	15 MHz	QPSK	39725	2503.5	1	0	22.47	22.50
					1	37	22.44	22.50
					1	74	22.54	23.00
					36	0	21.52	22.00
					36	19	21.53	22.00
					36	39	21.49	21.50
					75	0	21.55	22.00
			39765	2507.5	1	0	22.51	23.00
					1	37	22.60	23.00
					1	74	22.51	23.00
					36	0	21.52	22.00
					36	19	21.55	22.00
					36	39	21.41	21.50
					75	0	21.44	21.50
			40173	2548.3	1	0	22.42	22.50
					1	37	22.32	22.50
					1	74	22.43	22.50
					36	0	21.41	21.50
					36	19	21.45	21.50
					36	39	21.40	21.50
					75	0	21.54	22.00
			40620	2593.0	1	0	22.29	22.50
					1	37	22.38	22.50
					1	74	22.47	22.50
					36	0	21.35	21.50
					36	19	21.42	21.50
					36	39	21.42	21.50
					75	0	21.40	21.50
			41068	2637.8	1	0	22.50	23.00
					1	37	22.40	22.50
					1	74	22.64	23.00
					36	0	21.66	22.00
					36	19	21.50	22.00
					36	39	21.46	21.50
					75	0	21.53	22.00
			41515	2682.5	1	0	22.32	22.50
					1	37	22.29	22.50
					1	74	22.27	22.50
					36	0	21.35	21.50
					36	19	21.39	21.50
					36	39	21.36	21.50
					75	0	21.37	21.50

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 41	15 MHz	16QAM	39725	2503.5	1	0	21.67	22.00
					1	37	21.66	22.00
					1	74	21.75	22.00
					36	0	20.53	21.00
					36	19	20.57	21.00
					36	39	20.57	21.00
					75	0	20.54	21.00
			39765	2507.5	1	0	21.79	22.00
					1	37	21.57	22.00
					1	74	21.65	22.00
					36	0	20.52	21.00
					36	19	20.38	20.50
					36	39	20.42	20.50
					75	0	20.50	21.00
			40173	2548.3	1	0	21.74	22.00
					1	37	21.56	22.00
					1	74	21.67	22.00
					36	0	20.40	20.50
					36	19	20.45	20.50
					36	39	20.42	20.50
					75	0	20.60	21.00
			40620	2593.0	1	0	21.65	22.00
					1	37	21.65	22.00
					1	74	21.75	22.00
					36	0	20.45	20.50
					36	19	20.52	21.00
					36	39	20.49	20.50
					75	0	20.50	21.00
			41068	2637.8	1	0	21.81	22.00
					1	37	21.82	22.00
					1	74	21.77	22.00
					36	0	20.75	21.00
					36	19	20.61	21.00
					36	39	20.58	21.00
					75	0	20.67	21.00
			41515	2682.5	1	0	21.59	22.00
					1	37	21.56	22.00
					1	74	21.57	22.00
					36	0	20.41	20.50
					36	19	20.43	20.50
					36	39	20.43	20.50
					75	0	20.41	20.50

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 41	20 MHz	QPSK	39750	2506.0	1	0	22.49	22.50
					1	49	22.49	22.50
					1	99	22.42	22.50
					50	0	21.61	22.00
					50	25	21.46	21.50
					50	50	21.48	21.50
					100	0	21.52	22.00
			39790	2510.0	1	0	22.41	22.50
					1	49	22.45	22.50
					1	99	22.45	22.50
					50	0	21.78	22.00
					50	25	21.73	22.00
					50	50	21.73	22.00
					100	0	21.68	22.00
			40185	2549.5	1	0	22.43	22.50
					1	49	22.30	22.50
					1	99	22.38	22.50
					50	0	21.51	22.00
					50	25	21.56	22.00
					50	50	21.49	21.50
					100	0	21.55	22.00
			40620	2593.0	1	0	22.31	22.50
					1	49	22.32	22.50
					1	99	22.39	22.50
					50	0	21.38	21.50
					50	25	21.43	21.50
					50	50	21.46	21.50
					100	0	21.43	21.50
			41055	2636.5	1	0	22.41	22.50
					1	49	22.40	22.50
					1	99	22.46	22.50
					50	0	21.70	22.00
					50	25	21.56	22.00
					50	50	21.70	22.00
					100	0	21.56	22.00
			41490	2680.0	1	0	22.36	22.50
					1	49	22.35	22.50
					1	99	22.62	23.00
					50	0	21.52	22.00
					50	25	21.45	21.50
					50	50	21.48	21.50
					100	0	21.51	22.00

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average (dBm)	
					Size	Offset	Conducted power	Tune-up power
LTE Band 41	20 MHz	16QAM	39750	2506.0	1	0	21.68	22.00
					1	49	21.67	22.00
					1	99	21.64	22.00
					50	0	20.62	21.00
					50	25	20.48	20.50
					50	50	20.52	21.00
					100	0	20.53	21.00
			39790	2510.0	1	0	21.66	22.00
					1	49	21.66	22.00
					1	99	21.72	22.00
					50	0	20.64	21.00
					50	25	20.45	20.50
					50	50	20.50	21.00
					100	0	20.55	21.00
			40185	2549.5	1	0	21.63	22.00
					1	49	21.50	22.00
					1	99	21.67	22.00
					50	0	20.47	20.50
					50	25	20.70	21.00
					50	50	20.63	21.00
					100	0	20.60	21.00
			40620	2593.0	1	0	21.58	22.00
					1	49	21.64	22.00
					1	99	21.76	22.00
					50	0	20.50	21.00
					50	25	20.52	21.00
					50	50	20.59	21.00
					100	0	20.56	21.00
			41055	2636.5	1	0	21.96	22.00
					1	49	21.88	22.00
					1	99	21.74	22.00
					50	0	20.65	21.00
					50	25	20.81	21.00
					50	50	20.67	21.00
					100	0	20.61	21.00
			41490	2680.0	1	0	21.72	22.00
					1	49	21.61	22.00
					1	99	21.95	22.00
					50	0	20.57	21.00
					50	25	20.48	20.50
					50	50	20.56	21.00
					100	0	20.61	21.00

< 2.4 GHz WLAN >

According to KDB 248227 D01, 802.11a/g/n modes have the same specified maximum output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11b is chosen over 802.11n then 802.11ac or 802.11g is chosen over 802.11n.

Band	Data Rate	CH	Frequency (MHz)	Average Conducted power		Average Tune-up power	
				ANT-0	ANT-1	ANT-0	ANT-1
IEEE 802.11b	1 M	1	2412.0	17.71	17.82	18.00	18.00
		6	2437.0	17.39	17.22	17.50	17.50
		11	2462.0	17.69	17.42	18.00	17.50
IEEE 802.11g	6 M	1	2412.0	15.68	15.82	16.00	16.00
		6	2437.0	15.64	15.71	16.00	16.00
		11	2462.0	15.62	15.58	16.00	16.00
IEEE 802.11n 2.4 GHz 20 MHz	6.5 M	1	2412.0	14.98	15.07	15.00	15.50
		6	2437.0	15.59	15.55	16.00	16.00
		11	2462.0	15.65	15.42	16.00	15.50
IEEE 802.11n 2.4 GHz 40 MHz	13.5 M	3	2422.0	12.71	12.73	13.00	13.00
		6	2437.0	15.51	15.58	16.00	16.00
		9	2452.0	12.19	12.11	12.50	12.50

< 5 GHz WLAN >

The initial test configuration for 5 GHz OFDM transmission modes is determined by the 802.11 configuration with the highest maximum output power specified for production units, including tune-up tolerance, in each standalone and aggregated frequency band. SAR for the initial test configuration is measured using the highest maximum output power channel determined by the default power measurement procedures. When multiple transmission modes (802.11a/g/n/ac) have the same specified maximum output power, largest channel bandwidth, lowest order modulation and lowest data rate, lowest order 802.11 mode is selected (i.e. a, g, n, ac then ax).

Band		Data Rate	CH	Frequency (MHz)	Average Conducted power		Average Tune-up power	
					ANT-0	ANT-1	ANT-0	ANT-1
IEEE 802.11a	U-NII-1	6 M	36	5180.0	15.66	15.89	16.00	16.00
			40	5200.0	15.61	15.62	16.00	16.00
			44	5220.0	15.38	15.63	15.50	16.00
			48	5240.0	15.22	15.54	15.50	16.00
	U-NII-2A		52	5260.0	15.32	15.41	15.50	15.50
			56	5280.0	15.26	15.57	15.50	16.00
			60	5300.0	15.25	15.51	15.50	16.00
			64	5320.0	15.35	15.71	15.50	16.00
	U-NII-2C		100	5500.0	15.54	15.66	16.00	16.00
			104	5520.0	15.72	15.63	16.00	16.00
			108	5540.0	15.72	15.59	16.00	16.00
			112	5560.0	15.69	15.81	16.00	16.00
			116	5580.0	15.54	15.82	16.00	16.00
			132	5660.0	15.47	16.04	15.50	16.50
			136	5680.0	15.15	16.14	15.50	16.50
			140	5700.0	15.23	16.11	15.50	16.50
	U-NII-3		149	5745.0	15.64	16.54	16.00	17.00
			153	5765.0	15.57	16.31	16.00	16.50
			157	5785.0	15.41	16.04	15.50	16.50
			161	5805.0	15.68	16.24	16.00	16.50
			165	5825.0	15.61	15.97	16.00	16.00

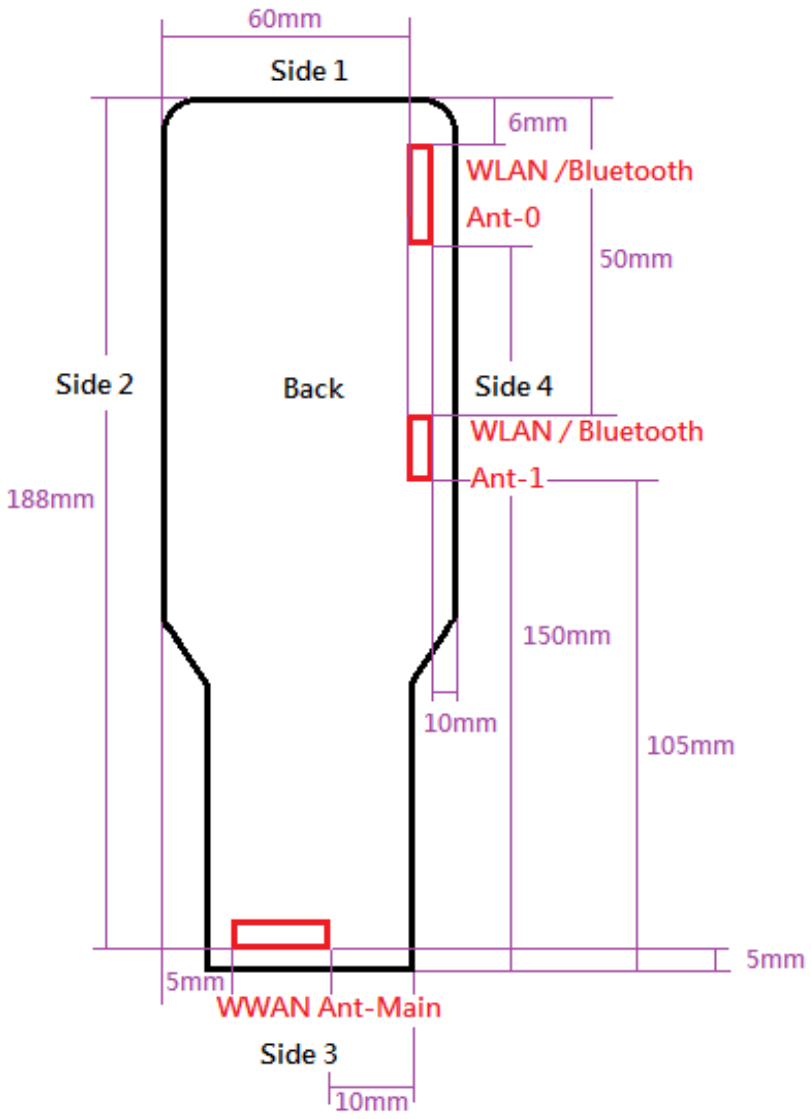
Band		Data Rate	CH	Frequency (MHz)	Average Conducted power		Average Tune-up power	
					ANT-0	ANT-1	ANT-0	ANT-1
IEEE 802.11ac 20 MHz	U-NII-1	6.5 M	36	5180.0	15.61	15.34	16.00	15.50
			40	5200.0	15.59	15.61	16.00	16.00
			44	5220.0	15.26	15.41	15.50	15.50
			48	5240.0	15.19	15.34	15.50	15.50
	U-NII-2A		52	5260.0	14.98	15.61	15.00	16.00
			56	5280.0	15.14	15.35	15.50	15.50
			60	5300.0	15.02	15.51	15.50	16.00
			64	5320.0	15.15	15.52	15.50	16.00
	U-NII-2C		100	5500.0	15.56	15.82	16.00	16.00
			104	5520.0	15.54	15.45	16.00	15.50
			108	5540.0	15.32	15.64	15.50	16.00
			112	5560.0	15.61	15.71	16.00	16.00
			116	5580.0	15.13	15.44	15.50	15.50
			132	5660.0	15.01	16.18	15.50	16.50
			136	5680.0	15.22	16.13	15.50	16.50
			140	5700.0	15.31	16.25	15.50	16.50
	U-NII-3		149	5745.0	15.46	16.23	15.50	16.50
			153	5765.0	15.41	16.31	15.50	16.50
			157	5785.0	15.52	16.25	16.00	16.50
			161	5805.0	15.47	16.11	15.50	16.50
			165	5825.0	15.44	15.94	15.50	16.00
IEEE 802.11ac 40 MHz	U-NII-1	13.5M	38	5190.0	15.31	15.44	15.50	15.50
			46	5230.0	15.34	15.97	15.50	16.00
	U-NII-2A		54	5270.0	15.36	15.91	15.50	16.00
			62	5310.0	13.24	13.34	13.50	13.50
	U-NII-2C		102	5510.0	15.99	16.23	16.00	16.50
			110	5550.0	15.82	16.11	16.00	16.50
			134	5670.0	15.71	16.42	16.00	16.50
	U-NII-3		151	5755.0	15.94	16.92	16.00	17.00
			159	5795.0	15.89	16.72	16.00	17.00
IEEE 802.11ac 5 GHz 80 MHz	U-NII-1	29.3M	42	5210.0	14.91	15.04	15.00	15.50
	U-NII-2A		58	5290.0	12.19	12.72	12.50	13.00
	U-NII-2C		106	5530.0	15.61	15.32	16.00	15.50
	U-NII-3		155	5775.0	15.76	16.26	16.00	16.50

Band	CH	Frequency (MHz)	Packet Type	Average Power (dBm)	
				Conducted power	Tune-up power
Bluetooth BR GFSK	0	2402.0	DH1	10.33	10.50
			DH3	10.36	10.50
			DH5	10.41	10.50
	39	2441.0	DH1	10.27	10.50
			DH3	10.34	10.50
			DH5	10.37	10.50
	78	2480.0	DH1	9.74	10.00
			DH3	9.77	10.00
			DH5	9.81	10.00
Bluetooth EDR π/4-DQPSK	0	2402.0	DH1	9.01	9.50
			DH3	9.05	9.50
			DH5	9.12	9.50
	39	2441.0	DH1	8.36	8.50
			DH3	8.43	8.50
			DH5	8.48	8.50
	78	2480.0	DH1	8.36	8.50
			DH3	8.44	8.50
			DH5	8.51	9.00
Bluetooth EDR 8DPSK	0	2402.0	DH1	9.07	9.50
			DH3	9.11	9.50
			DH5	9.15	9.50
	39	2441.0	DH1	8.42	8.50
			DH3	8.47	8.50
			DH5	8.50	9.00
	78	2480.0	DH1	8.45	8.50
			DH3	8.48	8.50
			DH5	8.53	9.00
Bluetooth LE 1M	0	2402.0	---	0.25	0.50
	19	2440.0		-0.08	0.00
	39	2480.0		0.08	0.50
Bluetooth LE 2M	0	2402.0	---	0.11	0.50
	19	2440.0		-0.20	0.00
	39	2480.0		0.01	0.50

7.7 Antenna location

Ant	Antenna to user distance (mm)					
	Front	Back	Side 1	Side 2	Side 3	Side 4
WLAN Ant-0	17.83	5	6	60	150	10
WLAN Ant-1	18.15	5	50	60	105	10
Bluetooth Ant-0	17.83	5	6	60	150	10
WWAN Ant	10.95	5	188	5	5	10

Antenna location



7.8 Standalone SAR Test Exclusion Calculation

Ant. Used	Band Channel	Frequency	Tune-Power		Distance of Ant. To User (mm)					
		(GHz)	(dBm)	(mW)	Front	Back	Side1	Side2	Side3	Side4
WWAN Antenna	GSM/GPRS 850 (4Tx slot)	0.848	33.0	1995	10.95	5	188	5	5	10
	GSM/GPRS 1900 (4Tx slot)	1.909	29.5	891	10.95	5	188	5	5	10
	WCDMA II	1.907	24.0	251	10.95	5	188	5	5	10
	WCDMA V	0.846	23.5	224	10.95	5	188	5	5	10
	LTE 2	1.909	23.0	200	10.95	5	188	5	5	10
	LTE 4	1.754	23.0	200	10.95	5	188	5	5	10
	LTE 5	0.848	23.0	200	10.95	5	188	5	5	10
	LTE 7	2.567	21.5	141	10.95	5	188	5	5	10
	LTE 12	0.715	23.0	200	10.95	5	188	5	5	10
	LTE 17	0.713	23.0	200	10.95	5	188	5	5	10
	LTE 38	2.617	23.0	200	10.95	5	188	5	5	10
	LTE 41	2.687	23.0	200	10.95	5	188	5	5	10
Bluetooth Antenna	BT Ant-0	2.480	10.5	11	17.83	5	6	60	150	10
WLAN Antenna	2.4GHz WLAN Ant-0	2.462	18.0	63	17.83	5	6	60	150	10
	2.4GHz WLAN Ant-1	2.462	18.0	63	18.15	5	50	60	105	10
	5GHz WLAN Ant-0	5.825	16.0	40	17.83	5	6	60	150	10
	5GHz WLAN Ant-1	5.825	17.0	50	18.15	5	50	60	105	10

Ant. Used	Band	Frequency	Tune-Power		Calculated value and evaluated result					
		(GHz)	(dBm)	(mW)	Front	Back	Side1	Side2	Side3	Side4
WWAN Antenna	GSM/GPRS 850 (4Tx slot)	0.848	33.0	1995	167.8	367.4	943.0	367.4	367.4	183.7
					MEASURE	MEASURE	MEASURE	MEASURE	MEASURE	MEASURE
	GSM/GPRS 1900 (4Tx slot)	1.909	29.5	891	112.4	246.2	1489.0	246.2	246.2	123.1
					MEASURE	MEASURE	EXEMPT	MEASURE	MEASURE	MEASURE
	WCDMA II	1.907	24.0	251	31.7	69.3	1489.0	69.3	69.3	34.7
					MEASURE	MEASURE	EXEMPT	MEASURE	EXEMPT	MEASURE
	WCDMA V	0.846	23.5	224	18.8	41.2	941.4	41.2	41.2	20.6
					MEASURE	MEASURE	EXEMPT	MEASURE	EXEMPT	MEASURE
	LTE 2	1.909	23.0	200	25.2	55.3	1489.0	55.3	55.3	27.6
					MEASURE	MEASURE	EXEMPT	MEASURE	EXEMPT	MEASURE
	LTE 4	1.754	23.0	200	24.2	53.0	1493.0	53.0	53.0	26.5
					MEASURE	MEASURE	EXEMPT	MEASURE	EXEMPT	MEASURE
	LTE 5	0.848	23.0	200	16.8	36.8	943.0	36.8	36.8	18.4
					MEASURE	MEASURE	EXEMPT	MEASURE	EXEMPT	MEASURE
	LTE 7	2.567	21.5	141	20.6	45.2	1474.0	45.2	45.2	22.6
					MEASURE	MEASURE	EXEMPT	MEASURE	EXEMPT	MEASURE
	LTE 12	0.715	23.0	200	15.4	33.8	835.2	33.8	33.8	16.9
					MEASURE	MEASURE	EXEMPT	MEASURE	EXEMPT	MEASURE
	LTE 17	0.713	23.0	200	15.4	33.8	833.6	33.8	33.8	16.9
					MEASURE	MEASURE	EXEMPT	MEASURE	EXEMPT	MEASURE
	LTE 38	2.617	23.0	200	29.6	64.7	1473.0	64.7	64.7	32.4
					MEASURE	MEASURE	EXEMPT	MEASURE	EXEMPT	MEASURE
	LTE 41	2.687	23.0	200	29.9	65.6	1472.0	65.6	65.6	32.8
					MEASURE	MEASURE	EXEMPT	MEASURE	MEASURE	MEASURE
Bluetooth Antenna	BT Ant-0	2.480	10.5	11	1.0	3.5	2.9	195.0	1095.0	1.7
					EXEMPT	MEASURE	EXEMPT	EXEMPT	EXEMPT	EXEMPT
WLAN Antenna	2.4GHz WLAN Ant-0	2.462	18.0	63	5.5	19.8	16.5	196.0	1096.0	9.9
					MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	MEASURE
	2.4GHz WLAN Ant-1	2.462	18.0	63	5.5	19.8	2.0	196.0	646.0	9.9
					MEASURE	MEASURE	EXEMPT	EXEMPT	EXEMPT	MEASURE
	5GHz WLAN Ant-0	5.825	16.0	40	5.4	19.3	16.1	162.0	1062.0	9.7
					MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	MEASURE
	5GHz WLAN Ant-1	5.825	17.0	50	6.7	24.1	2.4	162.0	612.0	12.1
					MEASURE	MEASURE	EXEMPT	EXEMPT	EXEMPT	MEASURE

Note:

1.The test reduction for distance less than 50mm and more than 50mm. Use the max power to make sure minimum distance by evaluated for SAR testing.

2. For 100 MHz to 6 GHz and test separation distances > 50 mm, According to KDB 447498, if the calculated Power threshold is less than the output power then SAR testing is required.

3. For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:
   According to KDB 447498, if the calculated threshold value are >3 then Body SAR and >7.5 then Limbs SAR testing are required.

4. When an antenna qualifies for the standalone SAR test exclusion of KDB 447498 section 4.3.1 and also transmits simultaneously with other antennas, the standalone SAR value must be estimated according to KDB 447498 section "4.3.2. Simultaneous transmission SAR test exclusion considerations b)"

5. We used highest frequency and power,that result should be evaluated the worst case.

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

7. The result is rounded to one decimal place for comparison.

7.9 Simultaneous Transmitting Evaluate

Simultaneous transmission configurations as below:

Condition(s)	Band					
	WWAN Ant	WLAN 2.4 GHz Ant-0	WLAN 2.4 GHz Ant-1	WLAN 5 GHz Ant-0	WLAN 5 GHz Ant-1	Bluetooth Ant-0
1	---	V	V	---	---	V
2	---	---	---	V	V	V
3	V	V	V	---	---	---
4	V	---	---	V	V	---
5	V	---	---	---	---	V

Estimated SAR

Ant. Used	Band	Frequency	Tune-Power		Estimated SAR 1-g (W/kg)					
		(GHz)	(dBm)	(mW)	Side 1	Side 2	Side 3	Side 4	Side 5	Side 6
WWAN Antenna	GSM/GPRS 850 (4Tx slot)	0.848	33.0	1995	---	---	---	---	---	---
	GSM/GPRS 1900 (4Tx slot)	1.909	29.5	891	---	---	0.87	---	---	---
	WCDMA II	1.907	24.0	251	---	---	0.25	---	---	---
	WCDMA V	0.846	23.5	224	---	---	0.15	---	---	---
	LTE 2	1.909	23.0	200	---	---	0.2	---	---	---
	LTE 4	1.754	23.0	200	---	---	0.19	---	---	---
	LTE 5	0.848	23.0	200	---	---	0.13	---	---	---
	LTE 7	2.567	21.5	141	---	---	0.16	---	---	---
	LTE 12	0.715	23.0	200	---	---	0.12	---	---	---
	LTE 17	0.713	23.0	200	---	---	0.12	---	---	---
	LTE 38	2.617	23.0	200	---	---	0.23	---	---	---
	LTE 41	2.687	23.0	200	---	---	0.23	---	---	---
Bluetooth Antenna	BT Ant-0	2.480	10.5	11	0.13	---	0.38	0.04	0.02	0.23
WLAN Antenna	2.4GHz WLAN Ant-0	2.462	18.0	63	---	---	---	0.22	0.09	---
	2.4GHz WLAN Ant-1	2.462	18.0	63	---	---	0.26	0.22	0.13	---
	5GHz WLAN Ant-0	5.825	16.0	40	---	---	---	0.21	0.09	---
	5GHz WLAN Ant-1	5.825	17.0	50	---	---	0.32	0.27	0.15	---

7.9.1 Sum of 1-g SAR of all simultaneously transmitting

When the sum of 1-g SAR of all simultaneously transmitting antennas in and operating mode and exposure condition combination is within the SAR limit, SAR test exclusion applies to that simultaneous transmission configuration.

Sum of 1-g SAR of summary as below:

Phantom Position		Spacing (mm)	ASSY	WWAN Ant (1)		2.4 GHz WLAN Ant-0 (2)		2.4 GHz WLAN Ant-1 (3)		5 GHz WLAN Ant-0 (4)		5 GHz WLAN Ant-1 (5)		Bluetooth Ant-0 (6)	
				Band	SAR1 g (W/Kg)	Band	SAR1 g (W/Kg)	Band	SAR1 g (W/Kg)	Band	SAR1 g (W/Kg)	Band	SAR1 g (W/Kg)	Band	SAR1 g (W/Kg)
Flat	Head Mode														
	Right Cheek	0	N/A	WWAN Band	0.35	IEEE 802.11	0.14	IEEE 802.11	0.01	IEEE 802.11	0.05	IEEE 802.11	0.02	Bluetooth	0.03
	Right Tilted	0	N/A	WWAN Band	0.23	IEEE 802.11	0.14	IEEE 802.11	0.01	IEEE 802.11	0.03	IEEE 802.11	0.02	Bluetooth	0.02
	Left Cheek	0	N/A	WWAN Band	0.36	IEEE 802.11	0.13	IEEE 802.11	0.01	IEEE 802.11	0.07	IEEE 802.11	0.06	Bluetooth	0.02
	Left Tilted	0	N/A	WWAN Band	0.21	IEEE 802.11	0.16	IEEE 802.11	0.01	IEEE 802.11	0.05	IEEE 802.11	0.02	Bluetooth	0.02
	Hotspot Mode														
	Front	10	N/A	WWAN Band	0.57	IEEE 802.11	0.08	IEEE 802.11	0.00	IEEE 802.11	0.04	IEEE 802.11	0.04	Bluetooth	*0.13
	Back	10	N/A	WWAN Band	0.49	IEEE 802.11	0.09	IEEE 802.11	0.01	IEEE 802.11	0.13	IEEE 802.11	0.23	Bluetooth	0.01
	Side 1	10	N/A	WWAN Band	0.03	IEEE 802.11	0.10	IEEE 802.11	*0.26	IEEE 802.11	0.04	IEEE 802.11	*0.32	Bluetooth	*0.38
	Side 2	10	N/A	WWAN Band	0.52	IEEE 802.11	*0.22	IEEE 802.11	*0.22	IEEE 802.11	*0.21	IEEE 802.11	*0.27	Bluetooth	*0.04
	Side 3	10	N/A	WWAN Band	1.14	IEEE 802.11	*0.09	IEEE 802.11	*0.13	IEEE 802.11	*0.09	IEEE 802.11	*0.15	Bluetooth	*0.02
	Side 4	10	N/A	WWAN Band	0.63	IEEE 802.11	0.31	IEEE 802.11	0.02	IEEE 802.11	0.20	IEEE 802.11	0.61	Bluetooth	*0.23

Phantom Position		Spacing (mm)	ASSY	WWAN Ant (1)		2.4 GHz WLAN Ant-0 (2)		2.4 GHz WLAN Ant-1 (3)		5 GHz WLAN Ant-0 (4)		5 GHz WLAN Ant-1 (5)		Bluetooth Ant-0 (6)	
				Band	SAR10 g (W/Kg)	Band	SAR10 g (W/Kg)	Band	SAR10 g (W/Kg)	Band	SAR10 g (W/Kg)	Band	SAR10 g (W/Kg)	Band	SAR10 g (W/Kg)
Flat	Extremity Mode														
	Front	0	N/A	WWAN Band	0.55	IEEE 802.11	0.11	IEEE 802.11	0.00	IEEE 802.11	0.02	IEEE 802.11	0.03	Bluetooth	*0.05
	Back	0	N/A	WWAN Band	0.63	IEEE 802.11	0.18	IEEE 802.11	0.01	IEEE 802.11	0.18	IEEE 802.11	0.20	Bluetooth	0.03

Phantom Position		(2)+(3)+(6) ∑ SAR1g (W/Kg)	(4)+(5)+(6) ∑ SAR1g (W/Kg)	(1)+(2)+(3) ∑ SAR1g (W/Kg)	(1)+(4)+(5) ∑ SAR1g (W/Kg)	(1)+(6) ∑ SAR1g (W/Kg)	Event
Flat	Head Mode						
	Right Cheek	0.18	0.10	0.50	0.41	0.38	<1.6
	Right Tilted	0.17	0.07	0.37	0.27	0.25	<1.6
	Left Cheek	0.17	0.16	0.50	0.49	0.38	<1.6
	Left Tilted	0.19	0.08	0.38	0.27	0.24	<1.6
	Hotspot Mode						
	Front	0.21	0.20	0.65	0.64	0.70	<1.6
	Back	0.11	0.36	0.59	0.84	0.50	<1.6
	Side 1	0.74	0.74	0.39	0.39	0.41	<1.6
	Side 2	0.48	0.52	0.96	1.00	0.56	<1.6
	Side 3	0.24	0.26	1.36	1.38	1.16	<1.6
	Side 4	0.56	1.04	0.96	1.44	0.86	<1.6

Phantom Position		(2)+(3)+(6) ∑ SAR10g (W/Kg)	(4)+(5)+(6) ∑ SAR10g (W/Kg)	(1)+(2)+(3) ∑ SAR10g (W/Kg)	(1)+(4)+(5) ∑ SAR10g (W/Kg)	(1)+(6) ∑ SAR10g (W/Kg)	Event
Flat	Extremity Mode						
	Front	0.16	0.10	0.66	0.60	0.60	<4.0
	Back	1.24	0.41	0.82	1.01	0.66	<4.0
	Front	0.16	0.10	0.66	0.60	0.60	<4.0

Note: 1. *=Estimated SAR

2. When the sum of 1-g SAR of all simultaneously transmitting antennas in and operating mode and exposure condition combination is within the SAR limit, SAR test exclusion applies to that simultaneous transmission configuration.

7.9.2 SAR to peak location separation ratio (SPLSR)

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

All of sum of SAR < 1.6 W/kg, therefore SPLSR is not required.

7.10 SAR test reduction according to KDB

General:

- The test data reported are the worst-case SAR value with the position set in a typical configuration. Test procedures used were according to FCC, Supplement C [June 2001], IEEE1528-2013.
- All modes of operation were investigated, and worst-case results are reported.
- Tissue parameters and temperatures are listed on the SAR plots.
- Batteries are fully charged for all readings.
- When the Channel's SAR 1 g of maximum conducted power is > 0.8 mW/g, low, middle and high channel are supposed to be tested.

KDB 447498:

- The test data reported are the worst-case SAR value with the position set in a typical configuration. Test procedures used were according to IEEE1528-2013.

KDB 865664:

- Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg.
- When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
- Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg.
- Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

KDB 941225:

For 2G

- In order to qualify for the above test reduction, the maximum burst-averaged output power for each mode (GMS/GPRS/EDGE) and the corresponding multi-slot class must be clearly identified in the SAR report for each frequency band.We perform worst case SAR with maximum time-average power on GMS/GPRS/EDGE mode.

For 3G-3GPP

- When HSDPA & (HSUPA / HSPA+ uplink with QPSK) power are not more than WCDMA 12.2K RMC 0.25 dB and the SAR value of WCDMA BII/BV<1.2 W/kg ,therefore HSDPA & HSUPA / HSPA+ Stand-alone SAR is not required.

For 4G

- 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.
- 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 5.2.1 and 5.2.2 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.
- 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.
- For smaller channel bandwidth 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.

For Hot-spot mode

- SAR must be measured for all sides and surfaces with a transmitting antenna located within 25 mm from that surface or edge.

KDB 248227:

- Refer 7.7 SAR Testing with 802.11 Transmitters.

8. System Verification and Validation

8.1 Symmetric Dipoles for System Verification

Construction	Symmetrical dipole with l/4 balun enables measurement of feed point impedance with NWA matched for use near flat phantoms filled with head simulating solutions Includes distance holder and tripod adaptor Calibration Calibrated SAR value for specified position and input power at the flat phantom in head simulating solutions.
Return Loss	> 20 dB at specified verification position
Options	Dipoles for other frequencies or solutions and other calibration conditions are available upon request

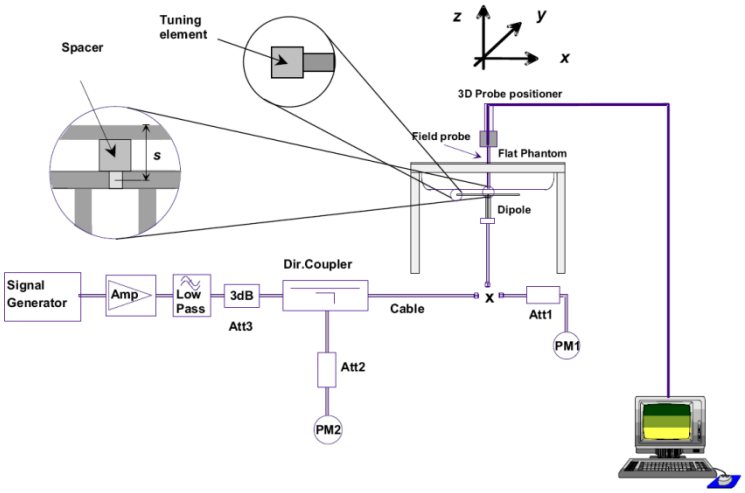


Figure 1. System Verification Setup Diagram

Figure 2. Validation Kit

8.2 Verification Summary

Prior to the assessment, the system validation kit was used to test whether the system was operating within its specifications of ± 10 %. The measured SAR will be normalized to 1 W input power.

Mixture Type	Frequency (MHz)	Power	Probe	Dipole	$SAR_{1\,g}$ (W/Kg)	Normalize to 1 Watt 1 g (W/Kg)	1 W Target $SAR_{1\,g}$ (W/Kg)	$SAR_{10\,g}$ (W/Kg)	Normalize to 1 Watt 10 g (W/Kg)	1 W Target $SAR_{10\,g}$ (W/Kg)	Difference percentage 1 g	Difference percentage 10 g	Date
			Model / Serial No.	Model / Serial No.									
Head	750	250 mW	EX3DV4-SN3847	D750V3 – SN1004	2.13	8.52	8.42	1.41	5.64	5.61	1.2%	0.5%	Mar. 19, 2020
Head	835	250 mW	EX3DV4-SN3847	D835V2 – SN4d082	2.46	9.84	9.39	1.57	6.28	6.33	4.6%	-0.8%	Mar. 20, 2020
Head	835	250 mW	EX3DV4-SN3847	D835V2 – SN4d082	2.55	10.2	9.39	1.64	6.56	6.33	7.9%	3.5%	Mar. 23, 2020
Head	1750	250 mW	EX3DV4-SN3847	D1750V2 – SN1023	8.98	35.92	36.10	4.74	18.96	18.90	-0.5%	0.3%	Mar. 17, 2020
Head	1900	250 mW	EX3DV4-SN3847	D1900V2 – SN5d111	10.4	41.6	39.90	5.32	21.28	20.60	4.1%	3.2%	Mar. 16, 2020
Head	1900	250 mW	EX3DV4-SN3847	D1900V2 – SN5d111	10.6	42.4	39.90	5.41	21.64	20.60	5.9%	4.8%	Mar. 18, 2020
Head	2450	250 mW	EX3DV4-SN3977	D2450V2 – SN712	14	56	52.10	6.54	26.16	24.00	7.0%	8.3%	Apr. 13, 2020
Head	2600	250 mW	EX3DV4-SN3847	D2600V2 – SN1007	14.8	59.2	56.00	6.76	27.04	24.80	5.4%	8.3%	Mar. 05, 2020
Head	2600	250 mW	EX3DV4-SN3847	D2600V2 – SN1007	14.3	57.2	56.00	6.41	25.64	24.80	2.1%	3.3%	Mar. 13, 2020
Head	2600	250 mW	EX3DV4-SN3847	D2600V2 – SN1007	14.7	58.8	56.00	6.63	26.52	24.80	4.8%	6.5%	Apr. 06, 2020
Head	5250	100 mW	EX3DV4-SN3977	D5250V2 – SN1145	8.11	81.1	78.80	2.28	22.8	22.60	2.8%	0.9%	Apr. 22, 2020
Head	5250	100 mW	EX3DV4-SN3977	D5250V2 – SN1145	7.94	79.4	78.80	2.18	21.8	22.60	0.8%	-3.7%	Apr. 23, 2020
Head	5600	100 mW	EX3DV4-SN3977	D5600V2 – SN1145	8.53	85.3	81.00	2.39	23.9	23.20	5.0%	2.9%	Apr. 22, 2020
Head	5600	100 mW	EX3DV4-SN3977	D5600V2 – SN1145	8.63	86.3	81.00	2.37	23.7	23.20	6.1%	2.1%	Apr. 23, 2020
Head	5750	100 mW	EX3DV4-SN3977	D5750V2 – SN1145	8.38	83.8	78.80	2.35	23.5	22.40	6.0%	4.7%	Apr. 22, 2020
Head	5750	100 mW	EX3DV4-SN3977	D5750V2 – SN1145	8.13	81.3	78.80	2.26	22.6	22.40	3.1%	0.9%	Apr. 23, 2020

9. Test Equipment List

Testing Engineer: Kris Pan, Jason Tsao

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Cal. Date	Cal.Period
SPEAG	750MHz System Validation Kit	D750V3	1004	2019/11/20	1 year
SPEAG	835MHz System Validation Kit	D835V2	4d082	2019/09/19	1 year
SPEAG	1750MHz System Validation Kit	D1750V2	1023	2019/06/20	1 year
SPEAG	1900MHz System Validation Kit	D1900V2	5d111	2019/09/19	1 year
SPEAG	2450MHz System Validation Kit	D2450V2	712	2019/04/15	1 year
SPEAG	2600MHz System Validation Kit	D2600V2	1007	2019/10/24	1 year
SPEAG	5GHz System Validation Kit	D5GHzV2	1145	2019/10/16	1 year
SPEAG	Dosimetric E-Field Probe	EX3DV4	3977	2019/08/30	1 year
SPEAG	Dosimetric E-Field Probe	EX3DV4	3847	2019/05/16	1 year
SPEAG	Data Acquisition Electronics	DAE4	779	2019/08/22	1 year
SPEAG	Measurement Server	SE UMS 011 AA	1025	NCR	
SPEAG	Device Holder	N/A	N/A	NCR	
SPEAG	Phantom	SAM V4.0	TP-1009	NCR	
SPEAG	Robot	Staubli TX90XL	F16/54FTA1/A/01	NCR	
SPEAG	Software	DASY52 V52.8 (3)	N/A	NCR	
SPEAG	Software	SEMCAD X V14.6.10 (7331)	N/A	NCR	
R&S	Wireless Communication Test Set	CMU200	112387	2020/03/15	1 year
Anritsu	Radio Communication Analyzer	MT8820C	6201342039	2019/12/11	1 year
SPEAG	Network Analyzer	DAKS_VNA R140	0010318	2019/05/03	1 year
SPEAG	Dielectric Probe Kit	DAKS-3.5	1101	2019/05/02	1 year
HILA	Digital Thermometer	TM-906A	1500033	2019/10/28	1 year
Agilent	Power Sensor	8481H	3318A20779	2019/06/11	1 year
Agilent	Power Meter	EDM Series E4418B	GB40206143	2019/06/11	1 year
Agilent	Signal Generator	E8257D	MY44320425	2020/03/04	1 year
Agilent	Dual Directional Coupler	778D	50334	NCR	
Woken	Dual Directional Coupler	0100AZ20200801O	11012409517	NCR	
Mini-Circuits	Power Amplifier	EMC014225P	980292	NCR	
Mini-Circuits	Power Amplifier	EMC2830P	980293	NCR	
Aisi	Attenuator	IEAT 3dB	N/A	NCR	

Table 3. Test Equipment List

10. Measurement Uncertainty

Decision Rule

■ Uncertainty is not included.

□ Uncertainty is included.

IEEE 1528-2013 & IEC 62209-1 Measurement uncertainty evaluation template for SAR test (300 MHz~3 GHz)								
Uncertainty component	**Tol.**	**Prob. Dist.**	**Div.**	**C_i - 1g**	**C_i - 10g**	**u_i - 1g (± %)**	**u_i - 10g (± %)**	**v_i**
Measurement system								
Probe calibration	6.1	N	1	1	1	6.1	6.1	∞
Axial isotropy	4.7	R	1.732	0.7	0.7	1.9	1.9	∞
Hemispherical isotropy	9.6	R	1.732	0.7	0.7	3.9	3.9	∞
Boundary effect	1.0	R	1.732	1	1	0.6	0.6	∞
Linearity	4.7	R	1.732	1	1	2.7	2.7	∞
System detection limits	0.25	R	1.732	1	1	0.1	0.1	∞
Readout electronics	0.3	N	1	1	1	0.3	0.3	∞
Response time	0.0	R	1.732	1	1	0.0	0.0	∞
Integration time	2.6	R	1.732	1	1	1.5	1.5	∞
RF Ambient Noise	3.0	R	1.732	1	1	1.7	1.7	∞
RF Ambient Reflections	3.0	R	1.732	1	1	1.7	1.7	∞
Probe Positioner	0.02	R	1.732	1	1	0.01	0.01	∞
Probe Positioning	0.4	R	1.732	1	1	0.2	0.2	∞
Max. SAR evaluation	2.0	R	1.732	1	1	1.2	1.2	∞
Test sample related								
Test sample positioning	2.9	N	1	1	1	2.9	2.9	145
Device holder uncertainty	3.6	N	1	1	1	3.6	3.6	7
SAR drift measurement	5.0	R	1.732	1	1	2.9	2.9	∞
Phantom and tissue parameters								
Phantom shell uncertainty	6.1	R	1.732	1	1	3.5	3.5	∞
Liquid Conductivity (target)	5.0	R	1.732	0.78	0.71	2.3	2.0	∞
Liquid Conductivity (measurement)	4.8	R	1.732	0.78	0.71	2.2	2.0	∞
Liquid Permittivity (target)	5.0	R	1.732	0.23	0.26	0.7	0.8	∞
Liquid Permittivity (measurement)	4.8	R	1.732	0.23	0.26	0.6	0.7	∞
Combined standard uncertainty								
-	-	RSS	-	-	-	11.2	11.2	642
Expanded uncertainty (95% confidence interval)								
-	-	k =2	-	-	-	22.4	22.3	-

IEEE 1528-2013 & IEC 62209-1 Measurement uncertainty evaluation template for SAR test (3 GHz~6 GHz)								
Uncertainty component	**Tol.**	**Prob. Dist.**	**Div.**	**C_i - 1g**	**C_i - 10g**	**u_i - 1g (± %)**	**u_i - 10g (± %)**	**v_i**
Measurement system								
Probe calibration	6.7	N	1	1	1	6.7	6.7	∞
Axial isotropy	4.7	R	1.732	0.7	0.7	1.9	1.9	∞
Hemispherical isotropy	9.6	R	1.732	0.7	0.7	3.9	3.9	∞
Boundary effect	2.0	R	1.732	1	1	1.2	1.2	∞
Linearity	4.7	R	1.732	1	1	2.7	2.7	∞
System detection limits	0.25	R	1.732	1	1	0.1	0.1	∞
Readout electronics	0.3	N	1	1	1	0.3	0.3	∞
Response time	0.0	R	1.732	1	1	0.0	0.0	∞
Integration time	2.6	R	1.732	1	1	1.5	1.5	∞
RF Ambient Noise	3.0	R	1.732	1	1	1.7	1.7	∞
RF Ambient Reflections	3.0	R	1.732	1	1	1.7	1.7	∞
Probe Positioner	0.04	R	1.732	1	1	0.02	0.02	∞
Probe Positioning	0.8	R	1.732	1	1	0.5	0.5	∞
Max. SAR evaluation	4.0	R	1.732	1	1	2.3	2.3	∞
Test sample related								
Test sample positioning	2.9	N	1	1	1	2.9	2.9	145
Device holder uncertainty	3.6	N	1	1	1	3.6	3.6	7
SAR drift measurement	5.0	R	1.732	1	1	2.9	2.9	∞
Phantom and tissue parameters								
Phantom shell uncertainty	6.6	R	1.732	1	1	3.8	3.8	∞
Liquid Conductivity (target)	5.0	R	1.732	0.78	0.71	2.3	2.0	∞
Liquid Conductivity (measurement)	4.8	R	1.732	0.78	0.71	2.2	2.0	∞
Liquid Permittivity (target)	5.0	R	1.732	0.23	0.26	0.7	0.8	∞
Liquid Permittivity (measurement)	4.8	R	1.732	0.23	0.26	0.6	0.7	∞
Combined standard uncertainty								
-	-	RSS	-	-	-	11.9	11.8	804
Expanded uncertainty (95% confidence interval)								
-	-	k =2	-	-	-	23.7	23.6	-

IEC 62209-2 Measurement uncertainty evaluation template for SAR test (300 MHz~3 GHz)								
Uncertainty component	**Tol.**	**Prob. Dist.**	**Div.**	**C_i - 1g**	**C_i - 10g**	**u_i - 1g (± %)**	**u_i - 10g (± %)**	**v_i**
Measurement system								
Probe calibration	6.1	N	1	1	1	6.1	6.1	∞
Axial isotropy	4.7	R	1.732	0.7	0.7	1.9	1.9	∞
Hemispherical isotropy	9.6	R	1.732	0.7	0.7	3.9	3.9	∞
Boundary effect	1.0	R	1.732	1	1	0.6	0.6	∞
Linearity	4.7	R	1.732	1	1	2.7	2.7	∞
System detection limits	0.25	R	1.732	1	1	0.1	0.1	∞
Readout electronics	0.3	N	1	1	1	0.3	0.3	∞
Response time	0.0	R	1.732	1	1	0.0	0.0	∞
Integration time	2.6	R	1.732	1	1	1.5	1.5	∞
RF Ambient Noise	3.0	R	1.732	1	1	1.7	1.7	∞
RF Ambient Reflections	3.0	R	1.732	1	1	1.7	1.7	∞
Probe Positioner	0.02	R	1.732	1	1	0.01	0.01	∞
Probe Positioning	0.4	R	1.732	1	1	0.2	0.2	∞
Max. SAR evaluation	2.0	R	1.732	1	1	1.2	1.2	∞
Test sample related								
Test sample positioning	2.9	N	1	1	1	2.9	2.9	145
Device holder uncertainty	3.6	N	1	1	1	3.6	3.6	7
SAR drift measurement	5.0	R	1.732	1	1	2.9	2.9	∞
Phantom and tissue parameters								
Phantom shell uncertainty	7.2	R	1.732	1	1	4.2	4.2	∞
Liquid Conductivity (target)	5.0	R	1.732	0.78	0.71	2.3	2.0	∞
Liquid Conductivity (measurement)	4.8	R	1.732	0.78	0.71	2.2	2.0	∞
Liquid Permittivity (target)	5.0	R	1.732	0.23	0.26	0.7	0.8	∞
Liquid Permittivity (measurement)	4.8	R	1.732	0.23	0.26	0.6	0.7	∞
Combined standard uncertainty								
-	-	RSS	-	-	-	11.4	11.4	693
Expanded uncertainty (95% confidence interval)								
-	-	k =2	-	-	-	22.9	22.7	-

IEC 62209-2 Measurement uncertainty evaluation template for SAR test (3 GHz~6 GHz)								
Uncertainty component	**Tol.**	**Prob. Dist.**	**Div.**	**C_i - 1g**	**C_i - 10g**	**u_i - 1g (± %)**	**u_i - 10g (± %)**	**v_i**
Measurement system								
Probe calibration	6.1	N	1	1	1	6.1	6.1	∞
Axial isotropy	4.7	R	1.732	0.7	0.7	1.9	1.9	∞
Hemispherical isotropy	9.6	R	1.732	0.7	0.7	3.9	3.9	∞
Boundary effect	1.0	R	1.732	1	1	0.6	0.6	∞
Linearity	4.7	R	1.732	1	1	2.7	2.7	∞
System detection limits	0.25	R	1.732	1	1	0.1	0.1	∞
Readout electronics	0.3	N	1	1	1	0.3	0.3	∞
Response time	0.0	R	1.732	1	1	0.0	0.0	∞
Integration time	2.6	R	1.732	1	1	1.5	1.5	∞
RF Ambient Noise	3.0	R	1.732	1	1	1.7	1.7	∞
RF Ambient Reflections	3.0	R	1.732	1	1	1.7	1.7	∞
Probe Positioner	0.02	R	1.732	1	1	0.01	0.01	∞
Probe Positioning	0.4	R	1.732	1	1	0.2	0.2	∞
Max. SAR evaluation	2.0	R	1.732	1	1	1.2	1.2	∞
Test sample related								
Test sample positioning	2.9	N	1	1	1	2.9	2.9	145
Device holder uncertainty	3.6	N	1	1	1	3.6	3.6	7
SAR drift measurement	5.0	R	1.732	1	1	2.9	2.9	∞
Phantom and tissue parameters								
Phantom shell uncertainty	7.6	R	1.732	1	1	4.4	4.4	∞
Liquid Conductivity (target)	5.0	R	1.732	0.78	0.71	2.3	2.0	∞
Liquid Conductivity (measurement)	4.8	R	1.732	0.78	0.71	2.2	2.0	∞
Liquid Permittivity (target)	5.0	R	1.732	0.23	0.26	0.7	0.8	∞
Liquid Permittivity (measurement)	4.8	R	1.732	0.23	0.26	0.6	0.7	∞
Combined standard uncertainty								
-	-	RSS	-	-	-	12.1	12.0	859
Expanded uncertainty (95% confidence interval)								
-	-	k =2	-	-	-	24.1	24.0	-

11. Measurement Procedure

The measurement procedures are as follows:

1. For WLAN function, engineering testing software installed on DUTs can provide continuous transmitting signal.
2. Measure output power through RF cable and power meter
3. Set scan area, grid size and other setting on the DASY software
4. Find out the largest SAR result on these testing positions of each band
5. Measure SAR results for other channels in worst SAR testing position if the SAR of highest power channel is larger than 0.8 W/kg

According to the test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

1. Power reference measurement
2. Area scan
3. Zoom scan
4. Power drift measurement

11.1 Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1 g and 10 g, as well as for user-specific masses. The DASY software includes all numerical procedures necessary to evaluate the spatial peak SAR value.
The base for the evaluation is a "cube" measurement. The measured volume must include the 1 g and 10 g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.
The entire evaluation of the spatial peak values is performed within the post-processing engine (SEMCAD). The system always gives the maximum values for the 1 g and 10 g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages

1. Extraction of the measured data (grid and values) from the Zoom Scan
2. Calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
3. Generation of a high-resolution mesh within the measured volume
4. Interpolation of all measured values form the measurement grid to the high-resolution grid
5. Extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
6. Calculation of the averaged SAR within masses of 1 g and 10 g

11.2 Area & Zoom Scan Procedures

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan measures points and step size follow as below. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g.

<table>
<tr><td colspan="3"></td><td>≤ 3 GHz</td><td>> 3 GHz</td></tr>
<tr><td colspan="3">Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface</td><td>5 mm ± 1 mm</td><td>½·δ·ln(2) mm ± 0.5 mm</td></tr>
<tr><td colspan="3">Maximum probe angle from probe axis to phantom surface normal at the measurement location</td><td>30° ± 1°</td><td>20° ± 1°</td></tr>
<tr><td colspan="3" rowspan="2">Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}</td><td>≤ 2 GHz: ≤ 15 mm
2 – 3 GHz: ≤ 12 mm</td><td>3 – 4 GHz: ≤ 12 mm
4 – 6 GHz: ≤ 10 mm</td></tr>
<tr><td colspan="2">When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.</td></tr>
<tr><td colspan="3">Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}</td><td>≤ 2 GHz: ≤ 8 mm
2 – 3 GHz: ≤ 5 mm*</td><td>3 – 4 GHz: ≤ 5 mm*
4 – 6 GHz: ≤ 4 mm*</td></tr>
<tr><td rowspan="3">Maximum zoom scan spatial resolution, normal to phantom surface</td><td colspan="2">uniform grid: $\Delta z_{Zoom}(n)$</td><td>≤ 5 mm</td><td>3 – 4 GHz: ≤ 4 mm
4 – 5 GHz: ≤ 3 mm
5 – 6 GHz: ≤ 2 mm</td></tr>
<tr><td rowspan="2">graded grid</td><td>$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface</td><td>≤ 4 mm</td><td>3 – 4 GHz: ≤ 3 mm
4 – 5 GHz: ≤ 2.5 mm
5 – 6 GHz: ≤ 2 mm</td></tr>
<tr><td>$\Delta z_{Zoom}(n>1)$: between subsequent points</td><td colspan="2">≤ 1.5·$\Delta z_{Zoom}(n-1)$ mm</td></tr>
<tr><td>Minimum zoom scan volume</td><td colspan="2">x, y, z</td><td>≥ 30 mm</td><td>3 – 4 GHz: ≥ 28 mm
4 – 5 GHz: ≥ 25 mm
5 – 6 GHz: ≥ 22 mm</td></tr>
<tr><td colspan="5">Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see IEEE Std 1528-2013 for details.
* When zoom scan is required and the reported SAR from the area scan based 1-g SAR estimation procedures of KDB Publication 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.</td></tr>
</table>

(Our measure settings are refer KDB Publication 865664 D01v01r04)

11.3 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 1 g aggregate SAR, the DUT 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.

11.4 SAR Averaged Methods

In DASY, the interpolation and extrapolation are both based on the modified Quadratic Shepard's method. The interpolation scheme combines a least-square fitted function method and a weighted average method which are the two basic types of computational interpolation and approximation. Extrapolation routines are used to obtain SAR values between the lowest measurement points and the inner phantom surface. The extrapolation distance is determined by the surface detection distance and the probe sensor offset. The uncertainty increases with the extrapolation distance. To keep the uncertainty within 1% for the 1 g and 10 g cubes, the extrapolation distance should not be larger than 5 mm.

11.5 Power Drift Monitoring

All SAR testing is under the DUT 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 DUT 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 drift more than 5 %, the SAR will be retested.

11.6 Positioning of the DUT in relation to the phantom

<Used at the ear>

1. Specifies two handset test positions against the head phantom – the "Cheek" position and the "Tilt" position. The DUT shall be tested in both of these positions on the left and right sides of the SAM phantom. In some cases (e.g. asymmetric handsets) the DUT positioning procedures representing intended use conditions cannot be used.
2. The cheek position is established as follows:
   (a) Configure the DUT for talk operation, if necessary. For example, for a DUT with a flip, swivel or slide cover piece, open the cover if this is consistent with talk operation. If the DUT can also be used with the cover closed, both configurations shall be tested.
   (b) Define two imaginary lines on the DUT, the vertical centreline and the horizontal line, for the DUT in vertical orientation as shown in figure as below. The vertical centreline passes through two points on the front side of the DUT: the midpoint of the width wt of the handset at the level of the acoustic output (Point A), and the midpoint of the width wb at the bottom of the handset (Point B). The horizontal line is perpendicular to the vertical centreline and passes through the centre of the acoustic output. The two lines intersect at Point A.
   (c) Position the DUT close to the surface of the phantom such that Point A is on the (virtual) extension of the line passing through Points RE (right ear) and LE (left ear) on the phantom. The plane defined by the vertical centreline and the horizontal line of the DUT shall be parallel to the sagittal plane of the phantom.
   (d) Translate the DUT towards the phantom along the line passing through RE and LE until the handset touches the ear.
   (e) Rotate the DUT around its vertical centreline until the plane defined by the DUT vertical centreline and horizontal line is parallel to the N-F line, and then translate the DUT towards the phantom along the LE-RE line until DUT Point A touches the ear at the ERP (ear reference point).
   (f) While keeping Point A on the line passing through RE and LE and maintaining the DUT in contact with the pinna, rotate the handset about the line N-F until any point on the DUT is in contact with a phantom point below the pinna (cheek). The physical angles of rotation shall be documented.
   (g) While keeping DUT Point A in contact with the ERP, rotate the handset around a line perpendicular to the plane defined by the DUT vertical centreline and horizontal line and passing through DUT Point A, until the DUT vertical centreline is in the reference plane.

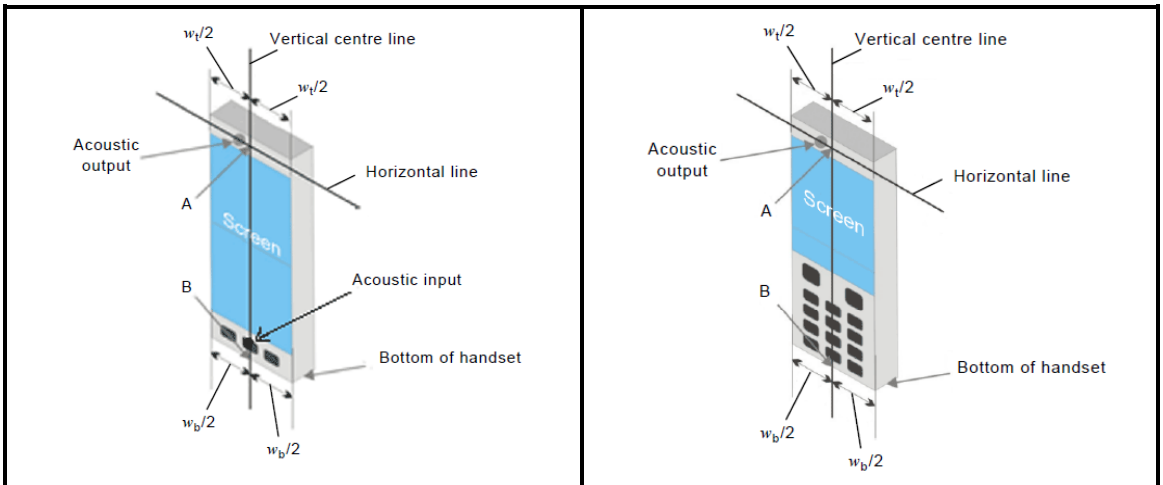


Figure - Vertical and horizontal reference lines and reference Points A, B on two example device types: a full touch screen smart phone (top) and a keyboard handset (bottom).

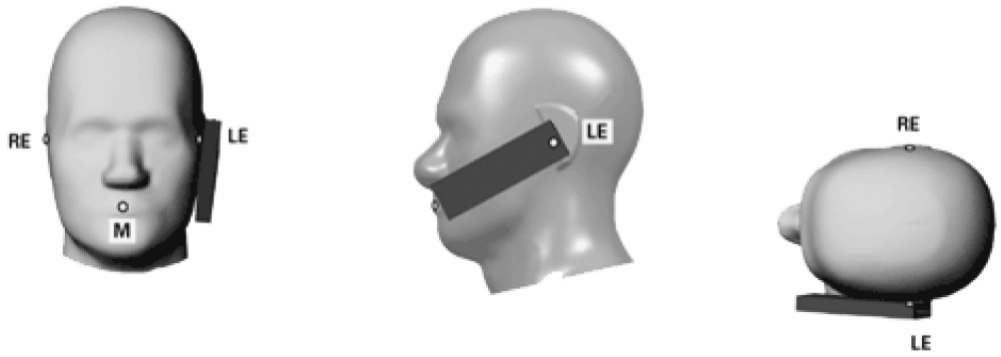


Figure - The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

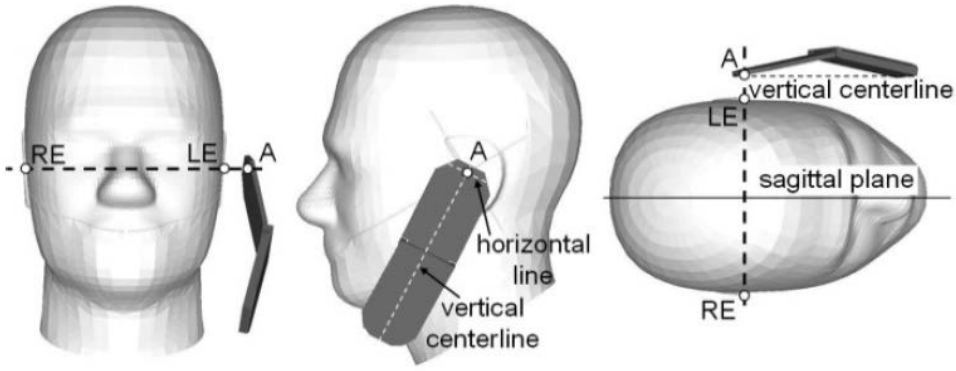


Figure - One possible DUT position against the head after Step (c).

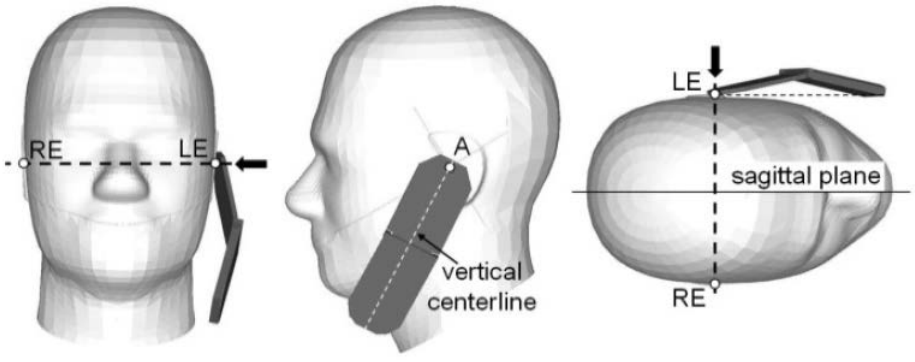


Figure - One possible DUT position against the head after Step (d).

3. The Tilt position is established as follows:
   (a) Repeat Steps (a) to (g) of cheek procedure to place the DUT in the cheek position.
   (b) While maintaining the orientation of the DUT, move the DUT away from the pinna along the line passing through RE and LE far enough to allow a rotation of the handset away from the cheek by 15°.
   (c) Rotate the DUT around the horizontal line by 15°.
   (d) While maintaining the orientation of the DUT, move the DUT towards the phantom on a line passing through RE and LE until any part of the DUT touches the ear. The tilt position is obtained when the contact is on the pinna. If the contact is at any location other than the pinna, e.g. extended antenna on the back of the phantom head, the angle of the DUT shall be reduced. In this case, the tilt position is obtained if any part of the DUT is in contact with the pinna and a second part of the DUT is in contact with the phantom, e.g. the antenna with the back of the head.

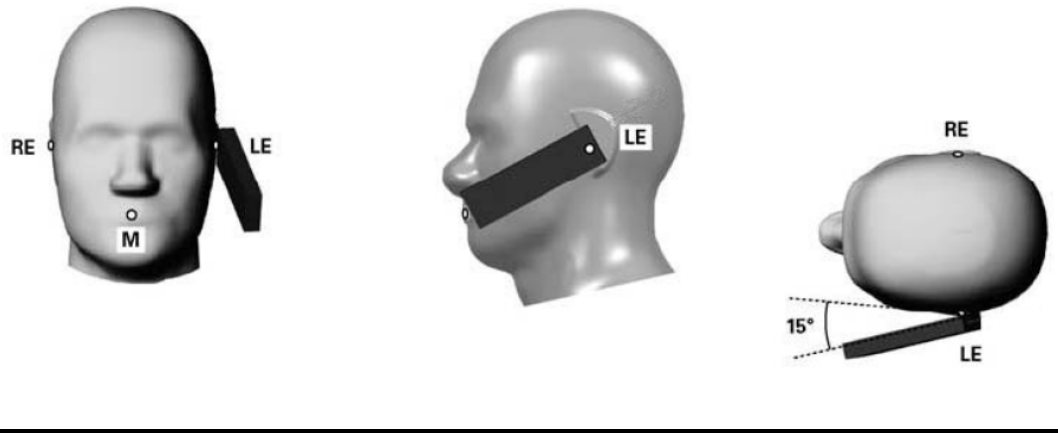


Figure - Tilt position of the wireless device on the left side of SAM.

<Hotspot mode exposure conditions>

According to KDB 648474 D04, for cellphones that support wireless routing capabilities, the relevant hand and near-body exposure conditions are tested according to the hotspot mode SAR procedures in KDB Publication 941225 D06. A test separation distance of 10 mm is required between the phantom and all surfaces and edges with a transmitting antenna located within 25 mm from that surface or edge. When the form factor of a handset is smaller than 9 cm × 5 cm, a test separation distance of 5 mm (instead of 10 mm) is required for testing hotspot mode. When the separation distance required for body-worn accessory testing is greater than or equal to that tested for hotspot mode, using the same wireless mode test configuration for voice and data, such as WCDMA, LTE and Wi-Fi, and for the same surface of the phone, the hotspot mode SAR data may be used to support body-worn accessory SAR compliance for that particular configuration (surface).

<Body-worn accessory exposure conditions>

According to the KDB 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 KDB Publication 447498 D01 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. When the same wireless transmission configuration is used for testing body-worn accessory and hotspot mode SAR, respectively, in voice and data mode, SAR results for the most conservative test separation distance configuration may be used to support both SAR conditions. 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 the body-worn accessory with a headset attached to the handset.

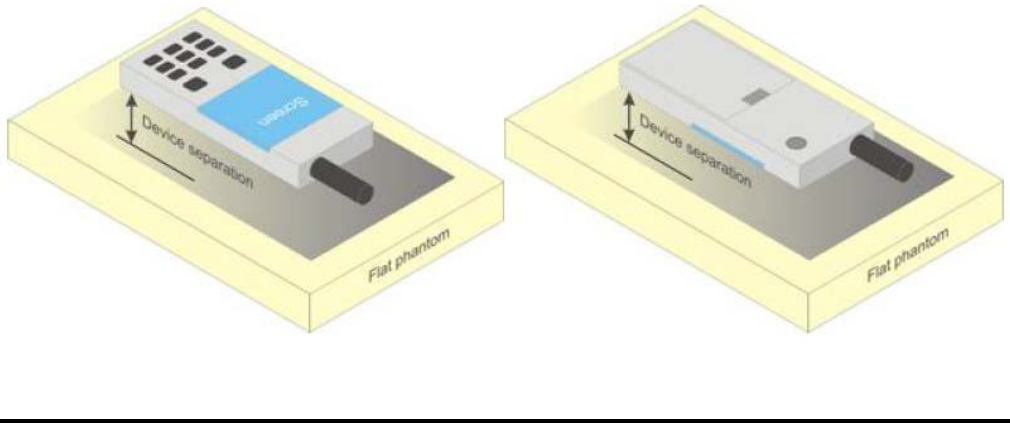


Figure - Test positions for body-worn devices.

<Phablet SAR test considerations>

1. The UMPC mini-tablet SAR procedures in KDB Publication 941225 D07 are primarily intended for devices with an overall diagonal dimensions ≤ 20 cm that operate like a tablet and mainly support hand-held interactive use next to or near the body of users, with no provision for next to the ear voice mode operations.
2. For smart phones, with a display diagonal dimension > 15.0 cm or an overall diagonal dimension >16.0 cm, 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 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB Publication 865664 D01 to address interactive hand use exposure conditions.
   (c) The 1-g SAR at 5 mm for UMPC mini-tablets is not required. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.
   (d) The normal tablet procedures in KDB Publication 616217 are required when the overall diagonal dimension of the device is > 20.0 cm. Hotspot mode and extremity 10-g SAR is not required when normal tablet procedures are applied.

12. SAR Test Results Summary

1. Device supported frequency span for LTE 17 falls completely within the supports frequency span for LTE B12, and they have the same target power. SAR was only test for LTE B12.
2. Model: MC401 standard battery is the battery2 which using in test mode.
3. When the WWAN band channel's reported SAR1g of the position is > 0.8 W/kg, low, middle and high channel are supposed to be tested.
4. 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.
5. When the highest reported SAR for 1 RB and 50% RB allocation are > 0.8 W/kg,SAR is measured for the highest output power channel in 100%RB.
6. The procedures required for 1 RB allocation are applied to measure the SAR for QPSK with 50% RB allocation.
7. 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 are ≤ 0.8 W/kg.
8. 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.
9. The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) configurations with 12.2 kbps RMC as the primary mode.
10. SAR test reduction for GSM, GPRS and EDGE modes is determined by the source-based time-averaged output power.
11. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions.
12. The 3G SAR test reduction procedure is applied to 8-PSK EDGE with GMSK GPRS/EDGE as the primary mode.
13. As per KDB 248227 D01, SAR testing are not required for 802.11g/n/ax channels when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2W/kg.
14. When the reported SAR of the highest measured maximum output power channel is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS, otherwise, SAR is required using the next highest measured output power channel for 802.11b DSSS.
15. When the highest reported SAR for the initial test configuration, according to the initial test position or fixed exposure position requirements, is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for that subsequent test configuration.
16. SAR for the initial test configuration is measured using the highest maximum output power channel, when the reported SAR of the initial test configuration is > 0.8 W/kg, SAR measurement is required for subsequent next highest measured output power channel(s) in the initial test configuration until reported SAR is ≤ 1.2 W/kg or all required channels are tested.
17. When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band.
18. When multiple transmission modes (802.11a/g/n/ac) have the same specified maximum output power, largest channel bandwidth, lowest order modulation and lowest data rate, lowest order 802.11 mode is selected (i.e. a, g, n, then ac).
19. The largest channel bandwidth configuration is selected among the multiple configurations in a frequency band with the same specified maximum output power.

12.1 Head SAR Measurement

< 2 G >

Index.	Band	Frequency		Test Mode	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Power	Max tune-up	Reported SAR_{1g} (W/kg)
		Ch.	MHz								
	GSM850	190	836.6	GPRS (4 Tx slots)	Right-Cheek	0	---	0.324	32.71	33.00	0.35
	GSM850	190	836.6	GPRS (4 Tx slots)	Right-Tilted	0	---	0.213	32.71	33.00	0.23
#287	GSM850	190	836.6	GPRS (4 Tx slots)	Left-Cheek	0	---	0.332	32.71	33.00	0.36
	GSM850	190	836.6	GPRS (4 Tx slots)	Left-Cheek	0	Battery 2	0.287	32.71	33.00	0.31
	GSM850	190	836.6	GPRS (4 Tx slots)	Left-Tilted	0	---	0.200	32.71	33.00	0.21
	GSM1900	661	1880.0	GPRS (4 Tx slots)	Right-Cheek	0	---	0.086	29.41	29.50	0.09
	GSM1900	661	1880.0	GPRS (4 Tx slots)	Right-Tilted	0	---	0.076	29.41	29.50	0.08
#177	GSM1900	661	1880.0	GPRS (4 Tx slots)	Left-Cheek	0	---	0.141	29.41	29.50	0.14
	GSM1900	661	1880.0	GPRS (4 Tx slots)	Left-Cheek	0	Battery 2	0.121	29.41	29.50	0.12
	GSM1900	661	1880.0	GPRS (4 Tx slots)	Left-Tilted	0	---	0.060	29.41	29.50	0.06

< WCDMA >

Index.	Band	Frequency		Test Mode	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Power	Max tune-up	Reported SAR_{1g} (W/kg)
		Ch.	MHz								
	WCDMA Band II	9262	1852.4	RMC12.2K	Right-Cheek	0	---	0.103	23.66	24.00	0.11
	WCDMA Band II	9262	1852.4	RMC12.2K	Right-Tilted	0	---	0.096	23.66	24.00	0.10
#172	WCDMA Band II	9262	1852.4	RMC12.2K	Left-Cheek	0	---	0.165	23.66	24.00	0.18
	WCDMA Band II	9262	1852.4	RMC12.2K	Left-Cheek	0	Battery 2	0.155	23.66	24.00	0.17
	WCDMA Band II	9262	1852.4	RMC12.2K	Left-Tilted	0	---	0.077	23.66	24.00	0.08
	WCDMA Band V	4183	836.6	RMC12.2K	Right-Cheek	0	---	0.161	23.02	23.50	0.18
	WCDMA Band V	4183	836.6	RMC12.2K	Right-Tilted	0	---	0.100	23.02	23.50	0.11
#282	WCDMA Band V	4183	836.6	RMC12.2K	Left-Cheek	0	---	0.169	23.02	23.50	0.19
	WCDMA Band V	4183	836.6	RMC12.2K	Left-Cheek	0	Battery 2	0.137	23.02	23.50	0.15
	WCDMA Band V	4183	836.6	RMC12.2K	Left-Tilted	0	---	0.096	23.02	23.50	0.11

< LTE >

Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Powe (dBm)	Max tune-up (dBm)	Reported SAR_{1g} (W/kg)
		Ch.	MHz											
	LTE Band 2	18900	1880.0	20M	QPSK	1	0	Right-Cheek	0	---	0.053	22.72	23.00	0.06
	LTE Band 2	19100	1900.0	20M	QPSK	50	25	Right-Cheek	0	---	0.038	21.79	22.00	0.04
#148	LTE Band 2	18900	1880.0	20M	QPSK	1	0	Right-Tilted	0	---	0.076	22.72	23.00	0.08
	LTE Band 2	18900	1880.0	20M	QPSK	1	0	Right-Tilted	0	Battery 2	0.063	22.72	23.00	0.07
	LTE Band 2	19100	1900.0	20M	QPSK	50	25	Right-Tilted	0	---	0.047	21.79	22.00	0.05
	LTE Band 2	18900	1880.0	20M	QPSK	1	0	Left-Cheek	0	---	0.063	22.72	23.00	0.07
	LTE Band 2	19100	1900.0	20M	QPSK	50	25	Left-Cheek	0	---	0.054	21.79	22.00	0.06
	LTE Band 2	18900	1880.0	20M	QPSK	1	0	Left-Tilted	0	---	0.055	22.72	23.00	0.06
	LTE Band 2	19100	1900.0	20M	QPSK	50	25	Left-Tilted	0	---	0.040	21.79	22.00	0.04
	LTE Band 4	20175	1732.5	20M	QPSK	1	0	Right-Cheek	0	---	0.073	22.70	23.00	0.08
	LTE Band 4	20175	1732.5	20M	QPSK	50	25	Right-Cheek	0	---	0.065	21.69	22.00	0.07
#157	LTE Band 4	20175	1732.5	20M	QPSK	1	0	Right-Tilted	0	---	0.105	22.70	23.00	0.11
	LTE Band 4	20175	1732.5	20M	QPSK	1	0	Right-Tilted	0	Battery 2	0.097	22.70	23.00	0.10
	LTE Band 4	20175	1732.5	20M	QPSK	50	25	Right-Tilted	0	---	0.090	21.69	22.00	0.10
	LTE Band 4	20175	1732.5	20M	QPSK	1	0	Left-Cheek	0	---	0.101	22.70	23.00	0.11
	LTE Band 4	20175	1732.5	20M	QPSK	50	25	Left-Cheek	0	---	0.090	21.69	22.00	0.10
	LTE Band 4	20175	1732.5	20M	QPSK	1	0	Left-Tilted	0	---	0.081	22.70	23.00	0.09
	LTE Band 4	20175	1732.5	20M	QPSK	50	25	Left-Tilted	0	---	0.071	21.69	22.00	0.08
	LTE Band 5	20525	836.5	10M	QPSK	1	49	Right-Cheek	0	---	0.116	22.45	22.50	0.12
	LTE Band 5	20525	836.5	10M	QPSK	25	12	Right-Cheek	0	---	0.098	21.52	22.00	0.11
	LTE Band 5	20525	836.5	10M	QPSK	1	49	Right-Tilted	0	---	0.073	22.45	22.50	0.07
	LTE Band 5	20525	836.5	10M	QPSK	25	12	Right-Tilted	0	---	0.062	21.52	22.00	0.07
#274	LTE Band 5	20525	836.5	10M	QPSK	1	49	Left-Cheek	0	---	0.146	22.45	22.50	0.15
	LTE Band 5	20525	836.5	10M	QPSK	1	49	Left-Cheek	0	Battery 2	0.119	22.45	22.50	0.12
	LTE Band 5	20525	836.5	10M	QPSK	25	12	Left-Cheek	0	---	0.116	21.52	22.00	0.13
	LTE Band 5	20525	836.5	10M	QPSK	1	49	Left-Tilted	0	---	0.085	22.45	22.50	0.09
	LTE Band 5	20525	836.5	10M	QPSK	25	12	Left-Tilted	0	---	0.067	21.52	22.00	0.08

Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Powe (dBm)	Max tune-up (dBm)	Reported SAR_{1g} (W/kg)
		Ch.	MHz											
#100	LTE Band 7	20850	2510.0	20M	QPSK	1	49	Right-Cheek	0	---	0.106	21.23	21.50	0.11
	LTE Band 7	20850	2510.0	20M	QPSK	1	49	Right-Cheek	0	Battery 2	0.104	21.23	21.50	0.11
	LTE Band 7	20850	2510.0	20M	QPSK	50	0	Right-Cheek	0	---	0.091	19.72	20.00	0.10
	LTE Band 7	20850	2510.0	20M	QPSK	1	49	Right-Tilted	0	---	0.025	21.23	21.50	0.03
	LTE Band 7	20850	2510.0	20M	QPSK	50	0	Right-Tilted	0	---	0.022	19.72	20.00	0.02
	LTE Band 7	20850	2510.0	20M	QPSK	1	49	Left-Cheek	0	---	0.049	21.23	21.50	0.05
	LTE Band 7	20850	2510.0	20M	QPSK	50	0	Left-Cheek	0	---	0.042	19.72	20.00	0.05
	LTE Band 7	20850	2510.0	20M	QPSK	1	49	Left-Tilted	0	---	0.031	21.23	21.50	0.03
	LTE Band 7	20850	2510.0	20M	QPSK	50	0	Left-Tilted	0	---	0.030	19.72	20.00	0.03
	LTE Band 12	23095	707.5	10M	QPSK	1	0	Right-Cheek	0	---	0.049	22.61	23.00	0.05
	LTE Band 12	23095	707.5	10M	QPSK	25	12	Right-Cheek	0	---	0.042	21.68	22.00	0.05
	LTE Band 12	23095	707.5	10M	QPSK	1	0	Right-Tilted	0	---	0.027	22.61	23.00	0.03
	LTE Band 12	23095	707.5	10M	QPSK	25	12	Right-Tilted	0	---	0.022	21.68	22.00	0.02
#264	LTE Band 12	23095	707.5	10M	QPSK	1	0	Left-Cheek	0	---	0.063	22.61	23.00	0.07
	LTE Band 12	23095	707.5	10M	QPSK	1	0	Left-Cheek	0	Battery 2	0.057	22.61	23.00	0.06
	LTE Band 12	23095	707.5	10M	QPSK	25	12	Left-Cheek	0	---	0.052	21.68	22.00	0.06
	LTE Band 12	23095	707.5	10M	QPSK	1	0	Left-Tilted	0	---	0.028	22.61	23.00	0.03
	LTE Band 12	23095	707.5	10M	QPSK	25	12	Left-Tilted	0	---	0.024	21.68	22.00	0.03
	LTE Band 17	23790	710.0	10M	QPSK	1	49	Left-Cheek	0	---	0.056	22.58	23.00	0.06
#80	LTE Band 38	38000	2595.0	20M	QPSK	1	0	Right-Cheek	0	---	0.041	22.78	23.00	0.04
	LTE Band 38	38000	2595.0	20M	QPSK	1	0	Right-Cheek	0	Battery 2	0.039	22.78	23.00	0.04
	LTE Band 38	38000	2595.0	20M	QPSK	50	25	Right-Cheek	0	---	0.030	21.90	22.00	0.03
	LTE Band 38	38000	2595.0	20M	QPSK	1	0	Right-Tilted	0	---	0.017	22.78	23.00	0.02
	LTE Band 38	38000	2595.0	20M	QPSK	50	25	Right-Tilted	0	---	0.014	21.90	22.00	0.01
	LTE Band 38	38000	2595.0	20M	QPSK	1	0	Left-Cheek	0	---	0.011	22.78	23.00	0.01
	LTE Band 38	38000	2595.0	20M	QPSK	50	25	Left-Cheek	0	---	0.017	21.90	22.00	0.02
	LTE Band 38	38000	2595.0	20M	QPSK	1	0	Left-Tilted	0	---	0.010	22.78	23.00	0.01
	LTE Band 38	38000	2595.0	20M	QPSK	50	25	Left-Tilted	0	---	0.007	21.90	22.00	0.01

Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Powe (dBm)	Max tune-up (dBm)	Reported SAR_{1g} (W/kg)
		Ch.	MHz											
#90	LTE Band 41	41490	2680.0	20M	QPSK	1	99	Right-Cheek	0	---	0.044	22.62	23.00	0.05
	LTE Band 41	41490	2680.0	20M	QPSK	1	99	Right-Cheek	0	Battery 2	0.040	22.62	23.00	0.04
	LTE Band 41	41055	2636.5	20M	QPSK	50	0	Right-Cheek	0	---	0.029	21.70	22.00	0.03
	LTE Band 41	41490	2680.0	20M	QPSK	1	99	Right-Tilted	0	---	0.010	22.62	23.00	0.01
	LTE Band 41	41055	2636.5	20M	QPSK	50	0	Right-Tilted	0	---	0.004	21.70	22.00	0.00
	LTE Band 41	41490	2680.0	20M	QPSK	1	99	Left-Cheek	0	---	0.013	22.62	23.00	0.01
	LTE Band 41	41055	2636.5	20M	QPSK	50	0	Left-Cheek	0	---	0.014	21.70	22.00	0.02
	LTE Band 41	41490	2680.0	20M	QPSK	1	99	Left-Tilted	0	---	0.017	22.62	23.00	0.02
	LTE Band 41	41055	2636.5	20M	QPSK	50	0	Left-Tilted	0	---	0.009	21.70	22.00	0.01

< WiFi >

Index.	Band	Mode	Frequency		Data Rate	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Power	Max tune-up	Duty Cycle (%)	Reported SAR_{1g} (W/kg)	Note
			Ch.	MHz										
	WLAN 2.4GHz	802.11b	1	2412.0	1 Mbps	Right-Cheek	0	---	0.133	17.71	18.00	99.51	0.14	Ant 0
	WLAN 2.4GHz	802.11b	1	2412.0	1 Mbps	Right-Tilted	0	---	0.129	17.71	18.00	99.51	0.14	Ant 0
	WLAN 2.4GHz	802.11b	1	2412.0	1 Mbps	Left-Cheek	0	---	0.121	17.71	18.00	99.51	0.13	Ant 0
#522	WLAN 2.4GHz	802.11b	1	2412.0	1 Mbps	Left-Tilted	0	---	0.149	17.71	18.00	99.51	0.16	Ant 0
	WLAN 2.4GHz	802.11b	1	2412.0	1 Mbps	Left-Tilted	0	Battery 2	0.143	17.71	18.00	99.51	0.15	Ant 0
	WLAN 2.4GHz	802.11b	1	2412.0	1 Mbps	Right-Cheek	0	---	0.008	17.82	18.00	99.47	0.01	Ant 1
	WLAN 2.4GHz	802.11b	1	2412.0	1 Mbps	Right-Tilted	0	---	0.006	17.82	18.00	99.47	0.01	Ant 1
#527	WLAN 2.4GHz	802.11b	1	2412.0	1 Mbps	Left-Cheek	0	---	0.013	17.82	18.00	99.47	0.01	Ant 1
	WLAN 2.4GHz	802.11b	1	2412.0	1 Mbps	Left-Cheek	0	Battery 2	0.012	17.82	18.00	99.47	0.01	Ant 1
	WLAN 2.4GHz	802.11b	1	2412.0	1 Mbps	Left-Tilted	0	---	0.006	17.82	18.00	99.47	0.01	Ant 1
#530	Bluetooth		0	2402.0	1 Mbps	Right-Cheek	0	---	0.022	10.41	10.50	77.89	0.03	Ant 0
	Bluetooth		0	2402.0	1 Mbps	Right-Cheek	0	Battery 2	0.021	10.41	10.50	77.89	0.03	Ant 0
	Bluetooth		0	2402.0	1 Mbps	Right-Tilted	0	---	0.018	10.41	10.50	77.89	0.02	Ant 0
	Bluetooth		0	2402.0	1 Mbps	Left-Cheek	0	---	0.016	10.41	10.50	77.89	0.02	Ant 0
	Bluetooth		0	2402.0	1 Mbps	Left-Tilted	0	---	0.018	10.41	10.50	77.89	0.02	Ant 0
	WLAN 5GHz	802.11ac 40 MHz	54	5270.0	27 Mbps	Right-Cheek	0	---	0.029	15.36	15.50	89.80	0.03	Ant 0
	WLAN 5GHz	802.11ac 40 MHz	54	5270.0	27 Mbps	Right-Tilted	0	---	0.013	15.36	15.50	89.80	0.02	Ant 0
#612	WLAN 5GHz	802.11ac 40 MHz	54	5270.0	27 Mbps	Left-Cheek	0	---	0.063	15.36	15.50	89.80	0.07	Ant 0
	WLAN 5GHz	802.11ac 40 MHz	54	5270.0	27 Mbps	Left-Cheek	0	Battery 2	0.057	15.36	15.50	89.80	0.07	Ant 0
	WLAN 5GHz	802.11ac 40 MHz	54	5270.0	27 Mbps	Left-Tilted	0	-	0.013	15.36	15.50	89.80	0.02	Ant 0
	WLAN 5GHz	802.11ac 40 MHz	54	5270.0	27 Mbps	Right-Cheek	0	---	0.015	15.91	16.00	89.73	0.02	Ant 1
	WLAN 5GHz	802.11ac 40 MHz	54	5270.0	27 Mbps	Right-Tilted	0	---	0.006	15.91	16.00	89.73	0.01	Ant 1
#618	WLAN 5GHz	802.11ac 40 MHz	54	5270.0	27 Mbps	Left-Cheek	0	---	0.031	15.91	16.00	89.73	0.04	Ant 1
	WLAN 5GHz	802.11ac 40 MHz	54	5270.0	27 Mbps	Left-Cheek	0	Battery 2	0.029	15.91	16.00	89.73	0.03	Ant 1
	WLAN 5GHz	802.11ac 40 MHz	54	5270.0	27 Mbps	Left-Tilted	0	---	0.005	15.91	16.00	89.73	0.01	Ant 1

Index.	Band	Mode	Frequency		Data Rate	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Power	Max tune-up	Duty Cycle (%)	Reported SAR_{1g} (W/kg)	Note
			Ch.	MHz										
#622	WLAN 5GHz	802.11ac 80 MHz	106	5530.0	58.5 Mbps	Right-Cheek	0	---	0.030	15.61	16.00	85.21	0.04	Ant 0
	WLAN 5GHz	802.11ac 80 MHz	106	5530.0	58.5 Mbps	Right-Cheek	0	Battery 2	0.029	15.61	16.00	85.21	0.04	Ant 0
	WLAN 5GHz	802.11ac 80 MHz	106	5530.0	58.5 Mbps	Right-Tilted	0	---	0.023	15.61	16.00	85.21	0.03	Ant 0
	WLAN 5GHz	802.11ac 80 MHz	106	5530.0	58.5 Mbps	Left-Cheek	0	---	0.018	15.61	16.00	85.21	0.02	Ant 0
	WLAN 5GHz	802.11ac 80 MHz	106	5530.0	58.5 Mbps	Left-Tilted	0	---	0.018	15.61	16.00	85.21	0.02	Ant 0
	WLAN 5GHz	802.11ac 80 MHz	106	5530.0	58.5 Mbps	Right-Cheek	0	---	0.018	15.32	15.50	85.18	0.02	Ant 1
	WLAN 5GHz	802.11ac 80 MHz	106	5530.0	58.5 Mbps	Right-Tilted	0	---	0.012	15.32	15.50	85.18	0.02	Ant 1
#630	WLAN 5GHz	802.11ac 80 MHz	106	5530.0	58.5 Mbps	Left-Cheek	0	---	0.042	15.32	15.50	85.18	0.05	Ant 1
	WLAN 5GHz	802.11ac 80 MHz	106	5530.0	58.5 Mbps	Left-Cheek	0	Battery 2	0.042	15.32	15.50	85.18	0.05	Ant 1
	WLAN 5GHz	802.11ac 80 MHz	106	5530.0	58.5 Mbps	Left-Tilted	0	---	0.012	15.32	15.50	85.18	0.02	Ant 1
#640	WLAN 5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Right-Cheek	0	---	0.037	15.76	16.00	85.21	0.05	Ant 0
	WLAN 5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Right-Cheek	0	Battery 2	0.034	15.76	16.00	85.21	0.04	Ant 0
	WLAN 5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Right-Tilted	0	---	0.023	15.76	16.00	85.21	0.03	Ant 0
	WLAN 5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Left-Cheek	0	---	0.027	15.76	16.00	85.21	0.03	Ant 0
	WLAN 5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Left-Tilted	0	---	0.036	15.76	16.00	85.21	0.05	Ant 0
	WLAN 5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Right-Cheek	0	---	0.018	16.26	16.50	85.18	0.02	Ant 1
	WLAN 5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Right-Tilted	0	---	0.003	16.26	16.50	85.18	0.00	Ant 1
#636	WLAN 5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Left-Cheek	0	---	0.051	16.26	16.50	85.18	0.06	Ant 1
	WLAN 5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Left-Cheek	0	Battery 2	0.047	16.26	16.50	85.18	0.06	Ant 1
	WLAN 5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Left-Tilted	0	---	0.007	16.26	16.50	85.18	0.01	Ant 1

12.2 Hot-spot mode SAR Measurement

< 2 G >

Index.	Band	Frequency		Test Mode	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Power	Max tune-up	Reported SAR_{1g} (W/kg)
		Ch.	MHz								
	GSM850	190	836.6	GPRS (4 Tx slots)	Front	10	---	0.336	32.71	33.00	0.36
	GSM850	190	836.6	GPRS (4 Tx slots)	Back	10	---	0.389	32.71	33.00	0.42
	GSM850	190	836.6	GPRS (4 Tx slots)	Side 1	10	---	0.032	32.71	33.00	0.03
	GSM850	190	836.6	GPRS (4 Tx slots)	Side 2	10	---	0.486	32.71	33.00	0.52
	GSM850	190	836.6	GPRS (4 Tx slots)	Side 3	10	---	0.361	32.71	33.00	0.39
#310	GSM850	190	836.6	GPRS (4 Tx slots)	Side 4	10	---	0.590	32.71	33.00	0.63
	GSM850	190	836.6	GPRS (4 Tx slots)	Side 4	10	Battery 2	0.461	32.71	33.00	0.49
	GSM1900	661	1880.0	GPRS (4 Tx slots)	Front	10	---	0.465	29.41	29.50	0.48
	GSM1900	661	1880.0	GPRS (4 Tx slots)	Back	10	---	0.230	29.41	29.50	0.24
	GSM1900	661	1880.0	GPRS (4 Tx slots)	Side 2	10	---	0.272	29.41	29.50	0.28
#197	GSM1900	661	1880.0	GPRS (4 Tx slots)	Side 3	10	---	0.687	29.41	29.50	0.70
	GSM1900	661	1880.0	GPRS (4 Tx slots)	Side 3	10	Battery 2	0.667	29.41	29.50	0.68
	GSM1900	661	1880.0	GPRS (4 Tx slots)	Side 4	10	---	0.211	29.41	29.50	0.22

< WCDMA >

Index.	Band	Frequency		Test Mode	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Power	Max tune-up	Reported SAR_{1g} (W/kg)
		Ch.	MHz								
#184	WCDMA Band II	9262	1852.4	RMC12.2K	Front	10	---	0.525	23.66	24.00	0.57
	WCDMA Band II	9262	1852.4	RMC12.2K	Front	10	Battery 2	0.440	23.66	24.00	0.48
	WCDMA Band II	9262	1852.4	RMC12.2K	Back	10	---	0.254	23.66	24.00	0.28
	WCDMA Band II	9262	1852.4	RMC12.2K	Side 2	10	---	0.220	23.66	24.00	0.24
	WCDMA Band II	9262	1852.4	RMC12.2K	Side 3	10	---	0.476	23.66	24.00	0.52
	WCDMA Band II	9262	1852.4	RMC12.2K	Side 4	10	---	0.158	23.66	24.00	0.17
	WCDMA Band V	4183	836.6	RMC12.2K	Front	10	---	0.128	23.02	23.50	0.14
	WCDMA Band V	4183	836.6	RMC12.2K	Back	10	---	0.194	23.02	23.50	0.22
	WCDMA Band V	4183	836.6	RMC12.2K	Side 2	10	---	0.185	23.02	23.50	0.21
	WCDMA Band V	4183	836.6	RMC12.2K	Side 3	10	---	0.191	23.02	23.50	0.21
#299	WCDMA Band V	4183	836.6	RMC12.2K	Side 4	10	---	0.222	23.02	23.50	0.25
	WCDMA Band V	4183	836.6	RMC12.2K	Side 4	10	Battery 2	0.178	23.02	23.50	0.20

< LTE >

Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Powe (dBm)	Max tune-up (dBm)	Reported SAR_{1g} (W/kg)
		Ch.	MHz											
	LTE Band 2	18900	1880.0	20M	QPSK	1	0	Front	10	---	0.401	22.72	23.00	0.43
	LTE Band 2	19100	1900.0	20M	QPSK	50	25	Front	10	---	0.246	21.79	22.00	0.26
	LTE Band 2	18900	1880.0	20M	QPSK	1	0	Back	10	---	0.202	22.72	23.00	0.22
	LTE Band 2	19100	1900.0	20M	QPSK	50	25	Back	10	---	0.155	21.79	22.00	0.16
	LTE Band 2	18900	1880.0	20M	QPSK	1	0	Side 2	10	---	0.173	22.72	23.00	0.19
	LTE Band 2	19100	1900.0	20M	QPSK	50	25	Side 2	10	---	0.114	21.79	22.00	0.12
#116	LTE Band 2	18900	1880.0	20M	QPSK	1	0	Side 3	10	---	0.414	22.72	23.00	0.44
	LTE Band 2	18900	1880.0	20M	QPSK	1	0	Side 3	10	Battery 2	0.375	22.72	23.00	0.40
	LTE Band 2	19100	1900.0	20M	QPSK	50	25	Side 3	10	---	0.339	21.79	22.00	0.36
	LTE Band 2	18900	1880.0	20M	QPSK	1	0	Side 4	10	---	0.156	22.72	23.00	0.17
	LTE Band 2	19100	1900.0	20M	QPSK	50	25	Side 4	10	---	0.107	21.79	22.00	0.11

Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Powe (dBm)	Max tune-up (dBm)	Reported SAR_{1g} (W/kg)
		Ch.	MHz											
#122	LTE Band 4	20175	1732.5	20M	QPSK	1	0	Front	10	---	0.359	22.70	23.00	0.39
	LTE Band 4	20175	1732.5	20M	QPSK	1	0	Front	10	Battery 2	0.339	22.70	23.00	0.36
	LTE Band 4	20175	1732.5	20M	QPSK	50	25	Front	10	---	0.317	21.69	22.00	0.34
	LTE Band 4	20175	1732.5	20M	QPSK	1	0	Back	10	---	0.162	22.70	23.00	0.17
	LTE Band 4	20175	1732.5	20M	QPSK	50	25	Back	10	---	0.136	21.69	22.00	0.15
	LTE Band 4	20175	1732.5	20M	QPSK	1	0	Side 2	10	---	0.172	22.70	23.00	0.18
	LTE Band 4	20175	1732.5	20M	QPSK	50	25	Side 2	10	---	0.142	21.69	22.00	0.15
	LTE Band 4	20175	1732.5	20M	QPSK	1	0	Side 3	10	---	0.161	22.70	23.00	0.17
	LTE Band 4	20175	1732.5	20M	QPSK	50	25	Side 3	10	---	0.144	21.69	22.00	0.16
	LTE Band 4	20175	1732.5	20M	QPSK	1	0	Side 4	10	---	0.042	22.70	23.00	0.05
	LTE Band 4	20175	1732.5	20M	QPSK	50	25	Side 4	10	---	0.041	21.69	22.00	0.04
	LTE Band 5	20525	836.5	10M	QPSK	1	49	Front	10	---	0.119	22.45	22.50	0.12
	LTE Band 5	20525	836.5	10M	QPSK	25	12	Front	10	---	0.095	21.52	22.00	0.11
	LTE Band 5	20525	836.5	10M	QPSK	1	49	Back	10	---	0.152	22.45	22.50	0.15
	LTE Band 5	20525	836.5	10M	QPSK	25	12	Back	10	---	0.122	21.52	22.00	0.14
	LTE Band 5	20525	836.5	10M	QPSK	1	49	Side 2	10	---	0.112	22.45	22.50	0.11
	LTE Band 5	20525	836.5	10M	QPSK	25	12	Side 2	10	---	0.093	21.52	22.00	0.10
	LTE Band 5	20525	836.5	10M	QPSK	1	49	Side 3	10	---	0.169	22.45	22.50	0.17
	LTE Band 5	20525	836.5	10M	QPSK	25	12	Side 3	10	---	0.135	21.52	22.00	0.15

Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Powe (dBm)	Max tune-up (dBm)	Reported SAR_{1g} (W/kg)
		Ch.	MHz											
#244	LTE Band 5	20525	836.5	10M	QPSK	1	49	Side 4	10	---	0.206	22.45	22.50	0.21
	LTE Band 5	20525	836.5	10M	QPSK	1	49	Side 4	10	Battery 2	0.152	22.45	22.50	0.15
	LTE Band 5	20525	836.5	10M	QPSK	25	12	Side 4	10	---	0.165	21.52	22.00	0.18
	LTE Band 7	20850	2510.0	20M	QPSK	1	49	Front	10	---	0.090	21.23	21.50	0.10
	LTE Band 7	20850	2510.0	20M	QPSK	50	0	Front	10	---	0.082	19.72	20.00	0.09
	LTE Band 7	20850	2510.0	20M	QPSK	1	49	Back	10	---	0.457	21.23	21.50	0.49
	LTE Band 7	20850	2510.0	20M	QPSK	50	0	Back	10	---	0.371	19.72	20.00	0.40
	LTE Band 7	20850	2510.0	20M	QPSK	1	49	Side 2	10	---	0.199	21.23	21.50	0.21
	LTE Band 7	20850	2510.0	20M	QPSK	50	0	Side 2	10	---	0.156	19.72	20.00	0.17
	LTE Band 7	20850	2510.0	20M	QPSK	1	49	Side 3	10	---	0.762	21.23	21.50	0.81
	LTE Band 7	21100	2535.0	20M	QPSK	1	49	Side 3	10	---	0.954	21.17	21.50	1.03
#328	LTE Band 7	21350	2560.0	20M	QPSK	1	99	Side 3	10	---	1.040	21.12	21.50	1.14
	LTE Band 7	21350	2560.0	20M	QPSK	1	99	Side 3	10	Repeat	1.030	21.12	21.50	1.12
	LTE Band 7	21350	2560.0	20M	QPSK	1	99	Side 3	10	Battery 2	0.845	21.12	21.50	0.92
	LTE Band 7	20850	2510.0	20M	QPSK	50	0	Side 3	10	---	0.544	19.72	20.00	0.58
	LTE Band 7	21100	2535.0	20M	QPSK	100	0	Side 3	10	---	0.559	19.89	20.00	0.57
	LTE Band 7	20850	2510.0	20M	QPSK	1	49	Side 4	10	---	0.059	21.23	21.50	0.06
	LTE Band 7	20850	2510.0	20M	QPSK	50	0	Side 4	10	---	0.039	19.72	20.00	0.04
	LTE Band 12	23095	707.5	10M	QPSK	1	0	Front	10	---	0.053	22.61	23.00	0.06
	LTE Band 12	23095	707.5	10M	QPSK	25	12	Front	10	---	0.045	21.68	22.00	0.05
	LTE Band 12	23095	707.5	10M	QPSK	1	0	Back	10	---	0.060	22.61	23.00	0.07
	LTE Band 12	23095	707.5	10M	QPSK	25	12	Back	10	---	0.052	21.68	22.00	0.06
	LTE Band 12	23095	707.5	10M	QPSK	1	0	Side 2	10	---	0.053	22.61	23.00	0.06
	LTE Band 12	23095	707.5	10M	QPSK	25	12	Side 2	10	---	0.043	21.68	22.00	0.05
	LTE Band 12	23095	707.5	10M	QPSK	1	0	Side 3	10	---	0.045	22.61	23.00	0.05
	LTE Band 12	23095	707.5	10M	QPSK	25	12	Side 3	10	---	0.039	21.68	22.00	0.04

Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Powe (dBm)	Max tune-up (dBm)	Reported SAR_{1g} (W/kg)
		Ch.	MHz											
#215	LTE Band 12	23095	707.5	10M	QPSK	1	0	Side 4	10	---	0.066	22.61	23.00	0.07
	LTE Band 12	23095	707.5	10M	QPSK	1	0	Side 4	10	Battery 2	0.059	22.61	23.00	0.07
	LTE Band 12	23095	707.5	10M	QPSK	25	12	Side 4	10	---	0.056	21.68	22.00	0.06
	LTE Band 17	23790	710.0	10M	QPSK	1	49	Side 4	10	---	0.061	22.58	23.00	0.07
	LTE Band 38	38000	2595.0	20M	QPSK	1	0	Front	10	---	0.061	22.78	23.00	0.07
	LTE Band 38	38000	2595.0	20M	QPSK	50	25	Front	10	---	0.048	21.90	22.00	0.05
	LTE Band 38	38000	2595.0	20M	QPSK	1	0	Back	10	---	0.313	22.78	23.00	0.33
	LTE Band 38	38000	2595.0	20M	QPSK	50	25	Back	10	---	0.199	21.90	22.00	0.21
	LTE Band 38	38000	2595.0	20M	QPSK	1	0	Side 2	10	---	0.074	22.78	23.00	0.08
	LTE Band 38	38000	2595.0	20M	QPSK	50	25	Side 2	10	---	0.059	21.90	22.00	0.06
#21	LTE Band 38	38000	2595.0	20M	QPSK	1	0	Side 3	10	---	0.649	22.78	23.00	0.69
	LTE Band 38	38000	2595.0	20M	QPSK	1	0	Side 3	10	Battery 2	0.645	22.78	23.00	0.68
	LTE Band 38	38000	2595.0	20M	QPSK	50	25	Side 3	10	---	0.536	21.90	22.00	0.55
	LTE Band 38	38000	2595.0	20M	QPSK	1	0	Side 4	10	---	0.045	22.78	23.00	0.05
	LTE Band 38	38000	2595.0	20M	QPSK	50	25	Side 4	10	---	0.037	21.90	22.00	0.04
	LTE Band 41	41490	2680.0	20M	QPSK	1	99	Front	10	---	0.048	22.62	23.00	0.05
	LTE Band 41	41055	2636.5	20M	QPSK	50	0	Front	10	---	0.039	21.70	22.00	0.04
	LTE Band 41	41490	2680.0	20M	QPSK	1	99	Back	10	---	0.183	22.62	23.00	0.20
	LTE Band 41	41055	2636.5	20M	QPSK	50	0	Back	10	---	0.166	21.70	22.00	0.18
	LTE Band 41	41490	2680.0	20M	QPSK	1	99	Side 2	10	---	0.071	22.62	23.00	0.08
	LTE Band 41	41055	2636.5	20M	QPSK	50	0	Side 2	10	---	0.055	21.70	22.00	0.06
	LTE Band 41	41490	2680.0	20M	QPSK	1	99	Side 3	10	---	0.636	22.62	23.00	0.70
	LTE Band 41	39750	2506.0	20M	QPSK	1	0	Side 3	10	---	0.333	22.49	22.50	0.34
	LTE Band 41	40185	2549.5	20M	QPSK	1	0	Side 3	10	---	0.505	22.43	22.50	0.52

Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Powe (dBm)	Max tune-up (dBm)	Reported SAR_{1g} (W/kg)
		Ch.	MHz											
#77	LTE Band 41	40620	2593.0	20M	QPSK	1	99	Side 3	10	---	0.677	22.39	22.50	0.70
	LTE Band 41	40620	2593.0	20M	QPSK	1	99	Side 3	10	Battery 2	0.673	22.39	22.50	0.69
	LTE Band 41	41055	2636.5	20M	QPSK	1	99	Side 3	10	---	0.608	22.46	22.50	0.62
	LTE Band 41	41055	2636.5	20M	QPSK	50	0	Side 3	10	---	0.531	21.70	22.00	0.57
	LTE Band 41	41055	2636.5	20M	QPSK	100	0	Side 3	10	---	0.517	21.56	22.00	0.58
	LTE Band 41	41490	2680.0	20M	QPSK	1	99	Side 4	10	---	0.041	22.62	23.00	0.05
	LTE Band 41	41055	2636.5	20M	QPSK	50	0	Side 4	10	---	0.031	21.70	22.00	0.03

< WiFi >

Index.	Band	Mode	Frequency		Data Rate	Test Position	Spacing	EUT & Accessory	SAR 1g	Burst Avg Powe (dBm)	Max tune-up (dBm)	Duty Cycle (%)	Reported SAR 1g	Note
			Ch.	MHz			(mm)		(W/Kg)					
	WLAN2.4GHz	802.11b	1	2412.0	1 Mbps	Front	10	---	0.077	17.71	18.00	99.51	0.08	Ant 0
	WLAN2.4GHz	802.11b	1	2412.0	1 Mbps	Back	10	---	0.087	17.71	18.00	99.51	0.09	Ant 0
	WLAN2.4GHz	802.11b	1	2412.0	1 Mbps	Side 1	10	---	0.096	17.71	18.00	99.51	0.10	Ant 0
#503	WLAN2.4GHz	802.11b	1	2412.0	1 Mbps	Side 4	10	---	0.284	17.71	18.00	99.51	0.31	Ant 0
	WLAN2.4GHz	802.11b	1	2412.0	1 Mbps	Side 4	10	Battery 2	0.210	17.71	18.00	99.51	0.23	Ant 0
	WLAN2.4GHz	802.11b	1	2412.0	1 Mbps	Front	10	---	0.002	17.82	18.00	99.47	0.00	Ant 1
	WLAN2.4GHz	802.11b	1	2412.0	1 Mbps	Back	10	---	0.009	17.82	18.00	99.47	0.01	Ant 1
#508	WLAN2.4GHz	802.11b	1	2412.0	1 Mbps	Side 4	10	---	0.023	17.82	18.00	99.47	0.02	Ant 1
	WLAN2.4GHz	802.11b	1	2412.0	1 Mbps	Side 4	10	Battery 2	0.018	17.82	18.00	99.47	0.02	Ant 1
#535	Bluetooth		0	2402.0	1 Mbps	Back	10	---	0.011	10.41	10.50	77.89	0.01	Ant 0
	WLAN5GHz	802.11ac 40 MHz	46	5230.0	27 Mbps	Front	10	---	0.032	15.34	15.50	89.80	0.04	Ant 0
	WLAN5GHz	802.11ac 40 MHz	46	5230.0	27 Mbps	Back	10	---	0.112	15.34	15.50	89.80	0.13	Ant 0
	WLAN5GHz	802.11ac 40 MHz	46	5230.0	27 Mbps	Side 1	10	---	0.025	15.34	15.50	89.80	0.03	Ant 0
#500	WLAN5GHz	802.11ac 40 MHz	46	5230.0	27 Mbps	Side 4	10	---	0.174	15.34	15.50	89.80	0.20	Ant 0
	WLAN5GHz	802.11ac 40 MHz	46	5230.0	27 Mbps	Side 4	10	Battery 2	0.169	15.34	15.50	89.80	0.20	Ant 0
	WLAN5GHz	802.11ac 40 MHz	46	5230.0	27 Mbps	Front	10	---	0.001	15.97	16.00	89.73	0.00	Ant 1
#505	WLAN5GHz	802.11ac 40 MHz	46	5230.0	27 Mbps	Back	10	---	0.149	15.97	16.00	89.73	0.17	Ant 1
	WLAN5GHz	802.11ac 40 MHz	46	5230.0	27 Mbps	Back	10	Battery 2	0.145	15.97	16.00	89.73	0.16	Ant 1
	WLAN5GHz	802.11ac 40 MHz	46	5230.0	27 Mbps	Side 4	10	----	0.109	15.97	16.00	89.73	0.12	Ant 1
	WLAN5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Front	10	---	0.009	15.76	16.00	85.21	0.01	Ant 0
	WLAN5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Back	10	---	0.042	15.76	16.00	85.21	0.05	Ant 0
	WLAN5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Side 1	10	---	0.032	15.76	16.00	85.21	0.04	Ant 0
#562	WLAN5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Side 4	10	---	0.116	15.76	16.00	85.21	0.14	Ant 0
	WLAN5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Side 4	10	Battery 2	0.108	15.76	16.00	85.21	0.13	Ant 0
	WLAN5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Front	10	---	0.028	16.26	16.50	85.18	0.04	Ant 1
	WLAN5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Back	10	---	0.184	16.26	16.50	85.18	0.23	Ant 1
#567	WLAN5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Side 4	10	---	0.491	16.26	16.50	85.18	0.61	Ant 1

12.3 Extremity SAR Measurement

< 2 G >

Index.	Band	Frequency		Test Mode	Test Position	Spacing (mm)	EUT & Accessory	SAR_{10g} (W/kg)	Burst Avg Power	Max tune-up	Reported SAR_{10g} (W/kg)
		Ch.	MHz								
	GSM850	190	836.6	GPRS (4 Tx slots)	Front	0	---	0.419	32.71	33.00	0.45
#302	GSM850	190	836.6	GPRS (4 Tx slots)	Back	0	---	0.593	32.71	33.00	0.63
	GSM850	190	836.6	GPRS (4 Tx slots)	Back	0	Battery 2	0.509	32.71	33.00	0.54
	GSM850	190	836.6	GPRS (4 Tx slots)	Back	0	Holster	0.426	32.71	33.00	0.46
#190	GSM1900	661	1880.0	GPRS (4 Tx slots)	Front	0	---	0.537	29.41	29.50	0.55
	GSM1900	661	1880.0	GPRS (4 Tx slots)	Front	0	Battery 2	0.494	29.41	29.50	0.50
	GSM1900	661	1880.0	GPRS (4 Tx slots)	Front	0	Holster	0.485	29.41	29.50	0.50
	GSM1900	661	1880.0	GPRS (4 Tx slots)	Back	0	---	0.356	29.41	29.50	0.36

< WCDMA >

Index.	Band	Frequency		Test Mode	Test Position	Spacing (mm)	EUT & Accessory	SAR_{10g} (W/kg)	Burst Avg Power	Max tune-up	Reported SAR_{10g} (W/kg)
		Ch.	MHz								
#180	WCDMA Band II	9262	1852.4	RMC12.2K	Front	0	---	0.472	23.66	24.00	0.51
	WCDMA Band II	9262	1852.4	RMC12.2K	Front	0	Battery 2	0.359	23.66	24.00	0.39
	WCDMA Band II	9262	1852.4	RMC12.2K	Front	0	Holster	0.467	23.66	24.00	0.51
	WCDMA Band II	9262	1852.4	RMC12.2K	Back	0	---	0.254	23.66	24.00	0.28
	WCDMA Band V	4183	836.6	RMC12.2K	Front	0	---	0.168	23.02	23.50	0.19
#291	WCDMA Band V	4183	836.6	RMC12.2K	Back	0	---	0.246	23.02	23.50	0.28
	WCDMA Band V	4183	836.6	RMC12.2K	Back	0	Battery 2	0.235	23.02	23.50	0.26
	WCDMA Band V	4183	836.6	RMC12.2K	Back	0	Holster	0.209	23.02	23.50	0.23

< LTE >

Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing (mm)	EUT & Accessory	SAR_{10g} (W/kg)	Burst Avg Powe (dBm)	Max tune-up (dBm)	Reported SAR_{10g} (W/kg)
		Ch.	MHz											
#134	LTE Band 2	18900	1880.0	20M	QPSK	1	0	Front	0	---	0.363	22.72	23.00	0.39
	LTE Band 2	18900	1880.0	20M	QPSK	1	0	Front	0	Battery 2	0.320	22.72	23.00	0.34
	LTE Band 2	18900	1880.0	20M	QPSK	1	0	Front	0	Holster	0.359	22.72	23.00	0.38
	LTE Band 2	19100	1900.0	20M	QPSK	50	25	Front	0	---	0.234	21.79	22.00	0.25
	LTE Band 2	18900	1880.0	20M	QPSK	1	0	Back	0	---	0.225	22.72	23.00	0.24
	LTE Band 2	19100	1900.0	20M	QPSK	50	25	Back	0	---	0.171	21.79	22.00	0.18
#140	LTE Band 4	20175	1732.5	20M	QPSK	1	0	Front	0	---	0.306	22.70	23.00	0.33
	LTE Band 4	20175	1732.5	20M	QPSK	1	0	Front	0	Battery 2	0.273	22.70	23.00	0.29
	LTE Band 4	20175	1732.5	20M	QPSK	1	0	Front	0	Holster	0.304	22.70	23.00	0.33
	LTE Band 4	20175	1732.5	20M	QPSK	50	25	Front	0	---	0.265	21.69	22.00	0.29
	LTE Band 4	20175	1732.5	20M	QPSK	1	0	Back	0	---	0.202	22.70	23.00	0.22
	LTE Band 4	20175	1732.5	20M	QPSK	50	25	Back	0	---	0.172	21.69	22.00	0.19
	LTE Band 5	20525	836.5	10M	QPSK	1	49	Front	0	---	0.153	22.45	22.50	0.16
	LTE Band 5	20525	836.5	10M	QPSK	25	12	Front	0	---	0.126	21.52	22.00	0.14
#232	LTE Band 5	20525	836.5	10M	QPSK	1	49	Back	0	---	0.205	22.45	22.50	0.21
	LTE Band 5	20525	836.5	10M	QPSK	1	49	Back	0	Battery 2	0.143	22.45	22.50	0.15
	LTE Band 5	20525	836.5	10M	QPSK	1	49	Back	0	Holster	0.204	22.45	22.50	0.21
	LTE Band 5	20525	836.5	10M	QPSK	25	12	Back	0	---	0.169	21.52	22.00	0.19
	LTE Band 7	20850	2510.0	20M	QPSK	1	49	Front	0	---	0.092	21.23	21.50	0.10
	LTE Band 7	20850	2510.0	20M	QPSK	50	0	Front	0	---	0.073	19.72	20.00	0.08
#337	LTE Band 7	20850	2510.0	20M	QPSK	1	49	Back	0	---	0.467	21.23	21.50	0.50
	LTE Band 7	20850	2510.0	20M	QPSK	1	49	Back	0	Battery 2	0.333	21.23	21.50	0.35
	LTE Band 7	20850	2510.0	20M	QPSK	1	49	Back	0	Holster	0.217	21.23	21.50	0.23
	LTE Band 7	20850	2510.0	20M	QPSK	50	0	Back	0	---	0.343	19.72	20.00	0.37
	LTE Band 12	23095	707.5	10M	QPSK	1	0	Front	0	---	0.070	22.61	23.00	0.08
	LTE Band 12	23095	707.5	10M	QPSK	25	12	Front	0	---	0.061	21.68	22.00	0.07

Index.	Band	Frequency		Bandwidth	Modulation	RB Size	RB Offset	Test Position	Spacing (mm)	EUT & Accessory	SAR_{10g} (W/kg)	Burst Avg Powe (dBm)	Max tune-up (dBm)	Reported SAR_{10g} (W/kg)
		Ch.	MHz											
#202	LTE Band 12	23095	707.5	10M	QPSK	1	0	Back	0	---	0.073	22.61	23.00	0.08
	LTE Band 12	23095	707.5	10M	QPSK	1	0	Back	0	Battery 2	0.053	22.61	23.00	0.06
	LTE Band 12	23095	707.5	10M	QPSK	1	0	Back	0	Holster	0.053	22.61	23.00	0.06
	LTE Band 12	23095	707.5	10M	QPSK	25	12	Back	0	---	0.060	21.68	22.00	0.07
	LTE Band 17	23790	710.0	10M	QPSK	1	49	Back	0	---	0.063	22.58	23.00	0.07
	LTE Band 38	38000	2595.0	20M	QPSK	1	0	Front	0	---	0.055	22.78	23.00	0.06
	LTE Band 38	38000	2595.0	20M	QPSK	50	25	Front	0	---	0.041	21.90	22.00	0.04
#58	LTE Band 38	38000	2595.0	20M	QPSK	1	0	Back	0	---	0.399	22.78	23.00	0.42
	LTE Band 38	38000	2595.0	20M	QPSK	1	0	Back	0	Battery 2	0.387	22.78	23.00	0.41
	LTE Band 38	38000	2595.0	20M	QPSK	1	0	Back	0	Holster	0.124	22.78	23.00	0.13
	LTE Band 38	38000	2595.0	20M	QPSK	50	25	Back	0	---	0.336	21.90	22.00	0.35
	LTE Band 41	41490	2680.0	20M	QPSK	1	99	Front	0	---	0.044	22.62	23.00	0.05
	LTE Band 41	41055	2636.5	20M	QPSK	50	0	Front	0	---	0.035	21.70	22.00	0.04
#64	LTE Band 41	41490	2680.0	20M	QPSK	1	99	Back	0	---	0.380	22.62	23.00	0.42
	LTE Band 41	41490	2680.0	20M	QPSK	1	99	Back	0	Battery 2	0.304	22.62	23.00	0.33
	LTE Band 41	41490	2680.0	20M	QPSK	1	99	Back	0	Holster	0.097	22.62	23.00	0.11
	LTE Band 41	41055	2636.5	20M	QPSK	50	0	Back	0	---	0.340	21.70	22.00	0.37

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Index.	Band	Mode	Frequency		Data Rate	Test Position	Spacing (mm)	EUT & Accessory	SAR_{10g} (W/kg)	Burst Avg Power	Max tune-up	Duty Cycle (%)	Reported SAR_{10g} (W/kg)	Note
			Ch.	MHz										
	WLAN 2.4GHz	802.11b	1	2412.0	1 Mbps	Front	0	---	0.101	17.71	18.00	99.51	0.11	Ant 0
#511	WLAN 2.4GHz	802.11b	1	2412.0	1 Mbps	Back	0	---	0.163	17.71	18.00	99.51	0.18	Ant 0
	WLAN 2.4GHz	802.11b	1	2412.0	1 Mbps	Back	0	Battery 2	0.155	17.71	18.00	99.51	0.17	Ant 0
	WLAN 2.4GHz	802.11b	1	2412.0	1 Mbps	Back	0	Holster	0.136	17.71	18.00	99.51	0.15	Ant 0
	WLAN 2.4GHz	802.11b	1	2412.0	1 Mbps	Front	0	---	0.004	17.82	18.00	99.47	0.00	Ant 1
#516	WLAN 2.4GHz	802.11b	1	2412.0	1 Mbps	Back	0	---	0.012	17.82	18.00	99.47	0.01	Ant 1
	WLAN 2.4GHz	802.11b	1	2412.0	1 Mbps	Back	0	Battery 2	0.010	17.82	18.00	99.47	0.01	Ant 1
	WLAN 2.4GHz	802.11b	1	2412.0	1 Mbps	Back	0	Holster	0.008	17.82	18.00	99.47	0.01	Ant 1
#538	Bluetooth		0	2402.0	1 Mbps	Back	0	---	0.019	10.41	10.50	77.89	0.03	Ant 0
	Bluetooth		0	2402.0	1 Mbps	Back	0	Battery 2	0.018	10.41	10.50	77.89	0.02	Ant 0
	Bluetooth		0	2402.0	1 Mbps	Back	0	Holster	0.015	10.41	10.50	77.89	0.02	Ant 0
	WLAN 5GHz	802.11ac 40 MHz	54	5270.0	27 Mbps	Front	0	---	0.013	15.36	15.50	89.80	0.02	Ant 0
#571	WLAN 5GHz	802.11ac 40 MHz	54	5270.0	27 Mbps	Back	0	---	0.157	15.36	15.50	89.80	0.18	Ant 0
	WLAN 5GHz	802.11ac 40 MHz	54	5270.0	27 Mbps	Back	0	Battery 2	0.148	15.36	15.50	89.80	0.17	Ant 0
	WLAN 5GHz	802.11ac 40 MHz	54	5270.0	27 Mbps	Back	0	Holster	0.153	15.36	15.50	89.80	0.18	Ant 0
	WLAN 5GHz	802.11ac 40 MHz	54	5270.0	27 Mbps	Front	0	---	0.006	15.91	16.00	89.73	0.01	Ant 1
#576	WLAN 5GHz	802.11ac 40 MHz	54	5270.0	27 Mbps	Back	0	---	0.107	15.91	16.00	89.73	0.12	Ant 1
	WLAN 5GHz	802.11ac 40 MHz	54	5270.0	27 Mbps	Back	0	Battery 2	0.095	15.91	16.00	89.73	0.11	Ant 1
	WLAN 5GHz	802.11ac 40 MHz	54	5270.0	27 Mbps	Back	0	Holster	0.090	15.91	16.00	89.73	0.10	Ant 1
	WLAN 5GHz	802.11ac 80 MHz	106	5530.0	58.5 Mbps	Front	0	---	0.013	15.61	16.00	85.21	0.02	Ant 0
#591	WLAN 5GHz	802.11ac 80 MHz	106	5530.0	58.5 Mbps	Back	0	---	0.085	15.61	16.00	85.21	0.11	Ant 0
	WLAN 5GHz	802.11ac 80 MHz	106	5530.0	58.5 Mbps	Back	0	Battery 2	0.073	15.61	16.00	85.21	0.09	Ant 0
	WLAN 5GHz	802.11ac 80 MHz	106	5530.0	58.5 Mbps	Back	0	Holster	0.069	15.61	16.00	85.21	0.09	Ant 0
	WLAN 5GHz	802.11ac 80 MHz	106	5530.0	58.5 Mbps	Front	0	---	0.007	15.32	15.50	85.18	0.01	Ant 1
#596	WLAN 5GHz	802.11ac 80 MHz	106	5530.0	58.5 Mbps	Back	0	---	0.130	15.32	15.50	85.18	0.16	Ant 1
	WLAN 5GHz	802.11ac 80 MHz	106	5530.0	58.5 Mbps	Back	0	Battery 2	0.128	15.32	15.50	85.18	0.16	Ant 1
	WLAN 5GHz	802.11ac 80 MHz	106	5530.0	58.5 Mbps	Back	0	Holster	0.087	15.32	15.50	85.18	0.11	Ant 1
	WLAN 5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Front	0	---	0.010	15.76	16.00	85.21	0.01	Ant 0

Index.	Band	Mode	Frequency		Data Rate	Test Position	Spacing (mm)	EUT & Accessory	SAR_{10g} (W/kg)	Burst Avg Power	Max tune-up	Duty Cycle (%)	Reported SAR_{10g} (W/kg)	Note
			Ch.	MHz										
#551	WLAN 5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Back	0	---	0.066	15.76	16.00	85.21	0.08	Ant 0
	WLAN 5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Back	0	Battery 2	0.059	15.76	16.00	85.21	0.07	Ant 0
	WLAN 5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Back	0	Holster	0.054	15.76	16.00	85.21	0.07	Ant 0
	WLAN 5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Front	0	---	0.024	16.26	16.50	85.18	0.03	Ant 1
#556	WLAN 5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Back	0	---	0.161	16.26	16.50	85.18	0.20	Ant 1
	WLAN 5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Back	0	Battery 2	0.160	16.26	16.50	85.18	0.20	Ant 1
	WLAN 5GHz	802.11ac 80 MHz	155	5775.0	58.5 Mbps	Back	0	Holster	0.159	16.26	16.50	85.18	0.20	Ant 1
	WLAN 5GHz	802.11b	1	2412.0	1 Mbps	Front	0	---	0.101	17.71	18.00	99.51	0.11	Ant 0

12.4 Std. C95.1-1992 RF Exposure Limit

Human Exposure	Population Uncontrolled Exposure (W/kg) or (mW/g)	Occupational Controlled Exposure (W/kg) or (mW/g)
Spatial Peak SAR* (head)	1.60	8.00
Spatial Peak SAR** (Whole Body)	0.08	0.40
Spatial Peak SAR*** (Partial-Body)	1.60	8.00
Spatial Peak SAR**** (Hands / Feet / Ankle / Wrist)	4.00	20.00

Table 4. Safety Limits for Partial Body Exposure

Notes：

***** The Spatial Peak value of the SAR averaged over any 1 gram of tissue.
(defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

****** The Spatial Average value of the SAR averaged over the whole – body.

******* The Spatial Average value of the SAR averaged over the partial – body.

******** The Spatial Peak value of the SAR averaged over any 10 grams of tissue.
(defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

Population / Uncontrolled Environments： are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

Occupational / Controlled Environments： are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation).

13. References

[1] Std. C95.1-1999, "*American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 300KHz to 100GHz",* New York.

[2] NCRP, National Council on Radiation Protection and Measurements, "Biological Effects and Exposure Criteria for Radio frequency Electromagnetic Fields", NCRP report NO. 86, 1986.

[3] T. Schmid, O. Egger, and N. Kuster, "Automatic E-field scanning system for dosimetric assessments", IEEE Transactions on Microwave Theory and Techniques, vol. 44, pp, 105-113, Jan. 1996.

[4] K. Pokovi ć, T. Schmid, and N. Kuster, "Robust setup for precise calibration of E-field probes in tissue simulating liquids at mobile communications frequency", in ICECOM'97, Dubrovnik, October 15-17, 1997, pp.120-124.

[5] K. Pokovi ć, T. Schmid, and N. Kuster, "E-field probe with improved isotropy in brain simulating liquids", in Proceedings of the ELMAR, Zadar, Croatia, 23-25 June, 1996, pp.172-175.

[6] N. Kuster, and Q. Balzano, "Energy absorption mechanism by biological bodies in the near field of dipole antennas above 300MHz", IEEE Transaction on Vehicular Technology, vol. 41, no. 1, Feb. 1992, pp. 17-23.

[7] Robert J. Renka, "Multivariate Interpolation Of Large Sets Of Scattered Data", University of North Texas ACM Transactions on Mathematical Software, vol. 14, no. 2, June 1988 , pp. 139-148.

[8] N. Kuster, R. Kastle, T. Schmid, Dosimetric evaluation of mobile communications equipment with known precision, IEEE Transaction on Communications, vol. E80-B, no. 5, May 1997, pp. 645-652.

[9] Std. C95.3-1991, "IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields – RF and Microwave, New York: IEEE, Aug. 1992.

[10] CENELEC CLC/SC111B, European Prestandard (prENV 50166-2), Human Exposure to Electromagnetic Fields High-frequency: 10KHz-300GHz, Jan. 1995.

[11] IEEE Std 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

Appendix A - System Performance Check

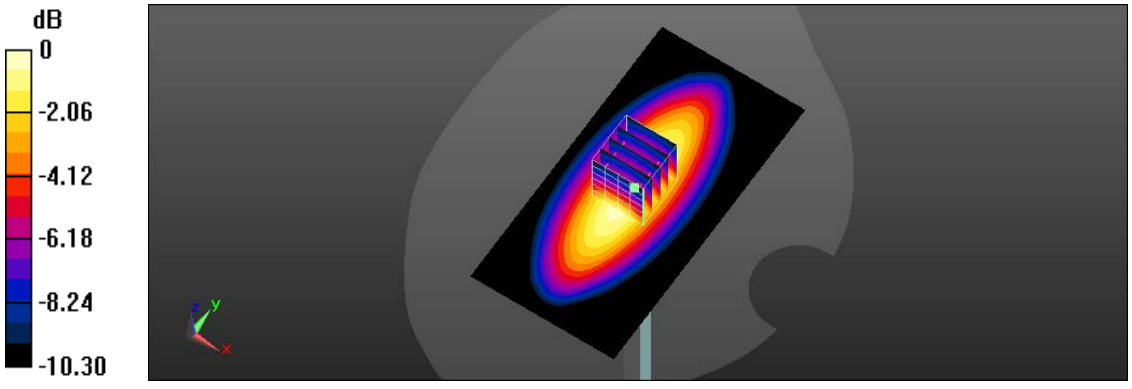
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/19
System Performance Check at 750MHz_20200319_Head
DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1004

Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.898 S/m; ε_r = 42.02; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.67, 9.67, 9.67) @ 750 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 750MHz/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.88 W/kg

System Performance Check at 750MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 58.14 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 3.34 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 = 16.3 mm
Ratio of SAR at M2 to SAR at M1 = 64%
Maximum value of SAR (measured) = 2.91 W/kg



0 dB = 2.91 W/kg = 4.64 dBW/kg

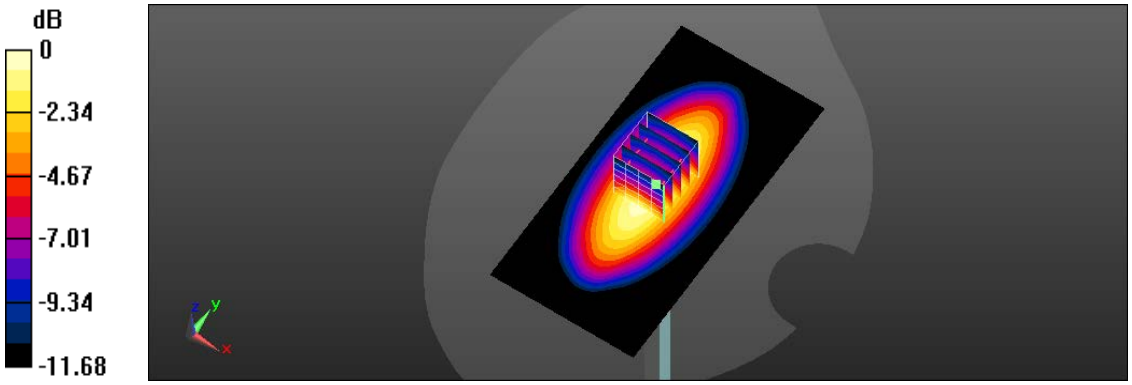
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/20
System Performance Check at 835MHz_20200320_Head
DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d082

Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.91 S/m; ε_r = 42.068; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.35, 9.35, 9.35) @ 835 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 835MHz/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.40 W/kg

System Performance Check at 835MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 61.89 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 4.01 W/kg
SAR(1 g) = 2.46 W/kg; SAR(10 g) = 1.57 W/kg
Smallest distance from peaks to all points 3 dB below = 16 mm
Ratio of SAR at M2 to SAR at M1 = 61.5%
Maximum value of SAR (measured) = 3.44 W/kg



0 dB = 3.44 W/kg = 5.37 dBW/kg

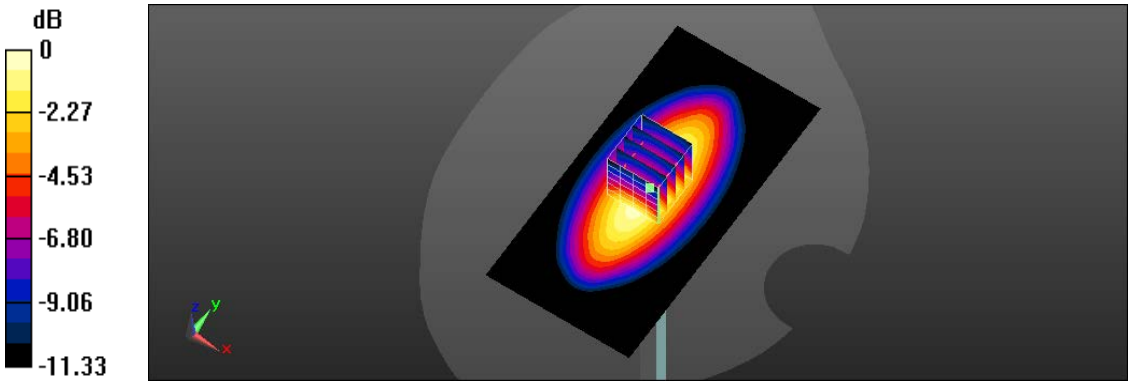
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/23
System Performance Check at 835MHz_20200323_Head
DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d082

Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.908 S/m; ε_r = 42.021; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.35, 9.35, 9.35) @ 835 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 835MHz/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.52 W/kg

System Performance Check at 835MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 63.26 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 4.09 W/kg
SAR(1 g) = 2.55 W/kg; SAR(10 g) = 1.64 W/kg
Smallest distance from peaks to all points 3 dB below = 16 mm
Ratio of SAR at M2 to SAR at M1 = 62.3%
Maximum value of SAR (measured) = 3.53 W/kg



0 dB = 3.53 W/kg = 5.48 dBW/kg

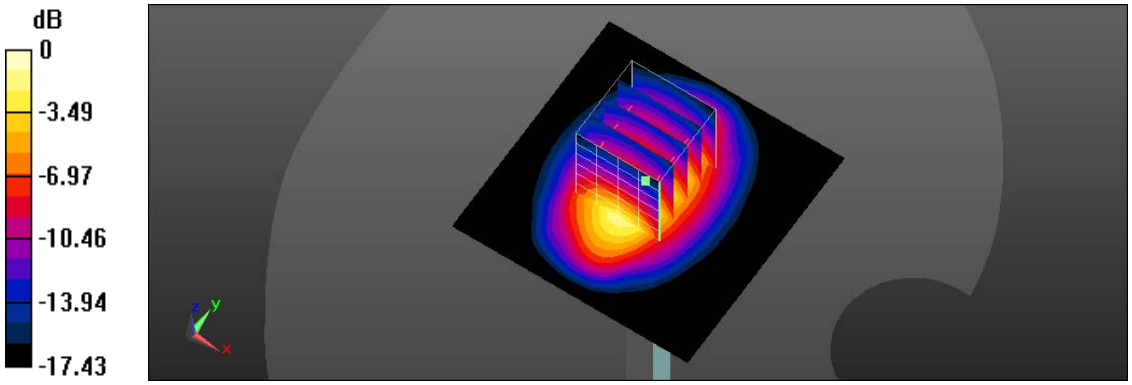
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/17
System Performance Check at 1750MHz_20200317_Head
DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2 - SN:1023

Communication System: UID 0, CW (0); Frequency: 1750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1750 MHz; σ = 1.324 S/m; ε_r = 40.558; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(8.15, 8.15, 8.15) @ 1750 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 1750MHz/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 13.8 W/kg

System Performance Check at 1750MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 102.6 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 16.6 W/kg
SAR(1 g) = 8.98 W/kg; SAR(10 g) = 4.74 W/kg
Smallest distance from peaks to all points 3 dB below = 10.7 mm
Ratio of SAR at M2 to SAR at M1 = 54%
Maximum value of SAR (measured) = 14.0 W/kg



0 dB = 14.0 W/kg = 11.46 dBW/kg

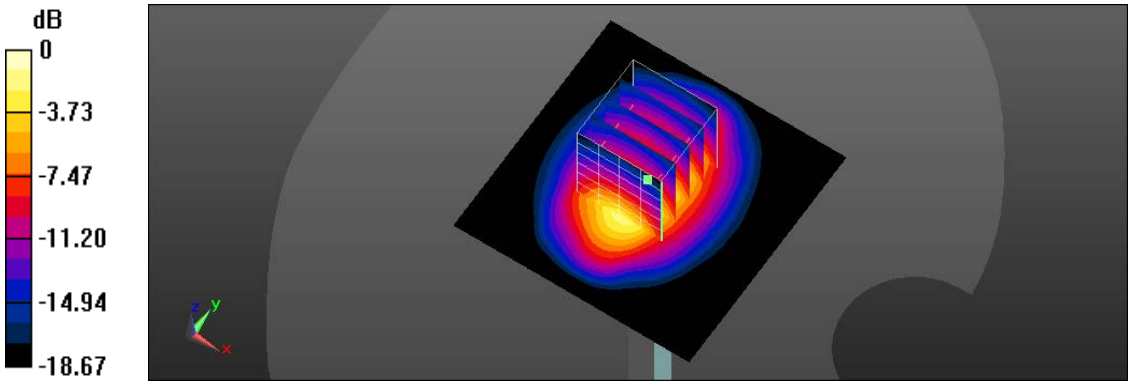
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/16
System Performance Check at 1900MHz_20200316_Head
DUT: Dipole D1900V2_SN5d111; Type: D1900V2; Serial: D1900V2 - SN:5d111

Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.458 S/m; ε_r = 40.054; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.72, 7.72, 7.72) @ 1900 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 1900MHz/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 16.5 W/kg

System Performance Check at 1900MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 106.4 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 20.0 W/kg
SAR(1 g) = 10.4 W/kg; SAR(10 g) = 5.32 W/kg
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 52.1%
Maximum value of SAR (measured) = 16.6 W/kg



0 dB = 16.6 W/kg = 12.20 dBW/kg

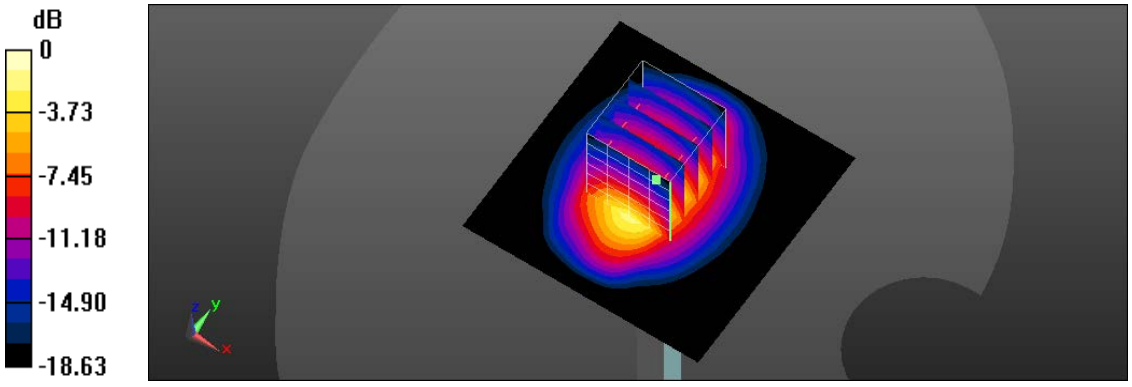
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/18
System Performance Check at 1900MHz_20200318_Head
DUT: Dipole D1900V2_SN5d111; Type: D1900V2; Serial: D1900V2 - SN:5d111

Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.452 S/m; ε_r = 39.986; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.72, 7.72, 7.72) @ 1900 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 1900MHz/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 16.5 W/kg

System Performance Check at 1900MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 105.0 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 20.2 W/kg
SAR(1 g) = 10.6 W/kg; SAR(10 g) = 5.41 W/kg
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 52.4%
Maximum value of SAR (measured) = 16.9 W/kg



0 dB = 16.9 W/kg = 12.28 dBW/kg

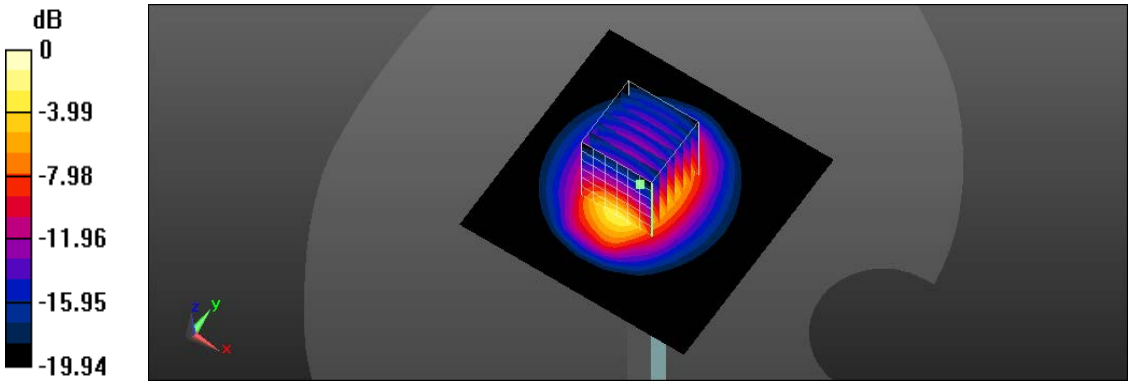
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/7
System Performance Check at 2300MHz_20200407_Head
DUT: Dipole 2300 MHz; Type: D2300V2; Serial: D2300V2 - SN:1005

Communication System: UID 0, CW (0); Frequency: 2300 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2300 MHz; σ = 1.621 S/m; ε_r = 40.348; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52) @ 2300 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 2300MHz/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 20.0 W/kg

System Performance Check at 2300MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 110.8 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 24.5 W/kg
SAR(1 g) = 12.5 W/kg; SAR(10 g) = 6.09 W/kg
Smallest distance from peaks to all points 3 dB below = 9.2 mm
Ratio of SAR at M2 to SAR at M1 = 51.5%
Maximum value of SAR (measured) = 20.3 W/kg



0 dB = 20.3 W/kg = 13.07 dBW/kg

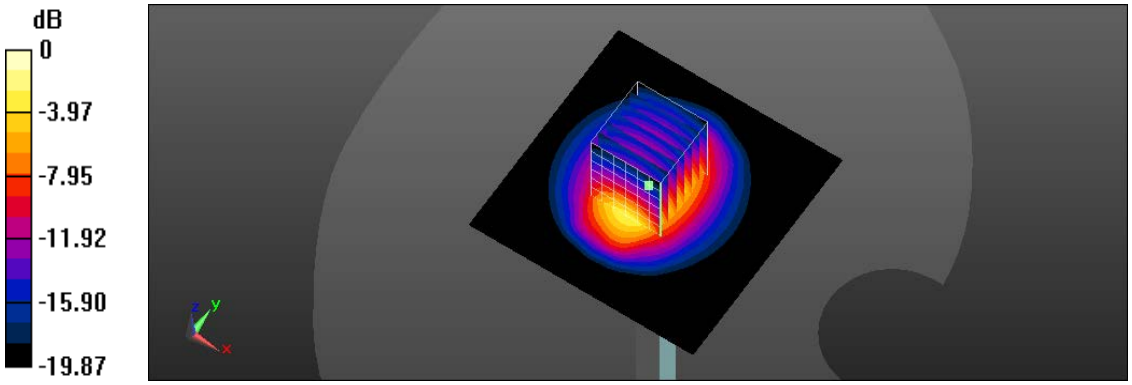
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/8
System Performance Check at 2300MHz_20200408_Head
DUT: Dipole 2300 MHz; Type: D2300V2; Serial: D2300V2 - SN:1005

Communication System: UID 0, CW (0); Frequency: 2300 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2300 MHz; σ = 1.615 S/m; ε_r = 40.274; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52) @ 2300 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 2300MHz/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 19.6 W/kg

System Performance Check at 2300MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 110.2 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 23.9 W/kg
SAR(1 g) = 12.2 W/kg; SAR(10 g) = 5.94 W/kg
Smallest distance from peaks to all points 3 dB below = 9.5 mm
Ratio of SAR at M2 to SAR at M1 = 51.6%
Maximum value of SAR (measured) = 19.7 W/kg



0 dB = 19.7 W/kg = 12.94 dBW/kg

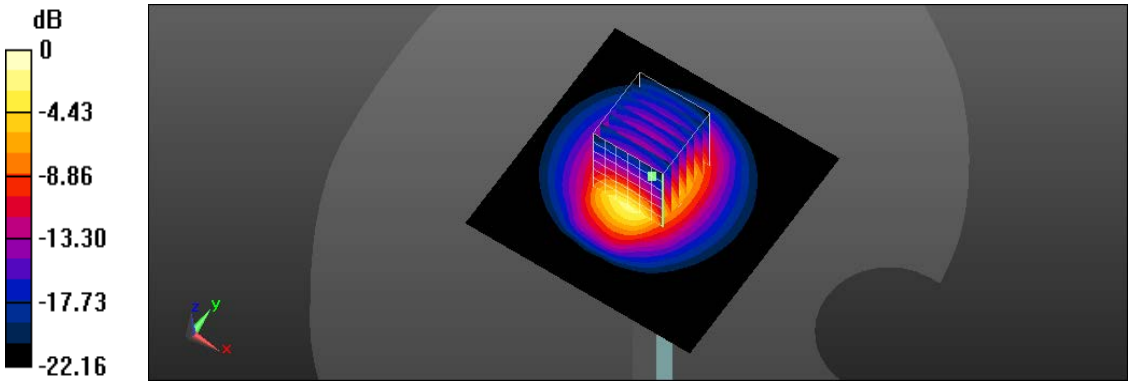
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/13
System Performance Check at 2450MHz_20200413_Head
DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:712

Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.809 S/m; ε_r = 40.023; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(7.65, 7.65, 7.65) @ 2450 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 2450MHz/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 23.3 W/kg

System Performance Check at 2450MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 109.1 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 28.7 W/kg
SAR(1 g) = 14 W/kg; SAR(10 g) = 6.54 W/kg
Smallest distance from peaks to all points 3 dB below = 9 mm
Ratio of SAR at M2 to SAR at M1 = 49.1%
Maximum value of SAR (measured) = 23.3 W/kg



0 dB = 23.3 W/kg = 13.67 dBW/kg

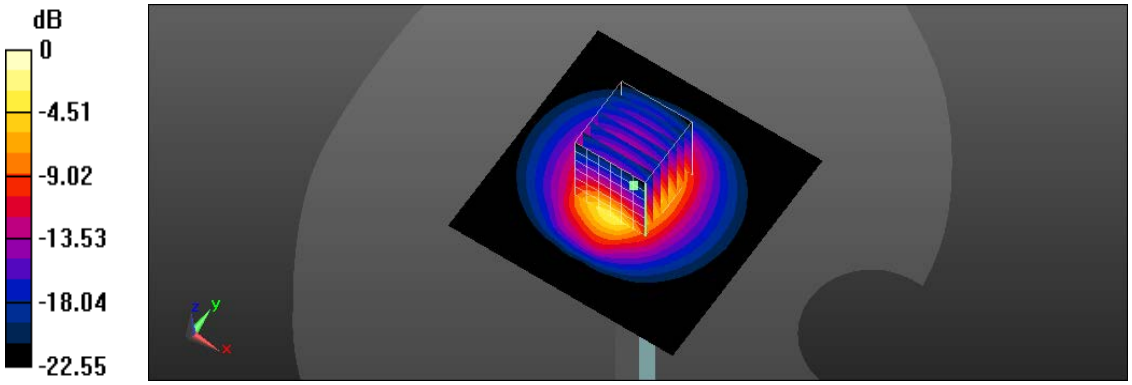
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/5
System Performance Check at 2600MHz_20200305_Head
DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1007

Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.987 S/m; ε_r = 39.415; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.11, 7.11, 7.11) @ 2600 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 2600MHz/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 24.7 W/kg

System Performance Check at 2600MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 112.8 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 30.9 W/kg
SAR(1 g) = 14.8 W/kg; SAR(10 g) = 6.76 W/kg
Smallest distance from peaks to all points 3 dB below = 9 mm
Ratio of SAR at M2 to SAR at M1 = 48.3%
Maximum value of SAR (measured) = 25.1 W/kg



0 dB = 25.1 W/kg = 14.00 dBW/kg

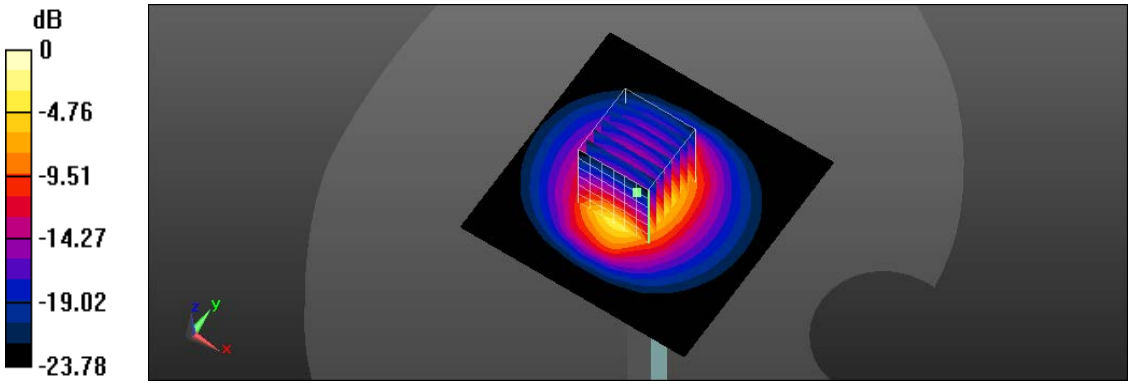
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/13
System Performance Check at 2600MHz_20200313_Head
DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1007

Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.993 S/m; ε_r = 39.499; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.11, 7.11, 7.11) @ 2600 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 2600MHz/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 24.3 W/kg

System Performance Check at 2600MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 111.3 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 30.8 W/kg
SAR(1 g) = 14.3 W/kg; SAR(10 g) = 6.41 W/kg
Smallest distance from peaks to all points 3 dB below = 8.9 mm
Ratio of SAR at M2 to SAR at M1 = 46.5%
Maximum value of SAR (measured) = 24.6 W/kg



0 dB = 24.6 W/kg = 13.91 dBW/kg

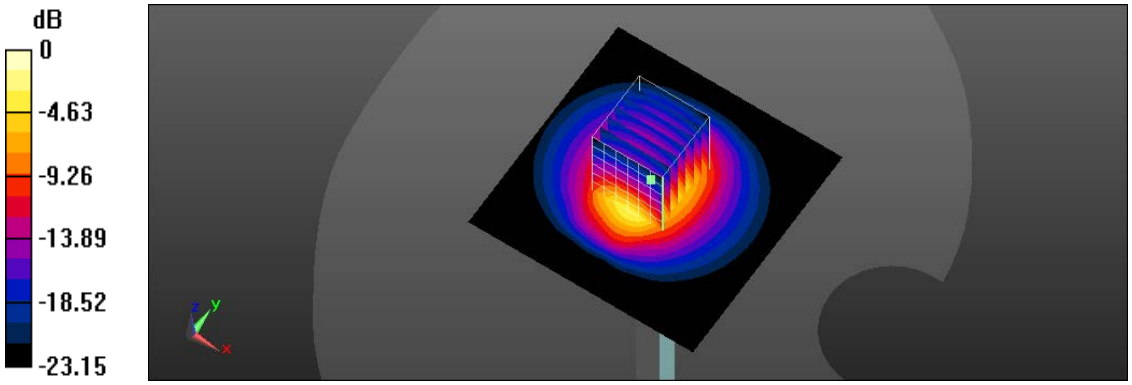
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/6
System Performance Check at 2600MHz_20200406_Head
DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1007

Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.983 S/m; ε_r = 39.391; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.11, 7.11, 7.11) @ 2600 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 2600MHz/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 24.4 W/kg

System Performance Check at 2600MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 111.6 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 31.0 W/kg
SAR(1 g) = 14.7 W/kg; SAR(10 g) = 6.63 W/kg
Smallest distance from peaks to all points 3 dB below = 9 mm
Ratio of SAR at M2 to SAR at M1 = 47.5%
Maximum value of SAR (measured) = 25.0 W/kg



0 dB = 25.0 W/kg = 13.98 dBW/kg

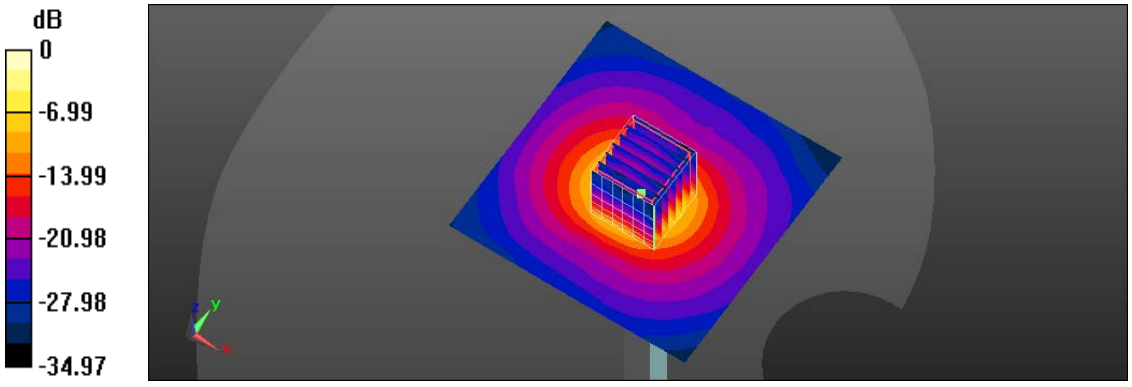
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/22
System Performance Check at 5250MHz_20200422_Head
DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1145

Communication System: UID 0, CW (0); Frequency: 5250 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; σ = 4.624 S/m; ε_r = 36.28; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(5.57, 5.57, 5.57) @ 5250 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 5250MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 18.6 W/kg

System Performance Check at 5250MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 71.70 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 30.7 W/kg
SAR(1 g) = 8.11 W/kg; SAR(10 g) = 2.28 W/kg
Smallest distance from peaks to all points 3 dB below = 7.4 mm
Ratio of SAR at M2 to SAR at M1 = 66.9%
Maximum value of SAR (measured) = 19.5 W/kg



0 dB = 19.5 W/kg = 12.90 dBW/kg

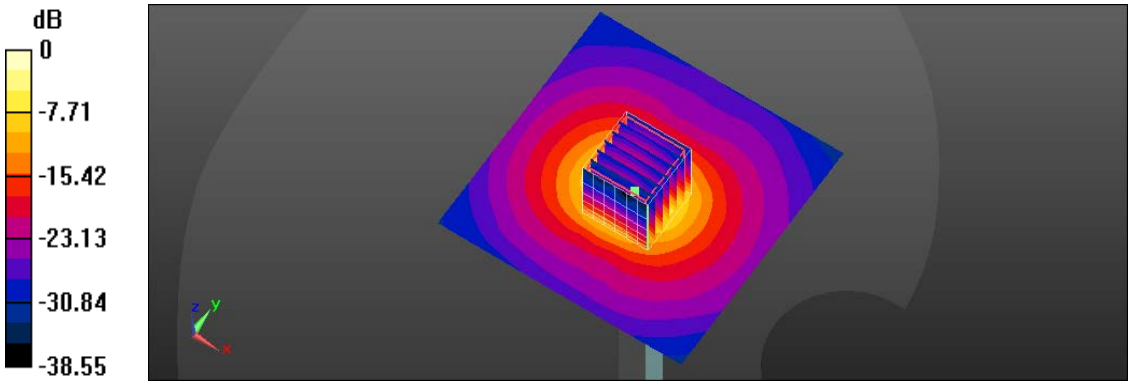
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/23
System Performance Check at 5250MHz_20200423_Head
DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1145

Communication System: UID 0, CW (0); Frequency: 5250 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; σ = 4.641 S/m; ε_r = 36.403; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(5.57, 5.57, 5.57) @ 5250 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 5250MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 18.5 W/kg

System Performance Check at 5250MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 70.80 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 31.6 W/kg
SAR(1 g) = 7.94 W/kg; SAR(10 g) = 2.18 W/kg
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 65.7%
Maximum value of SAR (measured) = 19.6 W/kg



0 dB = 16.7 W/kg = 12.23 dBW/kg

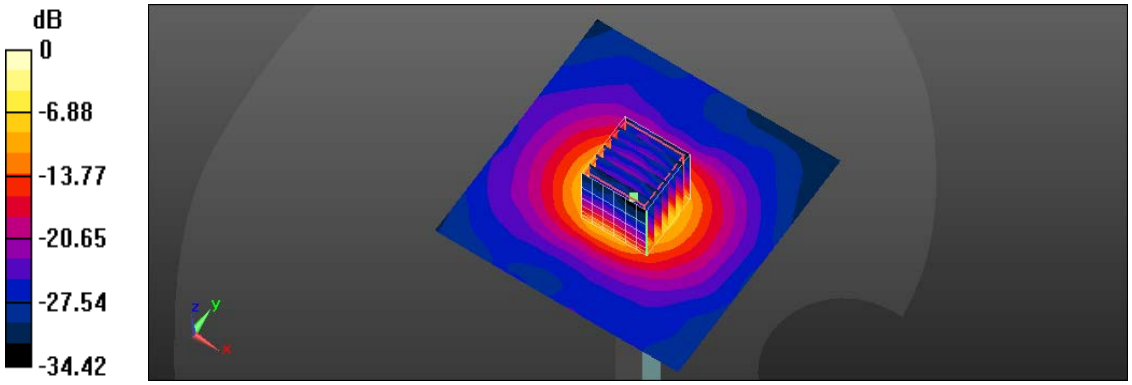
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/22
System Performance Check at 5600MHz_20200422_Head
DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1145

Communication System: UID 0, CW (0); Frequency: 5600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5600 MHz; σ = 4.991 S/m; ε_r = 35.663; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(4.81, 4.81, 4.81) @ 5600 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 5600MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 20.5 W/kg

System Performance Check at 5600MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 72.19 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 34.3 W/kg
SAR(1 g) = 8.53 W/kg; SAR(10 g) = 2.39 W/kg
Smallest distance from peaks to all points 3 dB below = 7.5 mm
Ratio of SAR at M2 to SAR at M1 = 64.8%
Maximum value of SAR (measured) = 21.2 W/kg



0 dB = 18.9 W/kg = 12.76 dBW/kg

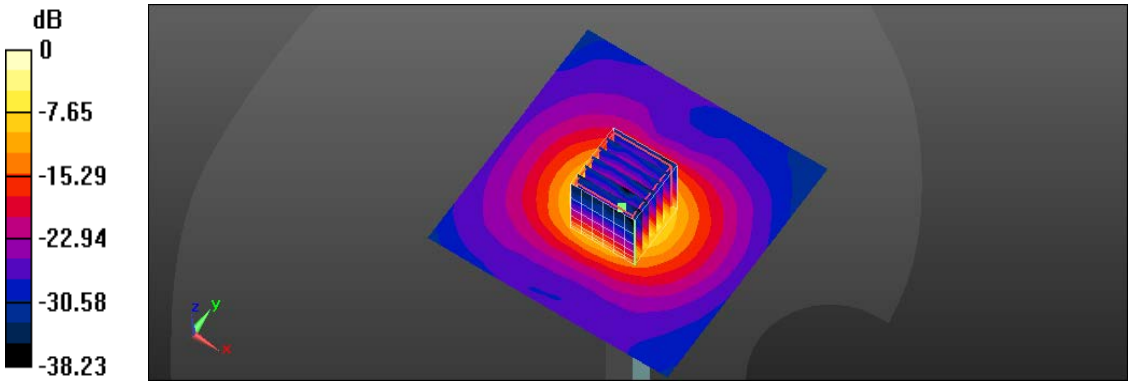
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/23
System Performance Check at 5600MHz_20200423_Head
DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1145

Communication System: UID 0, CW (0); Frequency: 5600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5600 MHz; σ = 5.01 S/m; ε_r = 35.785; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(4.81, 4.81, 4.81) @ 5600 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 5600MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 21.3 W/kg

System Performance Check at 5600MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 72.44 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 36.9 W/kg
SAR(1 g) = 8.63 W/kg; SAR(10 g) = 2.37 W/kg
Smallest distance from peaks to all points 3 dB below = 7.4 mm
Ratio of SAR at M2 to SAR at M1 = 63.3%
Maximum value of SAR (measured) = 21.9 W/kg



0 dB = 19.0 W/kg = 12.79 dBW/kg

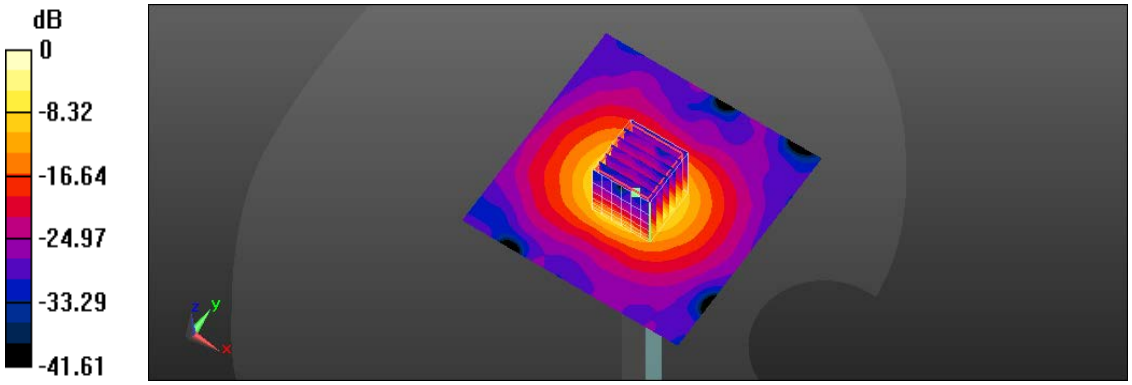
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/22
System Performance Check at 5750MHz_20200422_Head
DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1145

Communication System: UID 0, CW (0); Frequency: 5750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5750 MHz; σ = 5.258 S/m; ε_r = 35.34; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(5.06, 5.06, 5.06) @ 5750 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 5750MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 19.9 W/kg

System Performance Check at 5750MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 70.26 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 35.2 W/kg
SAR(1 g) = 8.38 W/kg; SAR(10 g) = 2.35 W/kg
Smallest distance from peaks to all points 3 dB below = 7.5 mm
Ratio of SAR at M2 to SAR at M1 = 63.5%
Maximum value of SAR (measured) = 21.2 W/kg



0 dB = 18.0 W/kg = 12.55 dBW/kg

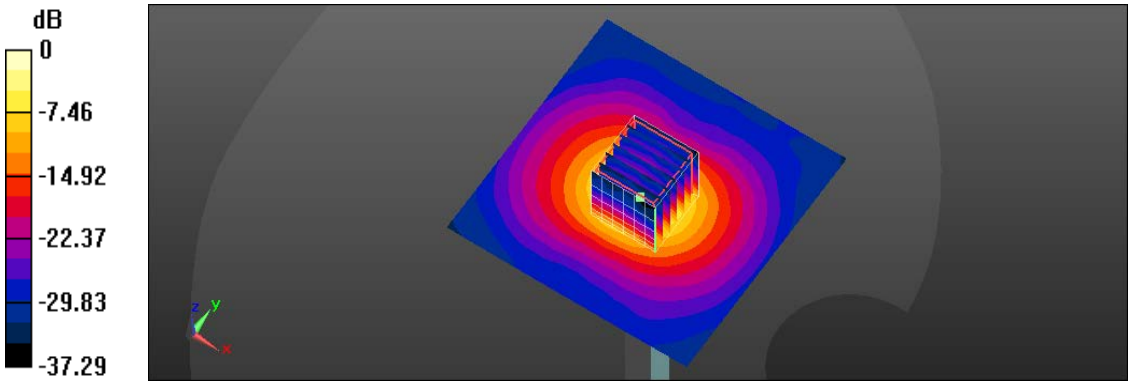
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/23
System Performance Check at 5750MHz_20200423_Head
DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1145

Communication System: UID 0, CW (0); Frequency: 5750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5750 MHz; σ = 5.277 S/m; ε_r = 35.463; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(5.06, 5.06, 5.06) @ 5750 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

System Performance Check at 5750MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 20.0 W/kg

System Performance Check at 5750MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 70.10 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 36.2 W/kg
SAR(1 g) = 8.13 W/kg; SAR(10 g) = 2.26 W/kg
Smallest distance from peaks to all points 3 dB below = 7.5 mm
Ratio of SAR at M2 to SAR at M1 = 61.8%
Maximum value of SAR (measured) = 20.5 W/kg



0 dB = 17.3 W/kg = 12.38 dBW/kg

Appendix B - SAR Measurement Data

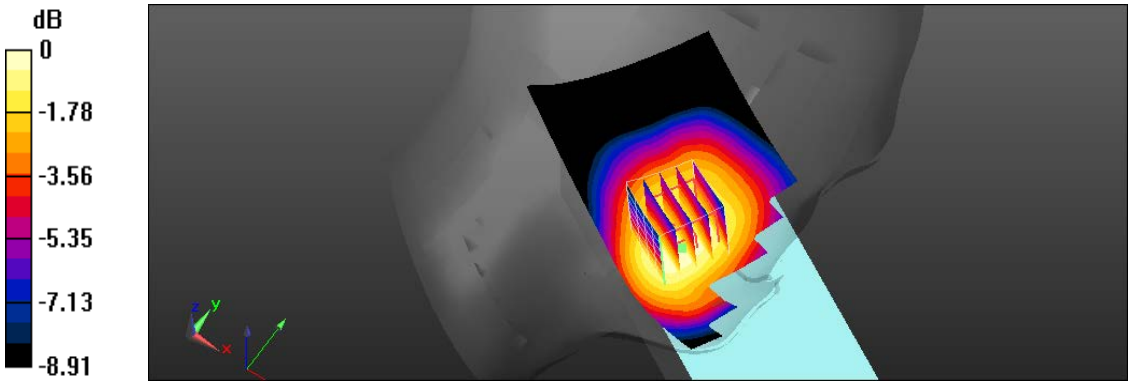
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/23
287_GSM850 CH 190_Left-Cheek
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, GPRS 850 (1Down, 4Up) (0); Frequency: 836.6 MHz;Duty Cycle: 1:2.08
Medium parameters used: f = 837 MHz; σ = 0.91 S/m; ε_r = 41.993; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.35, 9.35, 9.35) @ 836.6 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.406 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.32 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.451 W/kg
SAR(1 g) = 0.332 W/kg; SAR(10 g) = 0.255 W/kg
Ratio of SAR at M2 to SAR at M1 = 74.3%
Maximum value of SAR (measured) = 0.408 W/kg



0 dB = 0.408 W/kg = -3.89 dBW/kg

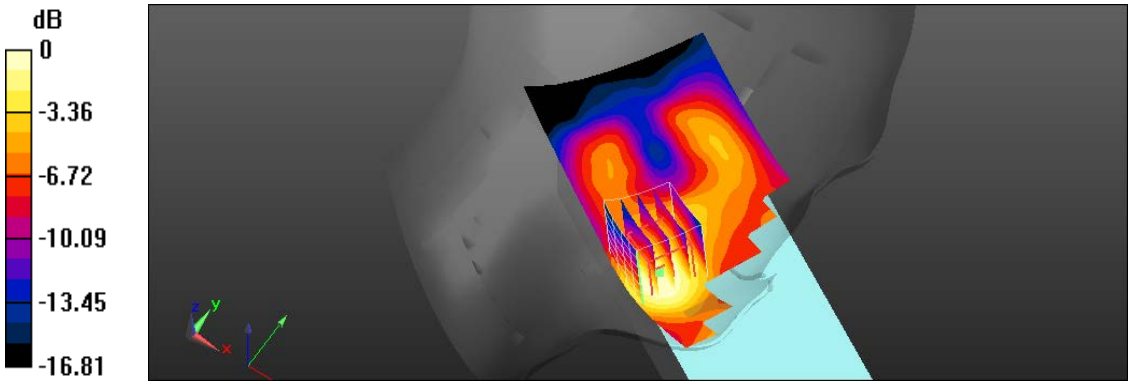
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/18
177_GSM1900 CH 661_Left-Cheek
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, GPRS PCS (1Down,4Up) (0); Frequency: 1880 MHz;Duty Cycle: 1:2.08
Medium parameters used: f = 1880 MHz; σ = 1.44 S/m; ε_r = 40.108; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.72, 7.72, 7.72) @ 1909.8 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.193 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.31 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.221 W/kg
SAR(1 g) = 0.141 W/kg; SAR(10 g) = 0.087 W/kg
Smallest distance from peaks to all points 3 dB below = 13.1 mm
Ratio of SAR at M2 to SAR at M1 = 66.4%
Maximum value of SAR (measured) = 0.189 W/kg



0 dB = 0.189 W/kg = -7.24 dBW/kg

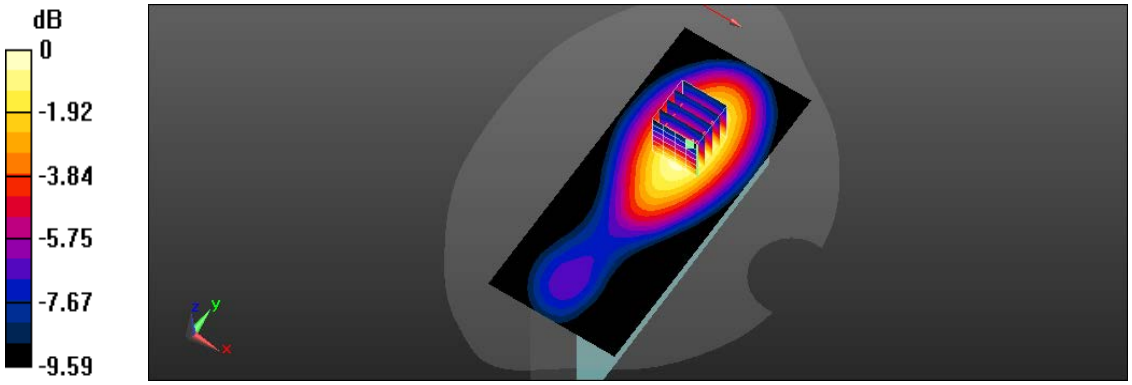
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/20
310_GSM850 CH 190_Side 4_10mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, GPRS 850 (1Down, 4Up) (0); Frequency: 836.6 MHz;Duty Cycle: 1:2.08
Medium parameters used: f = 837 MHz; σ = 0.912 S/m; ε_r = 42.039; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.35, 9.35, 9.35) @ 836.6 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.789 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.12 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.885 W/kg
SAR(1 g) = 0.590 W/kg; SAR(10 g) = 0.409 W/kg
Ratio of SAR at M2 to SAR at M1 = 66.6%
Maximum value of SAR (measured) = 0.771 W/kg



0 dB = 0.771 W/kg = -1.13 dBW/kg

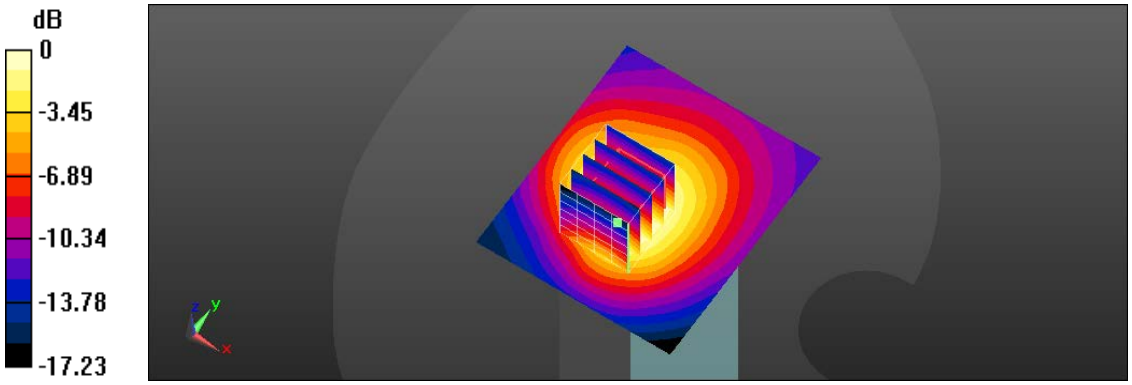
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/16
197_GSM1900 CH 661_Side 3_10mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, GPRS PCS (1Down,4Up) (0); Frequency: 1880 MHz;Duty Cycle: 1:2.08
Medium parameters used: f = 1880 MHz; σ = 1.44 S/m; ε_r = 40.108; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.72, 7.72, 7.72) @ 1909.8 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.15 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.94 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 1.25 W/kg
SAR(1 g) = 0.687 W/kg; SAR(10 g) = 0.399 W/kg
Smallest distance from peaks to all points 3 dB below = 15.8 mm
Ratio of SAR at M2 to SAR at M1 = 54.8%
Maximum value of SAR (measured) = 1.02 W/kg



0 dB = 1.02 W/kg = 0.09 dBW/kg

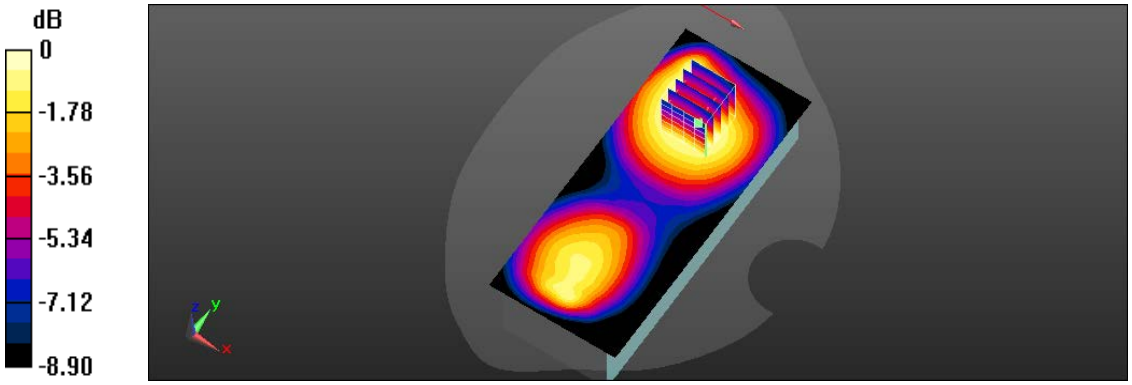
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/20
302_GSM850 CH 190_Back_0mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, GPRS 850 (1Down, 4Up) (0); Frequency: 836.6 MHz;Duty Cycle: 1:2.08
Medium parameters used: f = 837 MHz; σ = 0.912 S/m; ε_r = 42.039; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.35, 9.35, 9.35) @ 836.6 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.986 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 32.17 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.08 W/kg
SAR(1 g) = 0.794 W/kg; SAR(10 g) = 0.593 W/kg
Ratio of SAR at M2 to SAR at M1 = 75.4%
Maximum value of SAR (measured) = 0.970 W/kg



0 dB = 0.970 W/kg = -0.13 dBW/kg

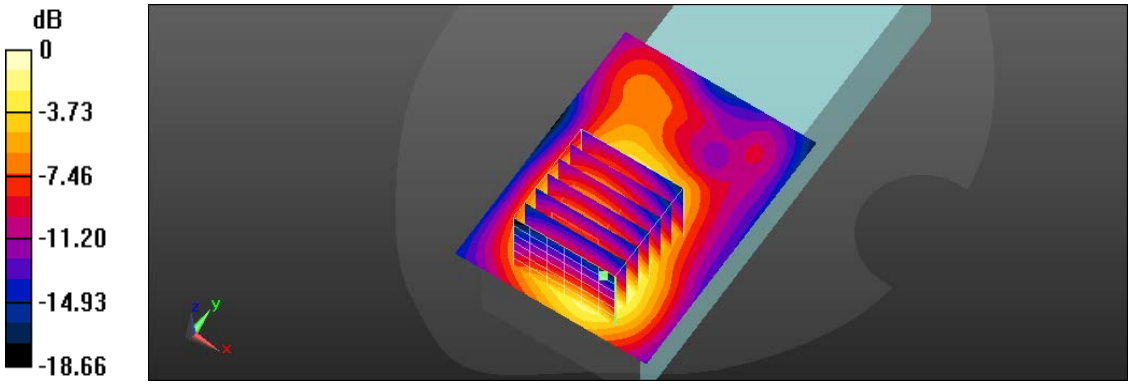
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/16
190_GSM1900 CH 661_Front_0mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, GPRS PCS (1Down,4Up) (0); Frequency: 1880 MHz;Duty Cycle: 1:2.08
Medium parameters used: f = 1880 MHz; σ = 1.44 S/m; ε_r = 40.108; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.72, 7.72, 7.72) @ 1909.8 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.25 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.76 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 1.37 W/kg
SAR(1 g) = 0.837 W/kg; SAR(10 g) = 0.537 W/kg
Smallest distance from peaks to all points 3 dB below = 16.1 mm
Ratio of SAR at M2 to SAR at M1 = 58.4%
Maximum value of SAR (measured) = 1.15 W/kg



0 dB = 1.15 W/kg = 0.61 dBW/kg

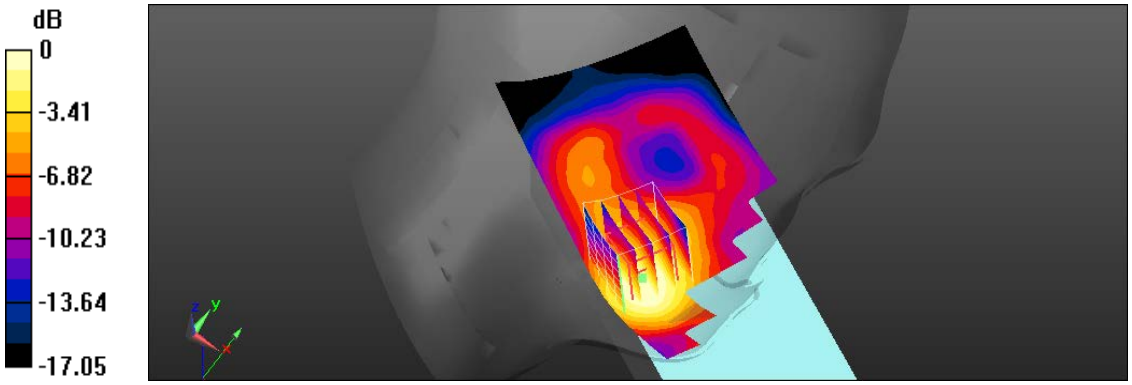
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/18
172_WCDMA Band II CH 9262_Left-Cheek
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, WCDMA Band II (0); Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.41 S/m; ε_r = 40.16; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.72, 7.72, 7.72) @ 1852.4 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.230 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.64 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.255 W/kg
SAR(1 g) = 0.165 W/kg; SAR(10 g) = 0.104 W/kg
Smallest distance from peaks to all points 3 dB below = 11.4 mm
Ratio of SAR at M2 to SAR at M1 = 68.4%
Maximum value of SAR (measured) = 0.215 W/kg



0 dB = 0.215 W/kg = -6.68 dBW/kg

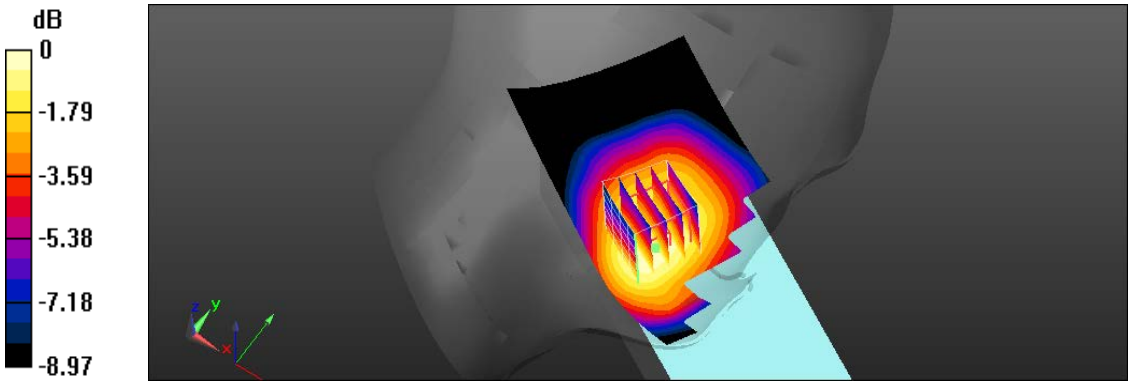
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/23
282_WCDMA Band V CH 4183_Left-Cheek
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, WCDMA Band V (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 837 MHz; σ = 0.91 S/m; ε_r = 41.993; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.35, 9.35, 9.35) @ 836.6 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.209 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.20 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.228 W/kg
SAR(1 g) = 0.169 W/kg; SAR(10 g) = 0.129 W/kg
Ratio of SAR at M2 to SAR at M1 = 75.4%
Maximum value of SAR (measured) = 0.207 W/kg



0 dB = 0.207 W/kg = -6.84 dBW/kg

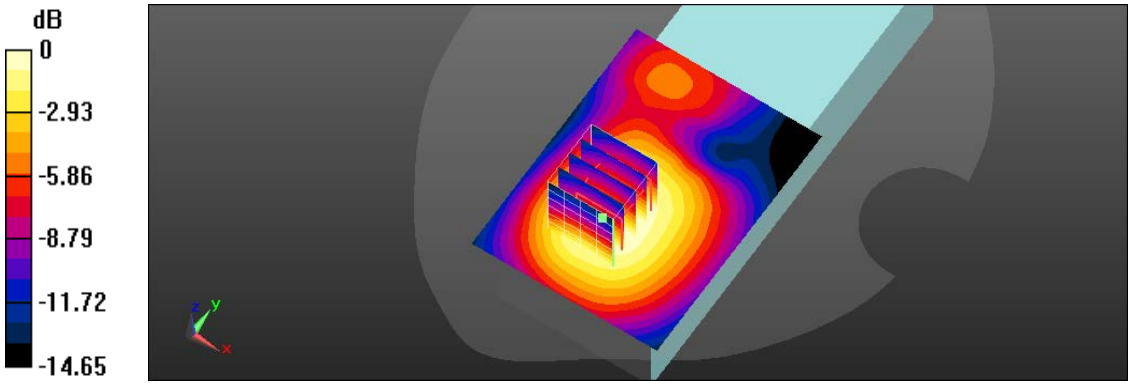
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/16
184_WCDMA Band II CH 9262_Front_10mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, WCDMA Band II (0); Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.415 S/m; ε_r = 40.228; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.72, 7.72, 7.72) @ 1852.4 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.728 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.14 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.813 W/kg
SAR(1 g) = 0.525 W/kg; SAR(10 g) = 0.340 W/kg
Smallest distance from peaks to all points 3 dB below = 25 mm
Ratio of SAR at M2 to SAR at M1 = 64.3%
Maximum value of SAR (measured) = 0.699 W/kg



0 dB = 0.699 W/kg = -1.56 dBW/kg

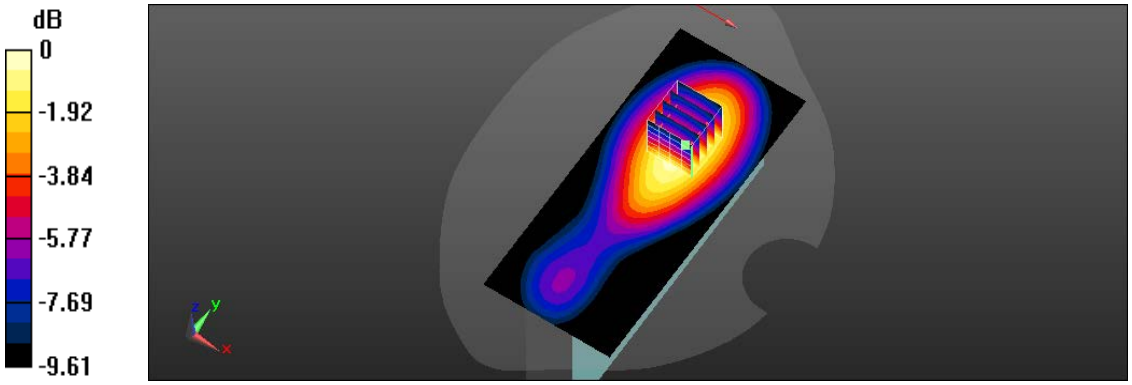
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/20
299_WCDMA Band V CH 4183_Side 4_10mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, WCDMA Band V (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 837 MHz; σ = 0.912 S/m; ε_r = 42.039; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.35, 9.35, 9.35) @ 836.6 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.294 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.00 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.338 W/kg
SAR(1 g) = 0.222 W/kg; SAR(10 g) = 0.153 W/kg
Ratio of SAR at M2 to SAR at M1 = 66%
Maximum value of SAR (measured) = 0.294 W/kg



0 dB = 0.294 W/kg = -5.32 dBW/kg

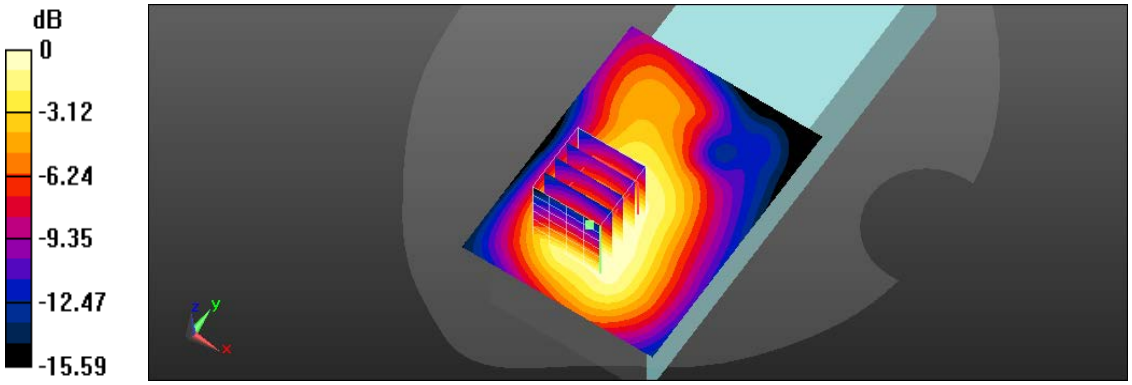
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/16
180_WCDMA Band II CH 9262_Front_0mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, WCDMA Band II (0); Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.415 S/m; ε_r = 40.228; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.72, 7.72, 7.72) @ 1852.4 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.01 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.26 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 1.08 W/kg
SAR(1 g) = 0.712 W/kg; SAR(10 g) = 0.472 W/kg
Smallest distance from peaks to all points 3 dB below = 21.8 mm
Ratio of SAR at M2 to SAR at M1 = 65.4%
Maximum value of SAR (measured) = 0.939 W/kg



0 dB = 0.939 W/kg = -0.27 dBW/kg

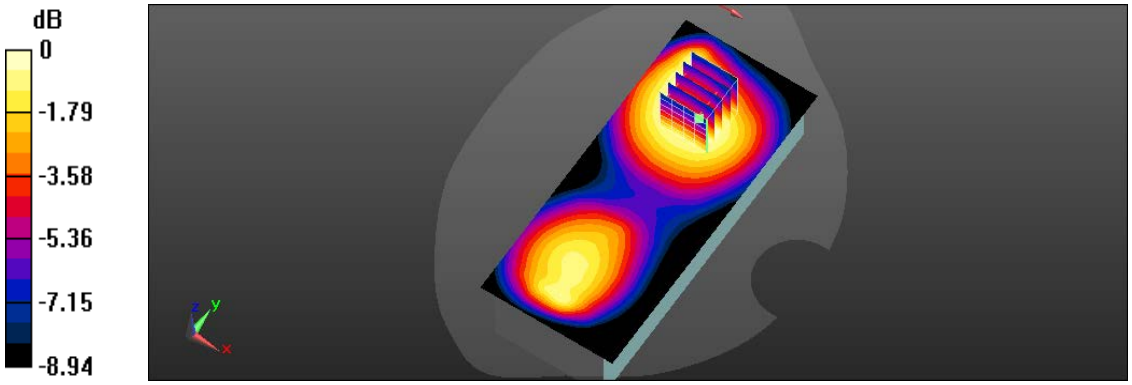
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/20
291_WCDMA Band V CH 4183_Back_0mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, WCDMA Band V (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 837 MHz; σ = 0.912 S/m; ε_r = 42.039; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.35, 9.35, 9.35) @ 836.6 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.403 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.69 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.447 W/kg
SAR(1 g) = 0.329 W/kg; SAR(10 g) = 0.246 W/kg
Ratio of SAR at M2 to SAR at M1 = 73.5%
Maximum value of SAR (measured) = 0.404 W/kg



0 dB = 0.404 W/kg = -3.94 dBW/kg

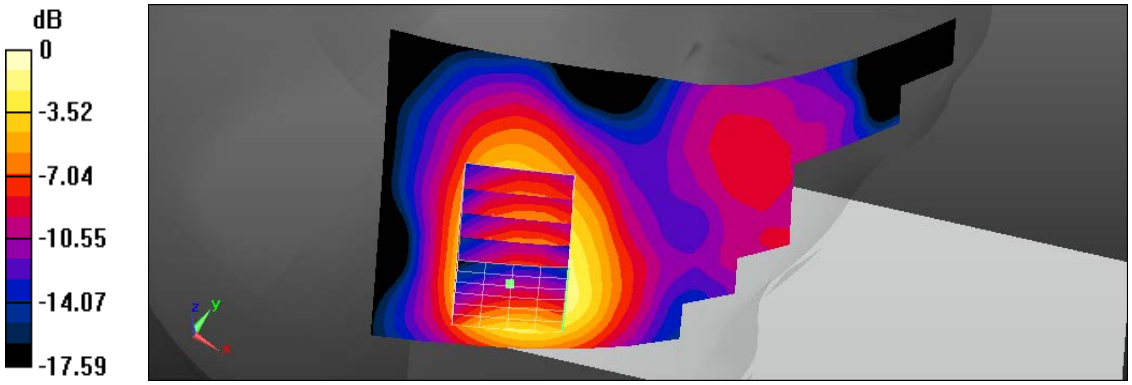
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/18
148_LTE Band 2 CH 18900_QPSK_BW 20M_1RB Size 0RB Offset_Right-Tilted
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.435 S/m; ε_r = 40.041; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.72, 7.72, 7.72) @ 1880 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.115 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.173 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.114 W/kg
SAR(1 g) = 0.076 W/kg; SAR(10 g) = 0.046 W/kg
Smallest distance from peaks to all points 3 dB below = 13.3 mm
Ratio of SAR at M2 to SAR at M1 = 70.3%
Maximum value of SAR (measured) = 0.0986 W/kg



0 dB = 0.0986 W/kg = -10.06 dBW/kg

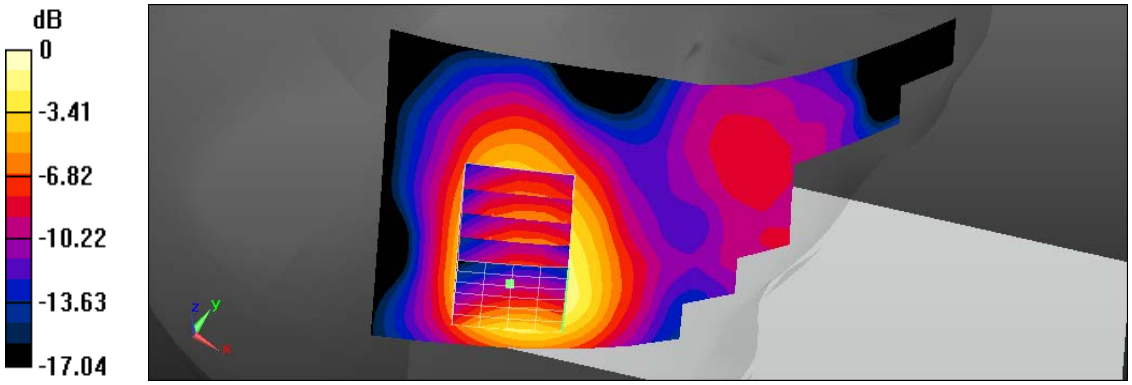
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/17
157_LTE Band 4 CH 20175_QPSK_BW 20M_1RB Size 0RB Offset_Right-Tilted
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.31 S/m; ε_r = 40.613; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(8.15, 8.15, 8.15) @ 1732.5 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.152 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.287 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.151 W/kg
SAR(1 g) = 0.105 W/kg; SAR(10 g) = 0.068 W/kg
Smallest distance from peaks to all points 3 dB below = 16.2 mm
Ratio of SAR at M2 to SAR at M1 = 71.2%
Maximum value of SAR (measured) = 0.134 W/kg



0 dB = 0.134 W/kg = -8.73 dBW/kg

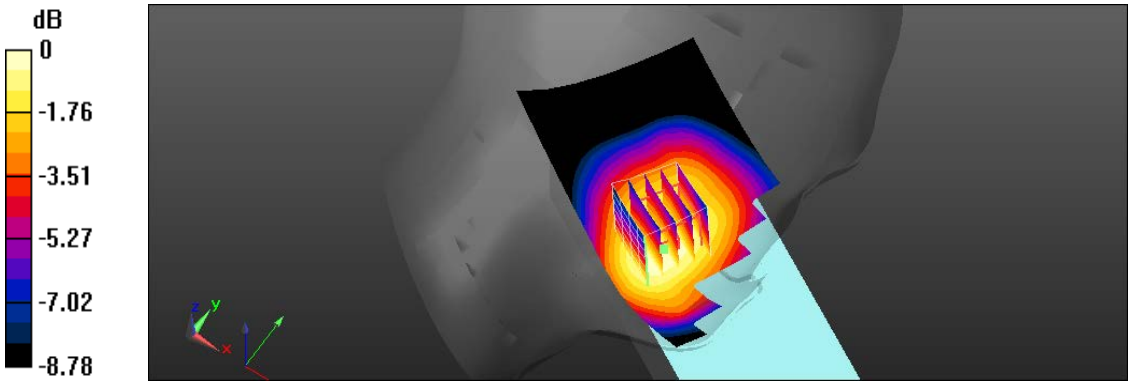
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/23
274_LTE Band 5 CH 20525_QPSK_BW 10M_1RB Size 49RB Offset_Left-Cheek
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.909 S/m; ε_r = 42; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.35, 9.35, 9.35) @ 836.5 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.181 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.26 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.195 W/kg
SAR(1 g) = 0.146 W/kg; SAR(10 g) = 0.112 W/kg
Ratio of SAR at M2 to SAR at M1 = 76.4%
Maximum value of SAR (measured) = 0.177 W/kg



0 dB = 0.177 W/kg = -7.52 dBW/kg

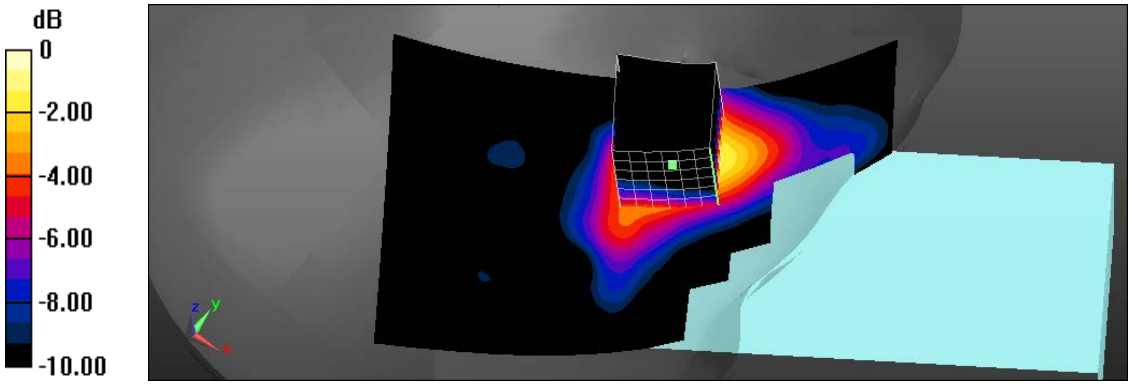
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/13
100_LTE Band 7 CH 20850_QPSK_BW 20M_1RB Size 49RB Offset_Right-Cheek
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 2510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2510 MHz; σ = 1.877 S/m; ε_r = 39.766; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.14, 7.14, 7.14) @ 2510 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x191x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.160 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.694 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.201 W/kg
SAR(1 g) = 0.106 W/kg; SAR(10 g) = 0.056 W/kg
Smallest distance from peaks to all points 3 dB below = 9.2 mm
Ratio of SAR at M2 to SAR at M1 = 52.6%
Maximum value of SAR (measured) = 0.161 W/kg



0 dB = 0.161 W/kg = -7.93 dBW/kg

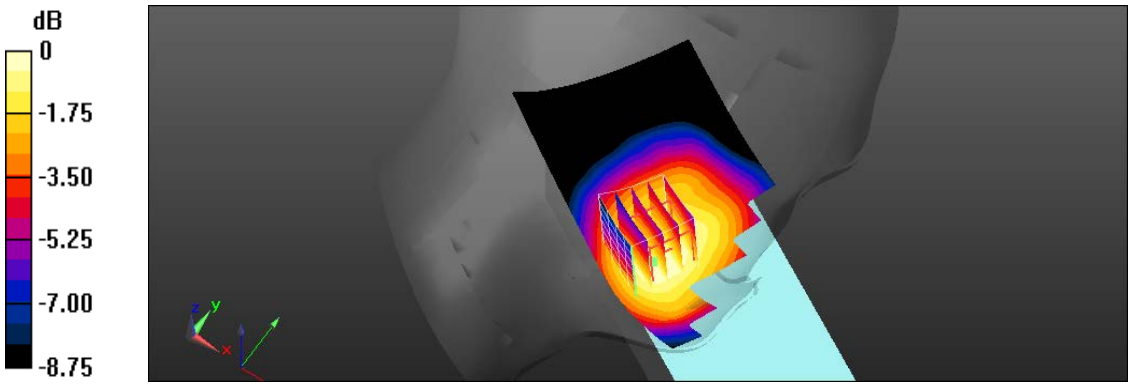
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/19
264_LTE Band 12 CH 23095_QPSK_BW 10M_1RB Size 0RB Offset_Left-Cheek
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.859 S/m; ε_r = 42.629; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.67, 9.67, 9.67) @ 707.5 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0742 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.993 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.0820 W/kg
SAR(1 g) = 0.063 W/kg; SAR(10 g) = 0.050 W/kg
Ratio of SAR at M2 to SAR at M1 = 76.9%
Maximum value of SAR (measured) = 0.0744 W/kg



0 dB = 0.0744 W/kg = -11.28 dBW/kg

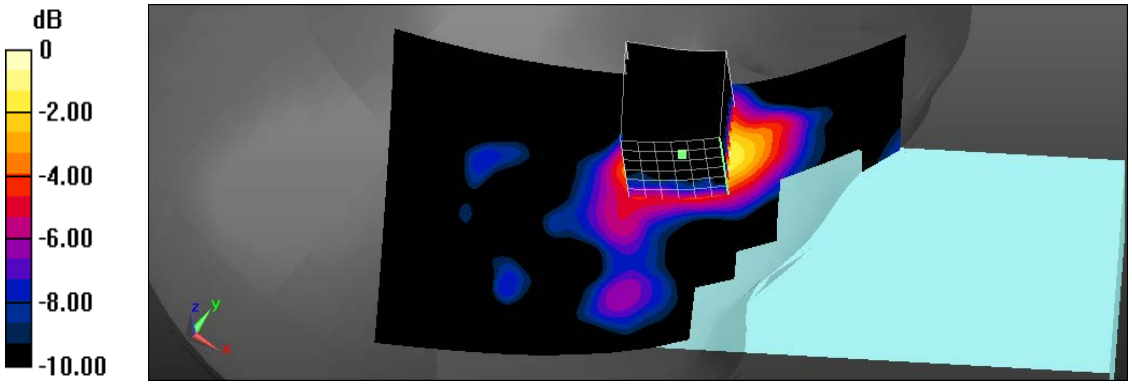
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/13
80_LTE Band 38 CH 38000_QPSK_BW 20M_1RB Size 0RB Offset_Right-Cheek
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 2595 MHz;Duty Cycle: 1:1.59
Medium parameters used (interpolated): f = 2595 MHz; σ = 1.986 S/m; ε_r = 39.514; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.11, 7.11, 7.11) @ 2595 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x191x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0643 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.113 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 0.0830 W/kg
SAR(1 g) = 0.041 W/kg; SAR(10 g) = 0.020 W/kg
Ratio of SAR at M2 to SAR at M1 = 53.3%
Maximum value of SAR (measured) = 0.0646 W/kg



0 dB = 0.0646 W/kg = -11.90 dBW/kg

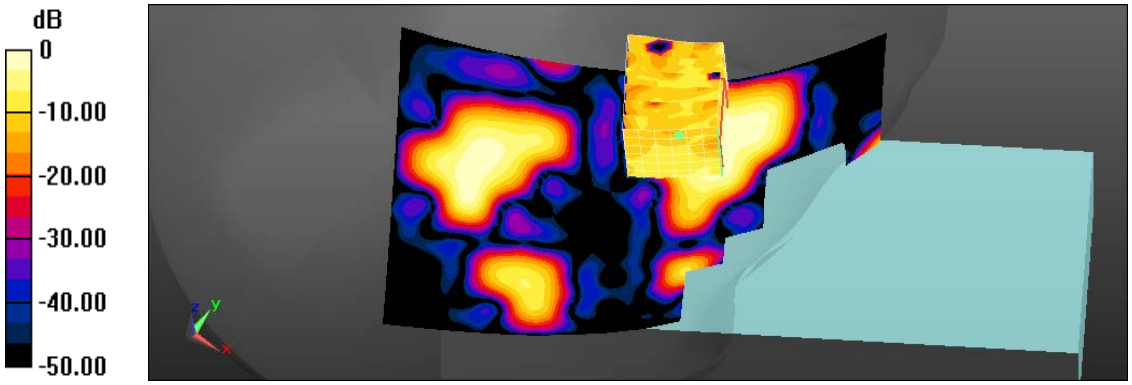
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/8
377_LTE Band 40 CH 38750_QPSK_BW 10M_1RB Size 0RB Offset_Right-Cheek
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 2310 MHz;Duty Cycle: 1:1.59
Medium parameters used: f = 2310 MHz; σ = 1.625 S/m; ε_r = 40.219; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52) @ 2310 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x191x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0349 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.274 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.0200 W/kg
SAR(1 g) = 0.011 W/kg; SAR(10 g) = 0.00577 W/kg
Ratio of SAR at M2 to SAR at M1 = 49.6%
Maximum value of SAR (measured) = 0.0165 W/kg



0 dB = 0.0165 W/kg = -17.83 dBW/kg

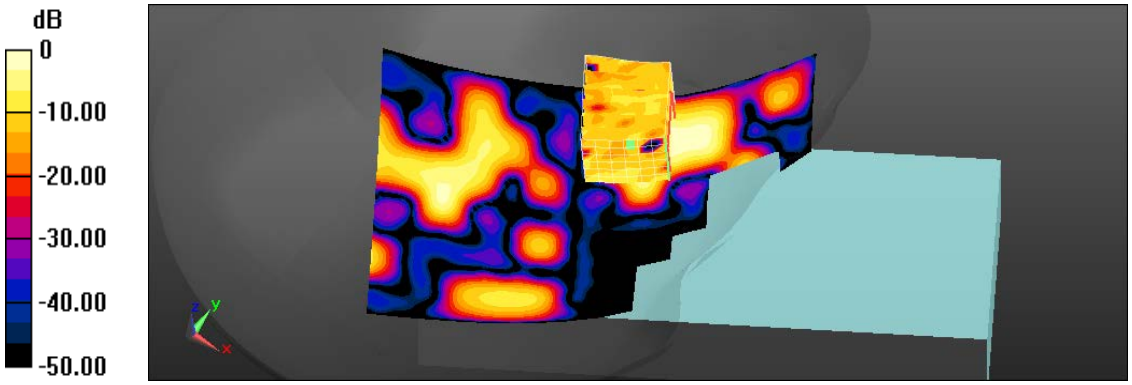
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/8
387_LTE Band 40 CH 39200_QPSK_BW 10M_1RB Size 0RB Offset_Right-Cheek
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 2355 MHz;Duty Cycle: 1:1.59
Medium parameters used (interpolated): f = 2355 MHz; σ = 1.675 S/m; ε_r = 40.039; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52) @ 2355 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x191x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0443 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.534 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.0240 W/kg
SAR(1 g) = 0.012 W/kg; SAR(10 g) = 0.00497 W/kg
Ratio of SAR at M2 to SAR at M1 = 49.2%
Maximum value of SAR (measured) = 0.0188 W/kg



0 dB = 0.0188 W/kg = -17.26 dBW/kg

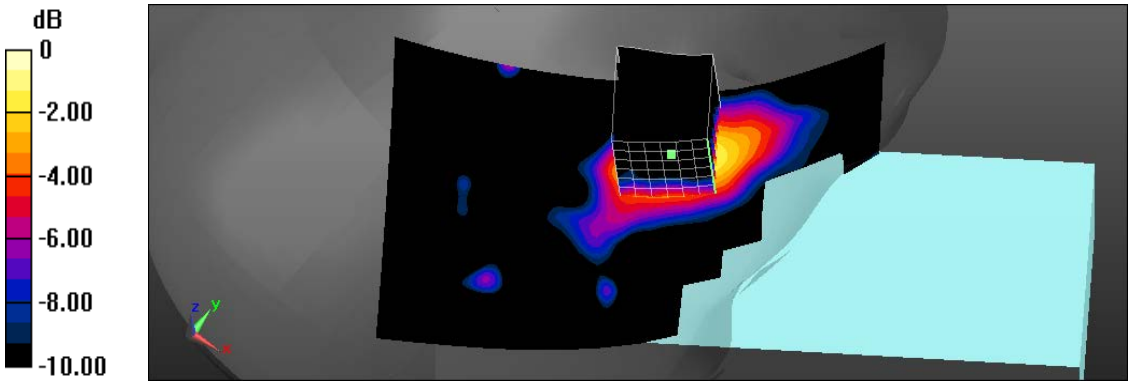
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/13
90_LTE Band 41 CH 41490_QPSK_BW 20M_1RB Size 99RB Offset_Right-Cheek
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 2680 MHz;Duty Cycle: 1:1.59
Medium parameters used: f = 2680 MHz; σ = 2.093 S/m; ε_r = 39.243; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.11, 7.11, 7.11) @ 2680 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x191x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0737 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.997 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.0890 W/kg
SAR(1 g) = 0.044 W/kg; SAR(10 g) = 0.022 W/kg
Ratio of SAR at M2 to SAR at M1 = 46.2%
Maximum value of SAR (measured) = 0.0709 W/kg



0 dB = 0.0709 W/kg = -11.49 dBW/kg

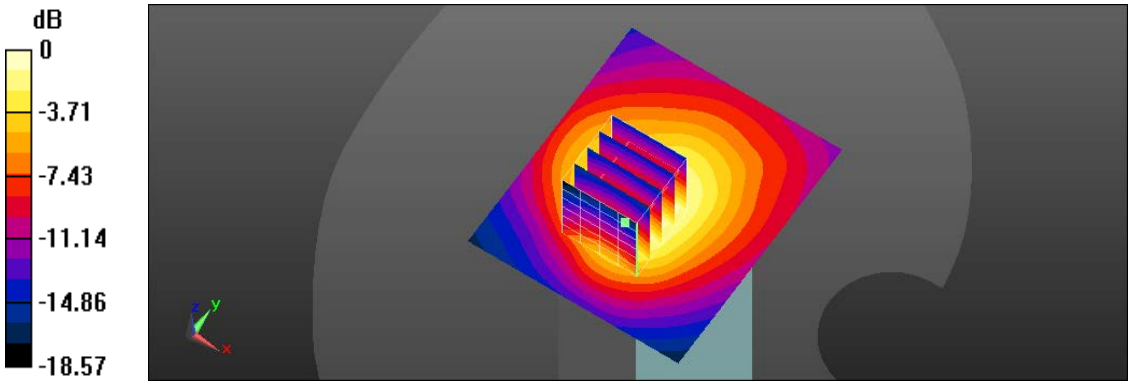
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/16
116_LTE Band 2 CH 18900_QPSK_BW 20M_1RB Size 0RB Offset_Side 3_10mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.44 S/m; ε_r = 40.108; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.72, 7.72, 7.72) @ 1880 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.652 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.89 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.779 W/kg
SAR(1 g) = 0.414 W/kg; SAR(10 g) = 0.238 W/kg
Smallest distance from peaks to all points 3 dB below = 14.3 mm
Ratio of SAR at M2 to SAR at M1 = 52.6%
Maximum value of SAR (measured) = 0.630 W/kg



0 dB = 0.630 W/kg = -2.01 dBW/kg

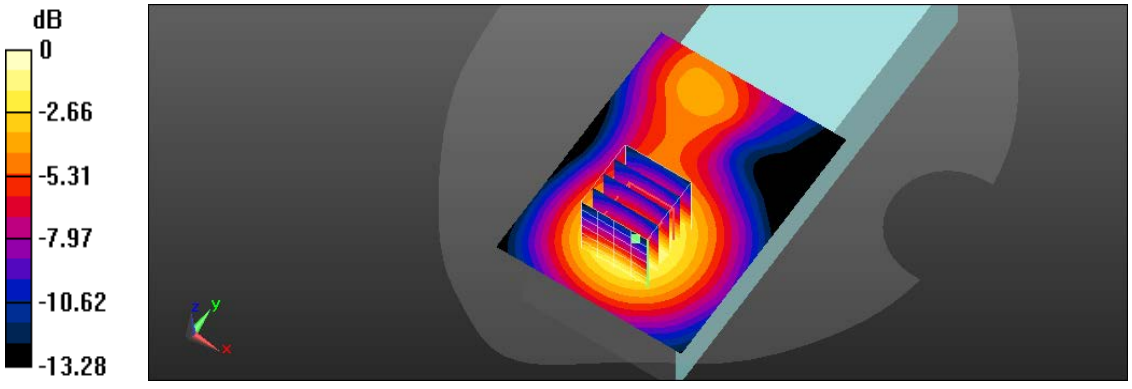
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/17
122_LTE Band 4 CH 20175_QPSK_BW 20M_1RB Size 0RB Offset_Front_10mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.31 S/m; ε_r = 40.613; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(8.15, 8.15, 8.15) @ 1732.5 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.392 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.17 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 0.545 W/kg
SAR(1 g) = 0.359 W/kg; SAR(10 g) = 0.233 W/kg
Smallest distance from peaks to all points 3 dB below = 24.9 mm
Ratio of SAR at M2 to SAR at M1 = 64.8%
Maximum value of SAR (measured) = 0.471 W/kg



0 dB = 0.471 W/kg = -3.27 dBW/kg

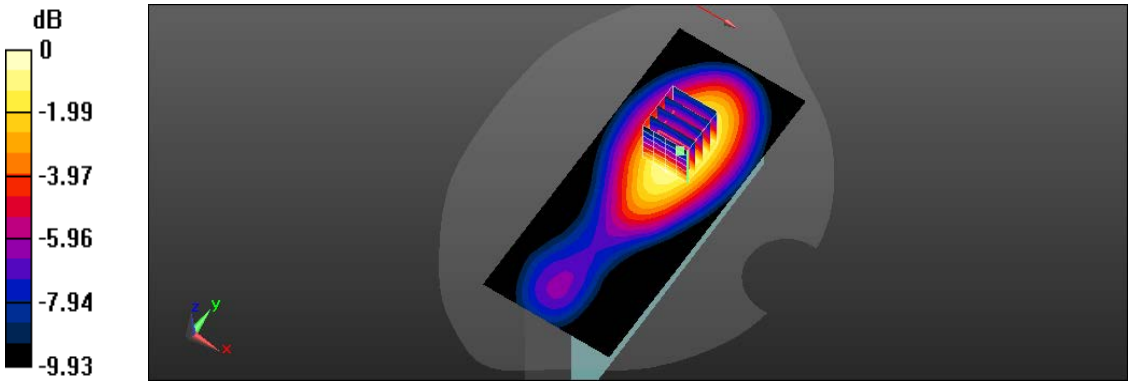
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/20
244_LTE Band 5 CH 20525_QPSK_BW 10M_1RB Size 49RB Offset_Side 4_10mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.911 S/m; ε_r = 42.047; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.35, 9.35, 9.35) @ 836.5 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.271 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.39 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.314 W/kg
SAR(1 g) = 0.206 W/kg; SAR(10 g) = 0.142 W/kg
Ratio of SAR at M2 to SAR at M1 = 65.8%
Maximum value of SAR (measured) = 0.272 W/kg



0 dB = 0.272 W/kg = -5.65 dBW/kg

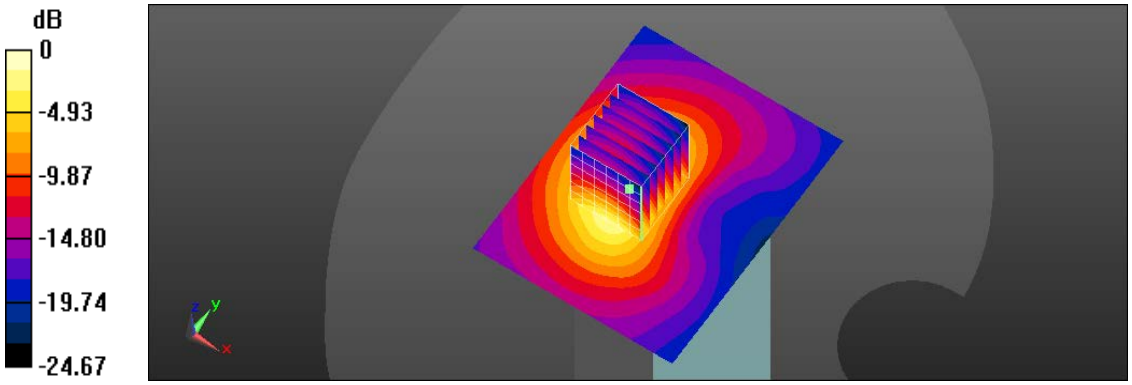
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/6
328_LTE Band 7 CH 21350_QPSK_BW 20M_1RB Size 99RB Offset_Side 3_10mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2560 MHz; σ = 1.925 S/m; ε_r = 39.55; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.11, 7.11, 7.11) @ 2560 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (71x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.86 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 30.23 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 2.04 W/kg
SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.508 W/kg
Smallest distance from peaks to all points 3 dB below = 10 mm
Ratio of SAR at M2 to SAR at M1 = 51.2%
Maximum value of SAR (measured) = 1.67 W/kg



0 dB = 1.67 W/kg = 2.23 dBW/kg

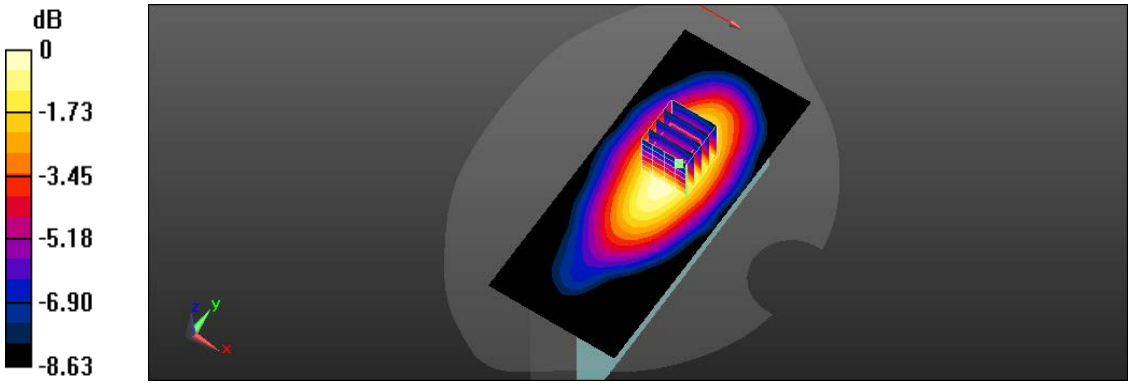
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/19
215_LTE Band 12 CH 23095_QPSK_BW 10M_1RB Size 0RB Offset_Side 4_10mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.859 S/m; ε_r = 42.629; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.67, 9.67, 9.67) @ 707.5 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0865 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.044 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.0980 W/kg
SAR(1 g) = 0.066 W/kg; SAR(10 g) = 0.047 W/kg
Ratio of SAR at M2 to SAR at M1 = 68.4%
Maximum value of SAR (measured) = 0.0851 W/kg



0 dB = 0.0851 W/kg = -10.70 dBW/kg

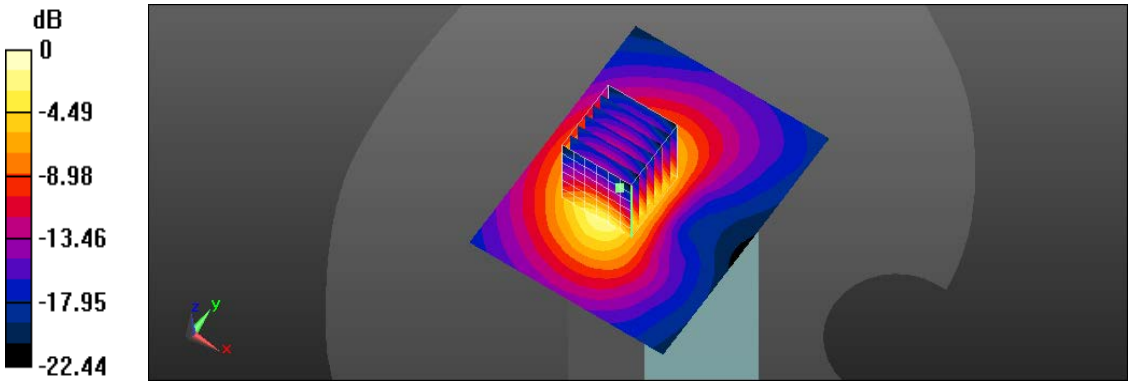
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/5
21_LTE Band 38 CH 38000_QPSK_BW 20M_1RB Size 0RB Offset_Side 3_10mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 2595 MHz;Duty Cycle: 1:1.59
Medium parameters used (interpolated): f = 2595 MHz; σ = 1.979 S/m; ε_r = 39.431; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.11, 7.11, 7.11) @ 2595 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (71x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.20 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.95 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 1.28 W/kg
SAR(1 g) = 0.649 W/kg; SAR(10 g) = 0.314 W/kg
Smallest distance from peaks to all points 3 dB below = 10 mm
Ratio of SAR at M2 to SAR at M1 = 51.8%
Maximum value of SAR (measured) = 1.02 W/kg



0 dB = 1.02 W/kg = 0.09 dBW/kg

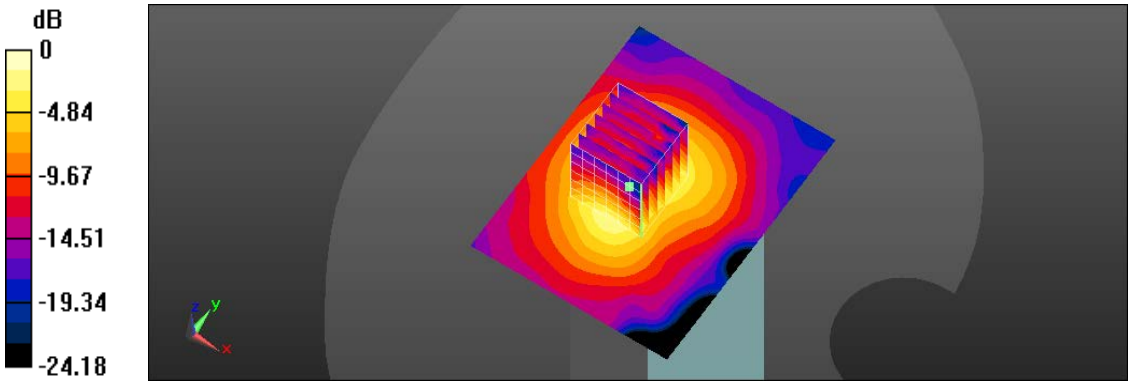
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/7
347_LTE Band 40 CH 38750_QPSK_BW 10M_1RB Size 0RB Offset_Side 3_10mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 2310 MHz;Duty Cycle: 1:1.59
Medium parameters used: f = 2310 MHz; σ = 1.63 S/m; ε_r = 40.293; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52) @ 2310 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (71x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.192 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.24 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.223 W/kg
SAR(1 g) = 0.123 W/kg; SAR(10 g) = 0.065 W/kg
Smallest distance from peaks to all points 3 dB below = 12 mm
Ratio of SAR at M2 to SAR at M1 = 55.8%
Maximum value of SAR (measured) = 0.187 W/kg



0 dB = 0.187 W/kg = -7.28 dBW/kg

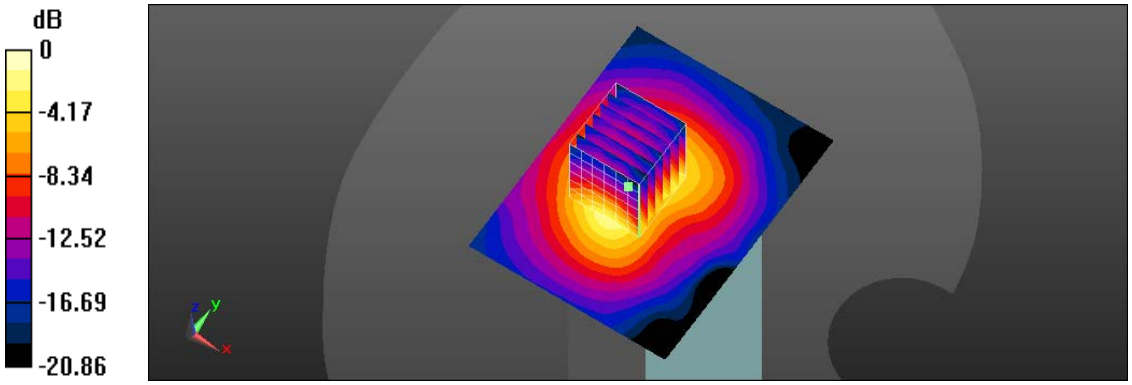
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/7
359_LTE Band 40 CH 39200_QPSK_BW 10M_1RB Size 0RB Offset_Side 3_10mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 2355 MHz;Duty Cycle: 1:1.59
Medium parameters used (interpolated): f = 2355 MHz; σ = 1.68 S/m; ε_r = 40.113; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52) @ 2355 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (71x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.258 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.72 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.299 W/kg
SAR(1 g) = 0.163 W/kg; SAR(10 g) = 0.085 W/kg
Smallest distance from peaks to all points 3 dB below = 11 mm
Ratio of SAR at M2 to SAR at M1 = 55%
Maximum value of SAR (measured) = 0.248 W/kg



0 dB = 0.248 W/kg = -6.06 dBW/kg

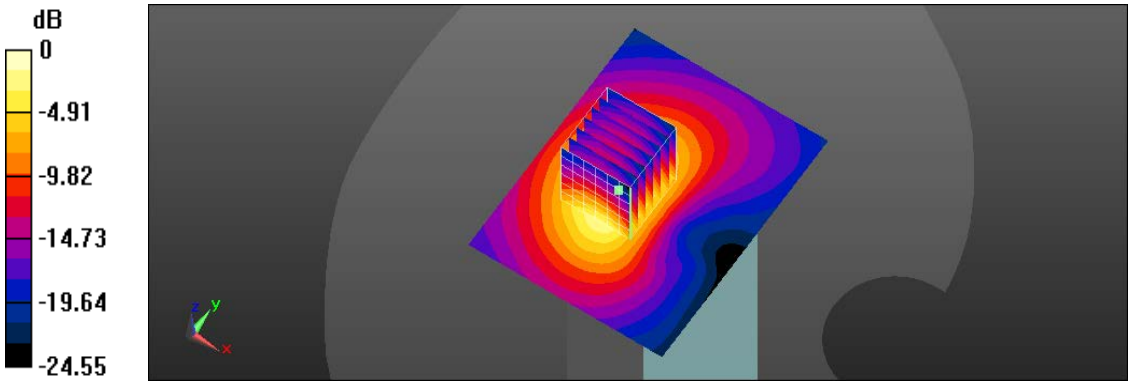
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/5
77_LTE Band 41 CH 40620_QPSK_BW 20M_1RB Size 99RB Offset_Side 3_10mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 2593 MHz;Duty Cycle: 1:1.59
Medium parameters used (interpolated): f = 2593 MHz; σ = 1.976 S/m; ε_r = 39.436; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.11, 7.11, 7.11) @ 2593 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (71x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.17 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.89 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.33 W/kg
SAR(1 g) = 0.677 W/kg; SAR(10 g) = 0.330 W/kg
Smallest distance from peaks to all points 3 dB below = 10 mm
Ratio of SAR at M2 to SAR at M1 = 51.2%
Maximum value of SAR (measured) = 1.08 W/kg



0 dB = 1.08 W/kg = 0.33 dBW/kg

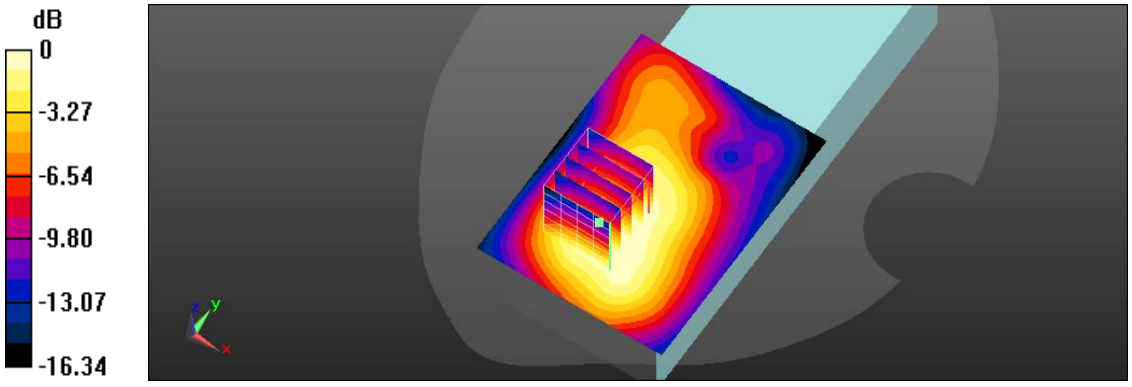
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/16
134_LTE Band 2 CH 18900_QPSK_BW 20M_1RB Size 0RB Offset_Front_0mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.44 S/m; ε_r = 40.108; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.72, 7.72, 7.72) @ 1880 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.779 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.07 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.846 W/kg
SAR(1 g) = 0.552 W/kg; SAR(10 g) = 0.363 W/kg
Smallest distance from peaks to all points 3 dB below = 20 mm
Ratio of SAR at M2 to SAR at M1 = 64.2%
Maximum value of SAR (measured) = 0.732 W/kg



0 dB = 0.732 W/kg = -1.35 dBW/kg

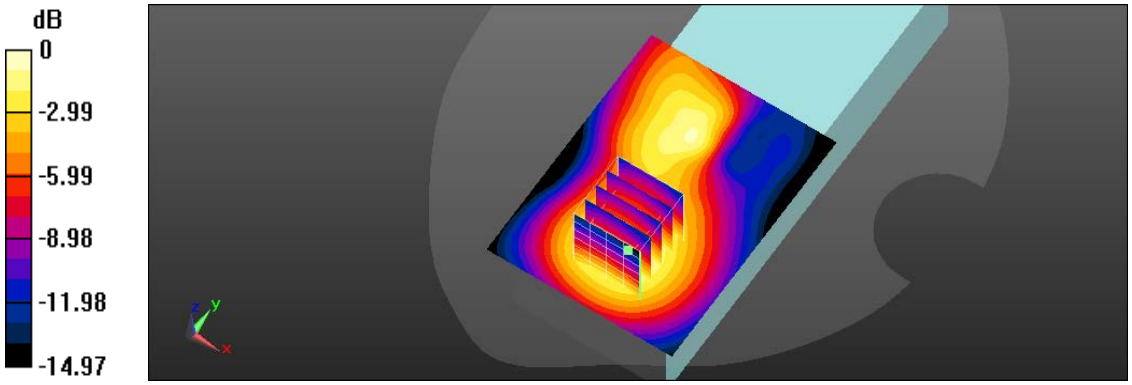
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/17
140_LTE Band 4 CH 20175_QPSK_BW 20M_1RB Size 0RB Offset_Front_0mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.31 S/m; ε_r = 40.613; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(8.15, 8.15, 8.15) @ 1732.5 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.565 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.96 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.718 W/kg
SAR(1 g) = 0.475 W/kg; SAR(10 g) = 0.306 W/kg
Ratio of SAR at M2 to SAR at M1 = 66.1%
Maximum value of SAR (measured) = 0.632 W/kg



0 dB = 0.632 W/kg = -1.99 dBW/kg

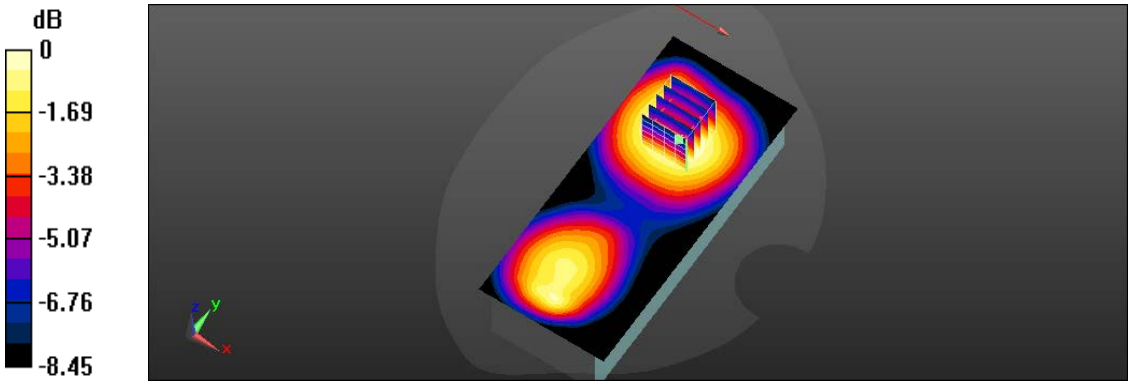
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/20
232_LTE Band 5 CH 20525_QPSK_BW 10M_1RB Size 49RB Offset_Back_0mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.911 S/m; ε_r = 42.047; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.35, 9.35, 9.35) @ 836.5 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.339 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.31 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.374 W/kg
SAR(1 g) = 0.277 W/kg; SAR(10 g) = 0.205 W/kg
Ratio of SAR at M2 to SAR at M1 = 74.8%
Maximum value of SAR (measured) = 0.339 W/kg



0 dB = 0.339 W/kg = -4.70 dBW/kg

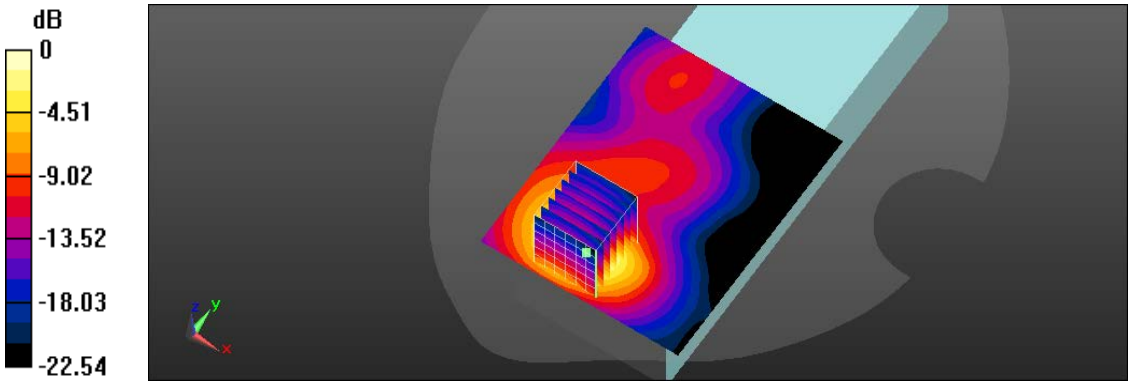
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/6
337_LTE Band 7 CH 20850_QPSK_BW 20M_1RB Size 49RB Offset_Back_0mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 2510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2510 MHz; σ = 1.866 S/m; ε_r = 39.658; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.14, 7.14, 7.14) @ 2510 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.55 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.54 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 1.96 W/kg
SAR(1 g) = 0.983 W/kg; SAR(10 g) = 0.467 W/kg
Smallest distance from peaks to all points 3 dB below = 10 mm
Ratio of SAR at M2 to SAR at M1 = 51.2%
Maximum value of SAR (measured) = 1.59 W/kg



0 dB = 1.59 W/kg = 2.01 dBW/kg

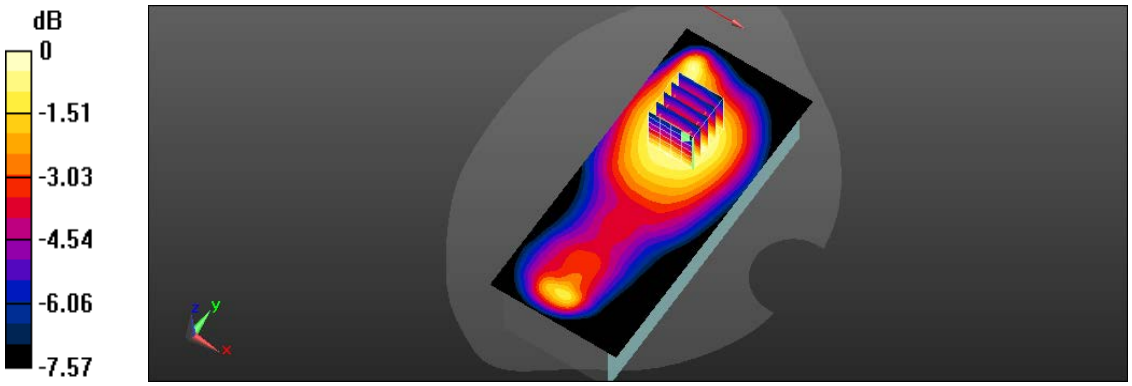
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/19
202_LTE Band 12 CH 23095_QPSK_BW 10M_1RB Size 0RB Offset_Back_0mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.859 S/m; ε_r = 42.629; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(9.67, 9.67, 9.67) @ 707.5 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (61x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.115 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.66 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.128 W/kg
SAR(1 g) = 0.095 W/kg; SAR(10 g) = 0.073 W/kg
Ratio of SAR at M2 to SAR at M1 = 74.7%
Maximum value of SAR (measured) = 0.116 W/kg



0 dB = 0.116 W/kg = -9.36 dBW/kg

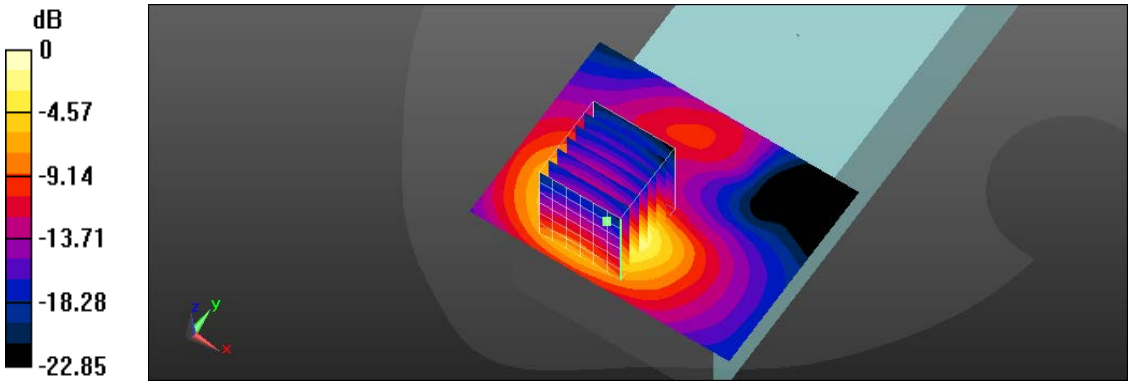
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/5
58_LTE Band 38 CH 38000_QPSK_BW 20M_1RB Size 0RB Offset_Back_0mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 2595 MHz;Duty Cycle: 1:1.59
Medium parameters used (interpolated): f = 2595 MHz; σ = 1.979 S/m; ε_r = 39.431; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.11, 7.11, 7.11) @ 2595 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x61x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.47 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.82 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.76 W/kg
SAR(1 g) = 0.870 W/kg; SAR(10 g) = 0.399 W/kg
Smallest distance from peaks to all points 3 dB below = 8 mm
Ratio of SAR at M2 to SAR at M1 = 50.3%
Maximum value of SAR (measured) = 1.44 W/kg



0 dB = 1.44 W/kg = 1.58 dBW/kg

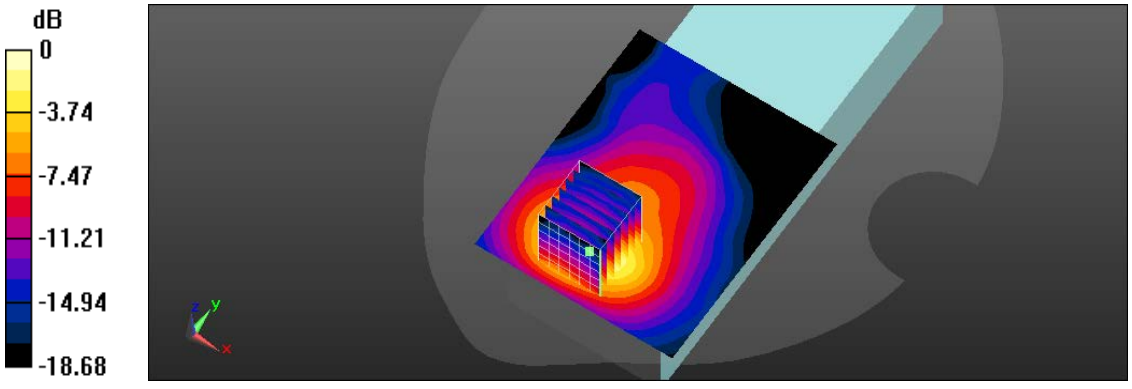
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/7
366_LTE Band 40 CH 38750_QPSK_BW 10M_1RB Size 0RB Offset_Back_0mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 2310 MHz;Duty Cycle: 1:1.59
Medium parameters used: f = 2310 MHz; σ = 1.63 S/m; ε_r = 40.293; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52) @ 2310 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.283 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.145 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.344 W/kg
SAR(1 g) = 0.188 W/kg; SAR(10 g) = 0.095 W/kg
Smallest distance from peaks to all points 3 dB below = 9.8 mm
Ratio of SAR at M2 to SAR at M1 = 56.2%
Maximum value of SAR (measured) = 0.292 W/kg



0 dB = 0.292 W/kg = -5.35 dBW/kg

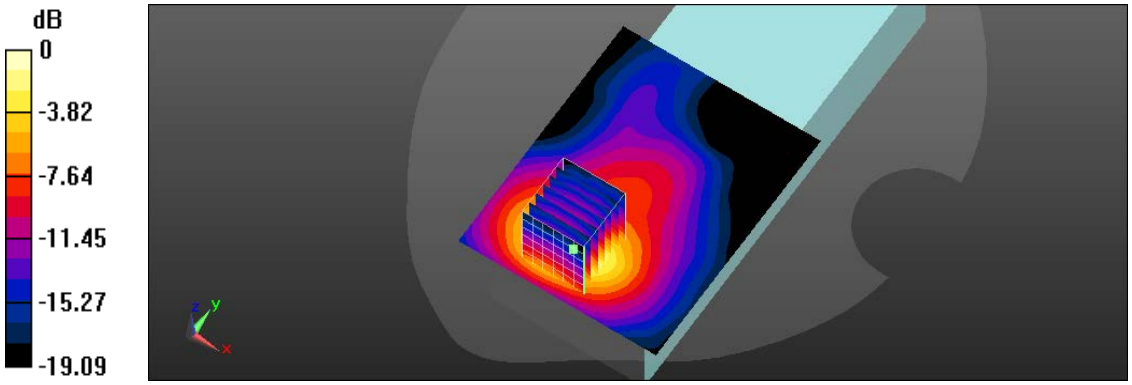
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/7
373_LTE Band 40 CH 39200_QPSK_BW 10M_1RB Size 0RB Offset_Back_0mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 2355 MHz;Duty Cycle: 1:1.59
Medium parameters used (interpolated): f = 2355 MHz; σ = 1.68 S/m; ε_r = 40.113; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.52, 7.52, 7.52) @ 2355 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.336 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.152 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.413 W/kg
SAR(1 g) = 0.220 W/kg; SAR(10 g) = 0.109 W/kg
Smallest distance from peaks to all points 3 dB below = 9.8 mm
Ratio of SAR at M2 to SAR at M1 = 54.6%
Maximum value of SAR (measured) = 0.346 W/kg



0 dB = 0.346 W/kg = -4.61 dBW/kg

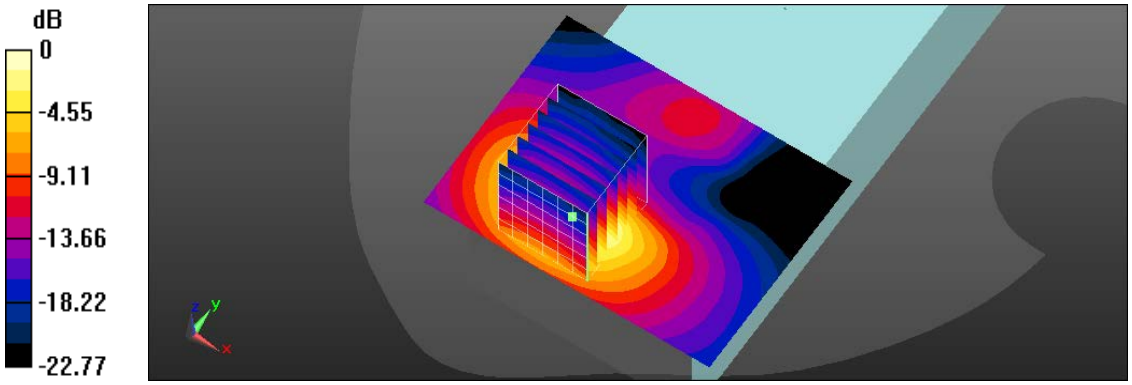
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/3/5
64_LTE Band 41 CH 41490_QPSK_BW 20M_1RB Size 99RB Offset_Back_0mm
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Generic LTE (0); Frequency: 2680 MHz;Duty Cycle: 1:1.59
Medium parameters used: f = 2680 MHz; σ = 2.086 S/m; ε_r = 39.16; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.11, 7.11, 7.11) @ 2680 MHz; Calibrated: 2019/5/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x61x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.47 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.37 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.76 W/kg
SAR(1 g) = 0.849 W/kg; SAR(10 g) = 0.380 W/kg
Smallest distance from peaks to all points 3 dB below = 8.9 mm
Ratio of SAR at M2 to SAR at M1 = 49.4%
Maximum value of SAR (measured) = 1.43 W/kg



0 dB = 1.43 W/kg = 1.55 dBW/kg

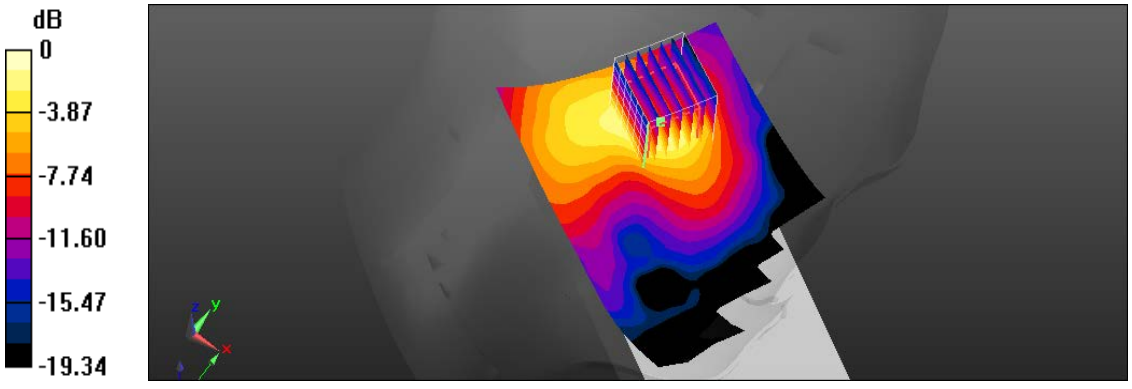
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/13
522_IEEE 802.11b CH1_1M_Left-Tilted_Ant 0
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2412 MHz;Duty Cycle: 1:1.005
Medium parameters used: f = 2412 MHz; σ = 1.764 S/m; ε_r = 40.127; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(7.65, 7.65, 7.65) @ 2412 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.229 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.12 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.275 W/kg
SAR(1 g) = 0.149 W/kg; SAR(10 g) = 0.080 W/kg
Smallest distance from peaks to all points 3 dB below = 13.1 mm
Ratio of SAR at M2 to SAR at M1 = 53.4%
Maximum value of SAR (measured) = 0.227 W/kg



0 dB = 0.227 W/kg = -6.44 dBW/kg

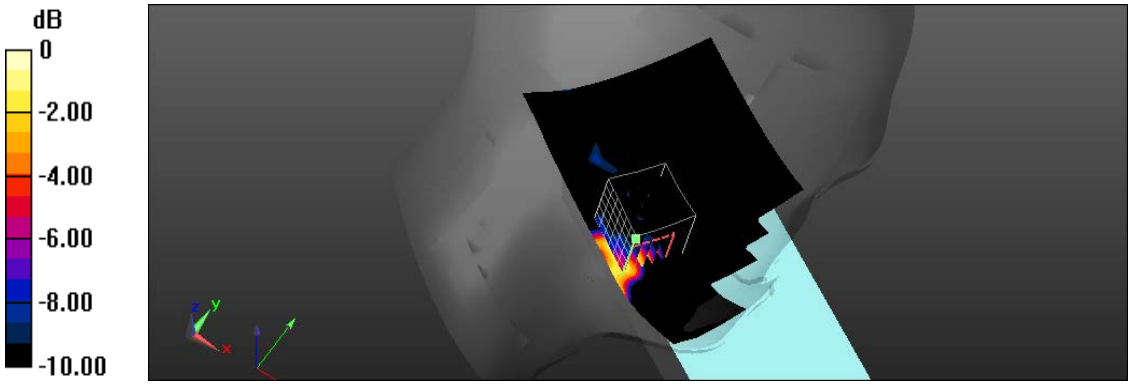
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/13
527_IEEE 802.11b CH1_1M_Left-Cheek_Ant 1
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2412 MHz;Duty Cycle: 1:1.005
Medium parameters used: f = 2412 MHz; σ = 1.764 S/m; ε_r = 40.127; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(7.65, 7.65, 7.65) @ 2412 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x191x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0280 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.366 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 0.0350 W/kg
SAR(1 g) = 0.013 W/kg; SAR(10 g) = 0.00642 W/kg
Ratio of SAR at M2 to SAR at M1 = 60%
Maximum value of SAR (measured) = 0.0219 W/kg



0 dB = 0.0219 W/kg = -16.60 dBW/kg

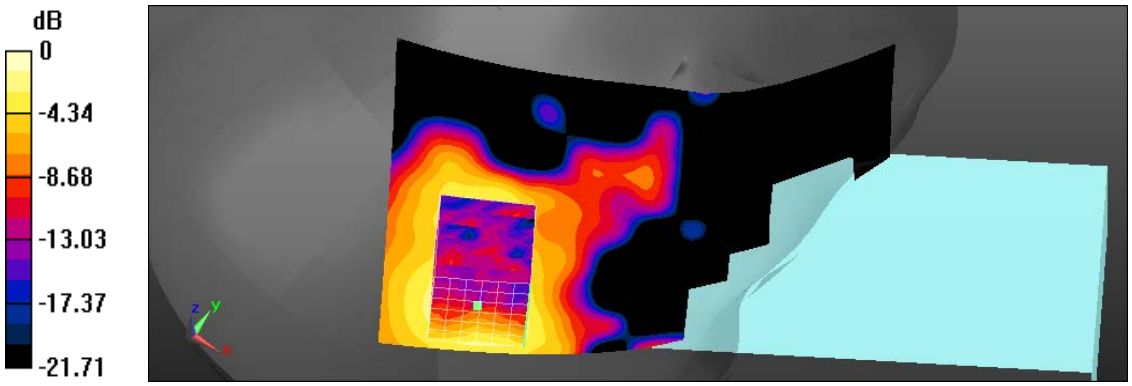
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/13
530_Bluetooth CH0_1M_Right-Cheek_Ant 0
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Bluetooth (0); Frequency: 2402 MHz;Duty Cycle: 1:1.284
Medium parameters used: f = 2402 MHz; σ = 1.752 S/m; ε_r = 40.167; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(7.65, 7.65, 7.65) @ 2402 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x191x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0300 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.444 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.0410 W/kg
SAR(1 g) = 0.022 W/kg; SAR(10 g) = 0.012 W/kg
Ratio of SAR at M2 to SAR at M1 = 51.7%
Maximum value of SAR (measured) = 0.0331 W/kg



0 dB = 0.0331 W/kg = -14.80 dBW/kg

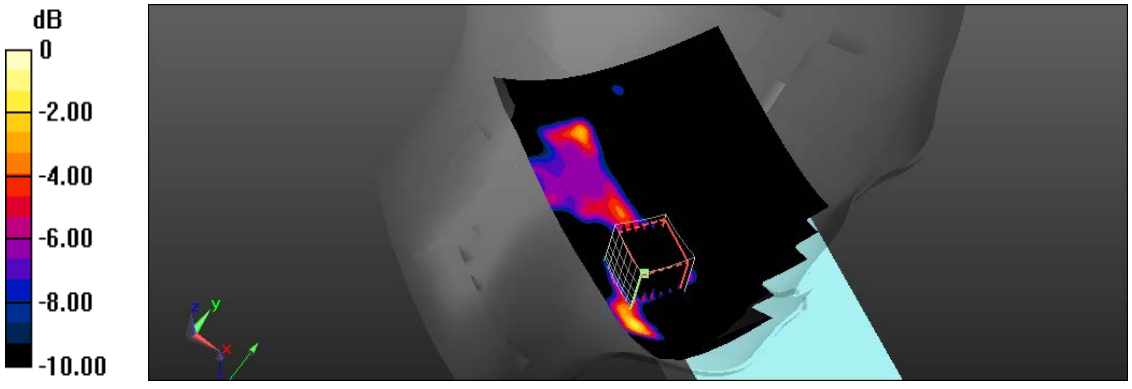
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/23
612_IEEE 802.11ac40 CH54_27M_Left-Cheek_Ant 0
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT40 (0); Frequency: 5270 MHz;Duty Cycle: 1:1.114
Medium parameters used: f = 5270 MHz; σ = 4.655 S/m; ε_r = 36.346; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(5.57, 5.57, 5.57) @ 5270 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (101x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.145 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 4.901 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 0.218 W/kg
SAR(1 g) = 0.063 W/kg; SAR(10 g) = 0.019 W/kg
Smallest distance from peaks to all points 3 dB below = 6.1 mm
Ratio of SAR at M2 to SAR at M1 = 69.6%
Maximum value of SAR (measured) = 0.149 W/kg



0 dB = 0.149 W/kg = -8.27 dBW/kg

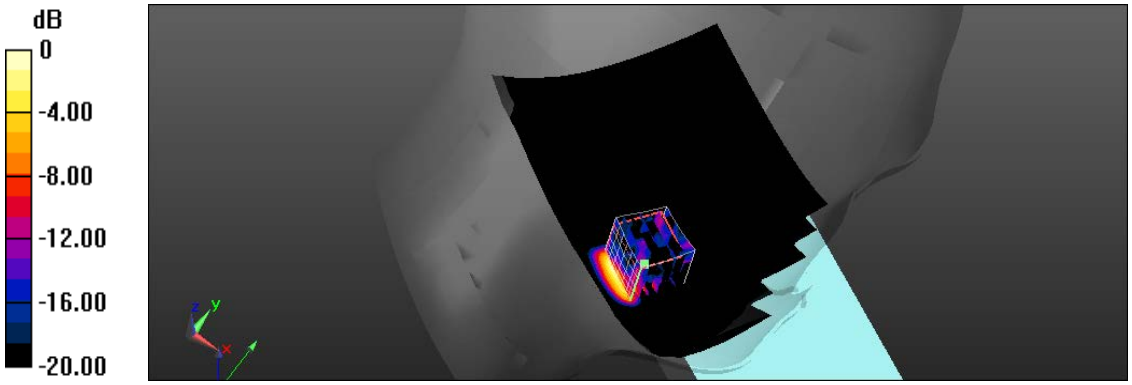
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/23
618_IEEE 802.11ac40 CH54_27M_Left-Cheek_Ant 1
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT40 (0); Frequency: 5270 MHz;Duty Cycle: 1:1.114
Medium parameters used: f = 5270 MHz; σ = 4.655 S/m; ε_r = 36.346; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(5.57, 5.57, 5.57) @ 5270 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (101x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.176 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 3.633 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.152 W/kg
SAR(1 g) = 0.031 W/kg; SAR(10 g) = 0.00869 W/kg
Ratio of SAR at M2 to SAR at M1 = 60.3%
Maximum value of SAR (measured) = 0.0857 W/kg



0 dB = 0.0857 W/kg = -10.67 dBW/kg

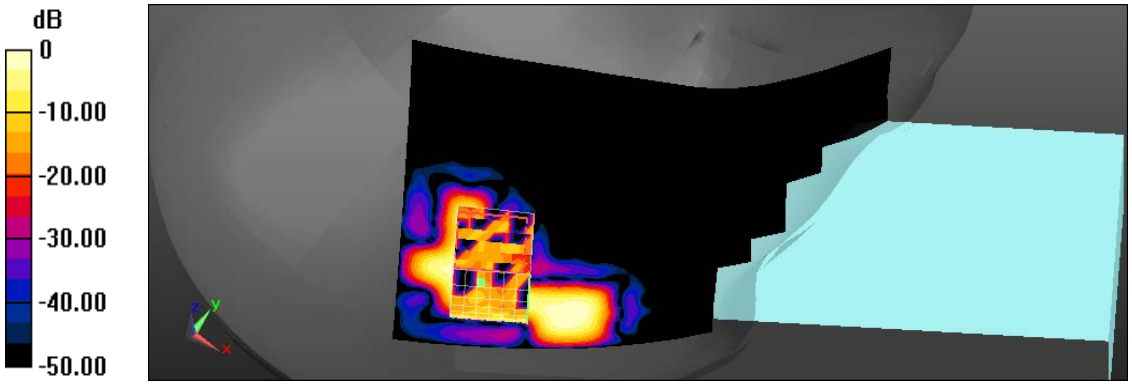
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/23
622_IEEE 802.11ac80 CH106_58.5M_Right-Cheek_Ant 0
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5530 MHz;Duty Cycle: 1:1.174
Medium parameters used: f = 5530 MHz; σ = 4.924 S/m; ε_r = 35.895; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(4.81, 4.81, 4.81) @ 5530 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (101x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.198 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 4.664 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.183 W/kg
SAR(1 g) = 0.030 W/kg; SAR(10 g) = 0.009 W/kg
Ratio of SAR at M2 to SAR at M1 = 65.4%
Maximum value of SAR (measured) = 0.0807 W/kg



0 dB = 0.0807 W/kg = -10.93 dBW/kg

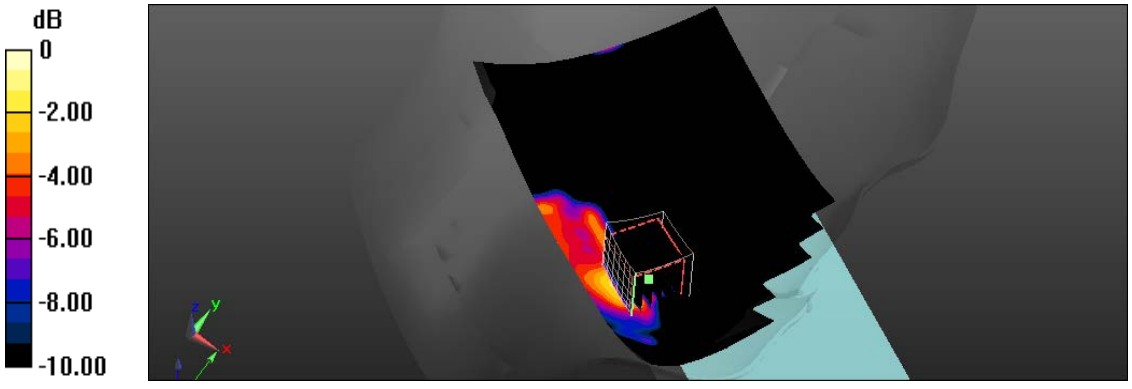
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/23
630_IEEE 802.11ac80 CH106_58.5M_Left-Cheek_Ant 1
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5530 MHz;Duty Cycle: 1:1.174
Medium parameters used: f = 5530 MHz; σ = 4.924 S/m; ε_r = 35.895; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(4.81, 4.81, 4.81) @ 5530 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (101x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.134 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 4.528 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 2.31 W/kg
SAR(1 g) = 0.042 W/kg; SAR(10 g) = 0.014 W/kg
Smallest distance from peaks to all points 3 dB below = 9.7 mm
Ratio of SAR at M2 to SAR at M1 = 56.3%
Maximum value of SAR (measured) = 0.103 W/kg



0 dB = 0.103 W/kg = -9.87 dBW/kg

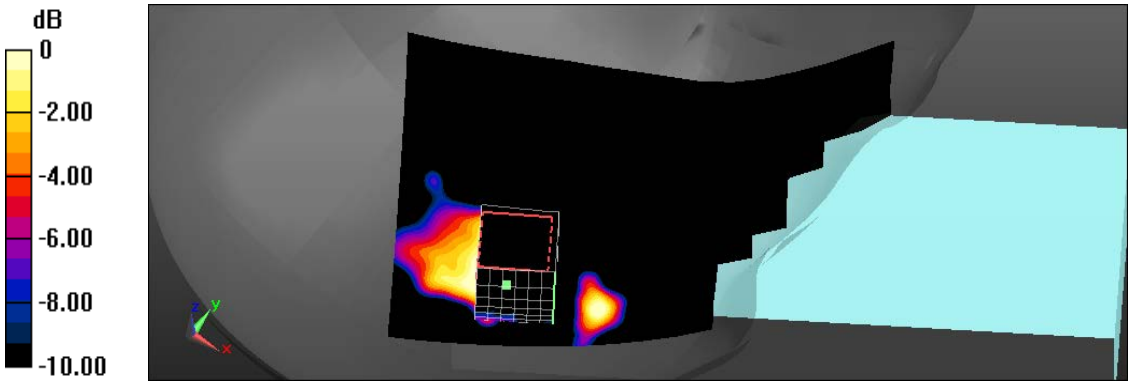
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/23
640_IEEE 802.11ac80 CH155_58.5M_Right-Cheek_Ant 0
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5775 MHz;Duty Cycle: 1:1.174
Medium parameters used: f = 5775 MHz; σ = 5.251 S/m; ε_r = 35.496; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(5.06, 5.06, 5.06) @ 5775 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (101x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.189 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 4.855 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 0.173 W/kg
SAR(1 g) = 0.037 W/kg; SAR(10 g) = 0.00958 W/kg
Ratio of SAR at M2 to SAR at M1 = 62.3%
Maximum value of SAR (measured) = 0.0985 W/kg



0 dB = 0.0985 W/kg = -10.07 dBW/kg

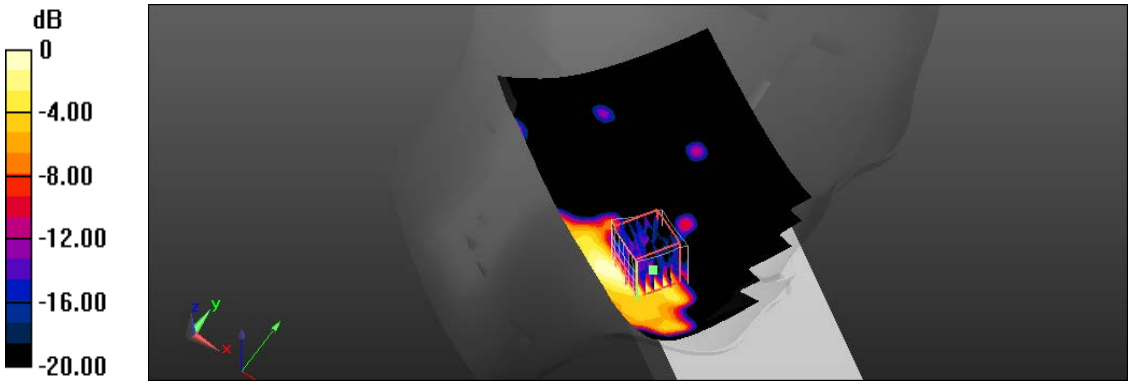
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/23
636_IEEE 802.11ac80 CH155_58.5M_Left-Cheek_Ant 1
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5775 MHz;Duty Cycle: 1:1.174
Medium parameters used: f = 5775 MHz; σ = 5.251 S/m; ε_r = 35.496; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(5.06, 5.06, 5.06) @ 5775 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (101x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.134 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 3.735 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.203 W/kg
SAR(1 g) = 0.051 W/kg; SAR(10 g) = 0.015 W/kg
Smallest distance from peaks to all points 3 dB below = 9.4 mm
Ratio of SAR at M2 to SAR at M1 = 57.4%
Maximum value of SAR (measured) = 0.112 W/kg



0 dB = 0.112 W/kg = -9.51 dBW/kg

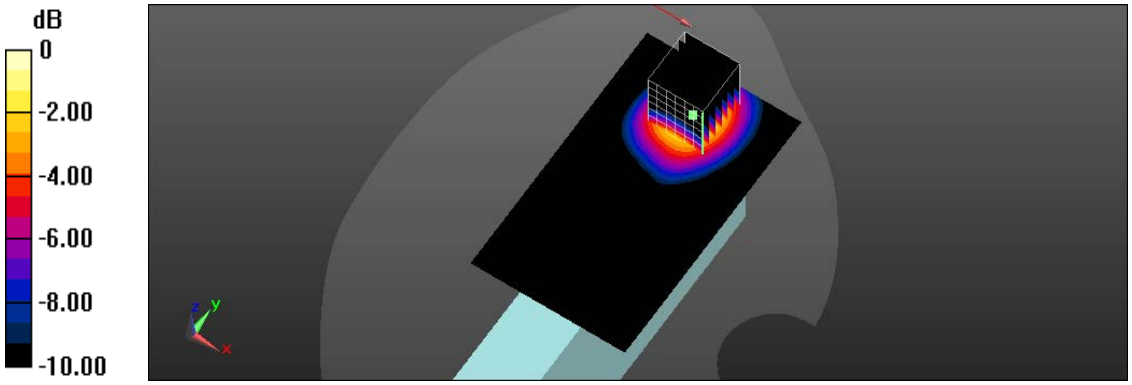
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/13
503_IEEE 802.11b CH1_1M_Side 4_10mm_Ant 0
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2412 MHz;Duty Cycle: 1:1.005
Medium parameters used: f = 2412 MHz; σ = 1.764 S/m; ε_r = 40.127; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(7.65, 7.65, 7.65) @ 2412 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.447 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.56 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.525 W/kg
SAR(1 g) = 0.284 W/kg; SAR(10 g) = 0.148 W/kg
Smallest distance from peaks to all points 3 dB below = 13 mm
Ratio of SAR at M2 to SAR at M1 = 53.8%
Maximum value of SAR (measured) = 0.437 W/kg



0 dB = 0.437 W/kg = -3.60 dBW/kg

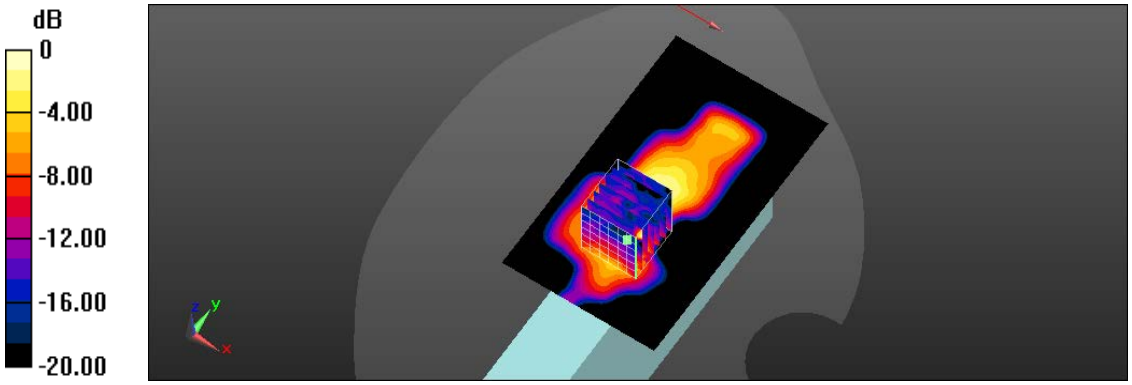
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/13
508_IEEE 802.11b CH1_1M_Side 4_10mm_Ant 1
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2412 MHz;Duty Cycle: 1:1.005
Medium parameters used: f = 2412 MHz; σ = 1.764 S/m; ε_r = 40.127; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(7.65, 7.65, 7.65) @ 2412 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0400 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.628 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.0480 W/kg
SAR(1 g) = 0.023 W/kg; SAR(10 g) = 0.012 W/kg
Ratio of SAR at M2 to SAR at M1 = 22.6%
Maximum value of SAR (measured) = 0.0476 W/kg



0 dB = 0.0476 W/kg = -13.22 dBW/kg

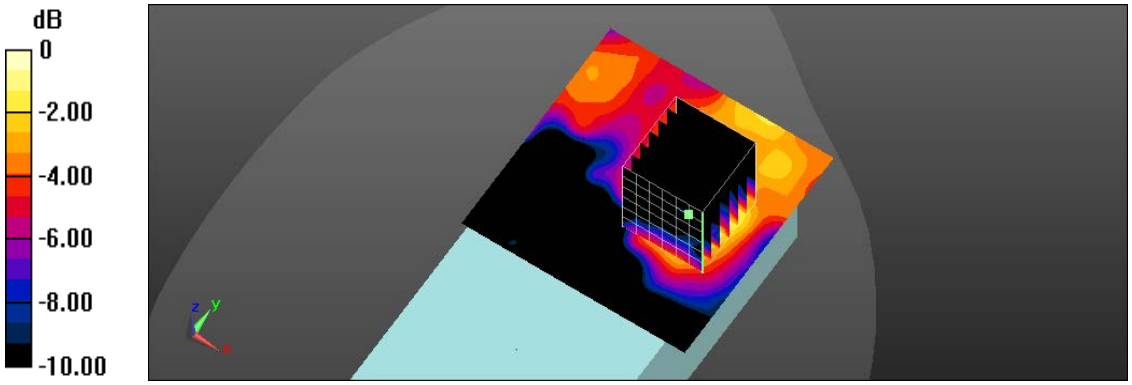
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/13
535_Bluetooth CH0_1M_Back_10mm_Ant 0
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Bluetooth (0); Frequency: 2402 MHz;Duty Cycle: 1:1.284
Medium parameters used: f = 2402 MHz; σ = 1.752 S/m; ε_r = 40.167; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(7.65, 7.65, 7.65) @ 2402 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (71x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0174 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.862 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.0210 W/kg
SAR(1 g) = 0.011 W/kg; SAR(10 g) = 0.00506 W/kg
Ratio of SAR at M2 to SAR at M1 = 51.3%
Maximum value of SAR (measured) = 0.0172 W/kg



0 dB = 0.0172 W/kg = -17.64 dBW/kg

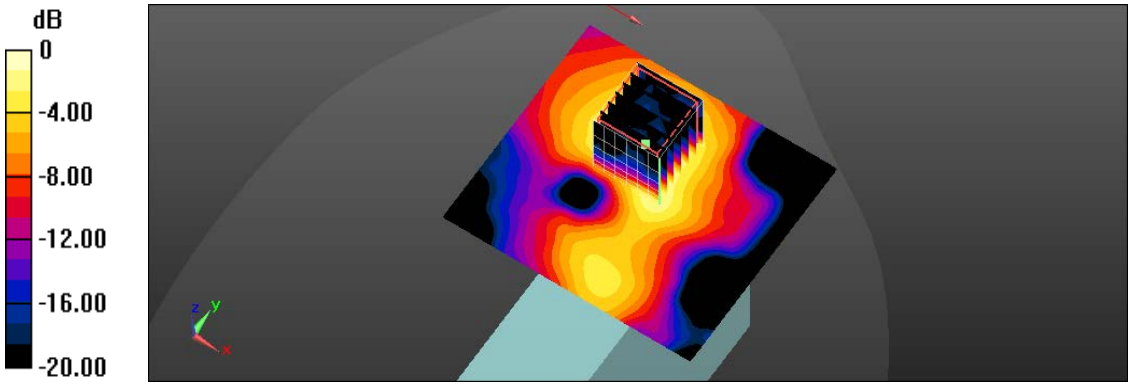
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/22
500_IEEE 802.11ac40 CH46_27M_Side 4_10mm_Ant 0
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT40 (0); Frequency: 5230 MHz;Duty Cycle: 1:1.11
Medium parameters used: f = 5230 MHz; σ = 4.601 S/m; ε_r = 36.338; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(5.57, 5.57, 5.57) @ 5230 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (91x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.378 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 7.024 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.593 W/kg
SAR(1 g) = 0.170 W/kg; SAR(10 g) = 0.066 W/kg
Smallest distance from peaks to all points 3 dB below = 12 mm
Ratio of SAR at M2 to SAR at M1 = 66.1%
Maximum value of SAR (measured) = 0.372 W/kg



0 dB = 0.372 W/kg = -4.29 dBW/kg

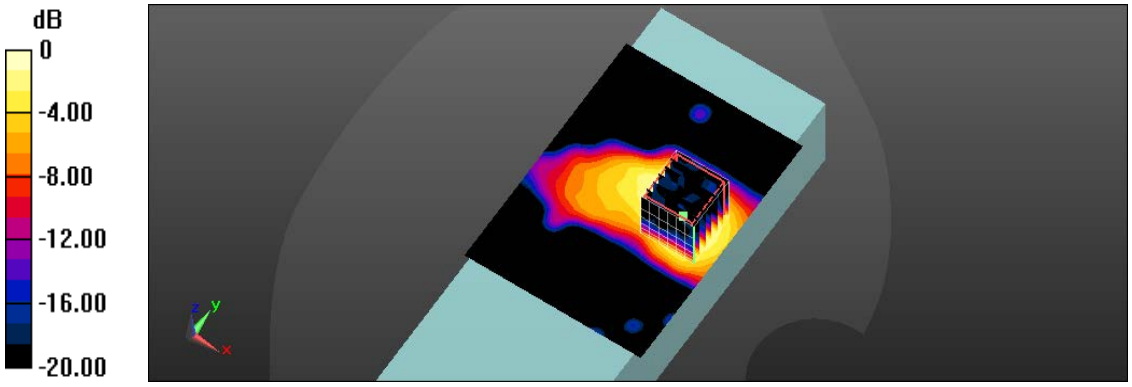
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/22
505_IEEE 802.11ac40 CH46_27M_Back_10mm_Ant 1
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT40 (0); Frequency: 5230 MHz;Duty Cycle: 1:1.11
Medium parameters used: f = 5230 MHz; σ = 4.601 S/m; ε_r = 36.338; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(5.57, 5.57, 5.57) @ 5230 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.323 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 7.116 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.500 W/kg
SAR(1 g) = 0.146 W/kg; SAR(10 g) = 0.057 W/kg
Smallest distance from peaks to all points 3 dB below = 11.8 mm
Ratio of SAR at M2 to SAR at M1 = 65%
Maximum value of SAR (measured) = 0.318 W/kg



0 dB = 0.318 W/kg = -4.98 dBW/kg

Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/22
562_IEEE 802.11ac80 CH155_58.5M_Side 4_10mm_Ant 0
DUT: MC401; Type: Mobile Computer

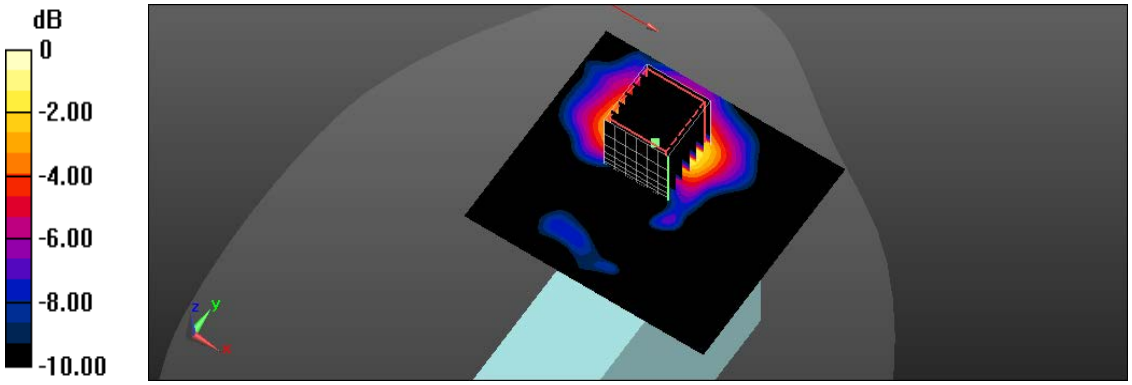
Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5775 MHz;Duty Cycle: 1:1.174
Medium parameters used: f = 5775 MHz; σ = 5.232 S/m; ε_r = 35.373; ρ = 1000 kg/m^3
Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(5.06, 5.06, 5.06) @ 5775 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (91x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.317 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 4.203 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.427 W/kg
SAR(1 g) = 0.116 W/kg; SAR(10 g) = 0.037 W/kg
Smallest distance from peaks to all points 3 dB below = 9.3 mm
Ratio of SAR at M2 to SAR at M1 = 62.3%
Maximum value of SAR (measured) = 0.266 W/kg



0 dB = 0.266 W/kg = -5.75 dBW/kg

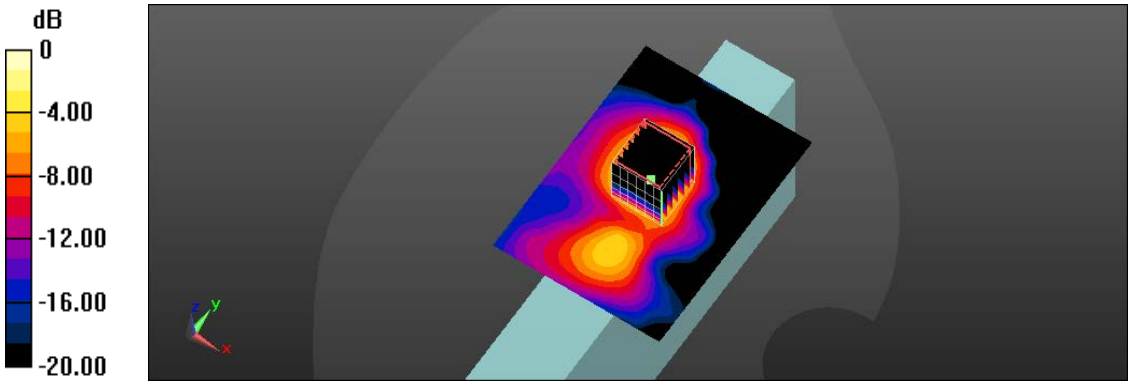
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/22
567_IEEE 802.11ac80 CH155_58.5M_Side 4_10mm_Ant 1
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5775 MHz;Duty Cycle: 1:1.174
Medium parameters used: f = 5775 MHz; σ = 5.232 S/m; ε_r = 35.373; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(5.06, 5.06, 5.06) @ 5775 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.19 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 9.155 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 1.96 W/kg
SAR(1 g) = 0.491 W/kg; SAR(10 g) = 0.171 W/kg
Smallest distance from peaks to all points 3 dB below = 9.1 mm
Ratio of SAR at M2 to SAR at M1 = 62.2%
Maximum value of SAR (measured) = 1.14 W/kg



0 dB = 1.14 W/kg = 0.57 dBW/kg

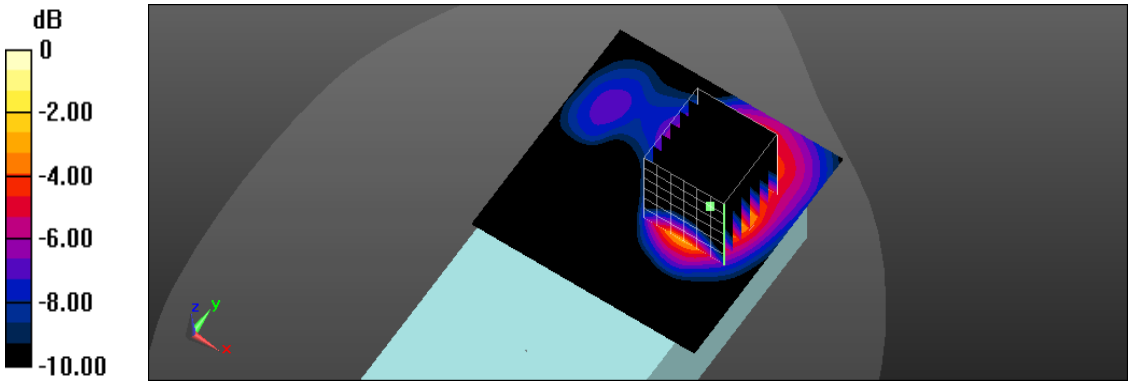
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/13
511_IEEE 802.11b CH1_1M_Back_0mm_Ant 0
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2412 MHz;Duty Cycle: 1:1.005
Medium parameters used: f = 2412 MHz; σ = 1.764 S/m; ε_r = 40.127; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(7.65, 7.65, 7.65) @ 2412 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (71x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.548 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.23 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.700 W/kg
SAR(1 g) = 0.342 W/kg; SAR(10 g) = 0.163 W/kg
Smallest distance from peaks to all points 3 dB below = 10 mm
Ratio of SAR at M2 to SAR at M1 = 48.8%
Maximum value of SAR (measured) = 0.544 W/kg



0 dB = 0.544 W/kg = -2.64 dBW/kg

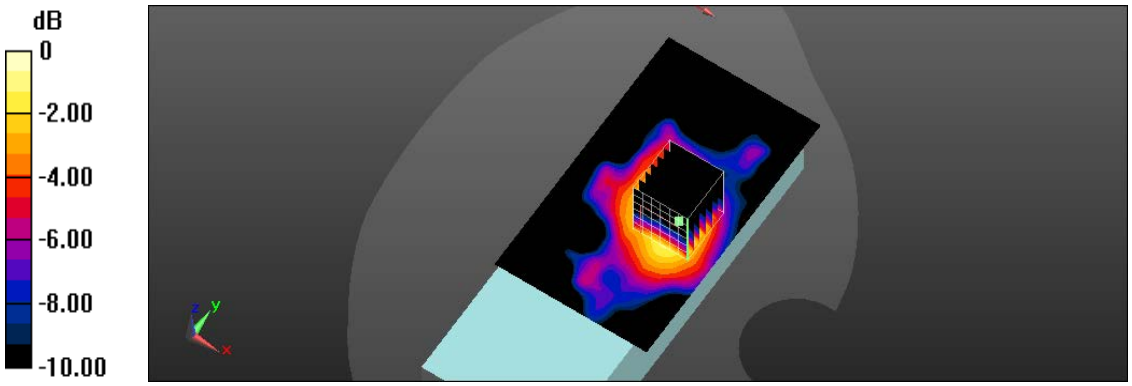
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/13
516_IEEE 802.11b CH1_1M_Back_0mm_Ant 1
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2412 MHz;Duty Cycle: 1:1.005
Medium parameters used: f = 2412 MHz; σ = 1.764 S/m; ε_r = 40.127; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(7.65, 7.65, 7.65) @ 2412 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0330 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.529 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.0430 W/kg
SAR(1 g) = 0.022 W/kg; SAR(10 g) = 0.012 W/kg
Ratio of SAR at M2 to SAR at M1 = 54.2%
Maximum value of SAR (measured) = 0.0362 W/kg



0 dB = 0.0362 W/kg = -14.41 dBW/kg

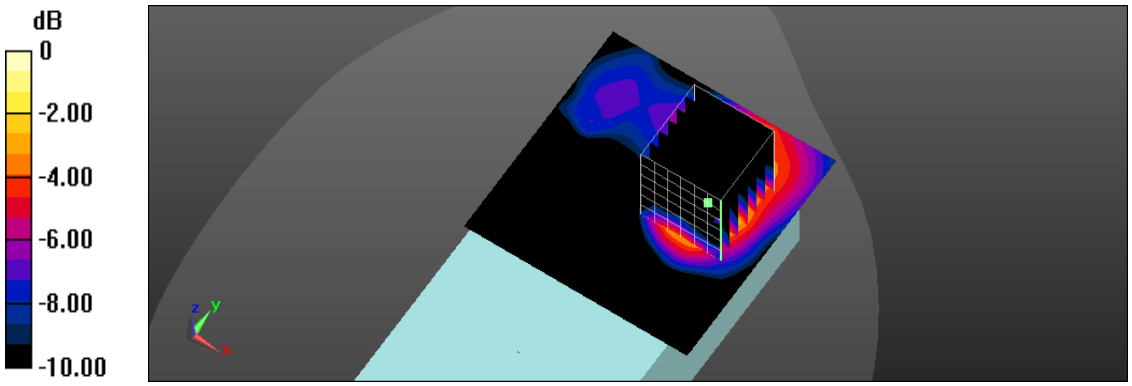
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/13
538_Bluetooth CH0_1M_Back_0mm_Ant 0
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, Bluetooth (0); Frequency: 2402 MHz;Duty Cycle: 1:1.284
Medium parameters used: f = 2402 MHz; σ = 1.752 S/m; ε_r = 40.167; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(7.65, 7.65, 7.65) @ 2402 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (71x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0672 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.893 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.0810 W/kg
SAR(1 g) = 0.040 W/kg; SAR(10 g) = 0.019 W/kg
Ratio of SAR at M2 to SAR at M1 = 48.8%
Maximum value of SAR (measured) = 0.0650 W/kg



0 dB = 0.0650 W/kg = -11.87 dBW/kg

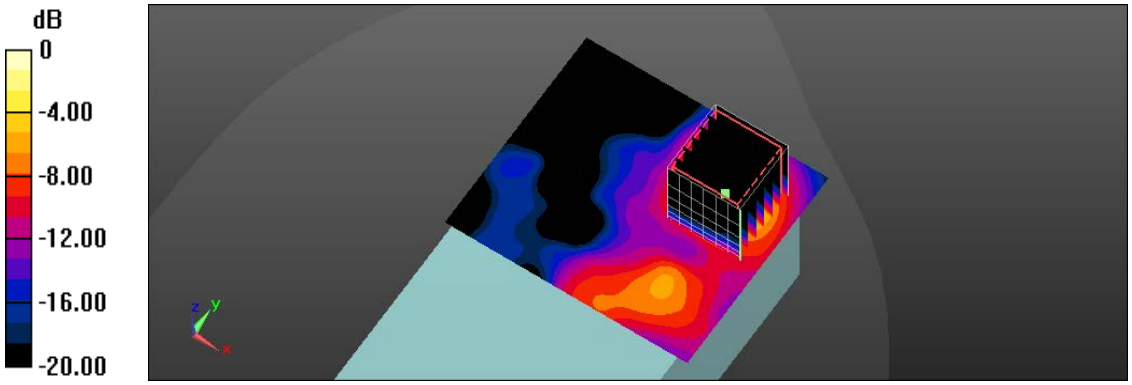
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/22
571_IEEE 802.11ac40 CH54_27M_Back_0mm_Ant 0
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT40 (0); Frequency: 5270 MHz;Duty Cycle: 1:1.114
Medium parameters used: f = 5270 MHz; σ = 4.637 S/m; ε_r = 36.223; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(5.57, 5.57, 5.57) @ 5270 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.30 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 11.18 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 2.06 W/kg
SAR(1 g) = 0.541 W/kg; SAR(10 g) = 0.157 W/kg
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 65.9%
Maximum value of SAR (measured) = 1.28 W/kg



0 dB = 1.28 W/kg = 1.07 dBW/kg

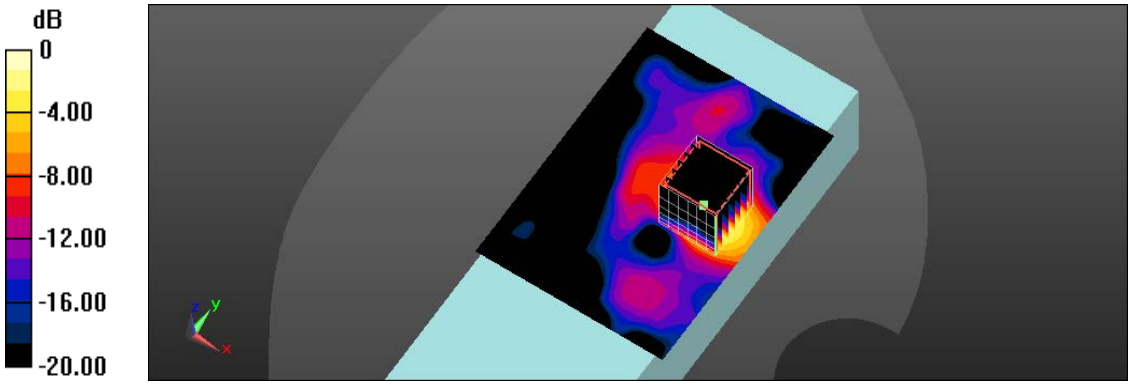
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/22
576_IEEE 802.11ac40 CH54_27M_Back_0mm_Ant 1
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT40 (0); Frequency: 5270 MHz;Duty Cycle: 1:1.114
Medium parameters used: f = 5270 MHz; σ = 4.637 S/m; ε_r = 36.223; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(5.57, 5.57, 5.57) @ 5270 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.734 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 9.259 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 1.12 W/kg
SAR(1 g) = 0.311 W/kg; SAR(10 g) = 0.107 W/kg
Smallest distance from peaks to all points 3 dB below = 9.1 mm
Ratio of SAR at M2 to SAR at M1 = 65.3%
Maximum value of SAR (measured) = 0.699 W/kg



0 dB = 0.699 W/kg = -1.56 dBW/kg

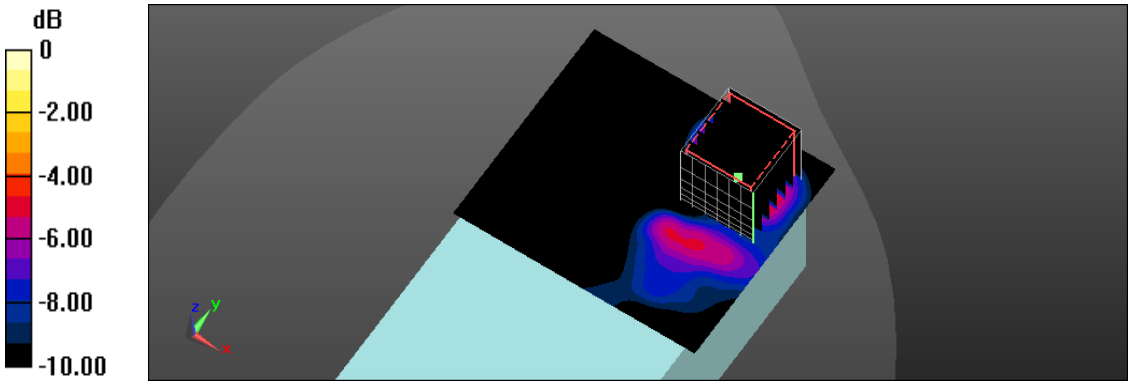
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/22
591_IEEE 802.11ac80 CH106_58.5M_Back_0mm_Ant 0
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5530 MHz;Duty Cycle: 1:1.174
Medium parameters used: f = 5530 MHz; σ = 4.924 S/m; ε_r = 35.895; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(4.81, 4.81, 4.81) @ 5530 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.778 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 5.490 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 1.20 W/kg
SAR(1 g) = 0.294 W/kg; SAR(10 g) = 0.085 W/kg
Smallest distance from peaks to all points 3 dB below = 6.4 mm
Ratio of SAR at M2 to SAR at M1 = 62.8%
Maximum value of SAR (measured) = 0.726 W/kg



0 dB = 0.726 W/kg = -1.39 dBW/kg

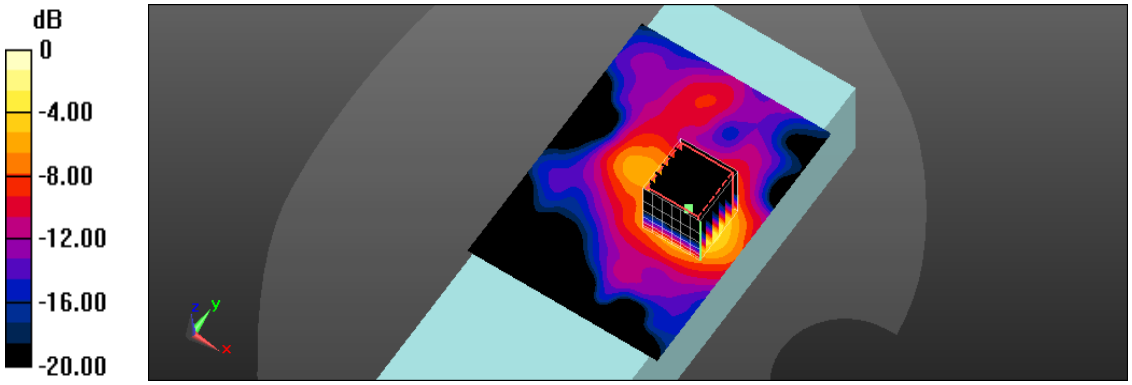
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/22
596_IEEE 802.11ac80 CH106_58.5M_Back_0mm_Ant 1
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5530 MHz;Duty Cycle: 1:1.174
Medium parameters used: f = 5530 MHz; σ = 4.924 S/m; ε_r = 35.895; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(4.81, 4.81, 4.81) @ 5530 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.905 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 12.46 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 1.33 W/kg
SAR(1 g) = 0.369 W/kg; SAR(10 g) = 0.130 W/kg
Smallest distance from peaks to all points 3 dB below = 10 mm
Ratio of SAR at M2 to SAR at M1 = 65.2%
Maximum value of SAR (measured) = 0.833 W/kg



0 dB = 0.833 W/kg = -0.79 dBW/kg

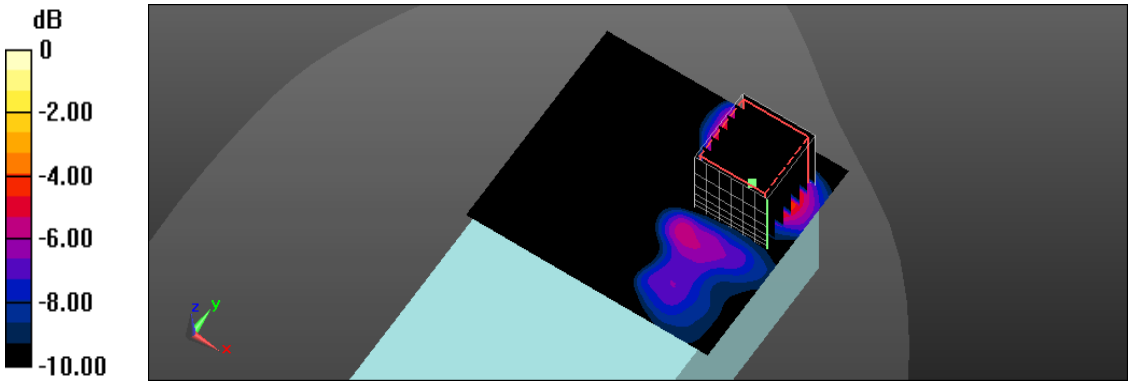
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/22
551_IEEE 802.11ac80 CH155_58.5M_Back_0mm_Ant 0
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5775 MHz;Duty Cycle: 1:1.174
Medium parameters used: f = 5775 MHz; σ = 5.232 S/m; ε_r = 35.373; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(5.06, 5.06, 5.06) @ 5775 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.632 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 5.255 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.970 W/kg
SAR(1 g) = 0.238 W/kg; SAR(10 g) = 0.066 W/kg
Smallest distance from peaks to all points 3 dB below = 6.6 mm
Ratio of SAR at M2 to SAR at M1 = 63.5%
Maximum value of SAR (measured) = 0.594 W/kg



0 dB = 0.594 W/kg = -2.26 dBW/kg

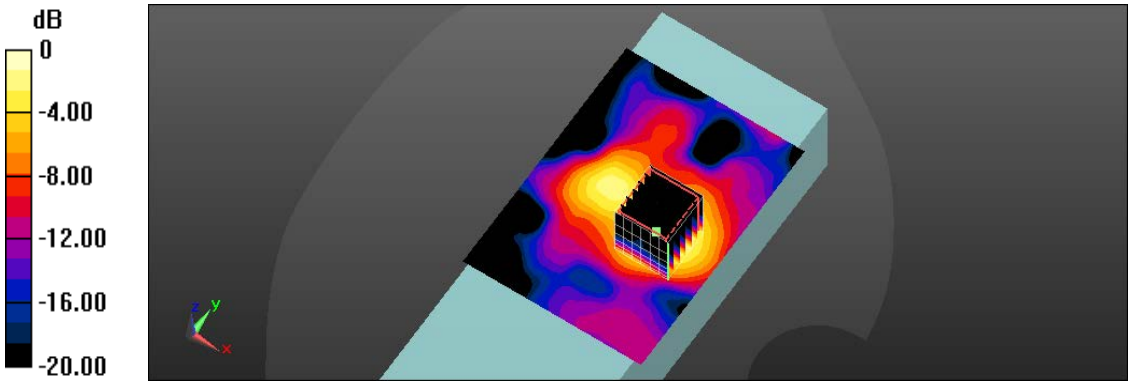
Test Laboratory: A Test Lab Techno Corp.
Date: 2020/4/22
556_IEEE 802.11ac80 CH155_58.5M_Back_0mm_Ant 1
DUT: MC401; Type: Mobile Computer

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5775 MHz;Duty Cycle: 1:1.174
Medium parameters used: f = 5775 MHz; σ = 5.232 S/m; ε_r = 35.373; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(5.06, 5.06, 5.06) @ 5775 MHz; Calibrated: 2019/8/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2019/8/22
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: TP-1009
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.10 (7331)

Area Scan (81x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.07 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 14.22 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 1.70 W/kg
SAR(1 g) = 0.437 W/kg; SAR(10 g) = 0.161 W/kg
Smallest distance from peaks to all points 3 dB below = 10.4 mm
Ratio of SAR at M2 to SAR at M1 = 62.5%
Maximum value of SAR (measured) = 1.01 W/kg



0 dB = 1.01 W/kg = 0.04 dBW/kg