A Test Lab Techno Corp.

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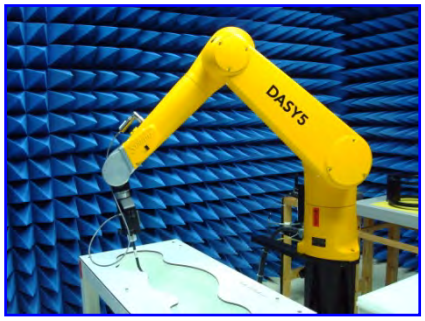
SAR EVALUATION REPORT

Applicant	:	Getac Technology Corporation
Product Type	:	Wireless Module
Trade Name	:	Getac
Model Number	:	EM7455
Received Date	:	Mar. 06, 2019
Test Period	:	Mar. 14 ~ Mar. 20, 2019
Issue Date	:	May 06, 2019
Test Environment	:	Ambient Temperature： 22 ±2 ° C Relative Humidity：40 - 70 %
Standard	:	ANSI/IEEE C95.1-1992 / IEEE Std. 1528-2013 47 CFR Part §2.1093 KDB 865664 D01 v01r04 / KDB 865664 D02 v01r02 KDB 447498 D01 v06 / KDB 941225 D01 v03r01 KDB 941225 D05 v02r05 / KDB 616217 D04 v01r02
Test Firm MRA designation number	:	TW0010



1. A Test Lab Techno Corp. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by A Test Lab Techno Corp. based on interpretations and/or observations of test results. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.
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Approved By : Edison Hu (Edison Hu)

Tested By : Kris Pan (Kris Pan)

Revision History

Rev.	Issue Date	Revisions	Revised By
00	Apr. 17, 2019	Initial Issue	Shelly Chen
01	Apr. 30, 2019	Page 4 Revised Highest Simultaneous Transmission SAR.	Shelly Chen
02	May 06, 2019	Page 5 Revised Class II Permissive Change description. Page 5 Added Battery Option. Page 78 Revised Standalone SAR Test Exclusion Calculation. Page 80 Revised Simultaneous Transmitting Evaluate	Shelly Chen

Contents

1. Summary of Maximum Reported SAR Value

Equipment Class	Mode	Highest Reported
		Body Standalone SAR $_{1g}$ (W/kg)
Licensed	WCDMA Band II	0.95
	WCDMA Band IV	0.98
	WCDMA Band V	0.97
	LTE Band 4 (QPSK)	1.03
	LTE Band 7 (QPSK)	1.07
	LTE Band 12 (QPSK)	1.02
	LTE Band 13 (QPSK)	1.04
	LTE Band 25 (QPSK)	1.10
	LTE Band 26 (QPSK)	0.99
	LTE Band 41 (QPSK)	1.14
DTS	WLAN 2.4 GHz ANT-Main	1.09
	WLAN 2.4 GHz ANT-AUX	0.63
U-NII	WLAN 5 GHz ANT-Main	1.12
	WLAN 5 GHz ANT-AUX	1.16
DSS	Bluetooth	0.02
Highest Simultaneous Transmission SAR		Highest Simultaneous Transmission 1 g SAR (W/kg)
At test position side 1		1.24

NOTE: 1. The SAR limit (Head & Body: SAR_{1g} 1.6 W/kg) for general population / uncontrolled exposure is specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992.

2. WLAN in the ANT-Main and ANT-AUX of the SAR value reference to the FCC ID QYL9260NG of the report no.1904FS13 (System 2 Full).

2. Description of Equipment under Test (EUT)

Applicant	Getac Technology Corporation 5F., Building A, No.209, Sec.1, Nangang Rd., Nangang Dist., Taipei City, 11568, Taiwan	
Manufacture	Sierra Wireless Inc. 13811 Wireless Way, Richmond, BC, V6V 3A4, Canada	
Product Type	Wireless Module	
Trade Name	Getac	
Model Number	EM7455	
IMEI No.	353431080191380	
FCC ID	QYLEM7455U	
Class II Permissive Change	This is to request a Class II permissive change for FCC ID: QYLEM7455U, originally granted on 2019/4/9 The major change filed under this application is: Change #1: Additional Chassis added, Getac, model number: UX10. #2: Addition one antenna, the antenna type is same, the antenna gain is low than the original application. #3: Disable LTE band 30 by software.	
Host Information	Product Type: Tablet Trade Name: Getac Model Name: UX10	
RF Function	Operate Bands	Operate Frequency (MHz)
	WCDMA(RMC 12.2K) / HSDPA / HSUPA Band II	1852.4 - 1907.6
	WCDMA(RMC 12.2K) / HSDPA / HSUPA Band IV	1712.4 - 1752.6
	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 13 (BW 5, 10 MHz)	777 - 787
	LTE Band 25 (BW 1.4, 3, 5, 10, 15, 20 MHz)	1850 - 1915
	LTE Band 26 (BW 1.4, 3, 5, 10, 15 MHz)	824 - 849
	LTE Band 26 (BW 1.4, 3, 5, 10 MHz)	814 - 824
	LTE Band 41 (BW 5, 10, 15, 20 MHz)	2496 - 2690
Antenna Type	FPC Antenna	
Battery Option	Standard	
	(1) Large Battery: Trade Name: Getac Model: BP3S3P3450P-03 Spec: DC 10.8 V / 9240 mAh (2) Bridge Battery: Trade Name: Getac Model: BP2S1P2100S Spec: DC 7.4 V / 2100 mAh	
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.

3. Introduction

The A Test Lab Techno Corp. has performed measurements of the maximum potential exposure to the user of **Getac Technology Corporation Trade Name：Getac Model(s)：EM7455**. The test procedures, as described in American National Standards, Institute C95.1-1999〔1〕were employed and they specify the maximum exposure limit of 1.6 mW/g 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.

3.1 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

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

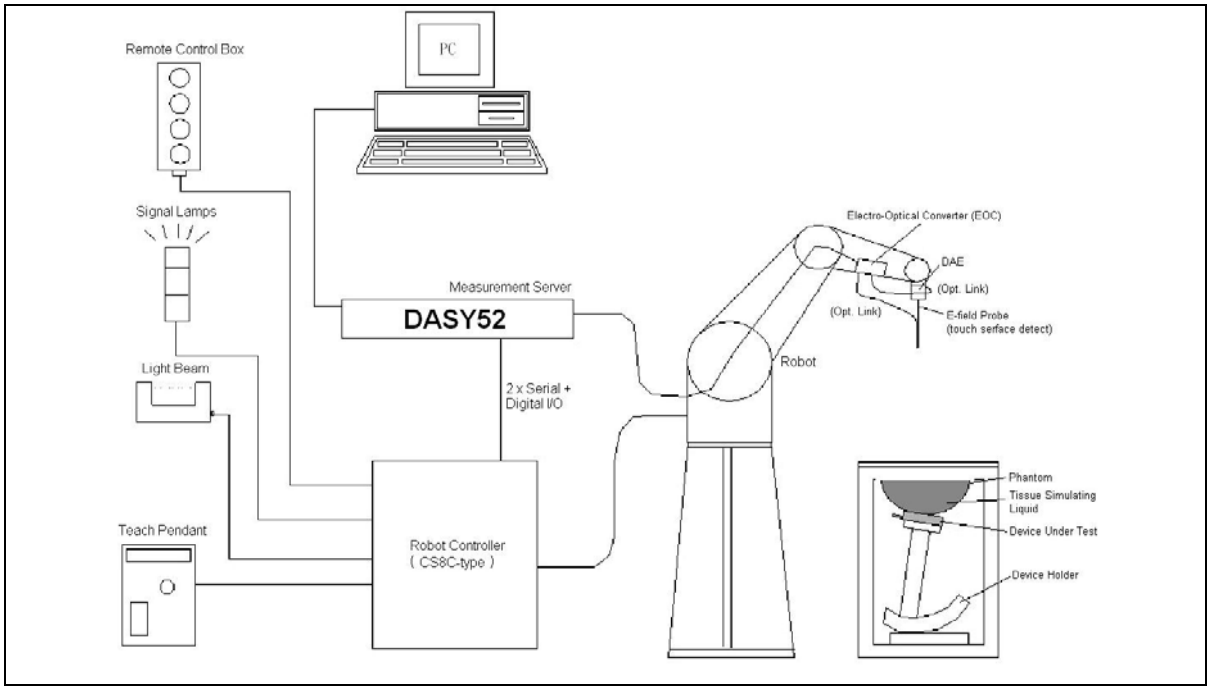
Where：

σ = conductivity of the tissue (S/m)

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

E = RMS electric field strength (V/m)

4. 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 2000 or Windows XP.
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.

4.1 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.

4.1.1 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)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to > 6 GHz
	Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	±0.3 dB in 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

Figure 1. E-field Probe

Figure 2. Probe setup on robot

4.2 Data Acquisition Electronic (DAE) System

Model：	DAE3, DAE4
Construction：	Signal amplifier, multiplexer, A/D converter and control logic. Serial optical link for communication with DASY4/5 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

4.3 Robot

Positioner：	Stäubli Unimation Corp. Robot Model: TX90XL
Repeatability：	±0.02 mm
No. of Axis：	6

4.4 Measurement Server

Processor：	PC/104 with a 400MHz intel ULV Celeron
I/O-board：	Link to DAE4 (or DAE3) 16-bit A/D converter for surface detection system Digital I/O interface Serial link to robot Direct emergency stop output for robot

4.5 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.

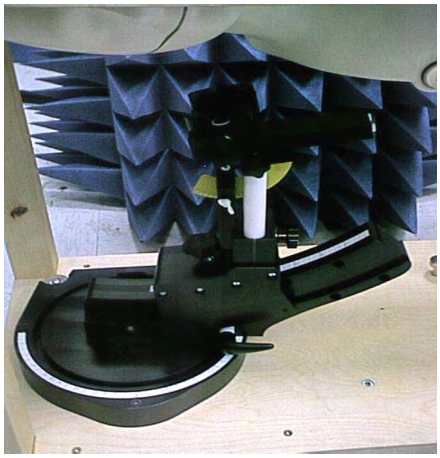


Figure 3. Device Holder

Figure 4. Device Holder for Laptops

4.6 Oval Flat Phantom - ELI 4.0

The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (Oval Flat) phantom defined in IEEE 1528-2013, CENELEC 50361 and IEC 62209. It enables the dosimetric evaluation of wireless portable device 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. 30 liters
Dimensions	190×600×400 mm (H×L×W)

Table 1. Specification of ELI 4.0

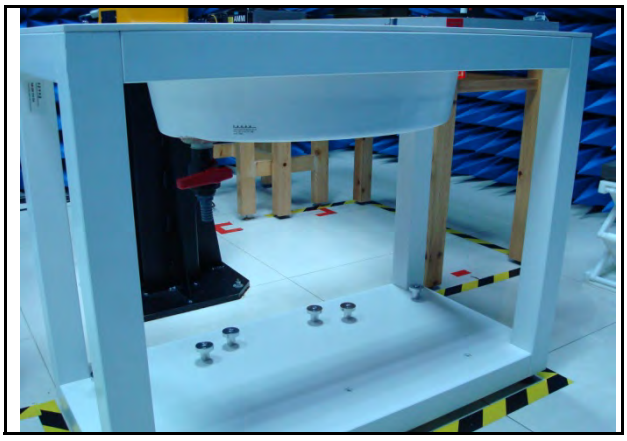


Figure 5. Oval Flat Phantom

5. 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

5.1 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

5.2 Liquid Parameters

The dielectric parameters of the liquids were verified prior to the SAR evaluation using an 85070C Dielectric Probe Kit and an E5071B Network Analyzer.

Tissue Temp (°C)	Head / Body	Frequency (MHz)	Cond.	Perm.	target Cond.	target Perm.	σ (Delta) (%)	εr (Delta) (%)	Limit (%)	Date
			σ	εr	σ	εr				
22.2	Body	707.5	0.92	57.503	0.96	55.67	-3.97	3.29	±5	Mar. 19, 2019
22.2	Body	750.0	0.96	56.912	0.96	55.53	-0.52	2.49	±5	Mar. 19, 2019
22.2	Body	782.0	1.00	56.653	0.97	55.41	3.93	2.24	±5	Mar. 19, 2019
22.1	Body	826.4	1.01	57.526	0.97	55.23	3.81	4.16	±5	Mar. 19, 2019
22.1	Body	831.5	1.01	57.479	0.97	55.25	4.55	4.03	±5	Mar. 19, 2019
22.1	Body	835.0	1.02	57.447	0.97	55.20	4.64	4.07	±5	Mar. 19, 2019
22.1	Body	836.6	1.02	57.429	0.97	55.20	4.85	4.04	±5	Mar. 19, 2019
22.1	Body	846.6	1.03	57.341	0.98	55.16	4.80	3.95	±5	Mar. 19, 2019
22.0	Body	1712.4	1.40	53.613	1.47	53.47	-4.96	0.27	±5	Mar. 15, 2019
22.0	Body	1712.4	1.40	53.613	1.47	53.47	-4.96	0.27	±5	Mar. 15, 2019
22.0	Body	1732.5	1.42	53.566	1.42	53.57	0.02	-0.01	±5	Mar. 15, 2019
22.0	Body	1732.6	1.42	53.564	1.48	53.43	-4.37	0.25	±5	Mar. 15, 2019
22.0	Body	1750.0	1.43	53.524	1.49	53.43	-3.89	0.18	±5	Mar. 15, 2019
22.0	Body	1752.6	1.44	53.517	1.49	53.39	-3.82	0.24	±5	Mar. 15, 2019
22.4	Body	1852.4	1.53	53.273	1.52	53.30	0.53	-0.05	±5	Mar. 14, 2019
22.4	Body	1860.0	1.54	53.254	1.52	53.30	1.02	-0.09	±5	Mar. 14, 2019
22.4	Body	1880.0	1.55	53.206	1.52	53.30	2.29	-0.18	±5	Mar. 14, 2019
22.4	Body	1882.5	1.56	53.200	1.52	53.30	2.43	-0.19	±5	Mar. 14, 2019
22.4	Body	1900.0	1.58	53.157	1.52	53.30	2.43	-0.19	±5	Mar. 14, 2019
22.4	Body	1905.0	1.58	53.144	1.52	53.30	3.93	-0.29	±5	Mar. 14, 2019
22.4	Body	1907.6	1.58	53.136	1.52	53.30	4.09	-0.31	±5	Mar. 14, 2019
22.1	Body	2506.0	2.08	50.633	2.03	52.63	2.47	-3.79	±5	Mar. 16, 2019
22.1	Body	2510.0	2.08	50.616	2.03	52.62	2.36	-3.81	±5	Mar. 16, 2019
22.1	Body	2549.5	2.12	50.479	2.09	52.57	1.77	-3.98	±5	Mar. 16, 2019
22.1	Body	2593.0	2.18	50.364	2.15	52.52	1.35	-4.11	±5	Mar. 16, 2019
22.1	Body	2600.0	2.19	50.349	2.16	52.51	1.20	-4.12	±5	Mar. 16, 2019
22.1	Body	2636.5	2.23	50.243	2.21	52.46	0.59	-4.23	±5	Mar. 16, 2019
22.1	Body	2680.0	2.28	50.110	2.28	52.41	0.22	-4.39	±5	Mar. 16, 2019
22.3	Body	2510.0	2.08	51.634	2.04	52.62	2.26	-1.87	±5	Mar. 18, 2019
22.3	Body	2535.0	2.11	51.564	2.07	52.59	1.93	-1.95	±5	Mar. 18, 2019
22.3	Body	2560.0	2.14	51.493	2.11	52.56	1.71	-2.03	±5	Mar. 18, 2019
22.3	Body	2600.0	2.19	51.367	2.16	52.51	1.44	-2.18	±5	Mar. 18, 2019

5.3 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.

Figure 6. Liquid Height for Body SAR

6. SAR Testing with RF Transmitters

6.1 SAR Testing with WCDMA Transmitters

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).

- Step 1: 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

6.2 SAR Testing with HSDPA Transmitters

HSDPA Date Devices setup for SAR Measurement

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

Setup for Release 5 HSDPA							
Sub-test	βc	βd	βd (SF)	βc/βd	βhs(1,2)	CM(3) (dB)	MRP(3) (dB)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15(4)	15/15(4)	64	12/15(4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note

1. Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 8 ⇔ Ahs = βhs/βc = 30/15 ⇔ βhs= 30/15 *βc
2. For theHS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude(EVM) with HS-DPCCH test in clause 5.13.1A and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and Δ_{NACK} = 30/15 with βhs = 30/15 *βc and Δ_{CQI} = 24/15 with βhs = 24/15*βc
3. CM = 1 for βc/βd =12/15, βhs/βc=24/15. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.
4. For subtest 2 the βc/βd ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to βc = 11/15 and βd = 15/15.

HSPA Date Devices setup for SAR Measurement.

The following procedures are applicable to HSPA (HSUPA/HSDPA) data devices operating under 3GPP Release 6. Body exposure conditions generally apply to these devices, including handsets and data modems operating in various electronic devices. HSUPA operates in conjunction with WCDMA and HSDPA. SAR is initially measured in WCDMA test configurations without HSPA. The default test configuration is to establish a radio link between the DUT and a communication test set to configure a 12.2 kbps RMC (reference measurement channel) in Test Loop Mode 1. SAR for HSPA is selectively measured with HS-DPCCH, EDPCCH and E-DPDCH, all enabled, along with a 12.2 kbps RMC using the highest SAR configuration in WCDMA with 12.2 kbps RMC only. An FRC is configured according to HSDPCCH Sub-test 1 using H-set 1 and QPSK. HSPA is configured according to E-DCH Subtest 5 requirements. SAR for other HSPA sub-test configurations is also confirmed selectively according to output power, exposure conditions and E-DCH UE Category. Maximum output power is verified according to procedures in applicable versions of 3GPP TS 34.121 and SAR must be measured according to these maximum output conditions. The UE Categories for HSDPCCH and HSPA should be clearly identified in the SAR report. The following procedures are applicable only if Maximum Power Reduction (MPR) is implemented according to Cubic Metric (CM) requirements.

When voice transmission and head exposure conditions are applicable to a WCDMA/HSPA data device, head exposure is measured according to the 'Head SAR Measurements' procedures in the 'WCDMA Handsets' section of this document. SAR for body exposure configurations are measured according to the 'Body SAR Measurements' procedures in the 'WCDMA Handsets' section of this document. In addition, body SAR is also measured for HSPA when the maximum average output of each RF channel with HSPA active is at least ¼ dB higher than that measured without HSPA using 12.2 kbps RMC or the maximum SAR for 12.2 kbps RMC is above 75% of the SAR limit. Body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set 1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 with power control algorithm 2, according to the highest body SAR configuration in 12.2 kbps RMC without HSPA. When VOIP is applicable for head exposure, SAR is not required when the maximum output of each RF channel with HSPA is less than ¼ dB higher than that measured using 12.2 kbps RMC; otherwise, the same HSPA configuration used for body measurements should be used to test for head exposure.

Due to inner loop power control requirements in HSPA, a commercial communication test set should be used for the output power and SAR tests. The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSPA should be configured according to the β values indicated below as well as other applicable procedures described in the 'WCDMA Handset' and 'Release 5 HSDPA Data Devices' sections of this document.

The highest body SAR measured in Antenna Extended & Retracted configurations on a channel in 12.2 kbps RMC. The possible channels are the High, Middle & Low channel. Contact the FCC Laboratory for test and approval requirements if the maximum output power measured in E-DCH Sub-test 2 - 4 is higher than Sub-test 5.

Setup for Release 6 HSPA / Release 7 HSPA+													
Sub-test	βc	βd	βd (SF)	βc/βd	βhs(1)	βec	βed	Bed (SF)	Bed (codes)	CM(2) (dB)	MPR (dB)	AG(4) Index	E-TFCI
1	11/15(3)	15/15(3)	64	11/15(3)	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	βed1: 47/15 βed2: 47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15(4)	15/15(4)	64	15/15(4)	30/15	24/15	134/15	4	1	1.0	0.0	21	81

Note

1. Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 8 ⇔ Ahs = βhs/βc = 30/15 ⇔ βhs= 30/15 *βc.
2. CM = 1 for βc/βd =12/15, βhs/βc=24/15. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.
3. For subtest 1 the βc/βd ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to βc = 10/15 and βd = 15/15.
4. For subtest 5 the βc/βd ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to βc = 14/15 and βd = 15/15.
5. Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g.
6. βed can not be set directly; it is set by Absolute Grant Value.

6.3 SAR Testing with LTE-FDD Transmitters

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.

6.4 SAR Testing with LTE-TDD Transmitters

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	☐

6.5 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 13	---	---	V	V	---	---
LTE Band 25	V	V	V	V	V	V
LTE Band 26 (824~849)	V	V	V	V	V	---
LTE Band 26 (814~824)	V	V	V	V	---	---
LTE Band 41	---	---	V	V	V	V

LTE Band	Bandwidth (MHz)	Test requency 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 requency 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 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	Bandwidth (MHz)	Test requency ID	N_{UL}	Frequency of Uplink (MHz)
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 13	5	Low Range	23205	779.5
		Mid Range	23230	782.0
		High Range	23255	784.5
	10	---	23230	782.0
LTE Band 25	1.4	Low Range	26047	1850.7
		Mid Range	26365	1882.5
		High Range	26683	1914.3
	3	Low Range	26055	1851.5
		Mid Range	26365	1882.5
		High Range	26675	1913.5
	5	Low Range	26065	1852.5
		Mid Range	26365	1882.5
		High Range	26665	1912.5
	10	Low Range	26090	1855.0
		Mid Range	26365	1882.5
		High Range	26640	1910.0
	15	Low Range	26115	1857.5
		Mid Range	26365	1882.5
		High Range	26615	1907.5
	20	Low Range	26140	1860.0
		Mid Range	26365	1882.5
		High Range	26590	1905.0

LTE Band	Bandwidth (MHz)	Test requency ID	N_{UL}	Frequency of Uplink (MHz)
LTE Band 26 (824~849)	1.4	Low Range	26797	824.7
		Mid Range	26915	836.5
		High Range	27033	848.3
	3	Low Range	26805	825.5
		Mid Range	26915	836.5
		High Range	27025	847.5
	5	Low Range	26815	826.5
		Mid Range	26915	836.5
		High Range	27015	846.5
	10	Low Range	26840	829.0
		Mid Range	26915	836.5
		High Range	26990	844.0
	15	Low Range	26865	831.5
		Mid Range	26915	836.5
		High Range	26965	841.5
LTE Band 26 (814~824)	1.4	Low Range	26697	814.7
		Mid Range	26740	819.0
		High Range	26783	823.3
	3	Low Range	26705	815.5
		Mid Range	26740	819.0
		High Range	26775	822.5
	5	Low Range	26715	816.5
		Mid Range	26740	819.0
		High Range	26765	821.5
	10	---	26740	819.0
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

6.5.1 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

6.6 Power reduction

No power reduction issue.

6.7 SAR Testing with 802.11 Transmitters

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.

6.8 Conducted Power

Bands	Modulation Type	Sub-Test	Frequency (MHz)	Burst Average Power		Peak Power	
				(dBm)	(W)	(dBm)	(W)
WCDMA Band II	QPSK	-----	1852.4	23.58	0.228	26.95	0.495
			1880.0	23.53	0.225	26.91	0.491
			1907.6	23.57	0.228	**26.96**	**0.497**
HSDPA Band II	QPSK	1	1852.4	22.73	0.187	26.05	0.403
			1880.0	22.67	0.185	25.88	0.387
			1907.6	22.71	0.187	25.99	0.397
		2	1852.4	22.12	0.163	25.44	0.350
			1880.0	22.13	0.163	25.41	0.348
			1907.6	22.15	0.164	25.43	0.349
		3	1852.4	22.11	0.163	25.29	0.338
			1880.0	22.05	0.160	25.29	0.338
			1907.6	22.13	0.163	25.40	0.347
		4	1852.4	22.56	0.180	25.74	0.375
			1880.0	22.44	0.175	25.76	0.377
			1907.6	22.53	0.179	25.77	0.378
HSUPA Band II	QPSK	1	1852.4	22.14	0.164	25.32	0.340
			1880.0	22.08	0.161	25.28	0.337
			1907.6	22.12	0.163	25.28	0.337
		2	1852.4	20.07	0.102	23.38	0.218
			1880.0	20.06	0.101	23.36	0.217
			1907.6	20.10	0.102	23.26	0.212
		3	1852.4	21.06	0.128	24.22	0.264
			1880.0	20.99	0.126	24.31	0.270
			1907.6	21.07	0.128	24.30	0.269
		4	1852.4	20.09	0.102	23.32	0.215
			1880.0	20.04	0.101	23.31	0.214
			1907.6	20.00	0.100	23.26	0.212
		5	1852.4	21.94	0.156	25.23	0.333
			1880.0	21.86	0.153	25.03	0.318
			1907.6	21.89	0.155	25.07	0.321

Bands	Modulation Type	Sub-Test	Frequency (MHz)	Burst Average Power		Peak Power	
				(dBm)	(W)	(dBm)	(W)
WCDMA Band IV	QPSK	-----	1712.4	23.66	0.232	26.97	0.498
			1732.6	23.61	0.230	**27.07**	**0.509**
			1752.6	23.59	0.229	26.96	0.497
HSDPA Band IV	QPSK	1	1712.4	22.73	0.187	25.91	0.390
			1732.6	22.80	0.191	26.03	0.401
			1752.6	22.71	0.187	25.90	0.389
		2	1712.4	22.20	0.166	25.39	0.346
			1732.6	22.23	0.167	25.55	0.359
			1752.6	22.16	0.164	25.33	0.341
		3	1712.4	22.19	0.166	25.44	0.350
			1732.6	22.18	0.165	25.50	0.355
			1752.6	22.16	0.164	25.43	0.349
		4	1712.4	22.55	0.180	25.72	0.373
			1732.6	22.63	0.183	25.81	0.381
			1752.6	22.49	0.177	25.63	0.366
HSUPA Band IV	QPSK	1	1712.4	22.18	0.165	25.36	0.344
			1732.6	22.22	0.167	25.51	0.356
			1752.6	22.12	0.163	25.29	0.338
		2	1712.4	20.07	0.102	23.35	0.216
			1732.6	20.15	0.104	23.40	0.219
			1752.6	20.09	0.102	23.41	0.219
		3	1712.4	21.14	0.130	24.41	0.276
			1732.6	21.17	0.131	24.35	0.272
			1752.6	21.01	0.126	24.27	0.267
		4	1712.4	20.10	0.102	23.36	0.217
			1732.6	20.12	0.103	23.41	0.219
			1752.6	20.02	0.100	23.22	0.210
		5	1712.4	22.03	0.160	25.21	0.332
			1732.6	22.06	0.161	25.23	0.333
			1752.6	21.97	0.157	25.12	0.325

Bands	Modulation Type	Sub-Test	Frequency (MHz)	Burst Average Power		Peak Power	
				(dBm)	(W)	(dBm)	(W)
WCDMA Band V	QPSK	-----	826.4	23.75	0.237	26.97	0.498
			836.6	23.73	0.236	**26.99**	**0.500**
			846.6	23.74	0.237	**26.99**	**0.500**
HSDPA Band V	QPSK	1	826.4	22.90	0.195	26.12	0.409
			836.6	22.86	0.193	26.10	0.407
			846.6	22.88	0.194	26.13	0.410
		2	826.4	22.29	0.169	25.55	0.359
			836.6	22.27	0.169	25.46	0.352
			846.6	22.26	0.168	25.44	0.350
		3	826.4	22.32	0.171	25.54	0.358
			836.6	22.30	0.170	25.50	0.355
			846.6	22.31	0.170	25.50	0.355
		4	826.4	22.72	0.187	25.89	0.388
			836.6	22.63	0.183	25.93	0.392
			846.6	22.67	0.185	26.01	0.399
HSUPA Band V	QPSK	1	826.4	22.31	0.170	25.62	0.365
			836.6	22.29	0.169	25.48	0.353
			846.6	22.27	0.169	25.49	0.354
		2	826.4	20.27	0.106	23.56	0.227
			836.6	20.27	0.106	23.56	0.227
			846.6	20.23	0.105	23.38	0.218
		3	826.4	21.25	0.133	24.52	0.283
			836.6	21.23	0.133	24.55	0.285
			846.6	21.17	0.131	24.49	0.281
		4	826.4	20.21	0.105	23.55	0.226
			836.6	20.24	0.106	23.38	0.218
			846.6	20.22	0.105	23.46	0.222
		5	826.4	22.11	0.163	25.26	0.336
			836.6	22.12	0.163	25.29	0.338
			846.6	22.10	0.162	25.27	0.337

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band2	1.4 MHz	QPSK	18607	1850.7	1	0	23.52	0.225
					1	2	**23.54**	**0.226**
					1	5	23.48	0.223
					3	0	23.41	0.219
					3	1	23.44	0.221
					3	3	23.36	0.217
					6	0	22.39	0.173
			18900	1880.0	1	0	23.39	0.218
					1	2	23.53	0.225
					1	5	23.47	0.222
					3	0	23.44	0.221
					3	1	23.48	0.223
					3	3	23.47	0.222
					6	0	22.41	0.174
			19193	1909.3	1	0	23.53	0.225
					1	2	23.49	0.223
					1	5	23.45	0.221
					3	0	23.31	0.214
					3	1	23.43	0.220
					3	3	23.34	0.216
					6	0	22.40	0.174
		16QAM	18607	1850.7	1	0	22.40	0.174
					1	2	**22.61**	**0.182**
					1	5	22.44	0.175
					3	0	21.95	0.157
					3	1	22.03	0.160
					3	3	22.00	0.158
					6	0	20.90	0.123
			18900	1880.0	1	0	22.25	0.168
					1	2	22.34	0.171
					1	5	22.23	0.167
					3	0	22.00	0.158
					3	1	22.06	0.161
					3	3	21.96	0.157
					6	0	20.99	0.126
			19193	1909.3	1	0	22.27	0.169
					1	2	22.33	0.171
					1	5	22.35	0.172
					3	0	22.04	0.160
					3	1	22.10	0.162
					3	3	22.08	0.161
					6	0	20.87	0.122

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band2	3 MHz	QPSK	18615	1851.5	1	0	23.08	0.203
					1	7	23.63	0.231
					1	14	23.08	0.203
					8	0	22.08	0.161
					8	3	22.13	0.163
					8	7	22.12	0.163
					15	0	22.05	0.160
			18900	1880.0	1	0	23.25	0.211
					1	7	**23.64**	**0.231**
					1	14	22.95	0.197
					8	0	22.03	0.160
					8	3	22.04	0.160
					8	7	22.06	0.161
					15	0	22.04	0.160
			19185	1908.5	1	0	23.01	0.200
					1	7	23.12	0.205
					1	14	22.99	0.199
					8	0	22.00	0.158
					8	3	22.06	0.161
					8	7	22.07	0.161
					15	0	22.04	0.160
		16QAM	18615	1851.5	1	0	22.47	0.177
					1	7	22.64	0.184
					1	14	22.43	0.175
					8	0	21.11	0.129
					8	3	21.12	0.129
					8	7	21.11	0.129
					15	0	21.08	0.128
			18900	1880.0	1	0	22.51	0.178
					1	7	**22.75**	**0.188**
					1	14	22.36	0.172
					8	0	20.93	0.124
					8	3	20.98	0.125
					8	7	21.01	0.126
					15	0	21.00	0.126
			19185	1908.5	1	0	22.42	0.175
					1	7	22.40	0.174
					1	14	22.57	0.181
					8	0	20.97	0.125
					8	3	21.02	0.126
					8	7	21.00	0.126
					15	0	21.07	0.128

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band2	5 MHz	QPSK	18625	1852.5	1	0	23.48	0.223
					1	12	23.44	0.221
					1	24	23.49	0.223
					12	0	22.29	0.169
					12	6	22.34	0.171
					12	13	22.37	0.173
					25	0	22.30	0.170
			18900	1880.0	1	0	23.41	0.219
					1	12	23.40	0.219
					1	24	23.43	0.220
					12	0	22.20	0.166
					12	6	22.31	0.170
					12	13	22.16	0.164
					25	0	22.22	0.167
			19175	1907.5	1	0	**23.61**	**0.230**
					1	12	23.55	0.226
					1	24	23.46	0.222
					12	0	22.22	0.167
					12	6	22.29	0.169
					12	13	22.26	0.168
					25	0	22.18	0.165
		16QAM	18625	1852.5	1	0	22.68	0.185
					1	12	22.77	0.189
					1	24	**22.79**	**0.190**
					12	0	21.25	0.133
					12	6	21.35	0.136
					12	13	21.31	0.135
					25	0	21.28	0.134
			18900	1880.0	1	0	22.48	0.177
					1	12	22.24	0.167
					1	24	22.47	0.177
					12	0	21.24	0.133
					12	6	21.26	0.134
					12	13	21.16	0.131
					25	0	21.15	0.130
			19175	1907.5	1	0	22.64	0.184
					1	12	22.53	0.179
					1	24	22.61	0.182
					12	0	21.08	0.128
					12	6	21.16	0.131
					12	11	21.15	0.130
					25	0	21.12	0.129

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band2	10 MHz	QPSK	18650	1855.0	1	0	23.43	0.220
					1	24	23.46	0.222
					1	49	23.31	0.214
					25	0	22.46	0.176
					25	12	22.46	0.176
					25	25	22.33	0.171
					50	0	22.33	0.171
			18900	1880.0	1	0	23.31	0.214
					1	24	23.40	0.219
					1	49	23.19	0.208
					25	0	22.31	0.170
					25	12	22.36	0.172
					25	25	22.28	0.169
					50	0	22.36	0.172
			19150	1905.0	1	0	**23.58**	**0.228**
					1	24	23.48	0.223
					1	49	23.21	0.209
					25	0	22.39	0.173
					25	12	22.41	0.174
					25	25	22.27	0.169
					50	0	22.31	0.170
		16QAM	18650	1855.0	1	0	22.72	0.187
					1	24	22.61	0.182
					1	49	22.68	0.185
					25	0	21.24	0.133
					25	12	21.23	0.133
					25	25	21.08	0.128
					50	0	21.08	0.128
			18900	1880.0	1	0	22.71	0.187
					1	24	22.67	0.185
					1	49	**22.76**	**0.189**
					25	0	21.13	0.130
					25	12	21.16	0.131
					25	25	21.11	0.129
					50	0	21.14	0.130
			19150	1905.0	1	0	22.52	0.179
					1	24	22.38	0.173
					1	49	22.30	0.170
					25	0	21.17	0.131
					25	12	21.27	0.134
					25	25	21.11	0.129
					50	0	21.17	0.131

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band2	15 MHz	QPSK	18675	1857.5	1	0	23.54	0.226
					1	37	23.48	0.223
					1	74	23.34	0.216
					36	0	22.50	0.178
					36	19	22.48	0.177
					36	39	22.44	0.175
					75	0	22.37	0.173
			18900	1880.0	1	0	**23.62**	**0.230**
					1	37	23.36	0.217
					1	74	23.49	0.223
					36	0	22.49	0.177
					36	19	22.49	0.177
					36	39	22.48	0.177
					75	0	22.47	0.177
			19125	1902.5	1	0	23.55	0.226
					1	37	23.49	0.223
					1	74	23.51	0.224
					36	0	22.56	0.180
					36	19	22.64	0.184
					36	39	22.55	0.180
					75	0	22.50	0.178
		16QAM	18675	1857.5	1	0	22.58	0.181
					1	37	22.51	0.178
					1	74	22.36	0.172
					36	0	21.19	0.132
					36	19	21.21	0.132
					36	39	21.14	0.130
					75	0	21.16	0.131
			18900	1880.0	1	0	**22.77**	**0.189**
					1	37	22.36	0.172
					1	74	22.49	0.177
					36	0	21.23	0.133
					36	19	21.20	0.132
					36	39	21.20	0.132
					75	0	21.19	0.132
			19125	1902.5	1	0	22.69	0.186
					1	37	22.58	0.181
					1	74	22.59	0.182
					36	0	21.27	0.134
					36	19	21.36	0.137
					36	39	21.28	0.134
					75	0	21.25	0.133

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band2	20 MHz	QPSK	18700	1860.0	1	0	23.41	0.219
					1	49	23.29	0.213
					1	99	23.03	0.201
					50	0	22.33	0.171
					50	25	22.24	0.167
					50	50	22.21	0.166
					100	0	22.33	0.171
			18900	1880.0	1	0	**23.55**	**0.226**
					1	49	23.23	0.210
					1	99	23.12	0.205
					50	0	22.25	0.168
					50	25	22.29	0.169
					50	50	22.27	0.169
					100	0	22.32	0.171
			19100	1900.0	1	0	23.26	0.212
					1	49	23.17	0.207
					1	99	23.06	0.202
					50	0	22.20	0.166
					50	25	22.21	0.166
					50	50	22.22	0.167
					100	0	22.25	0.168
		16QAM	18700	1860.0	1	0	22.54	0.179
					1	49	22.32	0.171
					1	99	21.92	0.156
					50	0	21.14	0.130
					50	25	21.06	0.128
					50	50	21.02	0.126
					100	0	21.11	0.129
			18900	1880.0	1	0	**22.64**	**0.184**
					1	49	22.43	0.175
					1	99	22.32	0.171
					50	0	21.11	0.129
					50	25	21.14	0.130
					50	50	21.12	0.129
					100	0	21.16	0.131
			19100	1900.0	1	0	22.35	0.172
					1	49	22.22	0.167
					1	99	22.28	0.169
					50	0	21.05	0.127
					50	25	21.05	0.127
					50	50	21.04	0.127
					100	0	21.10	0.129

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band4	1.4 MHz	QPSK	19957	1710.7	1	0	23.48	0.223
					1	2	23.45	0.221
					1	5	**23.54**	**0.226**
					3	0	23.36	0.217
					3	1	23.40	0.219
					3	3	23.43	0.220
					6	0	22.34	0.171
			20175	1732.5	1	0	23.23	0.210
					1	2	23.44	0.221
					1	5	23.19	0.208
					3	0	23.23	0.210
					3	1	23.36	0.217
					3	3	23.34	0.216
					6	0	22.32	0.171
			20393	1754.3	1	0	23.30	0.214
					1	2	23.20	0.209
					1	5	23.06	0.202
					3	0	23.22	0.210
					3	1	23.19	0.208
					3	3	23.08	0.203
					6	0	22.26	0.168
		16QAM	19957	1710.7	1	0	22.48	0.177
					1	2	22.43	0.175
					1	5	22.47	0.177
					3	0	22.03	0.160
					3	1	22.09	0.162
					3	3	22.19	0.166
					6	0	20.94	0.124
			20175	1732.5	1	0	22.34	0.171
					1	2	**22.50**	**0.178**
					1	5	22.24	0.167
					3	0	22.04	0.160
					3	1	22.11	0.163
					3	3	22.14	0.164
					6	0	21.06	0.128
			20393	1754.3	1	0	22.17	0.165
					1	2	22.18	0.165
					1	5	22.03	0.160
					3	0	22.07	0.161
					3	1	22.05	0.160
					3	3	21.94	0.156
					6	0	20.90	0.123

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band4	3 MHz	QPSK	19965	1711.5	1	0	23.12	0.205
					1	7	**23.55**	**0.226**
					1	14	23.15	0.207
					8	0	22.09	0.162
					8	3	22.12	0.163
					8	7	22.05	0.160
					15	0	22.07	0.161
			20175	1732.5	1	0	23.15	0.207
					1	7	23.47	0.222
					1	14	23.02	0.200
					8	0	22.03	0.160
					8	3	22.03	0.160
					8	7	22.02	0.159
					15	0	21.98	0.158
			20385	1753.5	1	0	22.97	0.198
					1	7	23.10	0.204
					1	14	22.82	0.191
					8	0	21.93	0.156
					8	3	21.92	0.156
					8	7	21.96	0.157
					15	0	21.99	0.158
		16QAM	19965	1711.5	1	0	22.42	0.175
					1	7	**22.50**	**0.178**
					1	14	22.42	0.175
					8	0	21.20	0.132
					8	3	21.14	0.130
					8	7	21.14	0.130
					15	0	21.11	0.129
			20175	1732.5	1	0	22.43	0.175
					1	7	22.46	0.176
					1	14	22.29	0.169
					8	0	20.98	0.125
					8	3	21.00	0.126
					8	7	21.00	0.126
					15	0	20.99	0.126
			20385	1753.5	1	0	22.31	0.170
					1	7	22.27	0.169
					1	14	22.11	0.163
					8	0	20.93	0.124
					8	3	20.91	0.123
					8	7	21.02	0.126
					15	0	21.02	0.126

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band4	5 MHz	QPSK	19975	1712.5	1	0	**23.64**	**0.231**
					1	12	23.46	0.222
					1	24	23.61	0.230
					12	0	22.47	0.177
					12	6	22.48	0.177
					12	13	22.46	0.176
					25	0	22.42	0.175
			20175	1732.5	1	0	23.52	0.225
					1	12	23.42	0.220
					1	24	23.49	0.223
					12	0	22.34	0.171
					12	6	22.35	0.172
					12	13	22.32	0.171
					25	0	22.21	0.166
			20375	1752.5	1	0	23.60	0.229
					1	12	23.32	0.215
					1	24	23.17	0.207
					12	0	22.40	0.174
					12	6	22.40	0.174
					12	13	22.44	0.175
					25	0	22.32	0.171
		16QAM	19975	1712.5	1	0	**22.54**	**0.179**
					1	12	22.36	0.172
					1	24	22.43	0.175
					12	0	21.15	0.130
					12	6	21.20	0.132
					12	13	21.10	0.129
					25	0	21.15	0.130
			20175	1732.5	1	0	22.28	0.169
					1	12	22.04	0.160
					1	24	22.45	0.176
					12	0	21.16	0.131
					12	6	21.11	0.129
					12	13	21.08	0.128
					25	0	20.94	0.124
			20375	1752.5	1	0	22.38	0.173
					1	12	22.37	0.173
					1	24	22.07	0.161
					12	0	21.11	0.129
					12	6	21.09	0.129
					12	11	21.13	0.130
					25	0	21.08	0.128

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band4	10 MHz	QPSK	20000	1715.0	1	0	23.65	0.232
					1	24	23.64	0.231
					1	49	23.65	0.232
					25	0	22.68	0.185
					25	12	22.68	0.185
					25	25	22.56	0.180
					50	0	22.60	0.182
			20175	1732.5	1	0	23.61	0.230
					1	24	23.57	0.228
					1	49	23.50	0.224
					25	0	22.54	0.179
					25	12	22.69	0.186
					25	25	22.62	0.183
					50	0	22.56	0.180
			20350	1750.0	1	0	23.55	0.226
					1	24	**23.67**	**0.233**
					1	49	23.28	0.213
					25	0	22.50	0.178
					25	12	22.54	0.179
					25	25	22.45	0.176
					50	0	22.51	0.178
		16QAM	20000	1715.0	1	0	22.60	0.182
					1	24	22.57	0.181
					1	49	**22.63**	**0.183**
					25	0	21.12	0.129
					25	12	21.14	0.130
					25	25	21.08	0.128
					50	0	21.04	0.127
			20175	1732.5	1	0	22.61	0.182
					1	24	22.60	0.182
					1	49	22.39	0.173
					25	0	21.04	0.127
					25	12	21.18	0.131
					25	25	21.12	0.129
					50	0	21.02	0.126
			20350	1750.0	1	0	22.23	0.167
					1	24	22.29	0.169
					1	49	22.07	0.161
					25	0	20.94	0.124
					25	12	21.06	0.128
					25	25	20.91	0.123
					50	0	21.03	0.127

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band4	15 MHz	QPSK	20025	1717.5	1	0	23.35	0.216
					1	37	**23.59**	**0.229**
					1	74	23.29	0.213
					36	0	22.34	0.171
					36	19	22.32	0.171
					36	39	22.25	0.168
					75	0	22.30	0.170
			20175	1732.5	1	0	23.38	0.218
					1	37	23.22	0.210
					1	74	23.23	0.210
					36	0	22.40	0.174
					36	19	22.48	0.177
					36	39	22.32	0.171
					75	0	22.38	0.173
			20325	1747.5	1	0	23.28	0.213
					1	37	23.31	0.214
					1	74	23.22	0.210
					36	0	22.34	0.171
					36	19	22.48	0.177
					36	39	22.25	0.168
					75	0	22.30	0.170
		16QAM	20025	1717.5	1	0	22.43	0.175
					1	37	22.33	0.171
					1	74	22.32	0.171
					36	0	21.04	0.127
					36	19	21.07	0.128
					36	39	20.99	0.126
					75	0	21.04	0.127
			20175	1732.5	1	0	**22.49**	**0.177**
					1	37	22.44	0.175
					1	74	22.30	0.170
					36	0	21.16	0.131
					36	19	21.23	0.133
					36	39	21.08	0.128
					75	0	21.10	0.129
			20325	1747.5	1	0	22.25	0.168
					1	37	22.27	0.169
					1	74	22.19	0.166
					36	0	21.04	0.127
					36	19	21.18	0.131
					36	39	20.97	0.125
					75	0	21.03	0.127

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band4	20 MHz	QPSK	20050	1720.0	1	0	23.46	0.222
					1	49	23.37	0.217
					1	99	23.28	0.213
					50	0	22.32	0.171
					50	25	22.37	0.173
					50	50	22.38	0.173
					100	0	22.41	0.174
			20175	1732.5	1	0	23.49	0.223
					1	49	**23.54**	**0.226**
					1	99	23.20	0.209
					50	0	22.43	0.175
					50	25	22.50	0.178
					50	50	22.52	0.179
					100	0	22.47	0.177
			20300	1745.0	1	0	23.24	0.211
					1	49	23.20	0.209
					1	99	23.01	0.200
					50	0	22.41	0.174
					50	25	22.45	0.176
					50	50	22.36	0.172
					100	0	22.40	0.174
		16QAM	20050	1720.0	1	0	22.33	0.171
					1	49	22.20	0.166
					1	99	22.25	0.168
					50	0	21.01	0.126
					50	25	21.11	0.129
					50	50	21.06	0.128
					100	0	21.12	0.129
			20175	1732.5	1	0	22.41	0.174
					1	49	**22.46**	**0.176**
					1	99	22.21	0.166
					50	0	21.16	0.131
					50	25	21.26	0.134
					50	50	21.18	0.131
					100	0	21.17	0.131
			20300	1745.0	1	0	22.31	0.170
					1	49	22.21	0.166
					1	99	22.21	0.166
					50	0	21.10	0.129
					50	25	21.14	0.130
					50	50	21.05	0.127
					100	0	21.09	0.129

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band5	1.4 MHz	QPSK	20407	824.7	1	0	23.41	0.219
					1	2	**23.46**	**0.222**
					1	5	23.45	0.221
					3	0	23.28	0.213
					3	1	23.35	0.216
					3	3	23.33	0.215
					6	0	22.31	0.170
			20525	836.5	1	0	23.24	0.211
					1	2	23.14	0.206
					1	5	23.12	0.205
					3	0	23.20	0.209
					3	1	23.06	0.202
					3	3	23.12	0.205
					6	0	22.05	0.160
			20643	848.3	1	0	22.80	0.191
					1	2	22.71	0.187
					1	5	22.52	0.179
					3	0	22.72	0.187
					3	1	22.71	0.187
					3	3	22.57	0.181
					6	0	21.78	0.151
		16QAM	20407	824.7	1	0	22.58	0.181
					1	2	**22.70**	**0.186**
					1	5	22.59	0.182
					3	0	22.01	0.159
					3	1	22.15	0.164
					3	3	22.19	0.166
					6	0	20.98	0.125
			20525	836.5	1	0	22.10	0.162
					1	2	22.21	0.166
					1	5	22.12	0.163
					3	0	21.91	0.155
					3	1	21.83	0.152
					3	3	21.87	0.154
					6	0	20.83	0.121
			20643	848.3	1	0	22.28	0.169
					1	2	22.23	0.167
					1	5	22.16	0.164
					3	0	21.88	0.154
					3	1	21.80	0.151
					3	3	21.75	0.150
					6	0	20.98	0.125

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band5	3 MHz	QPSK	20415	825.5	1	0	23.07	0.203
					1	7	**23.45**	**0.221**
					1	14	23.10	0.204
					8	0	22.00	0.158
					8	3	22.12	0.163
					8	7	22.05	0.160
					15	0	22.10	0.162
			20525	836.5	1	0	23.05	0.202
					1	7	23.29	0.213
					1	14	22.95	0.197
					8	0	21.95	0.157
					8	3	21.82	0.152
					8	7	21.79	0.151
					15	0	21.83	0.152
			20635	847.5	1	0	22.72	0.187
					1	7	22.77	0.189
					1	14	22.34	0.171
					8	0	21.76	0.150
					8	3	21.89	0.155
					8	7	21.59	0.144
					15	0	21.84	0.153
		16QAM	20415	825.5	1	0	22.40	0.174
					1	7	**22.57**	**0.181**
					1	14	22.46	0.176
					8	0	21.11	0.129
					8	3	21.19	0.132
					8	7	21.14	0.130
					15	0	21.10	0.129
			20525	836.5	1	0	22.34	0.171
					1	7	22.32	0.171
					1	14	22.19	0.166
					8	0	20.94	0.124
					8	3	20.74	0.119
					8	7	20.74	0.119
					15	0	20.83	0.121
			20635	847.5	1	0	22.28	0.169
					1	7	22.06	0.161
					1	14	21.62	0.145
					8	0	20.76	0.119
					8	3	20.94	0.124
					8	7	20.63	0.116
					15	0	20.91	0.123

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band5	5 MHz	QPSK	20425	826.5	1	0	23.58	0.228
					1	12	**23.64**	**0.231**
					1	24	23.42	0.220
					12	0	22.37	0.173
					12	6	22.36	0.172
					12	13	22.36	0.172
					25	0	22.34	0.171
			20525	836.5	1	0	23.44	0.221
					1	12	23.26	0.212
					1	24	23.33	0.215
					12	0	22.21	0.166
					12	6	22.10	0.162
					12	13	22.14	0.164
					25	0	22.12	0.163
			20625	846.5	1	0	23.36	0.217
					1	12	23.23	0.210
					1	24	22.76	0.189
					12	0	22.16	0.164
					12	6	22.11	0.163
					12	13	22.18	0.165
					25	0	22.15	0.164
		16QAM	20425	826.5	1	0	22.52	0.179
					1	12	**22.89**	**0.195**
					1	24	22.72	0.187
					12	0	21.14	0.130
					12	6	21.05	0.127
					12	13	21.06	0.128
					25	0	21.02	0.126
			20525	836.5	1	0	22.22	0.167
					1	12	21.96	0.157
					1	24	22.14	0.164
					12	0	21.02	0.126
					12	6	20.88	0.122
					12	13	20.90	0.123
					25	0	20.77	0.119
			20625	846.5	1	0	22.30	0.170
					1	12	22.10	0.162
					1	24	21.66	0.147
					12	0	20.85	0.122
					12	6	20.85	0.122
					12	11	20.91	0.123
					25	0	20.91	0.123

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band5	10 MHz	QPSK	20450	829.0	1	0	23.31	0.214
					1	24	23.30	0.214
					1	49	23.14	0.206
					25	0	22.35	0.172
					25	12	22.30	0.170
					25	25	22.13	0.163
					50	0	22.19	0.166
			20525	836.5	1	0	**23.56**	**0.227**
					1	24	23.30	0.214
					1	49	23.42	0.220
					25	0	22.33	0.171
					25	12	22.25	0.168
					25	25	22.20	0.166
					50	0	22.24	0.167
			20600	844.0	1	0	23.32	0.215
					1	24	23.43	0.220
					1	49	22.65	0.184
					25	0	22.29	0.169
					25	12	22.17	0.165
					25	25	22.21	0.166
					50	0	22.23	0.167
		16QAM	20450	829.0	1	0	22.59	0.182
					1	24	22.34	0.171
					1	49	22.30	0.170
					25	0	21.01	0.126
					25	12	20.93	0.124
					25	25	20.82	0.121
					50	0	20.86	0.122
			20525	836.5	1	0	**22.73**	**0.187**
					1	24	22.45	0.176
					1	49	22.48	0.177
					25	0	21.00	0.126
					25	12	20.95	0.124
					25	25	20.97	0.125
					50	0	20.97	0.125
			20600	844.0	1	0	22.38	0.173
					1	24	22.11	0.163
					1	49	21.62	0.145
					25	0	20.92	0.124
					25	12	20.88	0.122
					25	25	20.84	0.121
					50	0	20.96	0.125

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band7	5 MHz	QPSK	20775	2502.5	1	0	22.45	0.176
					1	12	22.29	0.169
					1	24	22.30	0.170
					12	0	21.35	0.136
					12	6	21.44	0.139
					12	13	21.49	0.141
					25	0	21.40	0.138
			21100	2535.0	1	0	22.44	0.175
					1	12	22.42	0.175
					1	24	22.45	0.176
					12	0	21.34	0.136
					12	6	21.43	0.139
					12	13	21.46	0.140
					25	0	21.38	0.137
			21425	2567.5	1	0	22.54	0.179
					1	12	**22.67**	**0.185**
					1	24	22.60	0.182
					12	0	21.72	0.149
					12	6	21.66	0.147
					12	13	21.75	0.150
					25	0	21.66	0.147
		16QAM	20775	2502.5	1	0	21.55	0.143
					1	12	21.59	0.144
					1	24	21.53	0.142
					12	0	20.61	0.115
					12	6	20.58	0.114
					12	13	20.63	0.116
					25	0	20.54	0.113
			21100	2535.0	1	0	21.64	0.146
					1	12	21.52	0.142
					1	24	21.65	0.146
					12	0	20.58	0.114
					12	6	20.54	0.113
					12	13	20.49	0.112
					25	0	20.57	0.114
			21425	2567.5	1	0	21.82	0.152
					1	12	**21.98**	**0.158**
					1	24	21.85	0.153
					12	0	20.83	0.121
					12	6	20.77	0.119
					12	11	20.74	0.119
					25	0	20.99	0.126

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band7	10 MHz	QPSK	20800	2505.0	1	0	22.35	0.172
					1	24	22.31	0.170
					1	49	22.30	0.170
					25	0	21.49	0.141
					25	12	21.44	0.139
					25	25	21.42	0.139
					50	0	21.59	0.144
			21100	2535.0	1	0	22.27	0.169
					1	24	22.42	0.175
					1	49	22.28	0.169
					25	0	21.54	0.143
					25	12	21.47	0.140
					25	25	21.45	0.140
					50	0	21.51	0.142
			21400	2565.0	1	0	22.67	0.185
					1	24	**22.73**	**0.187**
					1	49	22.63	0.183
					25	0	21.70	0.148
					25	12	21.78	0.151
					25	25	21.80	0.151
					50	0	21.77	0.150
		16QAM	20800	2505.0	1	0	21.75	0.150
					1	24	21.66	0.147
					1	49	21.66	0.147
					25	0	20.38	0.109
					25	12	20.32	0.108
					25	25	20.35	0.108
					50	0	20.41	0.110
			21100	2535.0	1	0	21.82	0.152
					1	24	21.41	0.138
					1	49	21.39	0.138
					25	0	20.32	0.108
					25	12	20.38	0.109
					25	25	20.22	0.105
					50	0	20.42	0.110
			21400	2565.0	1	0	21.56	0.143
					1	24	21.78	0.151
					1	49	**22.14**	**0.164**
					25	0	20.71	0.118
					25	12	20.67	0.117
					25	25	20.67	0.117
					50	0	20.64	0.116

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band7	15 MHz	QPSK	20825	2507.5	1	0	22.45	0.176
					1	37	22.31	0.170
					1	74	22.37	0.173
					36	0	21.42	0.139
					36	19	21.52	0.142
					36	39	21.39	0.138
					75	0	21.43	0.139
			21100	2535.0	1	0	22.31	0.170
					1	37	22.44	0.175
					1	74	22.33	0.171
					36	0	21.50	0.141
					36	19	21.36	0.137
					36	39	21.30	0.135
					75	0	21.48	0.141
			21375	2562.5	1	0	22.64	0.184
					1	37	**22.72**	**0.187**
					1	74	22.66	0.185
					36	0	21.85	0.153
					36	19	21.84	0.153
					36	39	21.73	0.149
					75	0	21.72	0.149
		16QAM	20825	2507.5	1	0	21.91	0.155
					1	37	21.76	0.150
					1	74	21.21	0.132
					36	0	20.40	0.110
					36	19	20.24	0.106
					36	39	20.21	0.105
					75	0	20.34	0.108
			21100	2535.0	1	0	21.92	0.156
					1	37	21.72	0.149
					1	74	21.89	0.155
					36	0	20.22	0.105
					36	19	20.40	0.110
					36	39	20.26	0.106
					75	0	20.39	0.109
			21375	2562.5	1	0	21.88	0.154
					1	37	21.98	0.158
					1	74	**22.21**	**0.166**
					36	0	20.68	0.117
					36	19	20.66	0.116
					36	39	20.65	0.116
					75	0	20.62	0.115

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band7	20 MHz	QPSK	20850	2510.0	1	0	22.40	0.174
					1	49	22.68	0.185
					1	99	22.31	0.170
					50	0	21.44	0.139
					50	25	21.35	0.136
					50	50	21.36	0.137
					100	0	21.33	0.136
			21100	2535.0	1	0	22.34	0.171
					1	49	22.69	0.186
					1	99	22.32	0.171
					50	0	21.55	0.143
					50	25	21.38	0.137
					50	50	21.42	0.139
					100	0	21.37	0.137
			21350	2560.0	1	0	22.70	0.186
					1	49	**22.76**	**0.189**
					1	99	22.68	0.185
					50	0	21.84	0.153
					50	25	21.74	0.149
					50	50	21.74	0.149
					100	0	21.79	0.151
		16QAM	20850	2510.0	1	0	21.88	0.154
					1	49	21.81	0.152
					1	99	21.61	0.145
					50	0	20.45	0.111
					50	25	20.50	0.112
					50	50	20.49	0.112
					100	0	20.57	0.114
			21100	2535.0	1	0	21.74	0.149
					1	49	21.70	0.148
					1	99	21.82	0.152
					50	0	20.44	0.111
					50	25	20.54	0.113
					50	50	20.47	0.111
					100	0	20.58	0.114
			21350	2560.0	1	0	22.08	0.161
					1	49	22.00	0.158
					1	99	**22.12**	**0.163**
					50	0	20.78	0.120
					50	25	20.80	0.120
					50	50	20.79	0.120
					100	0	20.71	0.118

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band12	1.4 MHz	QPSK	23017	699.7	1	0	23.46	0.222
					1	2	23.42	0.220
					1	5	**23.56**	**0.227**
					3	0	23.39	0.218
					3	1	23.46	0.222
					3	3	23.46	0.222
					6	0	22.32	0.171
			23095	707.5	1	0	23.50	0.224
					1	2	23.42	0.220
					1	5	23.35	0.216
					3	0	23.22	0.210
					3	1	23.28	0.213
					3	3	23.19	0.208
					6	0	22.16	0.164
			23173	715.3	1	0	22.49	0.177
					1	2	22.22	0.167
					1	5	21.77	0.150
					3	0	22.33	0.171
					3	1	22.21	0.166
					3	3	21.90	0.155
					6	0	21.31	0.135
		16QAM	23017	699.7	1	0	22.58	0.181
					1	2	**22.60**	**0.182**
					1	5	22.46	0.176
					3	0	22.20	0.166
					3	1	22.21	0.166
					3	3	22.20	0.166
					6	0	21.17	0.131
			23095	707.5	1	0	22.37	0.173
					1	2	22.53	0.179
					1	5	22.42	0.175
					3	0	22.01	0.159
					3	1	22.04	0.160
					3	3	22.01	0.159
					6	0	20.81	0.121
			23173	715.3	1	0	22.24	0.167
					1	2	22.40	0.174
					1	5	22.29	0.169
					3	0	21.88	0.154
					3	1	21.91	0.155
					3	3	21.88	0.154
					6	0	20.68	0.117

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band12	3 MHz	QPSK	23025	700.5	1	0	23.51	0.224
					1	7	**23.57**	**0.228**
					1	14	23.37	0.217
					8	0	22.37	0.173
					8	3	22.39	0.173
					8	7	22.30	0.170
					15	0	22.37	0.173
			23095	707.5	1	0	23.48	0.223
					1	7	23.44	0.221
					1	14	23.43	0.220
					8	0	22.28	0.169
					8	3	22.21	0.166
					8	7	22.19	0.166
					15	0	22.24	0.167
			23165	714.5	1	0	23.26	0.212
					1	7	22.93	0.196
					1	14	21.78	0.151
					8	0	22.18	0.165
					8	3	22.09	0.162
					8	7	21.42	0.139
					15	0	22.06	0.161
		16QAM	23025	700.5	1	0	22.34	0.171
					1	7	22.47	0.177
					1	14	22.18	0.165
					8	0	20.89	0.123
					8	3	20.87	0.122
					8	7	20.79	0.120
					15	0	20.84	0.121
			23095	707.5	1	0	22.16	0.164
					1	7	**22.61**	**0.182**
					1	14	22.30	0.170
					8	0	20.78	0.120
					8	3	20.72	0.118
					8	7	20.66	0.116
					15	0	20.73	0.118
			23165	714.5	1	0	22.30	0.170
					1	7	21.81	0.152
					1	14	20.64	0.116
					8	0	20.73	0.118
					8	3	20.62	0.115
					8	7	20.02	0.100
					15	0	20.61	0.115

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band12	5 MHz	QPSK	23035	701.5	1	0	**23.54**	**0.226**
					1	12	23.52	0.225
					1	24	23.37	0.217
					12	0	22.34	0.171
					12	6	22.37	0.173
					12	13	22.24	0.167
					25	0	22.26	0.168
			23095	707.5	1	0	23.49	0.223
					1	12	23.49	0.223
					1	24	23.33	0.215
					12	0	22.13	0.163
					12	6	22.20	0.166
					12	13	22.17	0.165
					25	0	22.12	0.163
			23155	713.5	1	0	23.51	0.224
					1	12	23.11	0.205
					1	24	22.18	0.165
					12	0	22.25	0.168
					12	6	22.23	0.167
					12	13	22.06	0.161
					25	0	22.18	0.165
		16QAM	23035	701.5	1	0	22.20	0.166
					1	12	22.47	0.177
					1	24	**22.49**	**0.177**
					12	0	20.84	0.121
					12	6	20.92	0.124
					12	13	20.80	0.120
					25	0	20.84	0.121
			23095	707.5	1	0	22.11	0.163
					1	12	21.74	0.149
					1	24	22.01	0.159
					12	0	20.77	0.119
					12	6	20.80	0.120
					12	13	20.76	0.119
					25	0	20.65	0.116
			23155	713.5	1	0	22.37	0.173
					1	12	22.05	0.160
					1	24	20.94	0.124
					12	0	20.75	0.119
					12	6	20.72	0.118
					12	11	20.67	0.117
					25	0	20.63	0.116

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band12	10 MHz	QPSK	23060	704.0	1	0	23.47	0.222
					1	24	23.23	0.210
					1	49	23.21	0.209
					25	0	22.28	0.169
					25	12	22.27	0.169
					25	25	22.29	0.169
					50	0	22.16	0.164
			23095	707.5	1	0	**23.49**	**0.223**
					1	24	23.34	0.216
					1	49	23.26	0.212
					25	0	22.25	0.168
					25	12	22.25	0.168
					25	25	22.14	0.164
					50	0	22.24	0.167
			23130	711.0	1	0	23.36	0.217
					1	24	23.39	0.218
					1	49	22.06	0.161
					25	0	22.26	0.168
					25	12	22.13	0.163
					25	25	22.15	0.164
					50	0	22.18	0.165
		16QAM	23060	704.0	1	0	**22.48**	**0.177**
					1	24	22.02	0.159
					1	49	22.05	0.160
					25	0	20.56	0.114
					25	12	20.54	0.113
					25	25	20.52	0.113
					50	0	20.50	0.112
			23095	707.5	1	0	22.44	0.175
					1	24	22.22	0.167
					1	49	22.41	0.174
					25	0	20.60	0.115
					25	12	20.59	0.115
					25	25	20.52	0.113
					50	0	20.48	0.112
			23130	711.0	1	0	22.12	0.163
					1	24	21.76	0.150
					1	49	20.74	0.119
					25	0	20.55	0.114
					25	12	20.53	0.113
					25	25	20.54	0.113
					50	0	20.50	0.112

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band13	5 MHz	QPSK	23205	779.5	1	0	22.12	0.163
					1	12	23.16	0.207
					1	24	23.17	0.207
					12	0	21.85	0.153
					12	6	21.92	0.156
					12	13	21.89	0.155
					25	0	21.94	0.156
			23230	782.0	1	0	23.01	0.200
					1	12	23.18	0.208
					1	24	23.02	0.200
					12	0	21.79	0.151
					12	6	21.92	0.156
					12	13	22.02	0.159
					25	0	21.90	0.155
			23255	784.5	1	0	23.20	0.209
					1	12	**23.23**	**0.210**
					1	24	22.99	0.199
					12	0	22.01	0.159
					12	6	22.00	0.158
					12	13	21.85	0.153
					25	0	21.98	0.158
		16QAM	23205	779.5	1	0	22.21	0.166
					1	12	22.11	0.163
					1	24	22.34	0.171
					12	0	20.71	0.118
					12	6	20.88	0.122
					12	13	20.90	0.123
					25	0	20.91	0.123
			23230	782.0	1	0	22.20	0.166
					1	12	**22.35**	**0.172**
					1	24	22.29	0.169
					12	0	20.82	0.121
					12	6	21.01	0.126
					12	13	20.97	0.125
					25	0	20.94	0.124
			23255	784.5	1	0	22.21	0.166
					1	12	22.27	0.169
					1	24	22.14	0.164
					12	0	21.09	0.129
					12	6	21.07	0.128
					12	11	20.92	0.124
					25	0	21.03	0.127

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band13	10 MHz	QPSK	23230	782.0	1	0	22.11	0.163
					1	24	**23.07**	**0.203**
					1	49	22.87	0.194
					25	0	21.93	0.156
					25	12	21.98	0.158
					25	25	21.96	0.157
					50	0	21.99	0.158
		16QAM	23230	782.0	1	0	21.86	0.153
					1	24	22.16	0.164
					1	49	**22.22**	**0.167**
					25	0	20.8	0.120
					25	12	21.02	0.126
					25	25	20.87	0.122
					50	0	20.96	0.125

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band25	1.4 MHz	QPSK	26047	1850.7	1	0	23.26	0.212
					1	2	23.39	0.218
					1	5	23.11	0.205
					3	0	23.14	0.206
					3	1	23.31	0.214
					3	3	23.32	0.215
					6	0	22.24	0.167
			26365	1882.5	1	0	23.46	0.222
					1	2	23.40	0.219
					1	5	23.21	0.209
					3	0	23.42	0.220
					3	1	23.41	0.219
					3	3	23.40	0.219
					6	0	22.23	0.167
			26683	1914.3	1	0	23.46	0.222
					1	2	**23.52**	**0.225**
					1	5	23.26	0.212
					3	0	23.41	0.219
					3	1	23.45	0.221
					3	3	23.46	0.222
					6	0	22.30	0.170
		16QAM	26047	1850.7	1	0	22.33	0.171
					1	2	22.41	0.174
					1	5	22.27	0.169
					3	0	22.26	0.168
					3	1	22.35	0.172
					3	3	22.33	0.171
					6	0	21.30	0.135
			26365	1882.5	1	0	22.34	0.171
					1	2	22.31	0.170
					1	5	22.30	0.170
					3	0	22.43	0.175
					3	1	22.41	0.174
					3	3	22.33	0.171
					6	0	21.38	0.137
			26683	1914.3	1	0	22.45	0.176
					1	2	22.47	0.177
					1	5	22.41	0.174
					3	0	22.45	0.176
					3	1	22.50	0.178
					3	3	**22.59**	**0.182**
					6	0	21.38	0.137

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band25	3 MHz	QPSK	26055	1851.5	1	0	23.18	0.208
					1	7	**23.54**	**0.226**
					1	14	23.28	0.213
					8	0	22.29	0.169
					8	3	22.19	0.166
					8	7	22.15	0.164
					15	0	22.25	0.168
			26365	1882.5	1	0	23.26	0.212
					1	7	23.46	0.222
					1	14	23.33	0.215
					8	0	22.24	0.167
					8	3	22.31	0.170
					8	7	22.34	0.171
					15	0	22.21	0.166
			26675	1913.5	1	0	23.31	0.214
					1	7	23.50	0.224
					1	14	23.21	0.209
					8	0	22.45	0.176
					8	3	22.38	0.173
					8	7	22.29	0.169
					15	0	22.20	0.166
		16QAM	26055	1851.5	1	0	22.43	0.175
					1	7	22.59	0.182
					1	14	22.48	0.177
					8	0	21.34	0.136
					8	3	21.27	0.134
					8	7	21.20	0.132
					15	0	21.20	0.132
			26365	1882.5	1	0	22.52	0.179
					1	7	**22.63**	**0.183**
					1	14	22.58	0.181
					8	0	21.40	0.138
					8	3	21.42	0.139
					8	7	21.35	0.136
					15	0	21.36	0.137
			26675	1913.5	1	0	22.48	0.177
					1	7	22.42	0.175
					1	14	22.49	0.177
					8	0	21.44	0.139
					8	3	21.37	0.137
					8	7	21.36	0.137
					15	0	21.21	0.132

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band25	5 MHz	QPSK	26065	1852.5	1	0	23.10	0.204
					1	12	23.32	0.215
					1	24	23.36	0.217
					12	0	22.30	0.170
					12	6	22.29	0.169
					12	13	22.35	0.172
					25	0	22.33	0.171
			26365	1882.5	1	0	23.40	0.219
					1	12	23.49	0.223
					1	24	23.46	0.222
					12	0	22.25	0.168
					12	6	22.44	0.175
					12	13	22.44	0.175
					25	0	22.49	0.177
			26665	1912.5	1	0	23.45	0.221
					1	12	**23.56**	**0.227**
					1	24	23.42	0.220
					12	0	22.40	0.174
					12	6	22.50	0.178
					12	13	22.53	0.179
					25	0	22.50	0.178
		16QAM	26065	1852.5	1	0	22.60	0.182
					1	12	22.55	0.180
					1	24	**22.67**	**0.185**
					12	0	21.35	0.136
					12	6	21.33	0.136
					12	13	21.35	0.136
					25	0	21.27	0.134
			26365	1882.5	1	0	22.61	0.182
					1	12	22.55	0.180
					1	24	22.57	0.181
					12	0	21.43	0.139
					12	6	21.41	0.138
					12	13	21.40	0.138
					25	0	21.46	0.140
			26665	1912.5	1	0	22.60	0.182
					1	12	22.46	0.176
					1	24	22.59	0.182
					12	0	21.58	0.144
					12	6	21.49	0.141
					12	11	21.45	0.140
					25	0	21.45	0.140

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band25	10 MHz	QPSK	26090	1855.0	1	0	23.28	0.213
					1	24	23.24	0.211
					1	49	23.15	0.207
					25	0	22.16	0.164
					25	12	22.26	0.168
					25	25	22.27	0.169
					50	0	22.21	0.166
			26365	1882.5	1	0	23.31	0.214
					1	24	23.34	0.216
					1	49	23.46	0.222
					25	0	22.26	0.168
					25	12	22.49	0.177
					25	25	22.37	0.173
					50	0	22.40	0.174
			26640	1910.0	1	0	23.41	0.219
					1	24	23.35	0.216
					1	49	**23.51**	**0.224**
					25	0	22.28	0.169
					25	12	22.51	0.178
					25	25	22.54	0.179
					50	0	22.49	0.177
		16QAM	26090	1855.0	1	0	22.58	0.181
					1	24	22.47	0.177
					1	49	22.53	0.179
					25	0	21.25	0.133
					25	12	21.31	0.135
					25	25	21.40	0.138
					50	0	21.31	0.135
			26365	1882.5	1	0	22.70	0.186
					1	24	22.64	0.184
					1	49	**22.77**	**0.189**
					25	0	21.39	0.138
					25	12	21.37	0.137
					25	25	21.43	0.139
					50	0	21.50	0.141
			26640	1910.0	1	0	22.74	0.188
					1	24	22.66	0.185
					1	49	22.64	0.184
					25	0	21.28	0.134
					25	12	21.43	0.139
					25	25	21.64	0.146
					50	0	21.61	0.145

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band25	15 MHz	QPSK	26115	1857.5	1	0	**23.56**	**0.227**
					1	37	23.47	0.222
					1	74	23.20	0.209
					36	0	22.54	0.179
					36	19	22.33	0.171
					36	39	22.32	0.171
					75	0	22.37	0.173
			26365	1882.5	1	0	23.26	0.212
					1	37	23.52	0.225
					1	74	23.14	0.206
					36	0	22.41	0.174
					36	19	22.62	0.183
					36	39	22.44	0.175
					75	0	22.40	0.174
			26615	1907.5	1	0	23.48	0.223
					1	37	23.31	0.214
					1	74	23.54	0.226
					36	0	22.40	0.174
					36	19	22.55	0.180
					36	39	22.33	0.171
					75	0	22.62	0.183
		16QAM	26115	1857.5	1	0	22.63	0.183
					1	37	22.57	0.181
					1	74	22.56	0.180
					36	0	21.42	0.139
					36	19	21.45	0.140
					36	39	21.49	0.141
					75	0	21.52	0.142
			26365	1882.5	1	0	**22.65**	**0.184**
					1	37	22.41	0.174
					1	74	22.47	0.177
					36	0	21.41	0.138
					36	19	21.54	0.143
					36	39	21.50	0.141
					75	0	21.44	0.139
			26615	1907.5	1	0	22.46	0.176
					1	37	22.35	0.172
					1	74	22.27	0.169
					36	0	21.53	0.142
					36	19	21.61	0.145
					36	39	21.55	0.143
					75	0	21.55	0.143

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band25	20 MHz	QPSK	26140	1860.0	1	0	23.48	0.223
					1	49	23.33	0.215
					1	99	23.17	0.207
					50	0	22.41	0.174
					50	25	22.49	0.177
					50	50	22.48	0.177
					100	0	22.66	0.185
			26365	1882.5	1	0	**23.61**	**0.230**
					1	49	23.49	0.223
					1	99	23.22	0.210
					50	0	22.53	0.179
					50	25	22.57	0.181
					50	50	22.55	0.180
					100	0	22.35	0.172
			26590	1905.0	1	0	23.60	0.229
					1	49	23.52	0.225
					1	99	23.38	0.218
					50	0	22.56	0.180
					50	25	22.56	0.180
					50	50	22.54	0.179
					100	0	22.45	0.176
		16QAM	26140	1860.0	1	0	22.64	0.184
					1	49	22.68	0.185
					1	99	22.67	0.185
					50	0	21.54	0.143
					50	25	21.60	0.145
					50	50	21.42	0.139
					100	0	21.59	0.144
			26365	1882.5	1	0	22.55	0.180
					1	49	**22.75**	**0.188**
					1	99	22.56	0.180
					50	0	21.60	0.145
					50	25	21.51	0.142
					50	50	21.49	0.141
					100	0	21.46	0.140
			26590	1905.0	1	0	22.69	0.186
					1	49	22.70	0.186
					1	99	22.49	0.177
					50	0	21.48	0.141
					50	25	21.48	0.141
					50	50	21.52	0.142
					100	0	21.60	0.145

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band26 (824~849)	1.4 MHz	QPSK	26797	824.7	1	0	23.17	0.207
					1	2	**23.39**	**0.218**
					1	5	23.31	0.214
					3	0	23.28	0.213
					3	1	23.36	0.217
					3	3	23.33	0.215
					6	0	22.31	0.170
			26915	836.5	1	0	22.99	0.199
					1	2	22.91	0.195
					1	5	22.92	0.196
					3	0	22.86	0.193
					3	1	22.84	0.192
					3	3	22.82	0.191
					6	0	21.73	0.149
			27033	848.3	1	0	23.01	0.200
					1	2	23.03	0.201
					1	5	22.97	0.198
					3	0	22.95	0.197
					3	1	22.98	0.199
					3	3	22.98	0.199
					6	0	21.83	0.152
		16QAM	26797	824.7	1	0	22.20	0.166
					1	2	22.37	0.173
					1	5	**22.39**	**0.173**
					3	0	22.16	0.164
					3	1	22.27	0.169
					3	3	22.28	0.169
					6	0	21.18	0.131
			26915	836.5	1	0	21.93	0.156
					1	2	21.89	0.155
					1	5	21.97	0.157
					3	0	21.78	0.151
					3	1	21.69	0.148
					3	3	21.71	0.148
					6	0	21.15	0.130
			27033	848.3	1	0	21.95	0.157
					1	2	22.03	0.160
					1	5	22.18	0.165
					3	0	21.89	0.155
					3	1	21.85	0.153
					3	3	21.86	0.153
					6	0	21.14	0.130

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band26 (824~849)	3 MHz	QPSK	26805	825.5	1	0	23.23	0.210
					1	7	**23.34**	**0.216**
					1	14	23.26	0.212
					8	0	22.27	0.169
					8	3	22.25	0.168
					8	7	22.29	0.169
					15	0	22.27	0.169
			26915	836.5	1	0	22.86	0.193
					1	7	22.88	0.194
					1	14	22.78	0.190
					8	0	21.80	0.151
					8	3	21.87	0.154
					8	7	21.82	0.152
					15	0	21.86	0.153
			27025	847.5	1	0	22.89	0.195
					1	7	23.07	0.203
					1	14	22.93	0.196
					8	0	21.90	0.155
					8	3	21.94	0.156
					8	7	21.95	0.157
					15	0	21.92	0.156
		16QAM	26805	825.5	1	0	22.25	0.168
					1	7	**22.39**	**0.173**
					1	14	22.30	0.170
					8	0	21.08	0.128
					8	3	21.09	0.129
					8	7	21.12	0.129
					15	0	20.99	0.126
			26915	836.5	1	0	21.86	0.153
					1	7	22.00	0.158
					1	14	21.83	0.152
					8	0	20.64	0.116
					8	3	20.70	0.117
					8	7	20.72	0.118
					15	0	20.64	0.116
			27025	847.5	1	0	21.93	0.156
					1	7	22.21	0.166
					1	14	21.96	0.157
					8	0	20.73	0.118
					8	3	20.75	0.119
					8	7	20.78	0.120
					15	0	20.66	0.116

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band26 (824~849)	5 MHz	QPSK	26815	826.5	1	0	**23.38**	**0.218**
					1	12	23.28	0.213
					1	24	23.28	0.213
					12	0	22.48	0.177
					12	6	22.53	0.179
					12	13	22.32	0.171
					25	0	22.33	0.171
			26915	836.5	1	0	23.03	0.201
					1	12	22.85	0.193
					1	24	22.93	0.196
					12	0	21.83	0.152
					12	6	22.02	0.159
					12	13	21.84	0.153
					25	0	21.92	0.156
			27015	846.5	1	0	23.06	0.202
					1	12	22.97	0.198
					1	24	23.10	0.204
					12	0	21.96	0.157
					12	6	22.04	0.160
					12	13	22.00	0.158
					25	0	22.02	0.159
		16QAM	26815	826.5	1	0	22.51	0.178
					1	12	22.50	0.178
					1	24	22.37	0.173
					12	0	21.48	0.141
					12	6	21.48	0.141
					12	13	21.34	0.136
					25	0	21.35	0.136
			26915	836.5	1	0	22.48	0.177
					1	12	22.18	0.165
					1	24	22.49	0.177
					12	0	20.84	0.121
					12	6	21.01	0.126
					12	13	20.88	0.122
					25	0	20.90	0.123
			27015	846.5	1	0	22.46	0.176
					1	12	22.37	0.173
					1	24	**22.59**	**0.182**
					12	0	21.02	0.126
					12	6	21.08	0.128
					12	11	21.07	0.128
					25	0	21.06	0.128

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band26 (824~849)	10 MHz	QPSK	26840	829.0	1	0	**23.40**	**0.219**
					1	24	23.23	0.210
					1	49	23.17	0.207
					25	0	22.30	0.170
					25	12	22.22	0.167
					25	25	22.11	0.163
					50	0	22.24	0.167
			26915	836.5	1	0	23.07	0.203
					1	24	22.97	0.198
					1	49	22.90	0.195
					25	0	21.97	0.157
					25	12	22.00	0.158
					25	25	21.87	0.154
					50	0	22.00	0.158
			26990	844.0	1	0	23.04	0.201
					1	24	23.09	0.204
					1	49	23.12	0.205
					25	0	22.00	0.158
					25	12	21.99	0.158
					25	25	22.05	0.160
					50	0	22.06	0.161
		16QAM	26840	829.0	1	0	22.46	0.176
					1	24	**22.50**	**0.178**
					1	49	22.32	0.171
					25	0	21.32	0.136
					25	12	21.23	0.133
					25	25	21.16	0.131
					50	0	21.26	0.134
			26915	836.5	1	0	22.34	0.171
					1	24	22.16	0.164
					1	49	22.07	0.161
					25	0	20.96	0.125
					25	12	21.03	0.127
					25	25	20.91	0.123
					50	0	20.99	0.126
			26990	844.0	1	0	22.21	0.166
					1	24	22.22	0.167
					1	49	22.31	0.170
					25	0	21.03	0.127
					25	12	20.97	0.125
					25	25	21.05	0.127
					50	0	21.00	0.126

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band26 (824~849)	15 MHz	QPSK	26865	831.5	1	0	**23.41**	**0.219**
					1	37	23.29	0.213
					1	74	23.27	0.212
					36	0	22.22	0.167
					36	19	22.30	0.170
					36	39	22.03	0.160
					75	0	22.29	0.169
			26915	836.5	1	0	23.01	0.200
					1	37	22.87	0.194
					1	74	22.95	0.197
					36	0	21.73	0.149
					36	19	21.99	0.158
					36	39	21.80	0.151
					75	0	21.92	0.156
			26965	841.5	1	0	22.98	0.199
					1	37	22.96	0.198
					1	74	22.90	0.195
					36	0	21.89	0.155
					36	19	21.97	0.157
					36	39	21.95	0.157
					75	0	22.01	0.159
		16QAM	26865	831.5	1	0	**22.54**	**0.179**
					1	37	22.52	0.179
					1	74	22.23	0.167
					36	0	21.28	0.134
					36	19	21.31	0.135
					36	39	21.14	0.130
					75	0	21.33	0.136
			26915	836.5	1	0	22.26	0.168
					1	37	22.20	0.166
					1	74	22.11	0.163
					36	0	21.00	0.126
					36	19	20.98	0.125
					36	39	20.97	0.125
					75	0	20.94	0.124
			26965	841.5	1	0	22.42	0.175
					1	37	22.25	0.168
					1	74	21.99	0.158
					36	0	21.02	0.126
					36	19	21.01	0.126
					36	39	21.01	0.126
					75	0	21.08	0.128

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band26 (814~824)	1.4 MHz	QPSK	26697	814.7	1	0	23.26	0.212
					1	2	23.19	0.208
					1	5	23.12	0.205
					3	0	23.11	0.205
					3	1	23.15	0.207
					3	3	23.10	0.204
					6	0	22.08	0.161
			26740	819.0	1	0	23.14	0.206
					1	2	**23.27**	**0.212**
					1	5	23.02	0.200
					3	0	22.91	0.195
					3	1	23.07	0.203
					3	3	23.00	0.200
					6	0	21.95	0.157
			26783	823.3	1	0	23.20	0.209
					1	2	22.97	0.198
					1	5	22.90	0.195
					3	0	22.98	0.199
					3	1	22.96	0.198
					3	3	22.91	0.195
					6	0	21.87	0.154
		16QAM	26697	814.7	1	0	22.49	0.177
					1	2	**22.52**	**0.179**
					1	5	22.45	0.176
					3	0	22.35	0.172
					3	1	22.38	0.173
					3	3	22.28	0.169
					6	0	21.39	0.138
			26740	819.0	1	0	22.31	0.170
					1	2	22.31	0.170
					1	5	22.35	0.172
					3	0	22.01	0.159
					3	1	22.15	0.164
					3	3	21.96	0.157
					6	0	21.44	0.139
			26783	823.3	1	0	22.42	0.175
					1	2	22.23	0.167
					1	5	22.27	0.169
					3	0	22.03	0.160
					3	1	22.07	0.161
					3	3	21.93	0.156
					6	0	21.43	0.139

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band26 (814~824)	3 MHz	QPSK	26705	815.5	1	0	23.20	0.209
					1	7	**23.31**	**0.214**
					1	14	23.18	0.208
					8	0	22.27	0.169
					8	3	22.22	0.167
					8	7	22.29	0.169
					15	0	22.28	0.169
			26740	819.0	1	0	23.05	0.202
					1	7	23.16	0.207
					1	14	22.96	0.198
					8	0	22.08	0.161
					8	3	22.04	0.160
					8	7	21.91	0.155
					15	0	21.91	0.155
			26775	822.5	1	0	23.06	0.202
					1	7	23.23	0.210
					1	14	22.97	0.198
					8	0	22.02	0.159
					8	3	22.02	0.159
					8	7	21.93	0.156
					15	0	21.92	0.156
		16QAM	26705	815.5	1	0	22.44	0.175
					1	7	22.32	0.171
					1	14	22.51	0.178
					8	0	21.16	0.131
					8	3	21.23	0.133
					8	7	21.26	0.134
					15	0	21.15	0.130
			26740	819.0	1	0	22.33	0.171
					1	7	**22.53**	**0.179**
					1	14	22.18	0.165
					8	0	21.10	0.129
					8	3	21.04	0.127
					8	7	21.10	0.129
					15	0	20.90	0.123
			26775	822.5	1	0	22.43	0.175
					1	7	22.50	0.178
					1	14	22.20	0.166
					8	0	21.09	0.129
					8	3	20.93	0.124
					8	7	21.01	0.126
					15	0	20.96	0.125

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band26 (814~824)	5 MHz	QPSK	26715	816.5	1	0	**23.32**	**0.215**
					1	12	23.26	0.212
					1	24	23.11	0.205
					12	0	22.27	0.169
					12	6	22.41	0.174
					12	13	22.09	0.162
					25	0	22.11	0.163
			26740	819.0	1	0	23.20	0.209
					1	12	23.03	0.201
					1	24	23.00	0.200
					12	0	21.94	0.156
					12	6	22.09	0.162
					12	13	21.88	0.154
					25	0	21.95	0.157
			26765	821.5	1	0	23.19	0.208
					1	12	23.19	0.208
					1	24	23.26	0.212
					12	0	22.37	0.173
					12	6	22.43	0.175
					12	13	22.14	0.164
					25	0	22.17	0.165
		16QAM	26715	816.5	1	0	22.45	0.176
					1	12	22.32	0.171
					1	24	22.11	0.163
					12	0	21.24	0.133
					12	6	21.22	0.132
					12	13	21.18	0.131
					25	0	21.11	0.129
			26740	819.0	1	0	22.37	0.173
					1	12	22.39	0.173
					1	24	22.29	0.169
					12	0	20.98	0.125
					12	6	21.11	0.129
					12	13	21.04	0.127
					25	0	20.96	0.125
			26765	821.5	1	0	**22.51**	**0.178**
					1	12	22.31	0.170
					1	24	22.35	0.172
					12	0	21.40	0.138
					12	6	21.26	0.134
					12	11	21.13	0.130
					25	0	21.26	0.134

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band26 (814~824)	10 MHz	QPSK	26740	819.0	1	0	**23.26**	**0.212**
					1	24	23.03	0.201
					1	49	22.99	0.199
					25	0	22.15	0.164
					25	12	22.08	0.161
					25	25	21.98	0.158
					50	0	22.07	0.161
		16QAM	26740	819.0	1	0	**22.44**	**0.175**
					1	24	22.39	0.173
					1	49	22.28	0.169
					25	0	21.06	0.128
					25	12	21.06	0.128
					25	25	20.95	0.124
					50	0	20.98	0.125

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band41	5 MHz	QPSK	39675	2498.5	1	0	22.38	0.173
					1	12	22.45	0.176
					1	24	22.50	0.178
					12	0	21.39	0.138
					12	6	21.60	0.145
					12	13	21.54	0.143
					25	0	21.47	0.140
			39715	2502.5	1	0	22.36	0.172
					1	12	22.49	0.177
					1	24	22.46	0.176
					12	0	21.57	0.144
					12	6	21.54	0.143
					12	13	21.49	0.141
					25	0	21.48	0.141
			40148	2545.8	1	0	22.21	0.166
					1	12	22.30	0.170
					1	24	22.37	0.173
					12	0	21.19	0.132
					12	6	21.40	0.138
					12	13	21.40	0.138
					25	0	21.32	0.136
			40620	2593.0	1	0	22.49	0.177
					1	12	22.62	0.183
					1	24	22.67	0.185
					12	0	21.71	0.148
					12	6	21.74	0.149
					12	13	21.67	0.147
					25	0	21.69	0.148
			41093	2640.3	1	0	22.04	0.160
					1	12	21.98	0.158
					1	24	21.97	0.157
					12	0	21.34	0.136
					12	6	21.39	0.138
					12	13	21.29	0.135
					25	0	21.35	0.136
			41565	2687.5	1	0	**22.24**	**0.167**
					1	12	22.11	0.163
					1	24	22.19	0.166
					12	0	21.56	0.143
					12	6	21.57	0.144
					12	13	21.47	0.140
					25	0	21.49	0.141

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band41	5 MHz	16QAM	39675	2498.5	1	0	21.23	0.133
					1	12	21.38	0.137
					1	24	21.48	0.141
					12	0	20.14	0.103
					12	6	20.22	0.105
					12	13	20.18	0.104
					25	0	20.25	0.106
			39715	2502.5	1	0	21.02	0.126
					1	12	21.23	0.133
					1	24	21.35	0.136
					12	0	19.93	0.098
					12	6	20.06	0.101
					12	13	19.99	0.100
					25	0	20.06	0.101
			40148	2545.8	1	0	21.68	0.147
					1	12	21.58	0.144
					1	24	21.67	0.147
					12	0	20.38	0.109
					12	6	20.37	0.109
					12	11	20.35	0.108
					25	0	20.24	0.106
			40620	2593.0	1	0	21.82	0.152
					1	12	21.73	0.149
					1	24	21.82	0.152
					12	0	20.57	0.114
					12	6	20.56	0.114
					12	13	20.52	0.113
					25	0	20.45	0.111
			41093	2640.3	1	0	21.04	0.127
					1	12	20.93	0.124
					1	24	20.70	0.117
					12	0	20.20	0.105
					12	6	20.16	0.104
					12	11	20.07	0.102
					25	0	20.04	0.101
			41565	2687.5	1	0	21.20	0.132
					1	12	21.08	0.128
					1	24	20.84	0.121
					12	0	20.34	0.108
					12	6	20.31	0.107
					12	11	20.23	0.105
					25	0	20.19	0.104

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band41	10 MHz	QPSK	39700	2501.0	1	0	22.15	0.164
					1	24	22.62	0.183
					1	49	22.44	0.175
					25	0	21.60	0.145
					25	12	21.59	0.144
					25	25	21.62	0.145
					50	0	21.57	0.144
			39740	2505.0	1	0	22.01	0.159
					1	24	22.47	0.177
					1	49	22.23	0.167
					25	0	21.44	0.139
					25	12	21.44	0.139
					25	25	21.47	0.140
					50	0	21.41	0.138
			40160	2547.0	1	0	21.78	0.151
					1	24	21.58	0.144
					1	49	21.56	0.143
					25	0	21.32	0.136
					25	12	21.23	0.133
					25	25	20.93	0.124
					50	0	21.14	0.130
			40620	2593.0	1	0	22.57	0.181
					1	24	**22.65**	**0.184**
					1	49	22.62	0.183
					25	0	21.56	0.143
					25	12	21.61	0.145
					25	25	21.63	0.146
					50	0	21.54	0.143
			41080	2639.0	1	0	22.45	0.176
					1	24	**22.50**	**0.178**
					1	49	22.46	0.176
					25	0	21.43	0.139
					25	12	21.40	0.138
					25	25	21.48	0.141
					50	0	21.40	0.138
			41540	2685.0	1	0	21.94	0.156
					1	24	21.74	0.149
					1	49	21.76	0.150
					25	0	21.50	0.141
					25	12	21.36	0.137
					25	25	21.05	0.127
					50	0	21.26	0.134

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band41	10 MHz	16QAM	39700	2501.0	1	0	21.24	0.133
					1	24	21.67	0.147
					1	49	21.44	0.139
					25	0	20.45	0.111
					25	12	20.46	0.111
					25	25	20.45	0.111
					50	0	20.37	0.109
			39740	2505.0	1	0	21.11	0.129
					1	24	21.48	0.141
					1	49	21.31	0.135
					25	0	20.32	0.108
					25	12	20.28	0.107
					25	25	20.32	0.108
					50	0	20.20	0.105
			40160	2547.0	1	0	21.56	0.143
					1	24	21.61	0.145
					1	49	21.52	0.142
					25	0	20.22	0.105
					25	12	20.34	0.108
					25	25	20.38	0.109
					50	0	20.32	0.108
			40620	2593.0	1	0	21.73	0.149
					1	24	21.77	0.150
					1	49	21.67	0.147
					25	0	20.43	0.110
					25	12	20.53	0.113
					25	25	20.55	0.114
					50	0	20.49	0.112
			41080	2639.0	1	0	20.94	0.124
					1	24	20.81	0.121
					1	49	20.38	0.109
					25	0	20.20	0.105
					25	12	20.09	0.102
					25	25	20.20	0.105
					50	0	19.98	0.100
			41540	2685.0	1	0	21.15	0.130
					1	24	20.96	0.125
					1	49	20.53	0.113
					25	0	20.35	0.108
					25	12	20.22	0.105
					25	25	20.33	0.108
					50	0	20.17	0.104

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band41	15 MHz	QPSK	39725	2503.5	1	0	22.44	0.175
					1	37	22.63	0.183
					1	74	22.49	0.177
					36	0	21.59	0.144
					36	19	21.66	0.147
					36	39	21.59	0.144
					75	0	21.66	0.147
			39765	2507.5	1	0	22.22	0.167
					1	37	22.48	0.177
					1	74	22.31	0.170
					36	0	21.38	0.137
					36	19	21.46	0.140
					36	39	21.40	0.138
					75	0	21.50	0.141
			40173	2548.3	1	0	22.58	0.181
					1	37	22.44	0.175
					1	74	22.37	0.173
					36	0	21.56	0.143
					36	19	21.49	0.141
					36	39	21.53	0.142
					75	0	21.34	0.136
			40620	2593.0	1	0	22.40	0.174
					1	37	**22.64**	**0.184**
					1	74	22.49	0.177
					36	0	21.61	0.145
					36	19	21.63	0.146
					36	39	21.61	0.145
					75	0	21.57	0.144
			41068	2637.8	1	0	22.32	0.171
					1	37	21.72	0.149
					1	74	21.39	0.138
					36	0	21.30	0.135
					36	19	21.28	0.134
					36	39	21.06	0.128
					75	0	21.15	0.130
			41515	2682.5	1	0	22.50	0.178
					1	37	21.86	0.153
					1	74	21.58	0.144
					36	0	21.46	0.140
					36	19	21.44	0.139
					36	39	21.22	0.132
					75	0	21.32	0.136

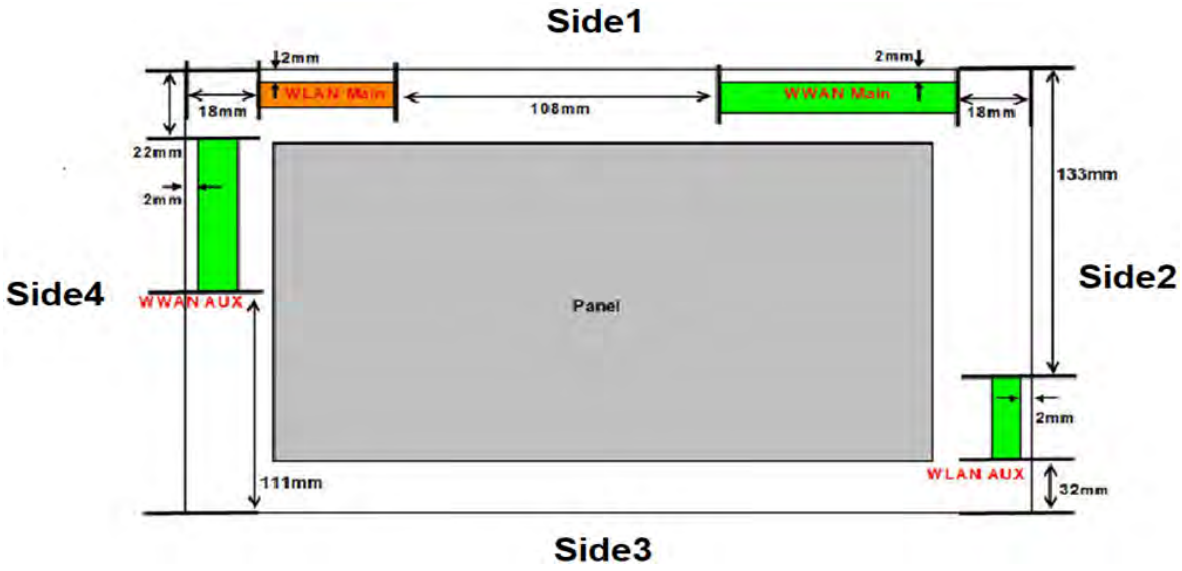
Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band41	15 MHz	16QAM	39725	2503.5	1	0	21.59	0.144
					1	37	21.63	0.146
					1	74	21.56	0.143
					36	0	20.54	0.113
					36	19	20.66	0.116
					36	39	20.55	0.114
					75	0	20.60	0.115
			39765	2507.5	1	0	21.45	0.140
					1	37	21.44	0.139
					1	74	21.41	0.138
					36	0	20.33	0.108
					36	19	20.50	0.112
					36	39	20.41	0.110
					75	0	20.39	0.109
			40173	2548.3	1	0	21.55	0.143
					1	37	21.40	0.138
					1	74	21.40	0.138
					36	0	20.39	0.109
					36	19	20.47	0.111
					36	39	20.48	0.112
					75	0	20.43	0.110
			40620	2593.0	1	0	21.77	0.150
					1	37	21.55	0.143
					1	74	21.60	0.145
					36	0	20.58	0.114
					36	19	20.65	0.116
					36	39	20.63	0.116
					75	0	20.58	0.114
			41068	2637.8	1	0	21.08	0.128
					1	37	20.93	0.124
					1	74	20.62	0.115
					36	0	20.25	0.106
					36	19	20.26	0.106
					36	39	20.22	0.105
					75	0	20.13	0.103
			41515	2682.5	1	0	21.28	0.134
					1	37	21.12	0.129
					1	74	20.82	0.121
					36	0	20.44	0.111
					36	19	20.45	0.111
					36	39	20.41	0.110
					75	0	20.33	0.108

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band41	20 MHz	QPSK	39750	2506.0	1	0	22.52	0.179
					1	49	**22.62**	**0.183**
					1	99	22.16	0.164
					50	0	21.37	0.137
					50	25	21.45	0.140
					50	50	21.44	0.139
					100	0	21.35	0.136
			39790	2510.0	1	0	22.11	0.163
					1	49	22.19	0.166
					1	99	22.07	0.161
					50	0	21.38	0.137
					50	25	21.40	0.138
					50	50	21.32	0.136
					100	0	21.07	0.128
			40185	2549.5	1	0	22.37	0.173
					1	49	22.41	0.174
					1	99	21.97	0.157
					50	0	21.16	0.131
					50	25	21.30	0.135
					50	50	21.24	0.133
					100	0	21.22	0.132
			40620	2593.0	1	0	22.29	0.169
					1	49	22.39	0.173
					1	99	22.21	0.166
					50	0	21.52	0.142
					50	25	21.61	0.145
					50	50	21.51	0.142
					100	0	21.20	0.132
			41055	2636.5	1	0	21.98	0.158
					1	49	22.37	0.173
					1	99	21.90	0.155
					50	0	21.17	0.131
					50	25	21.18	0.131
					50	50	20.81	0.121
					100	0	20.94	0.124
			41490	2680.0	1	0	22.12	0.163
					1	49	22.57	0.181
					1	99	22.08	0.161
					50	0	21.38	0.137
					50	25	21.30	0.135
					50	50	20.97	0.125
					100	0	21.06	0.128

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band41	20 MHz	16QAM	39750	2506.0	1	0	21.57	0.144
					1	49	21.73	0.149
					1	99	21.38	0.137
					50	0	20.38	0.109
					50	25	20.58	0.114
					50	50	20.55	0.114
					100	0	20.48	0.112
			39790	2510.0	1	0	21.41	0.138
					1	49	21.52	0.142
					1	99	21.16	0.131
					50	0	20.20	0.105
					50	25	20.37	0.109
					50	50	20.37	0.109
					100	0	20.32	0.108
			40185	2549.5	1	0	21.48	0.141
					1	49	21.57	0.144
					1	99	21.19	0.132
					50	0	20.30	0.107
					50	25	20.32	0.108
					50	50	20.25	0.106
					100	0	20.49	0.112
			40620	2593.0	1	0	21.69	0.148
					1	49	**21.75**	**0.150**
					1	99	21.40	0.138
					50	0	20.50	0.112
					50	25	20.53	0.113
					50	50	20.41	0.110
					100	0	20.66	0.116
			41055	2636.5	1	0	21.16	0.131
					1	49	20.93	0.124
					1	99	21.05	0.127
					50	0	20.48	0.112
					50	25	20.28	0.107
					50	50	20.23	0.105
					100	0	20.30	0.107
			41490	2680.0	1	0	21.28	0.134
					1	49	21.14	0.130
					1	99	21.20	0.132
					50	0	20.63	0.116
					50	25	20.48	0.112
					50	50	20.45	0.111
					100	0	20.47	0.111

6.9 Antenna location

Ant	Antenna to user distance (mm)					
	Front	Back	Side 1	Side 2	Side 3	Side 4
WWAN Main_Ant.	2	2	2	18	200	150

Antenna location


6.10 Standalone SAR Test Exclusion Calculation

Ant. Used	Band	Frequency	Tune-Power		Distance of Ant. To User (mm)				
		(GHz)	(dBm)	(mW)	Back	Side 1	Side 2	Side 3	Side 4
WWAN ANT	WCDMA Band II	1.907	24	251	2	2	18	200	150
	WCDMA Band IV	1.752	24	251	2	2	18	200	150
	WCDMA Band V	0.846	24	251	2	2	18	200	150
	LTE Band 4	1.754	24	251	2	2	18	200	150
	LTE Band 7	2.570	23	200	2	2	18	200	150
	LTE Band 12	0.715	24	251	2	2	18	200	150
	LTE Band 13	0.783	24	251	2	2	18	200	150
	LTE Band 25	1.914	24	251	2	2	18	200	150
	LTE Band 26	0.848	24	251	2	2	18	200	150
	LTE Band 41	2.688	23	200	2	2	18	200	150

Ant. Used	Band	Frequency	Tune-Power		Calculated value and evaluated result					
		(GHz)	(dBm)	(mW)	Back	Side 1	Side 2	Side 3	Side 4	Exclusion threshold
WWAN ANT	WCDMA Band II	1.907	24	251	69.3	69.3	19.3	1608.6 mW	1108.6 mW	3
					MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	
	WCDMA Band IV	1.752	24	251	66.4	66.4	18.5	1613.3 mW	1113.3 mW	3
					MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	
	WCDMA Band V	0.846	24	251	46.2	46.2	12.8	1009.1 mW	727.1 mW	3
					MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	
	LTE Band 4	1.754	24	251	66.5	66.5	18.5	1613.3 mW	1113.3 mW	3
					MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	
	LTE Band 7	2.570	23	200	64.1	64.1	17.8	1593.6mW	1093.6mW	3
					MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	
	LTE Band 12	0.715	24	251	42.5	42.5	11.8	892.4 mW	654.1 mW	3
					MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	
	LTE Band 13	0.783	24	251	44.5	44.5	12.4	952.5 mW	691.5 mW	3
					MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	
	LTE Band 25	1.914	24	251	69.5	69.5	19.3	1608.4 mW	1108.4 mW	3
					MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	
	LTE Band 26	0.848	24	251	46.2	46.2	12.8	1010.9 mW	728.2 mW	3
					MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	
	LTE Band 41	2.688	23	200	65.6	65.6	18.2	1591.5mW	1091.5mW	3
					MEASURE	MEASURE	MEASURE	EXEMPT	EXEMPT	

Note:

1. The test reduction for distance less than 50 mm and more than 50 mm. 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. Calculated Value include string "mW",that is meam through compare output power with threshold, if the output power more than threshold value the SAR test should be perform. Otherwise, the SAR test could be exempt. (> 50 mm)
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. Calculated Value only inculde number format, that is mean through compare output power with threshold, if the Calculated value more than 3, the SAR test should be perform. Otherwise, the SAR test could be exempt. (<50 mm)
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.

6.11 Simultaneous Transmitting Evaluate

Simultaneous transmission configurations as below:

Condition	Frequency Band			
	WWAN ANT	WLAN ANT-Main	WLAN ANT-AUX	Bluetooth ANT
1	V	V	V	V
2	V	V	V	---

Estimated SAR

Ant. Used	Band	Frequency	Tune-Power		Estimated SAR 1-g (W/kg)				
		(GHz)	(dBm)	(mW)	Back	Side 1	Side 2	Side 3	Side 4
WWAN ANT	WCDMA Band II	1.907	24	251	---	---	---	0.4	0.4
	WCDMA Band IV	1.752	24	251	---	---	---	0.4	0.4
	WCDMA Band V	0.846	24	251	---	---	---	0.4	0.4
	LTE Band 4	1.754	24	251	---	---	---	0.4	0.4
	LTE Band 7	2.570	23	200	---	---	---	0.4	0.4
	LTE Band 12	0.715	24	251	---	---	---	0.4	0.4
	LTE Band 13	0.783	24	251	---	---	---	0.4	0.4
	LTE Band 25	1.914	24	251	---	---	---	0.4	0.4
	LTE Band 26	0.848	24	251	---	---	---	0.4	0.4
	LTE Band 41	2.688	23	200	---	---	---	0.4	0.4

6.11.1 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)		WLAN ANT-Main (2)		WLAN ANT-AUX (3)	
				Band	SAR_{1g} (W/Kg)	Band	SAR_{1g} (W/Kg)	Band	SAR_{1g} (W/Kg)
Flat	Back	0	N/A	LTE Band	1.10	WLAN 5 GHz Band	0.14	WLAN 5 GHz Band	1.16
	Side 1	0	N/A	LTE Band	1.14	WLAN 5 GHz Band	1.12	WLAN 5 GHz Band	**0.4
	Side 2	0	N/A	LTE Band	0.11	WLAN 5 GHz Band	**0.4	WLAN 5 GHz Band	0.43
	Side 3	0	N/A	LTE Band	0.04	WLAN 5 GHz Band	**0.4	WLAN 5 GHz Band	0.62
	Side 4	0	N/A	LTE Band	0.17	WLAN 5 GHz Band	0.06	WLAN 5 GHz Band	**0.4

Phantom Position		Spacing (mm)	ASSY	Bluetooth ANT (4)		(1)+(2)+(3) ∑ SAR_{1g} (W/Kg)	(1)+(2)+(3)+(4) ∑ SAR_{1g} (W/Kg)	Event
				Band	SAR_{1g} (W/Kg)			
Flat	Back	0	N/A	Bluetooth	0.022	2.39	2.42	>1.6
	Side 1	0	N/A	Bluetooth	**0.4	*2.66	*3.06	>1.6
	Side 2	0	N/A	Bluetooth	0.007	*0.94	*0.95	>1.6
	Side 3	0	N/A	Bluetooth	*0.07	*1.05	*1.12	<1.6
	Side 4	0	N/A	Bluetooth	**0.4	*0.63	*1.03	<1.6

Note: 1. *=Estimated SAR

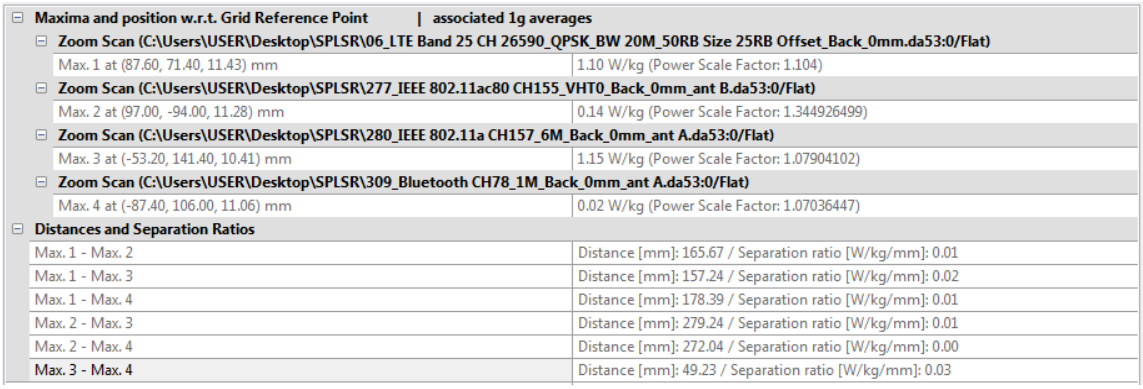
2. **The Estimated SAR 0.4W/Kg, test separation distances is > 50 mm.
3. When the sum of 1-g SAR of all simultaneously transmitting antennas in and operating mode and exposure condition combination is within the SAR limit, SAR test exclusion applies to that simultaneous transmission configuration.
4. WLAN in the ANT-Main and ANT-AUX of the SAR value reference to the FCC ID QYL9260NG of the report no.1904FS13 (System 2 Full).

6.11.2 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.

WWAN Main + WLAN 5 GHz Main + WLAN 5 GHz AUX + WLAN BT

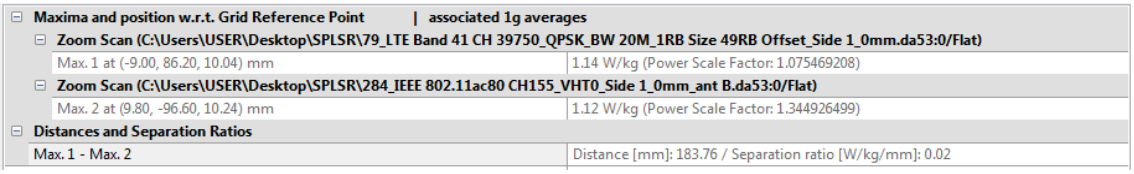
Antenna	Plot.	Frequency (GHz)	Test Position	SAR_{1g} (W/Kg)	$\sum SAR_{1g}$ (W/Kg)	Antenna pair (mm)	Peak location separation ratio
WWAN Main	#6	0.191	Back	1.10	1.24	165.67	0.01
WLAN Main	#277	5.775	Back	0.14			
WWAN Main	#6	0.191	Back	1.10	2.25	157.24	0.02
WLAN AUX	#280	5.785	Back	1.15			
WLAN Main	#6	0.191	Back	1.10	1.12	178.39	0.01
WLAN BT	#309	2.480	Back	0.02			
WLAN Main	#277	5.775	Back	0.14	1.29	279.24	0.01
WLAN AUX	#280	5.785	Back	1.15			
WLAN Main	#277	5.775	Back	0.14	0.16	272.04	0
WLAN BT	#309	2.480	Back	0.02			
WLAN AUX	#280	5.785	Back	1.15	1.17	49.23	0.03
WLAN BT	#309	2.480	Back	0.02			



Maxima and position w.r.t. Grid Reference Point | associated 1g averages	
Zoom Scan (C:\Users\USER\Desktop\SPLSR\06_LTE Band 25 CH 26590_QPSK_BW 20M_50RB Size 25RB Offset_Back_0mm.da53:0/Flat)	
Max. 1 at (87.60, 71.40, 11.43) mm	1.10 W/kg (Power Scale Factor: 1.104)
Zoom Scan (C:\Users\USER\Desktop\SPLSR\277_IEEE 802.11ac80 CH155_VHT0_Back_0mm_ant B.da53:0/Flat)	
Max. 2 at (97.00, -94.00, 11.28) mm	0.14 W/kg (Power Scale Factor: 1.344926499)
Zoom Scan (C:\Users\USER\Desktop\SPLSR\280_IEEE 802.11a CH157_6M_Back_0mm_ant A.da53:0/Flat)	
Max. 3 at (-53.20, 141.40, 10.41) mm	1.15 W/kg (Power Scale Factor: 1.07904102)
Zoom Scan (C:\Users\USER\Desktop\SPLSR\309_Bluetooth CH78_1M_Back_0mm_ant A.da53:0/Flat)	
Max. 4 at (-87.40, 106.00, 11.06) mm	0.02 W/kg (Power Scale Factor: 1.07036447)
Distances and Separation Ratios	
Max. 1 - Max. 2	Distance [mm]: 165.67 / Separation ratio [W/kg/mm]: 0.01
Max. 1 - Max. 3	Distance [mm]: 157.24 / Separation ratio [W/kg/mm]: 0.02
Max. 1 - Max. 4	Distance [mm]: 178.39 / Separation ratio [W/kg/mm]: 0.01
Max. 2 - Max. 3	Distance [mm]: 279.24 / Separation ratio [W/kg/mm]: 0.01
Max. 2 - Max. 4	Distance [mm]: 272.04 / Separation ratio [W/kg/mm]: 0.00
Max. 3 - Max. 4	Distance [mm]: 49.23 / Separation ratio [W/kg/mm]: 0.03

WWAN Main + WLAN 5 GHz Main + WLAN 5 GHz AUX

Antenna	Plot.	Frequency (GHz)	Test Position	SAR_{1g} (W/Kg)	ΣSAR_{1g} (W/Kg)	Antenna pair (mm)	Peak location separation ratio
WWAN Main	#79	2.506	Side 1	1.14	2.26	183.76	0.02
WLAN Main	#284	5.775	Side 1	1.12			



Maxima and position w.r.t. Grid Reference Point | associated 1g averages	
Zoom Scan (C:\Users\USER\Desktop\SPLSR\79_LTE Band 41 CH 39750_QPSK_BW 20M_1RB Size 49RB Offset_Side 1_0mm.da53:0/Flat)	
Max. 1 at (-9.00, 86.20, 10.04) mm	1.14 W/kg (Power Scale Factor: 1.075469208)
Zoom Scan (C:\Users\USER\Desktop\SPLSR\284_IEEE 802.11ac80 CH155_VHT0_Side 1_0mm_ant B.da53:0/Flat)	
Max. 2 at (9.80, -96.60, 10.24) mm	1.12 W/kg (Power Scale Factor: 1.344926499)
Distances and Separation Ratios	
Max. 1 - Max. 2	Distance [mm]: 183.76 / Separation ratio [W/kg/mm]: 0.02

6.12 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:

- 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.
- SAR for EVDO Rev. A is not required when the maximum average output of each RF channels is less than that measured in Subtype 0/1 Physical layer configurations.
- For 1xRTT SAR is not required when the maximum average output of each channel is less than 1/4 dB higher than that measured in EVDO Rev.0.
- 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.

7. System Verification and Validation

7.1 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

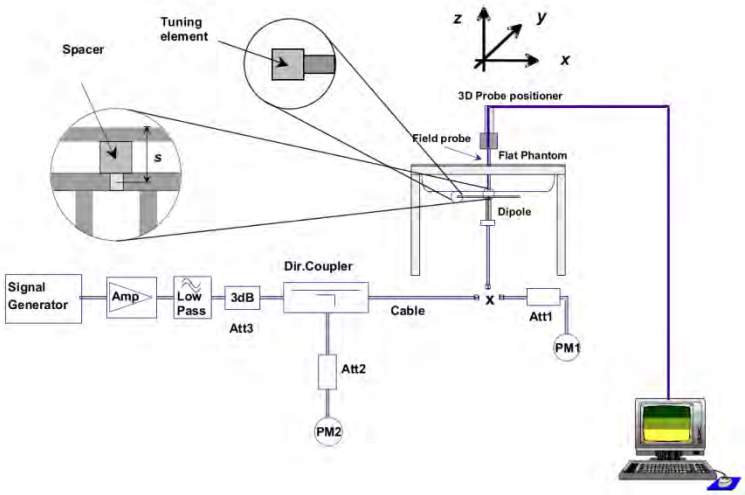


Figure 7. System Verification Setup Diagram

Figure 8. Validation Kit

7.2 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. The verification was performed at 750, 835, 1750, 1900 and 2600 MHz.

Mixture Type	Frequency (MHz)	Power	Probe	Dipole	$SAR_{1\,g}$ (W/Kg)	$SAR_{10\,g}$ (W/Kg)	1 W Target		Difference percentage		Date
			Model / Serial No.	Model / Serial No.			$SAR_{1\,g}$ [W/kg]	$SAR_{10\,g}$ [W/kg]	1 g	10 g	
Body	750	250 mW	EX3DV4-SN3847	D750V3 – SN1004	2.24	1.52	8.80	5.97	1.8 %	1.8 %	Mar. 19, 2019
		Normalize to 1 Watt			8.96	6.08					
Body	835	250 mW	EX3DV4-SN3847	D835V2 – SN4d082	2.61	1.73	9.66	6.50	7.5 %	6.1 %	Mar. 19, 2019
		Normalize to 1 Watt			10.44	6.92					
Body	1750	250 mW	EX3DV4-SN3847	D1750V2 – SN1023	9.7	5.09	36.80	19.70	5.2 %	3.2 %	Mar. 15, 2019
		Normalize to 1 Watt			38.80	20.36					
Body	1900	250 mW	EX3DV4-SN3847	D1900V2 – SN5d111	10.9	5.62	40.40	21.80	7.3 %	3.0 %	Mar. 14, 2019
		Normalize to 1 Watt			43.60	22.48					
Body	2600	250 mW	EX3DV4-SN3847	D2600V2 – SN1007	14.5	6.45	54.30	24.10	6.4 %	6.6 %	Mar. 16, 2019
		Normalize to 1 Watt			58.00	25.80					
Body	2600	250 mW	EX3DV4-SN3847	D2600V2 – SN1007	14.1	6.18	54.30	24.10	3.7 %	2.5 %	Mar. 18, 2019
		Normalize to 1 Watt			56.40	24.72					

8. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Cal. Date	Cal.Period
SPEAG	750MHz System Validation Kit	D750V3	1004	09/05/2018	1 year
SPEAG	835MHz System Validation Kit	D835V2	4d082	09/06/2018	1 year
SPEAG	1750MHz System Validation Kit	D1750V2	1023	06/11/2018	1 year
SPEAG	1900MHz System Validation Kit	D1900V2	5d111	09/11/2018	1 year
SPEAG	2600MHz System Validation Kit	D2600V2	1007	11/01/2018	1 year
SPEAG	Dosimetric E-Field Probe	EX3DV4	3847	04/26/2018	1 year
SPEAG	Data Acquisition Electronics	DAE4	917	12/07/2018	1 year
SPEAG	Measurement Server	SE UMS 011 AA	1025	NCR	
SPEAG	Device Holder	N/A	N/A	NCR	
SPEAG	Phantom	ELI V4.0	1036	NCR	
SPEAG	Robot	Staubli TX90XL	F16/54FTA1/A/01	NCR	
SPEAG	Software	DASY52 V52.10 (0)	N/A	NCR	
SPEAG	Software	SEMCAD X V14.6.10(7417)	N/A	NCR	
R&S	Wireless Communication Test Set	CMU200	112387	03/12/2019	1 year
Anritsu	Radio Communication Analyzer	MT8820C	6201342039	12/13/2018	1 year
Agilent	ENA Series Network Analyzer	E5071B	MY42404655	04/17/2018	1 year
Agilent	Dielectric Probe Kit	85070C	US99360094	NCR	
HILA	Digital Thermometer	TM-906	GF-006	05/22/2018	1 year
Agilent	Power Sensor	8481H	3318A20779	06/12/2018	1 year
Agilent	Power Meter	EDM Series E4418B	GB40206143	06/12/2018	1 year
Agilent	Signal Generator	E8257D	MY44320425	03/05/2019	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

9. Measurement Uncertainty

Item	Uncertainty Component	Uncertainty Value	Prob. Dist	Div.	c_i (1 g)	c_i (10 g)	Std. Unc. (1-g)	Std. Unc. (10-g)	v_i or V_{eff}
Measurement System									
u1	Probe Calibration (k=1)	±6.0 %	Normal	1	1	1	±6.0 %	±6.0 %	∞
u2	Axial Isotropy	±4.7 %	Rectangular	$\sqrt{3}$	0.7	0.7	±1.9 %	±1.9 %	∞
u3	Hemispherical Isotropy	±9.6 %	Rectangular	$\sqrt{3}$	0.7	0.7	±3.9 %	±3.9 %	
u4	Boundary Effect	±1.0 %	Rectangular	$\sqrt{3}$	1	1	±0.6 %	±0.6 %	∞
u5	Linearity	±4.7 %	Rectangular	$\sqrt{3}$	1	1	±2.7 %	±2.7 %	∞
u6	System Detection Limit	±1.0 %	Rectangular	$\sqrt{3}$	1	1	±0.6 %	±0.6 %	∞
u7	Readout Electronics	±0.3 %	Normal	1	1	1	±0.3 %	±0.3 %	∞
u8	Response Time	±0.8 %	Rectangular	$\sqrt{3}$	1	1	±0.5 %	±0.5 %	∞
u9	Integration Time	±1.9 %	Rectangular	$\sqrt{3}$	1	1	±1.1 %	±1.1 %	∞
u10	RF Ambient Conditions	±3.0 %	Rectangular	$\sqrt{3}$	1	1	±1.7 %	±1.7 %	∞
u11	RF Ambient Reflections	±3.0 %	Rectangular	$\sqrt{3}$	1	1	±1.7 %	±1.7 %	∞
u12	Probe Positioner Mechanical Tolerance	±0.4 %	Rectangular	$\sqrt{3}$	1	1	±0.2 %	±0.2 %	∞
u13	Probe Positioning with respect to Phantom Shell	±2.9 %	Rectangular	$\sqrt{3}$	1	1	±1.7 %	±1.7 %	∞
u14	Extrapolation, interpolation and integration Algorithms for Max. SAR Evaluation	±1.0 %	Rectangular	$\sqrt{3}$	1	1	±0.6 %	±0.6 %	∞
Test sample Related									
u15	Test sample Positioning	±2.9 %	Normal	1	1	1	±2.9 %	±2.9 %	89
u16	Device Holder Uncertainty	±3.6 %	Normal	1	1	1	±3.6 %	±3.6 %	5
u17	Output Power Variation - SAR drift measurement	±5.0 %	Rectangular	$\sqrt{3}$	1	1	±2.9 %	±2.9 %	∞
Phantom and Tissue Parameters									
u18	Phantom Uncertainty (shape and thickness tolerances)	±4.0 %	Rectangular	$\sqrt{3}$	1	1	±2.3 %	±2.3 %	∞
u19	Liquid Conductivity - deviation from target values	±5.0 %	Rectangular	$\sqrt{3}$	0.64	0.43	±1.8 %	±1.2 %	∞
u20	Liquid Conductivity - measurement uncertainty	±2.5 %	Normal	1	0.64	0.43	±1.6 %	±1.08 %	69
u21	Liquid Permittivity - deviation from target values	±5.0 %	Rectangular	$\sqrt{3}$	0.6	0.49	±1.7 %	±1.4 %	∞
u22	Liquid Permittivity - measurement uncertainty	±2.5 %	Normal	1	0.6	0.49	±1.5 %	±1.23 %	69
Combined standard uncertainty			RSS				±10.94 %	±10.71 %	380
Expanded uncertainty (95 % CONFIDENCE LEVEL)			k=2				±21.88 %	±21.41 %	

Table 4. Uncertainty Budget for frequency range 300 MHz to 3 GHz

Item	Uncertainty Component	Uncertainty Value	Prob. Dist	Div.	c_i (1 g)	c_i (10 g)	Std. Unc. （1-g）	Std. Unc. （10-g）	v_i or V_{eff}
Measurement System									
u1	Probe Calibration (k=1)	±6.5 %	Normal	1	1	1	±6.5 %	±6.5 %	∞
u2	Axial Isotropy	±4.7 %	Rectangular	$\sqrt{3}$	0.7	0.7	±1.9 %	±1.9 %	∞
u3	Hemispherical Isotropy	±9.6 %	Rectangular	$\sqrt{3}$	0.7	0.7	±3.9 %	±3.9 %	
u4	Boundary Effect	±2.0 %	Rectangular	$\sqrt{3}$	1	1	±1.2 %	±1.2 %	∞
u5	Linearity	±4.7 %	Rectangular	$\sqrt{3}$	1	1	±2.7 %	±2.7 %	∞
u6	System Detection Limit	±1.0 %	Rectangular	$\sqrt{3}$	1	1	±0.6 %	±0.6 %	∞
u7	Readout Electronics	±0.0 %	Normal	1	1	1	±0.0 %	±0.0 %	∞
u8	Response Time	±0.8 %	Rectangular	$\sqrt{3}$	1	1	±0.5 %	±0.5 %	∞
u9	Integration Time	±2.8 %	Rectangular	$\sqrt{3}$	1	1	±2.8 %	±2.8 %	∞
u10	RF Ambient Conditions	±3.0 %	Rectangular	$\sqrt{3}$	1	1	±1.7 %	±1.7 %	∞
u11	RF Ambient Reflections	±3.0 %	Rectangular	$\sqrt{3}$	1	1	±1.7 %	±1.7 %	∞
u12	Probe Positioner Mechanical Tolerance	±0.7 %	Rectangular	$\sqrt{3}$	1	1	±0.7 %	±0.7 %	∞
u13	Probe Positioning with respect to Phantom Shell	±9.9 %	Rectangular	$\sqrt{3}$	1	1	±5.7 %	±5.7 %	∞
u14	Extrapolation, interpolation and integration Algorithms for Max. SAR Evaluation	±3.0 %	Rectangular	$\sqrt{3}$	1	1	±1.7 %	±1.7 %	∞
Test sample Related									
u15	Test sample Positioning	±2.9 %	Normal	1	1	1	±2.9 %	±2.9 %	89
u16	Device Holder Uncertainty	±3.6 %	Normal	1	1	1	±3.6 %	±3.6 %	5
u17	Output Power Variation - SAR drift measurement	±5.0 %	Rectangular	$\sqrt{3}$	1	1	±2.9 %	±2.9 %	∞
Phantom and Tissue Parameters									
u18	Phantom Uncertainty (shape and thickness tolerances)	±4.0 %	Rectangular	$\sqrt{3}$	1	1	±2.3 %	±2.3 %	∞
u19	Liquid Conductivity - deviation from target values	±5.0 %	Rectangular	$\sqrt{3}$	0.64	0.43	±1.8 %	±1.2 %	∞
u20	Liquid Conductivity - measurement uncertainty	±2.5 %	Normal	1	0.64	0.43	±1.6 %	±1.08 %	69
u21	Liquid Permittivity - deviation from target values	±5.0 %	Rectangular	$\sqrt{3}$	0.6	0.49	±1.7 %	±1.4 %	∞
u22	Liquid Permittivity - measurement uncertainty	±2.5 %	Normal	1	0.6	0.49	±1.5 %	±1.23 %	69
Combined standard uncertainty			RSS				±12.68 %	±12.48 %	700
Expanded uncertainty (95 % CONFIDENCE LEVEL)			k=2				±25.37 %	±24.97 %	

Table 5. Uncertainty Budget for frequency range 3 GHz to 6 GHz

10. 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

10.1 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

10.2 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.

Grid Type	Frequency		Step size (mm)			X*Y*Z (Point)	Cube size			Step size		
			X	Y	Z		X	Y	Z	X	Y	Z
uniform grid	≦ 3 GHz	≦2 GHz	≤ 8	≤ 8	≤ 5	5*5*7	32	32	30	8	8	5
		2 G - 3 G	≤ 5	≤ 5	≤ 5	7*7*7	30	30	30	5	5	5
	3 - 6 GHz	3 - 4 GHz	≤ 5	≤ 5	≤ 4	7*7*8	30	30	28	5	5	4
		4 - 5 GHz	≤ 4	≤ 4	≤ 3	8*8*10	28	28	27	4	4	3
		5 - 6 GHz	≤ 4	≤ 4	≤ 2	8*8*12	28	28	22	4	4	2

(Our measure settings are refer KDB Publication 865664 D01v01r04)

10.3 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.

10.4 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.

10.5 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. SAR Test Results Summary

1. When the WWAN band channel's reported SAR 1 g of the position is > 0.8 W/kg, low, middle and high channel are supposed to be tested.
2. 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.
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. The procedures required for 1 RB allocation are applied to measure the SAR for QPSK with 50 % RB allocation.
5. 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.
6. The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) configurations with 12.2 kbps RMC as the primary mode.

11.1 Body SAR Measurement

Index.	Band	Frequency		Modulation or Sub-Test	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Power	Max tune-up	Duty Cycle (%)	Reported SAR_{1g} (W/kg)	Sensor trigger
		Ch.	MHz										
#32	WCDMA Band II	9262	1852.4	RMC12.2K	Back	0	---	0.907	19.46	19.5	100	0.92	On
#33	WCDMA Band II	9400	1880.0	RMC12.2K	Back	0	---	0.914	19.38	19.5	100	0.94	On
#34	WCDMA Band II	9538	1907.6	RMC12.2K	Back	0	---	0.921	19.35	19.5	100	0.95	On
#42	WCDMA Band II	9538	1907.6	RMC12.2K	Back	0	Battery 2	0.177	19.35	19.5	100	0.18	On
#35	WCDMA Band II	9262	1852.4	RMC12.2K	Back	7	---	0.66	23.58	24	100	0.73	OFF
#38	WCDMA Band II	9262	1852.4	RMC12.2K	Side 1	0	---	0.939	19.46	19.5	100	0.95	On
#39	WCDMA Band II	9400	1880.0	RMC12.2K	Side 1	0	---	0.847	19.38	19.5	100	0.87	On
#40	WCDMA Band II	9538	1907.6	RMC12.2K	Side 1	0	---	0.756	19.35	19.5	100	0.78	On
#41	WCDMA Band II	9262	1852.4	RMC12.2K	Side 1	10	---	0.558	23.58	24	100	0.62	OFF
#31	WCDMA Band II	9262	1852.4	RMC12.2K	Side 2	0	---	0.035	23.58	24	100	0.04	OFF

Index.	Band	Frequency		Modulation or Sub-Test	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Power	Max tune-up	Duty Cycle (%)	Reported SAR_{1g} (W/kg)	Sensor trigger
		Ch.	MHz										
#46	WCDMA Band IV	1312	1712.4	RMC12.2K	Back	0	---	0.578	19.44	19.5	100	0.59	On
#47	WCDMA Band IV	1312	1712.4	RMC12.2K	Back	7	---	0.485	23.66	24	100	0.52	OFF
#52	WCDMA Band IV	1312	1712.4	RMC12.2K	Side 1	0	---	0.893	19.44	19.5	100	0.91	On
#53	WCDMA Band IV	1413	1732.6	RMC12.2K	Side 1	0	---	0.924	19.42	19.5	100	0.94	On
#54	WCDMA Band IV	1513	1752.6	RMC12.2K	Side 1	0	---	0.955	19.38	19.5	100	0.98	On
#57	WCDMA Band IV	1513	1752.6	RMC12.2K	Side 1	0	Battery 2	0.935	19.38	19.5	100	0.96	On
#56	WCDMA Band IV	1312	1712.4	RMC12.2K	Side 1	10	---	0.285	23.66	24	100	0.31	OFF
#58	WCDMA Band IV	1312	1712.4	RMC12.2K	Side 2	0	---	0.013	23.66	24	100	0.01	OFF
#134	WCDMA Band V	4132	826.4	RMC12.2K	Back	0	---	0.626	23.75	24	100	0.66	OFF
#129	WCDMA Band V	4132	826.4	RMC12.2K	Side 1	0	---	0.845	21.7	22	100	0.91	On
#130	WCDMA Band V	4183	836.6	RMC12.2K	Side 1	0	---	0.905	21.7	22	100	0.97	On
#136	WCDMA Band V	4183	836.6	RMC12.2K	Side 1	0	Battery 2	0.849	21.7	22	100	0.91	On
#131	WCDMA Band V	4233	846.6	RMC12.2K	Side 1	0	---	0.839	21.66	22	100	0.91	On
#132	WCDMA Band V	4132	826.4	RMC12.2K	Side 1	10	---	0.4	23.75	24	100	0.42	OFF
#133	WCDMA Band V	4132	826.4	RMC12.2K	Side 2	0	---	0.074	23.75	24	100	0.08	OFF

Index.	Band	Frequency		Bandwidth	RB Size	RB Offset	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Power	Max tune-up	Duty Cycle (%)	Reported SAR_{1g} (W/kg)	Sensor trigger
		Ch.	MHz												
#68	LTE Band 4 (QPSK)	20175	1732.5	20M	1	49	Back	0	---	0.715	19.41	19.5	100	0.73	On
#69	LTE Band 4 (QPSK)	20175	1732.5	20M	50	50	Back	0	---	0.712	19.12	19.5	100	0.78	On
#66	LTE Band 4 (QPSK)	20175	1732.5	20M	1	49	Back	7	---	0.539	23.54	24	100	0.60	OFF
#67	LTE Band 4 (QPSK)	20175	1732.5	20M	50	50	Back	7	---	0.424	22.52	23	100	0.47	OFF
#61	LTE Band 4 (QPSK)	20175	1732.5	20M	1	49	Side 1	0	---	0.945	19.41	19.5	100	0.97	On
#62	LTE Band 4 (QPSK)	20175	1732.5	20M	50	50	Side 1	0	---	0.945	19.12	19.5	100	1.03	On
#77	LTE Band 4 (QPSK)	20175	1732.5	20M	50	50	Side 1	0	Battery 2	0.943	19.41	19.5	100	0.96	On
#63	LTE Band 4 (QPSK)	20175	1732.5	20M	100	0	Side 1	0	---	0.955	19.17	19.5	100	1.03	On
#64	LTE Band 4 (QPSK)	20175	1732.5	20M	1	49	Side 1	10	---	0.342	23.54	24	100	0.38	OFF
#65	LTE Band 4 (QPSK)	20175	1732.5	20M	50	50	Side 1	10	---	0.277	22.52	23	100	0.31	OFF
#59	LTE Band 4 (QPSK)	20175	1732.5	20M	1	49	Side 2	0	---	0.018	23.54	24	100	0.02	OFF
#60	LTE Band 4 (QPSK)	20175	1732.5	20M	50	50	Side 2	0	---	0.014	22.52	23	100	0.02	OFF

Index.	Band	Frequency		Bandwidth	RB Size	RB Offset	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Power	Max tune-up	Duty Cycle (%)	Reported SAR_{1g} (W/kg)	Sensor trigger
		Ch.	MHz												
#112	LTE Band 7 (QPSK)	21350	2560.0	20M	1	49	Back	0	---	0.78	18.39	18.5	100	0.80	On
#113	LTE Band 7 (QPSK)	20850	2510.0	20M	1	49	Back	0	---	1.02	18.28	18.5	100	1.07	On
#127	LTE Band 7 (QPSK)	20850	2510.0	20M	1	49	Back	0	Battery 2	0.179	18.28	18.5	100	0.19	On
#114	LTE Band 7 (QPSK)	21100	2535.0	20M	1	49	Back	0	---	0.913	18.37	18.5	100	0.94	On
#115	LTE Band 7 (QPSK)	21350	2560.0	20M	50	0	Back	0	---	0.78	18.37	18.5	100	0.80	On
#116	LTE Band 7 (QPSK)	20850	2510.0	20M	50	0	Back	0	---	1.01	18.35	18.5	100	1.05	On
#117	LTE Band 7 (QPSK)	21100	2535.0	20M	50	0	Back	0	---	0.936	18.33	18.5	100	0.97	On
#118	LTE Band 7 (QPSK)	21350	2560.0	20M	100	0	Back	0	---	0.77	18.32	18.5	100	0.80	On
#119	LTE Band 7 (QPSK)	21350	2560.0	20M	1	49	Back	7	---	0.347	22.76	23	100	0.37	OFF
#120	LTE Band 7 (QPSK)	21350	2560.0	20M	50	0	Back	7	---	0.275	21.84	22	100	0.29	OFF
#121	LTE Band 7 (QPSK)	21350	2560.0	20M	1	49	Side 1	0	---	0.652	18.39	18.5	100	0.67	On
#122	LTE Band 7 (QPSK)	21350	2560.0	20M	50	0	Side 1	0	---	0.66	18.28	18.5	100	0.69	On
#123	LTE Band 7 (QPSK)	21350	2560.0	20M	1	49	Side 1	10	---	0.419	22.76	23	100	0.44	OFF
#124	LTE Band 7 (QPSK)	21350	2560.0	20M	50	0	Side 1	10	---	0.33	21.84	22	100	0.34	OFF
#125	LTE Band 7 (QPSK)	21350	2560.0	20M	1	49	Side 2	0	---	0.049	22.76	23	100	0.05	OFF
#126	LTE Band 7 (QPSK)	21350	2560.0	20M	50	0	Side 2	0	---	0.039	21.84	22	100	0.04	OFF

Index.	Band	Frequency		Bandwidth	RB Size	RB Offset	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Power	Max tune-up	Duty Cycle (%)	Reported SAR_{1g} (W/kg)	Sensor trigger
		Ch.	MHz												
#161	LTE Band 12 (QPSK)	23095	707.5	10M	1	0	Back	0	---	0.907	23.49	24	100	1.02	OFF
#181	LTE Band 12 (QPSK)	23095	707.5	10M	1	0	Back	0	Battery 2	0.226	23.49	24	100	0.25	OFF
#162	LTE Band 12 (QPSK)	23095	707.5	10M	25	0	Back	0	---	0.672	22.25	23	100	0.80	OFF
#163	LTE Band 12 (QPSK)	23095	707.5	10M	50	0	Back	0	---	0.679	22.24	23	100	0.81	OFF
#170	LTE Band 12 (QPSK)	23095	707.5	10M	1	0	Side 1	0	---	0.836	21.93	22	100	0.85	On
#171	LTE Band 12 (QPSK)	23095	707.5	10M	25	0	Side 1	0	---	0.795	21.55	22	100	0.88	On
#172	LTE Band 12 (QPSK)	23095	707.5	10M	50	0	Side 1	0	---	0.812	21.44	22	100	0.92	On
#173	LTE Band 12 (QPSK)	23095	707.5	10M	1	0	Side 1	10	---	0.251	23.49	24	100	0.28	OFF
#174	LTE Band 12 (QPSK)	23095	707.5	10M	25	0	Side 1	10	---	0.189	22.25	23	100	0.23	OFF
#179	LTE Band 12 (QPSK)	23095	707.5	10M	1	0	Side 2	0	---	0.076	23.49	24	100	0.09	OFF
#180	LTE Band 12 (QPSK)	23095	707.5	10M	25	0	Side 2	0	---	0.061	22.25	23	100	0.07	OFF
#164	LTE Band 13 (QPSK)	23230	782.0	10M	1	24	Back	0	---	0.769	23.07	24	100	0.95	OFF
#165	LTE Band 13 (QPSK)	23230	782.0	10M	25	12	Back	0	---	0.587	21.98	23	100	0.74	OFF
#166	LTE Band 13 (QPSK)	23230	782.0	10M	50	0	Back	0	---	0.592	21.99	23	100	0.75	OFF
#167	LTE Band 13 (QPSK)	23230	782.0	10M	1	24	Side 1	0	---	0.943	21.64	22	100	1.02	On
#168	LTE Band 13 (QPSK)	23230	782.0	10M	25	12	Side 1	0	---	0.926	21.52	22	100	1.03	On
#169	LTE Band 13 (QPSK)	23230	782.0	10M	50	0	Side 1	0	---	0.946	21.6	22	100	1.04	On
#182	LTE Band 13 (QPSK)	23230	782.0	10M	50	0	Side 1	0	Battery 2	0.936	21.6	22	100	1.03	On
#175	LTE Band 13 (QPSK)	23230	782.0	10M	1	24	Side 1	10	---	0.382	23.07	24	100	0.47	OFF
#176	LTE Band 13 (QPSK)	23230	782.0	10M	25	12	Side 1	10	---	0.289	21.98	23	100	0.37	OFF
#177	LTE Band 13 (QPSK)	23230	782.0	10M	1	24	Side 2	0	---	0.086	23.07	24	100	0.11	OFF
#178	LTE Band 13 (QPSK)	23230	782.0	10M	25	12	Side 2	0	---	0.065	21.98	23	100	0.08	OFF

Index.	Band	Frequency		Bandwidth	RB Size	RB Offset	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Power	Max tune-up	Duty Cycle (%)	Reported SAR_{1g} (W/kg)	Sensor trigger
		Ch.	MHz												
#1	LTE Band 25 (QPSK)	26365	1882.5	20M	1	0	Back	0	---	0.941	19.36	19.5	100	0.97	On
#2	LTE Band 25 (QPSK)	26140	1860.0	20M	1	0	Back	0	---	0.873	19.01	19.5	100	0.98	On
#3	LTE Band 25 (QPSK)	26590	1905.0	20M	1	0	Back	0	---	0.955	19.15	19.5	100	1.04	On
#4	LTE Band 25 (QPSK)	26365	1882.5	20M	50	25	Back	0	---	0.97	19.13	19.5	100	1.06	On
#5	LTE Band 25 (QPSK)	26140	1860.0	20M	50	25	Back	0	---	0.921	19.15	19.5	100	1.00	On
#6	LTE Band 25 (QPSK)	26590	1905.0	20M	50	25	Back	0	---	0.997	19.07	19.5	100	1.10	On
#43	LTE Band 25 (QPSK)	26590	1905.0	20M	50	25	Back	0	Battery 2	0.175	19.07	19.5	100	0.19	On
#7	LTE Band 25 (QPSK)	26140	1860.0	20M	100	0	Back	0	---	0.925	19.14	19.5	100	1.01	On
#9	LTE Band 25 (QPSK)	26365	1882.5	20M	1	0	Back	7	---	0.816	23.61	24	100	0.89	OFF
#10	LTE Band 25 (QPSK)	26140	1860.0	20M	1	0	Back	7	---	0.742	23.48	24	100	0.84	OFF
#11	LTE Band 25 (QPSK)	26590	1905.0	20M	1	0	Back	7	---	0.884	23.6	24	100	0.97	OFF
#12	LTE Band 25 (QPSK)	26365	1882.5	20M	50	25	Back	7	---	0.688	22.57	23	100	0.76	OFF
#13	LTE Band 25 (QPSK)	26140	1860.0	20M	100	0	Back	7	---	0.63	22.66	23	100	0.68	OFF
#14	LTE Band 25 (QPSK)	26365	1882.5	20M	1	0	Side 1	0	---	0.9	19.36	19.5	100	0.93	On
#15	LTE Band 25 (QPSK)	26140	1860.0	20M	1	0	Side 1	0	---	0.953	19.01	19.5	100	1.07	On
#16	LTE Band 25 (QPSK)	26590	1905.0	20M	1	0	Side 1	0	---	0.863	19.15	19.5	100	0.94	On
#17	LTE Band 25 (QPSK)	26365	1882.5	20M	50	25	Side 1	0	---	0.922	19.13	19.5	100	1.00	On
#18	LTE Band 25 (QPSK)	26140	1860.0	20M	50	25	Side 1	0	---	0.979	19.15	19.5	100	1.06	On

Index.	Band	Frequency		Bandwidth	RB Size	RB Offset	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Power	Max tune-up	Duty Cycle (%)	Reported SAR_{1g} (W/kg)	Sensor trigger
		Ch.	MHz												
#19	LTE Band 25 (QPSK)	26590	1905.0	20M	50	25	Side 1	0	---	0.867	19.07	19.5	100	0.96	On
#20	LTE Band 25 (QPSK)	26140	1860.0	20M	100	0	Side 1	0	---	0.958	19.14	19.5	100	1.04	On
#22	LTE Band 25 (QPSK)	26365	1882.5	20M	1	0	Side 1	10	---	0.978	23.61	24	100	1.07	OFF
#23	LTE Band 25 (QPSK)	26140	1860.0	20M	1	0	Side 1	10	---	0.836	23.48	24	100	0.94	OFF
#25	LTE Band 25 (QPSK)	26590	1905.0	20M	1	0	Side 1	10	---	0.89	23.6	24	100	0.98	OFF
#26	LTE Band 25 (QPSK)	26365	1882.5	20M	50	25	Side 1	10	---	0.637	22.57	23	100	0.70	OFF
#27	LTE Band 25 (QPSK)	26140	1860.0	20M	100	0	Side 1	10	---	0.547	22.66	23	100	0.59	OFF
#28	LTE Band 25 (QPSK)	26365	1882.5	20M	1	0	Side 2	0	---	0.028	23.61	24	100	0.03	OFF
#29	LTE Band 25 (QPSK)	26365	1882.5	20M	50	25	Side 2	0	---	0.03	22.57	23	100	0.03	OFF

Index.	Band	Frequency		Bandwidth	RB Size	RB Offset	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Power	Max tune-up	Duty Cycle (%)	Reported SAR_{1g} (W/kg)	Sensor trigger
		Ch.	MHz												
#150	LTE Band 26 (QPSK)	26865	831.5	15M	1	0	Back	0	---	0.687	23.1	24	100	0.85	OFF
#151	LTE Band 26 (QPSK)	26865	831.5	15M	36	19	Back	0	---	0.571	22.03	23	100	0.71	OFF
#152	LTE Band 26 (QPSK)	26865	831.5	15M	75	0	Back	0	---	0.559	21.94	23	100	0.71	OFF
#153	LTE Band 26 (QPSK)	26865	831.5	15M	1	0	Side 1	0	---	0.844	21.55	22	100	0.94	On
#154	LTE Band 26 (QPSK)	26865	831.5	15M	36	19	Side 1	0	---	0.857	21.39	22	100	0.99	On
#156	LTE Band 26 (QPSK)	26865	831.5	15M	36	19	Side 1	0	Battery 2	0.854	21.39	22	100	0.98	On
#155	LTE Band 26 (QPSK)	26865	831.5	15M	75	0	Side 1	0	-	0.855	21.42	22	100	0.98	On
#157	LTE Band 26 (QPSK)	26865	831.5	15M	1	0	Side 1	10	---	0.339	23.1	24	100	0.42	OFF
#158	LTE Band 26 (QPSK)	26865	831.5	15M	36	19	Side 1	10	---	0.277	22.03	23	100	0.35	OFF
#159	LTE Band 26 (QPSK)	26865	831.5	15M	1	0	Side 2	0	---	0.079	23.1	24	100	0.10	OFF
#160	LTE Band 26 (QPSK)	26865	831.5	15M	36	19	Side 2	0	---	0.062	22.03	23	100	0.08	OFF

Index.	Band	Frequency		Bandwidth	RB Size	RB Offset	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Power	Max tune-up	Duty Cycle (%)	Reported SAR_{1g} (W/kg)	Sensor trigger
		Ch.	MHz												
#92	LTE Band 41 (QPSK)	39750	2506.0	20M	1	49	Back	0	---	0.917	20.7	21	62.9	0.99	On
#93	LTE Band 41 (QPSK)	39790	2510.0	20M	1	49	Back	0	---	0.894	20.71	21	62.9	0.96	On
#94	LTE Band 41 (QPSK)	40185	2549.5	20M	1	49	Back	0	---	0.73	20.6	21	62.9	0.81	On
#95	LTE Band 41 (QPSK)	40620	2593.0	20M	1	49	Back	0	---	0.676	20.59	21	62.9	0.75	On
#96	LTE Band 41 (QPSK)	41055	2636.5	20M	1	49	Back	0	---	0.619	20.51	21	62.9	0.70	On
#97	LTE Band 41 (QPSK)	41490	2680.0	20M	1	49	Back	0	---	0.646	20.51	21	62.9	0.73	On
#99	LTE Band 41 (QPSK)	39750	2506.0	20M	50	25	Back	0	---	0.933	20.52	21	62.9	1.05	On
#100	LTE Band 41 (QPSK)	39790	2510.0	20M	50	25	Back	0	---	0.912	20.39	21	62.9	1.06	On
#101	LTE Band 41 (QPSK)	40185	2549.5	20M	50	25	Back	0	---	0.723	20.47	21	62.9	0.82	On
#98	LTE Band 41 (QPSK)	40620	2593.0	20M	50	25	Back	0	---	0.685	20.59	21	62.9	0.76	On
#102	LTE Band 41 (QPSK)	41055	2636.5	20M	50	25	Back	0	---	0.627	20.5	21	62.9	0.71	On
#103	LTE Band 41 (QPSK)	41490	2680.0	20M	50	25	Back	0	---	0.645	20.46	21	62.9	0.74	On
#104	LTE Band 41 (QPSK)	39750	2506.0	20M	100	0	Back	0	---	0.913	20.6	21	62.9	1.01	On
#105	LTE Band 41 (QPSK)	39750	2506.0	20M	1	49	Back	7	---	0.252	22.62	23	62.9	0.28	OFF
#106	LTE Band 41 (QPSK)	40620	2593.0	20M	50	25	Back	7	---	0.173	21.61	23	62.9	0.24	OFF
#79	LTE Band 41 (QPSK)	39750	2506.0	20M	1	49	Side 1	0	---	1.06	20.7	21	62.9	1.14	On
#111	LTE Band 41 (QPSK)	39750	2506.0	20M	1	49	Side 1	0	Battery 2	1.05	20.7	21	62.9	1.13	On
#80	LTE Band 41 (QPSK)	39790	2510.0	20M	1	49	Side 1	0	---	1.05	20.71	21	62.9	1.13	On
#81	LTE Band 41 (QPSK)	40185	2549.5	20M	1	49	Side 1	0	---	0.912	20.6	21	62.9	1.01	On
#82	LTE Band 41 (QPSK)	40620	2593.0	20M	1	49	Side 1	0	---	0.86	20.59	21	62.9	0.95	On

Index.	Band	Frequency		Bandwidth	RB Size	RB Offset	Test Position	Spacing (mm)	EUT & Accessory	SAR_{1g} (W/kg)	Burst Avg Power	Max tune-up	Duty Cycle (%)	Reported SAR_{1g} (W/kg)	Sensor trigger
		Ch.	MHz												
#83	LTE Band 41 (QPSK)	41055	2636.5	20M	1	49	Side 1	0	---	0.583	20.51	21	62.9	0.66	On
#84	LTE Band 41 (QPSK)	41490	2680.0	20M	1	49	Side 1	0	---	0.497	20.51	21	62.9	0.56	On
#86	LTE Band 41 (QPSK)	39750	2506.0	20M	50	25	Side 1	0	---	0.95	20.52	21	62.9	1.07	On
#87	LTE Band 41 (QPSK)	39790	2510.0	20M	50	25	Side 1	0	---	0.915	20.39	21	62.9	1.06	On
#88	LTE Band 41 (QPSK)	40185	2549.5	20M	50	25	Side 1	0	---	0.733	20.47	21	62.9	0.83	On
#85	LTE Band 41 (QPSK)	40620	2593.0	20M	50	25	Side 1	0	---	0.655	20.59	21	62.9	0.72	On
#89	LTE Band 41 (QPSK)	41055	2636.5	20M	50	25	Side 1	0	---	0.53	20.5	21	62.9	0.60	On
#90	LTE Band 41 (QPSK)	41490	2680.0	20M	50	25	Side 1	0	---	0.465	20.46	21	62.9	0.53	On
#91	LTE Band 41 (QPSK)	39750	2506.0	20M	100	0	Side 1	0	---	0.915	20.6	21	62.9	1.01	On
#109	LTE Band 41 (QPSK)	39750	2506.0	20M	1	49	Side 1	10	---	0.241	22.62	23	62.9	0.27	OFF
#110	LTE Band 41 (QPSK)	40620	2593.0	20M	50	25	Side 1	10	---	0.191	21.61	23	62.9	0.27	OFF
#107	LTE Band 41 (QPSK)	39750	2506.0	20M	1	49	Side 2	0	---	0.023	22.62	23	62.9	0.03	OFF
#108	LTE Band 41 (QPSK)	40620	2593.0	20M	50	25	Side 2	0	---	0.019	21.61	23	62.9	0.03	OFF

11.2 SAR Variability Measurement

Detailed evaluations please refer KDB 865664 on "SAR test reduction according to KDB" section.
SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium.
The following procedures are applied to determine if repeated measurements are required.

1.The original highest measured Reported SAR 1g is ≥ 0.80 W/kg, repeat that measurement once.

2.Perform a second repeated measurement the ratio of largest to smallest SAR for the original and first repeated measurements is < 1.2,the original or repeated measurement is ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3.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.

Index	Band	Frequency		Modulation or Sub-Test	Test Phantom	Spacing (mm)	EUT & Accessory	Note	Original SAR_{1g} (W/Kg)	First SAR_{1g} (W/Kg)	First Ratio SAR_{1g}
		Ch.	MHz								
#135	WCDMA Band V	4183	836.6	RMC12.2K	Side 1	0	---	original #130_once	0.905	0.866	1.05

Index	Band	Frequency		Bandwidth	RB Size	RB Offset	Test Phantom	Spacing (mm)	EUT & Accessory	Note	Original SAR_{1g} (W/Kg)	First SAR_{1g} (W/Kg)	First Ratio SAR_{1g}
		Ch.	MHz										
#78	LTE Band 4 (QPSK)	20175	1732.5	20M	100	0	Side 1	0	---	original #63_once	0.955	0.943	1.01
#183	LTE Band 13 (QPSK)	23230	782.0	10M	50	0	Side 1	0	---	original #169_once	0.946	0.937	1.01
#44	LTE Band 25 (QPSK)	26590	1905.0	20M	50	25	Back	0	---	original #6_once	0.997	0.978	1.02
#128	LTE Band 41 (QPSK)	39750	2506.0	20M	1	49	Side 1	0	---	original #79_once	1.06	1.01	1.05

11.3 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 6. 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).

12. 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

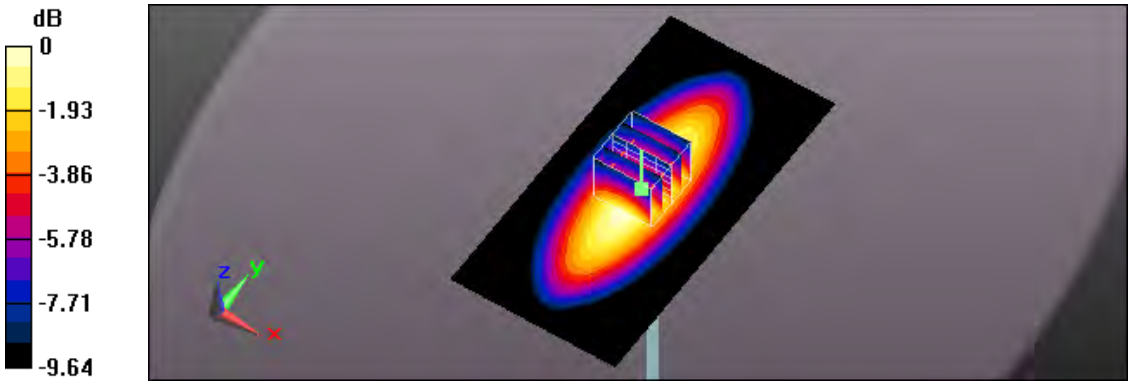
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 PM 08:58:37
System Performance Check at 750MHz_20190319_Body
DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1004

Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.958 S/m; ε_r = 56.912; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

System Performance Check at 750MHz/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.93 W/kg

System Performance Check at 750MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 58.05 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 3.25 W/kg
SAR(1 g) = 2.24 W/kg; SAR(10 g) = 1.52 W/kg
Maximum value of SAR (measured) = 2.92 W/kg



0 dB = 2.92 W/kg = 4.65 dBW/kg

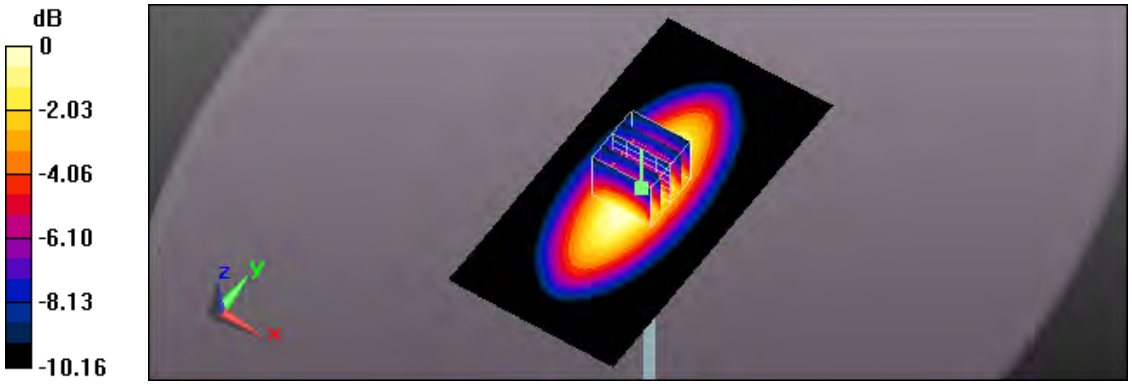
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 AM 01:13:09
System Performance Check at 835MHz_20190319_Body
DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d082

Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 1.015 S/m; ε_r = 57.447; 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(9.48, 9.48, 9.48); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

System Performance Check at 835MHz/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.53 W/kg

System Performance Check at 835MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 60.71 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 3.82 W/kg
SAR(1 g) = 2.61 W/kg; SAR(10 g) = 1.73 W/kg
Maximum value of SAR (measured) = 3.44 W/kg



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

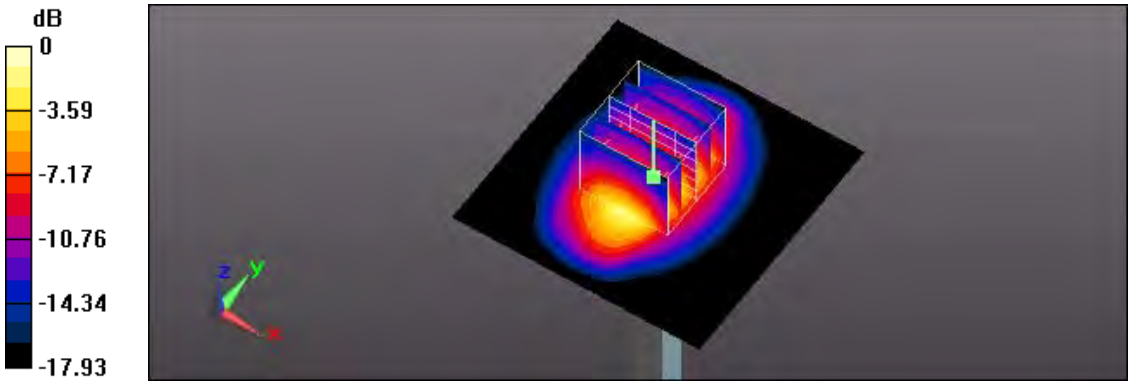
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/15 PM 03:49:49
System Performance Check at 1750MHz_20190315_Body
DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2 - SN:1023

Communication System: UID 0, CW (0); Frequency: 1750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1750 MHz; σ = 1.432 S/m; ε_r = 53.524; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

System Performance Check at 1750MHz/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 14.4 W/kg

System Performance Check at 1750MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 100.6 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 16.9 W/kg
SAR(1 g) = 9.7 W/kg; SAR(10 g) = 5.09 W/kg
Maximum value of SAR (measured) = 14.8 W/kg



0 dB = 14.8 W/kg = 11.70 dBW/kg

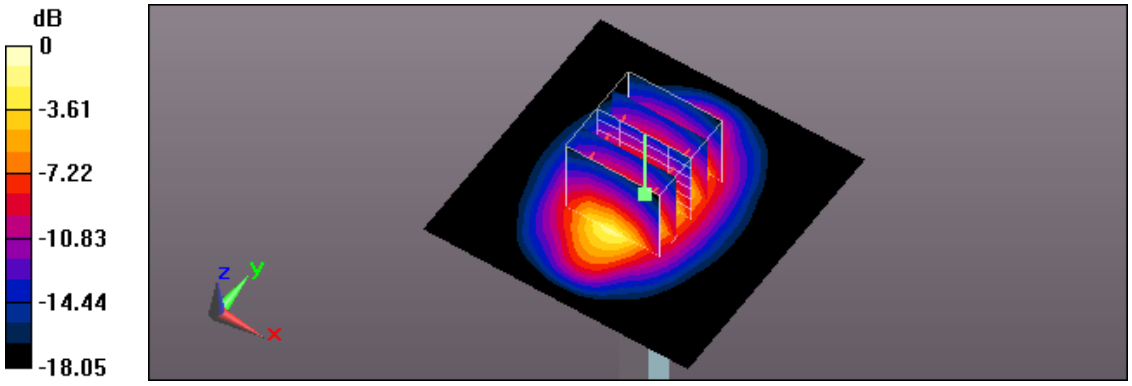
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 01:01:47
System Performance Check at 1900MHz_20190314_Body
DUT: Dipole D1900V2_SN5d111; Type: D1900V2; Serial: D1900V2 - SN:5d111

Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.575 S/m; ε_r = 53.157; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

System Performance Check at 1900MHz/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 16.9 W/kg

System Performance Check at 1900MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 107.5 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 19.8 W/kg
SAR(1 g) = 10.9 W/kg; SAR(10 g) = 5.62 W/kg
Maximum value of SAR (measured) = 16.9 W/kg



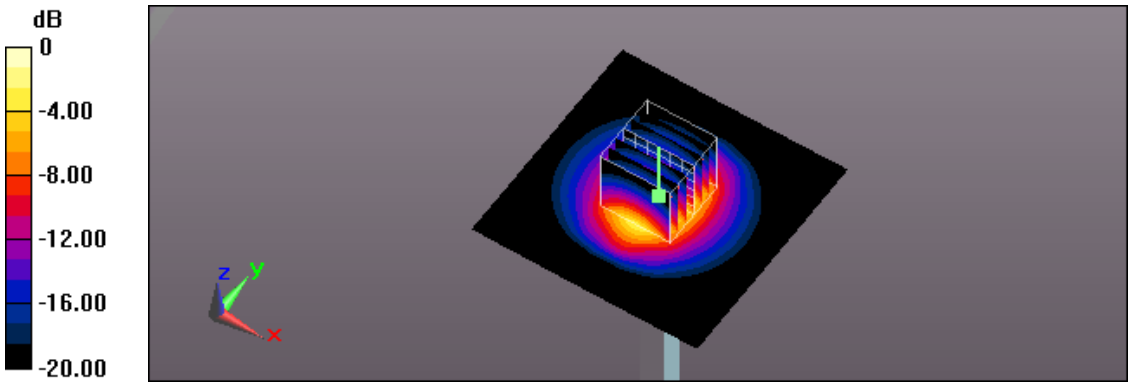
0 dB = 16.9 W/kg = 12.28 dBW/kg

Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 PM 12:12:24
System Performance Check at 2600MHz_20190316_Body
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 = 2.186 S/m; ε_r = 50.349; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

System Performance Check at 2600MHz/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 25.0 W/kg
System Performance Check at 2600MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 111.0 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 32.4 W/kg
SAR(1 g) = 14.5 W/kg; SAR(10 g) = 6.45 W/kg
Maximum value of SAR (measured) = 25.3 W/kg



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

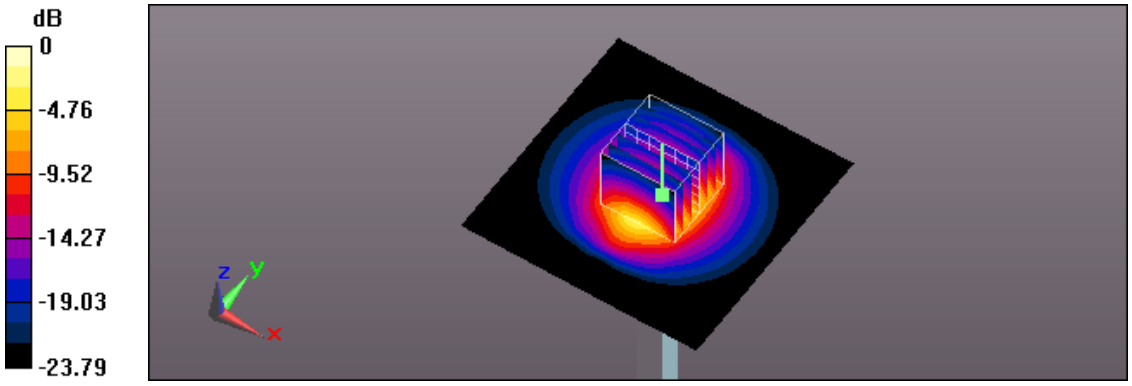
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/18 PM 01:43:13
System Performance Check at 2600MHz_20190318_Body
DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1007

Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 2.191 S/m; ε_r = 51.367; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

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 = 111.4 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 30.9 W/kg
SAR(1 g) = 14.1 W/kg; SAR(10 g) = 6.18 W/kg
Maximum value of SAR (measured) = 24.6 W/kg



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

Appendix B - SAR Measurement Data

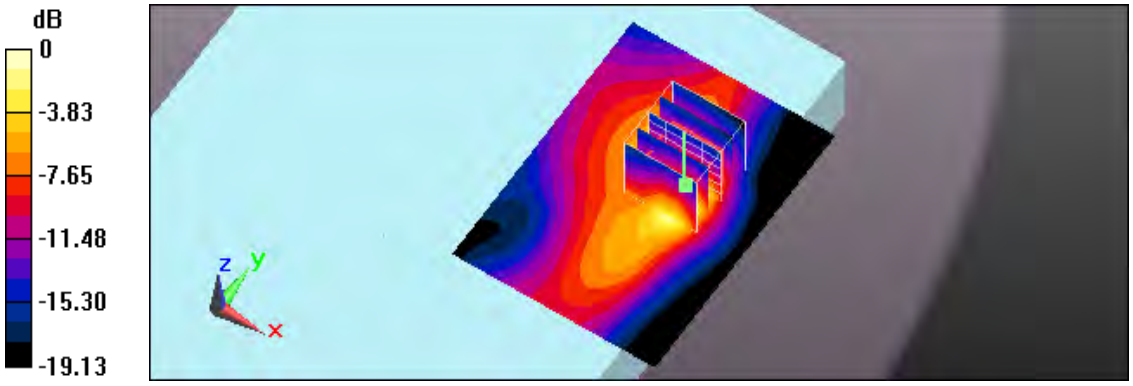
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 PM 02:30:52
32_WCDMA Band II CH 9262_Back_0mm
DUT: EM7455; Type: Wireless Module

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 = 1.528 S/m; ε_r = 53.273; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.51 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.58 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 1.86 W/kg
SAR(1 g) = 0.907 W/kg; SAR(10 g) = 0.427 W/kg
Maximum value of SAR (measured) = 1.49 W/kg



0 dB = 1.49 W/kg = 1.73 dBW/kg

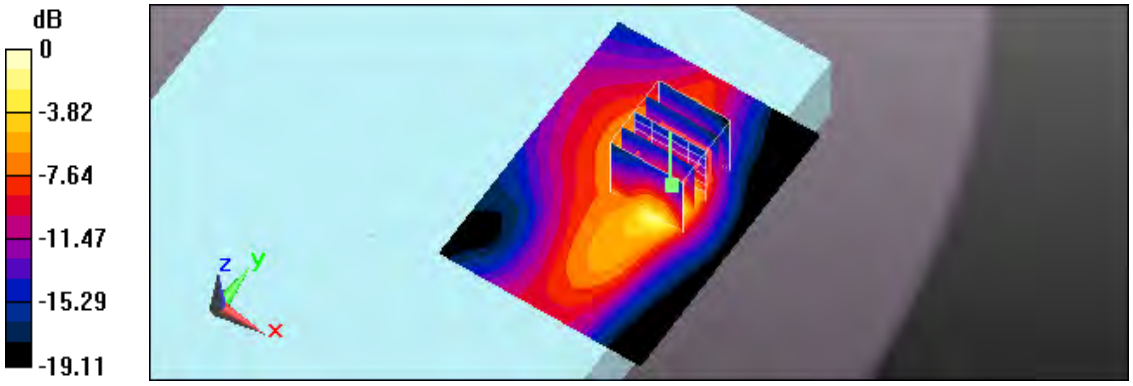
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 PM 02:45:00
33_WCDMA Band II CH 9400_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band II (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.555 S/m; ε_r = 53.206; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.54 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.24 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 1.89 W/kg
SAR(1 g) = 0.914 W/kg; SAR(10 g) = 0.429 W/kg
Maximum value of SAR (measured) = 1.51 W/kg



0 dB = 1.51 W/kg = 1.79 dBW/kg

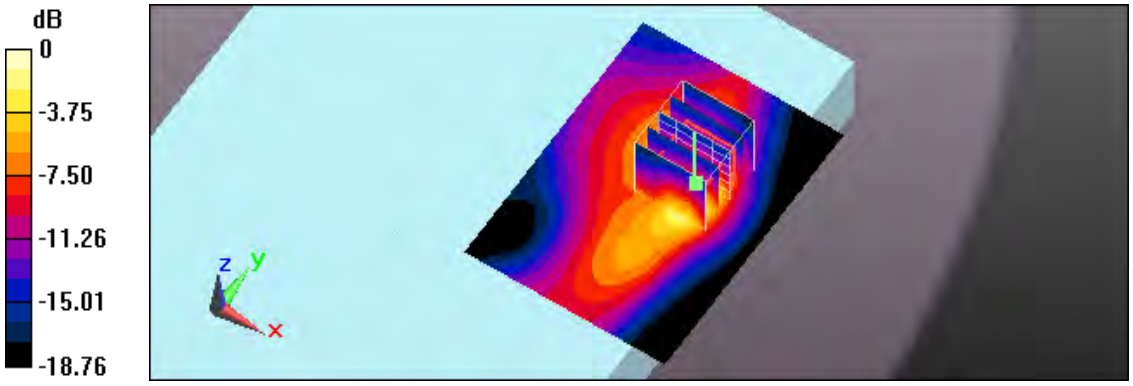
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 PM 02:58:23
34_WCDMA Band II CH 9538_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band II (0); Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1908 MHz; σ = 1.583 S/m; ε_r = 53.136; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.52 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.34 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 1.91 W/kg
SAR(1 g) = 0.921 W/kg; SAR(10 g) = 0.434 W/kg
Maximum value of SAR (measured) = 1.52 W/kg



0 dB = 1.52 W/kg = 1.82 dBW/kg

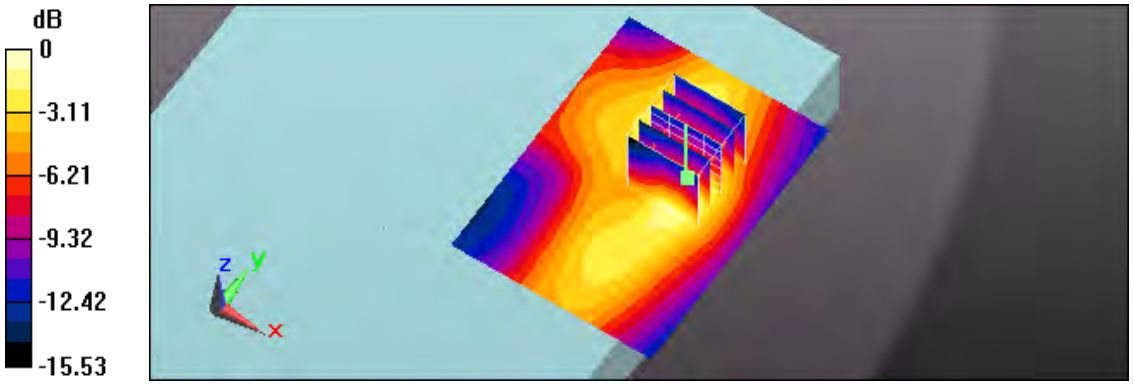
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 PM 06:27:01
42_WCDMA Band II CH 9538_Back_0mm;Battery 2
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band II (0); Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1908 MHz; σ = 1.583 S/m; ε_r = 53.136; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.257 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.03 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.304 W/kg
SAR(1 g) = 0.177 W/kg; SAR(10 g) = 0.101 W/kg
Maximum value of SAR (measured) = 0.256 W/kg



0 dB = 0.256 W/kg = -5.92 dBW/kg

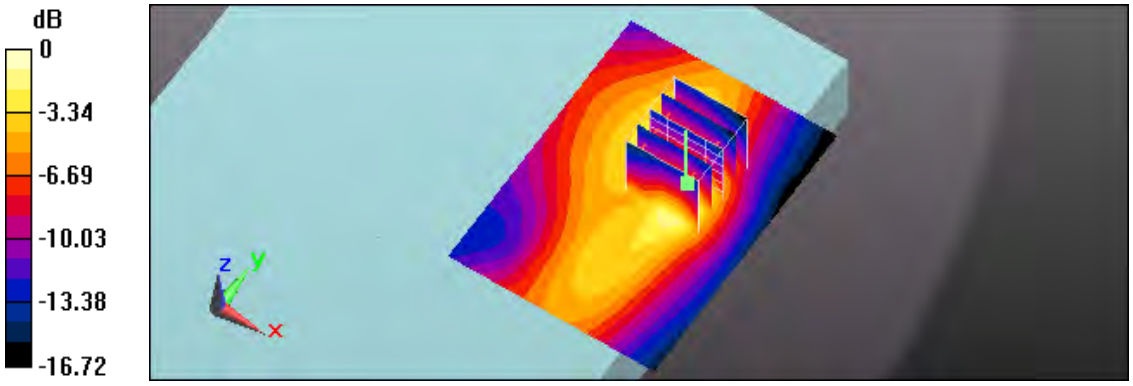
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 PM 03:16:27
35_WCDMA Band II CH 9262_Back_7mm
DUT: EM7455; Type: Wireless Module

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 = 1.528 S/m; ε_r = 53.273; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.02 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.25 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 1.19 W/kg
SAR(1 g) = 0.660 W/kg; SAR(10 g) = 0.367 W/kg
Maximum value of SAR (measured) = 1.00 W/kg



0 dB = 1.00 W/kg = 0.00 dBW/kg

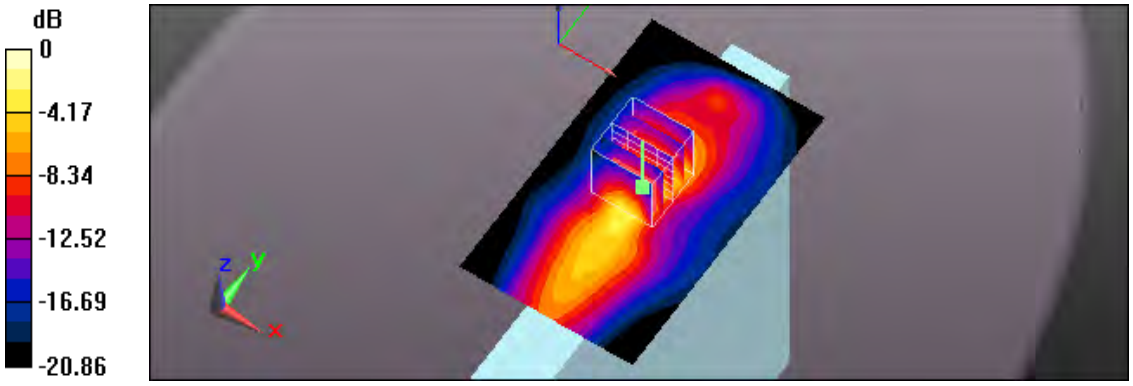
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 PM 04:47:06
38_WCDMA Band II CH 9262_Side 1_0mm
DUT: EM7455; Type: Wireless Module

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 = 1.528 S/m; ε_r = 53.273; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.46 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 23.54 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 1.75 W/kg
SAR(1 g) = 0.939 W/kg; SAR(10 g) = 0.461 W/kg
Maximum value of SAR (measured) = 1.46 W/kg



0 dB = 1.46 W/kg = 1.64 dBW/kg

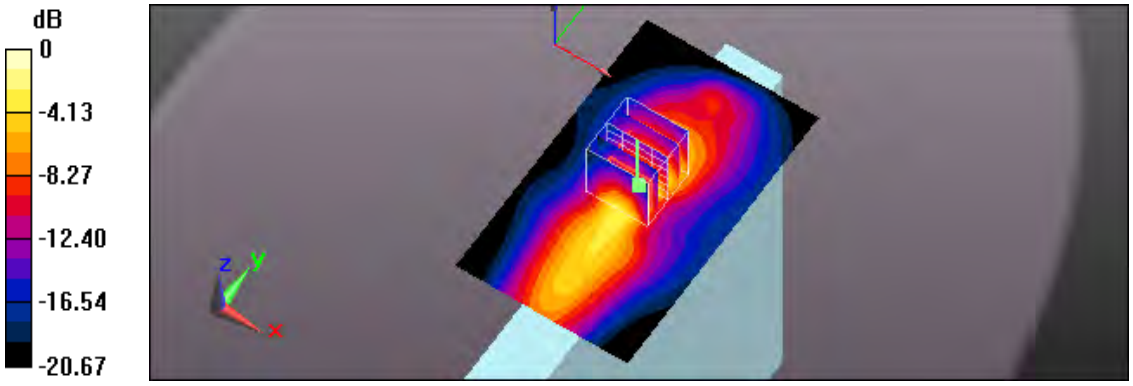
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 PM 05:01:27
39_WCDMA Band II CH 9400_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band II (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.555 S/m; ε_r = 53.206; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.32 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.71 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 1.59 W/kg
SAR(1 g) = 0.847 W/kg; SAR(10 g) = 0.416 W/kg
Maximum value of SAR (measured) = 1.31 W/kg



0 dB = 1.31 W/kg = 1.17 dBW/kg

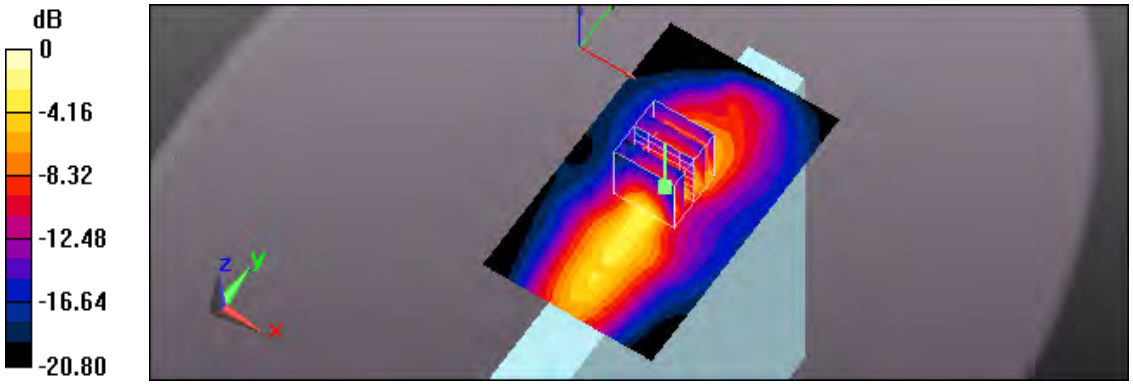
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 PM 05:16:58
40_WCDMA Band II CH 9538_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band II (0); Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1908 MHz; σ = 1.583 S/m; ε_r = 53.136; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.16 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.00 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 1.44 W/kg
SAR(1 g) = 0.756 W/kg; SAR(10 g) = 0.371 W/kg
Maximum value of SAR (measured) = 1.21 W/kg



0 dB = 1.21 W/kg = 0.83 dBW/kg

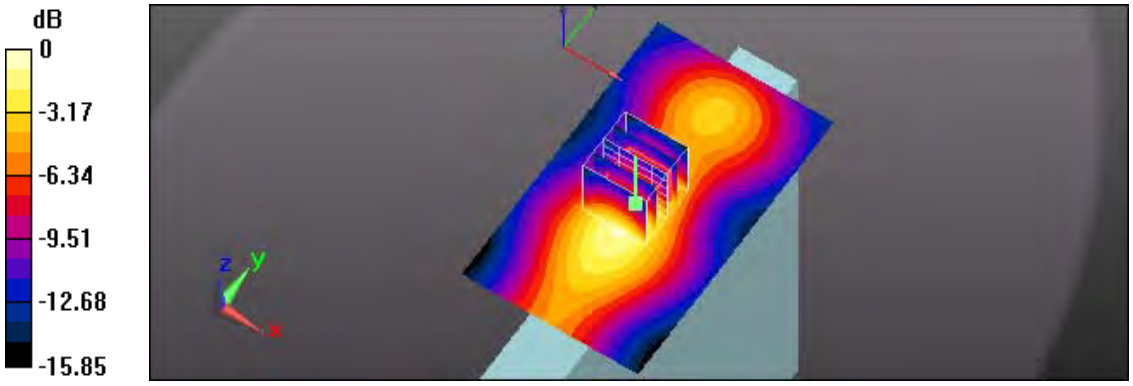
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 PM 06:09:34
41_WCDMA Band II CH 9262_Side 1_10mm
DUT: EM7455; Type: Wireless Module

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 = 1.528 S/m; ε_r = 53.273; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.805 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.31 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.943 W/kg
SAR(1 g) = 0.558 W/kg; SAR(10 g) = 0.323 W/kg
Maximum value of SAR (measured) = 0.797 W/kg



0 dB = 0.797 W/kg = -0.99 dBW/kg

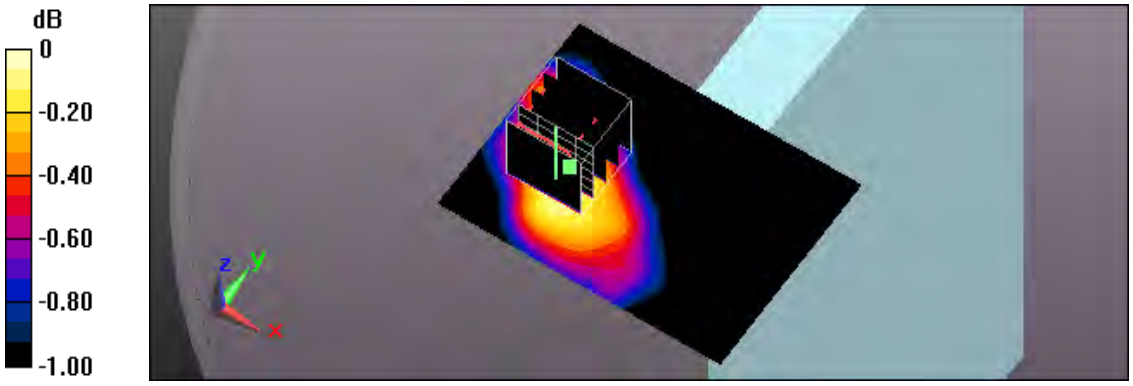
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 PM 01:39:29
31_WCDMA Band II CH 9262_Side 2_0mm
DUT: EM7455; Type: Wireless Module

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 = 1.528 S/m; ε_r = 53.273; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0455 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.636 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 0.0520 W/kg
SAR(1 g) = 0.035 W/kg; SAR(10 g) = 0.024 W/kg
Maximum value of SAR (measured) = 0.0455 W/kg



0 dB = 0.0455 W/kg = -13.42 dBW/kg

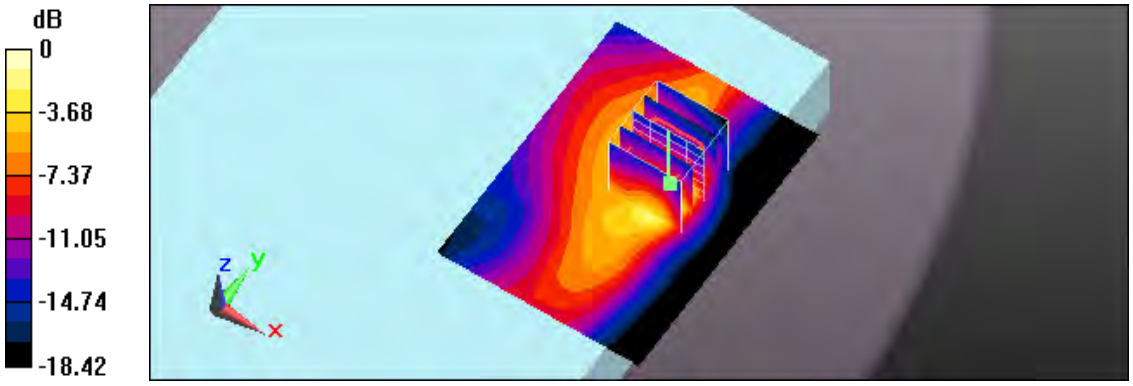
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/15 PM 05:39:35
46_WCDMA Band IV CH 1312_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band IV (0); Frequency: 1712.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.398 S/m; ε_r = 53.613; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.07 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.78 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 1.15 W/kg
SAR(1 g) = 0.578 W/kg; SAR(10 g) = 0.289 W/kg
Maximum value of SAR (measured) = 0.948 W/kg



0 dB = 0.948 W/kg = -0.23 dBW/kg

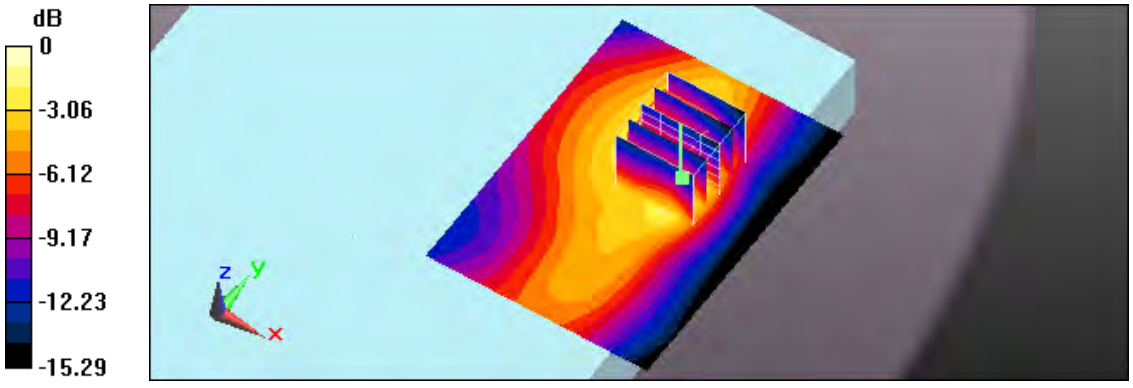
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/15 PM 06:35:11
47_WCDMA Band IV CH 1312_Back_7mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band IV (0); Frequency: 1712.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.398 S/m; ε_r = 53.613; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.754 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.52 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.872 W/kg
SAR(1 g) = 0.485 W/kg; SAR(10 g) = 0.287 W/kg
Maximum value of SAR (measured) = 0.727 W/kg



0 dB = 0.727 W/kg = -1.38 dBW/kg

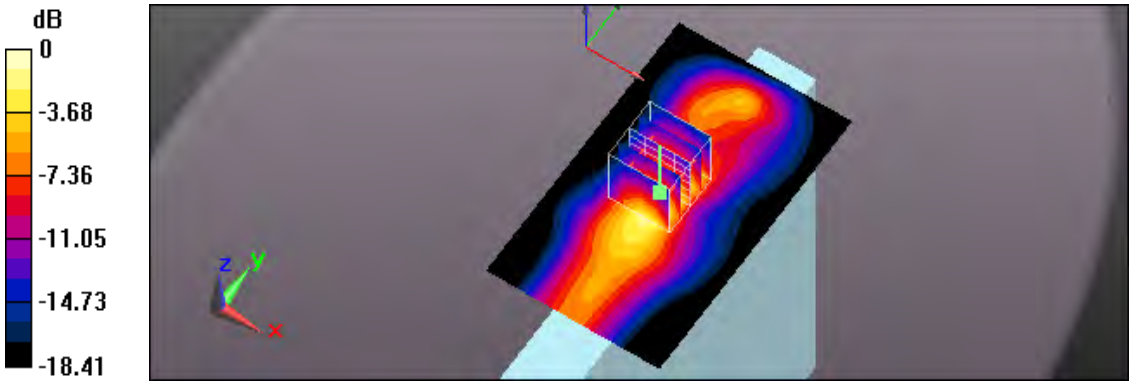
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/15 PM 08:15:07
52_WCDMA Band IV CH 1312_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band IV (0); Frequency: 1712.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.398 S/m; ε_r = 53.613; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.37 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.53 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 1.63 W/kg
SAR(1 g) = 0.893 W/kg; SAR(10 g) = 0.445 W/kg
Maximum value of SAR (measured) = 1.32 W/kg



0 dB = 1.32 W/kg = 1.21 dBW/kg

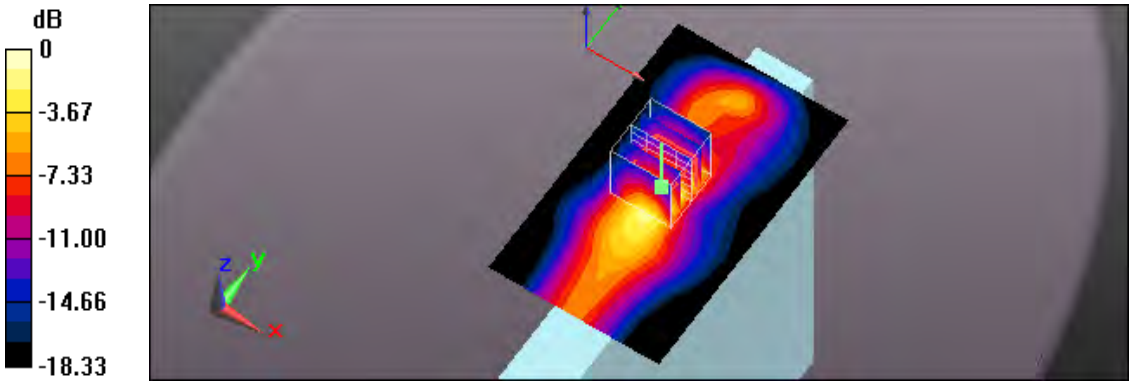
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/15 PM 08:44:32
53_WCDMA Band IV CH 1413_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band IV (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1733 MHz; σ = 1.417 S/m; ε_r = 53.564; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.45 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.45 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 1.69 W/kg
SAR(1 g) = 0.924 W/kg; SAR(10 g) = 0.459 W/kg
Maximum value of SAR (measured) = 1.33 W/kg



0 dB = 1.33 W/kg = 1.24 dBW/kg

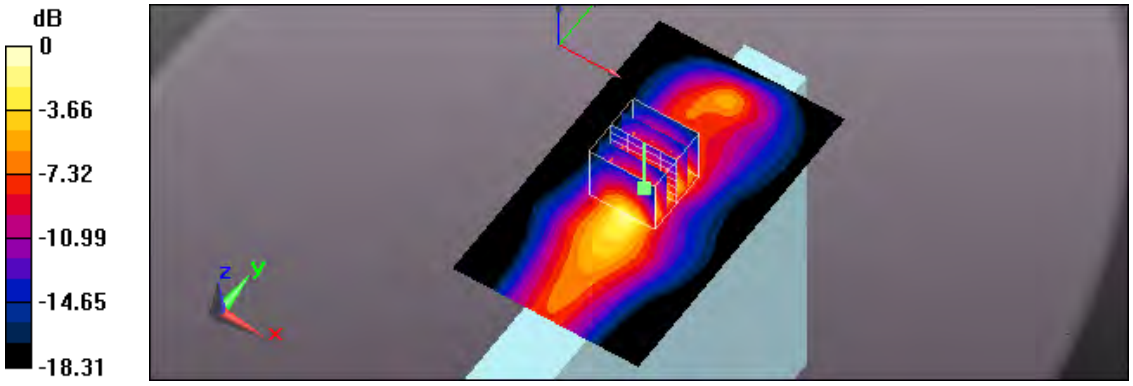
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/15 PM 09:21:07
54_WCDMA Band IV CH 1513_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band IV (0); Frequency: 1752.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1753 MHz; σ = 1.435 S/m; ε_r = 53.517; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.56 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.38 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 1.72 W/kg
SAR(1 g) = 0.955 W/kg; SAR(10 g) = 0.474 W/kg
Maximum value of SAR (measured) = 1.43 W/kg



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

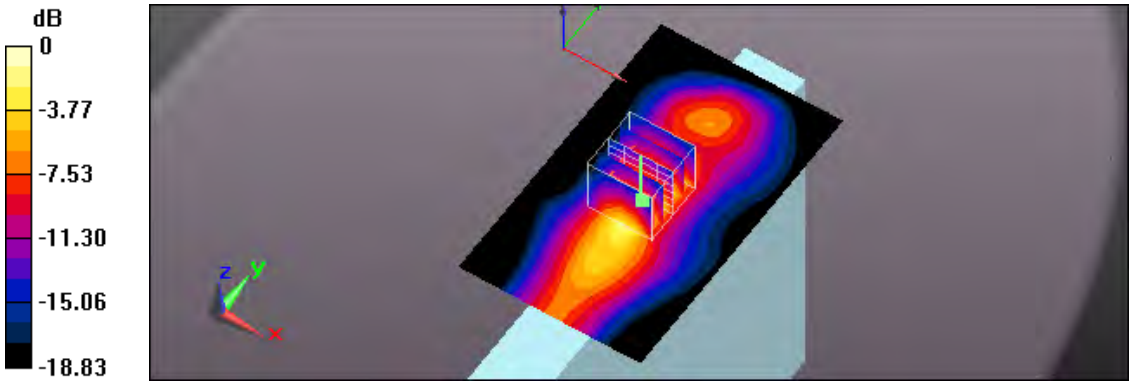
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/15 PM 11:22:00
57_WCDMA Band IV CH 1513_Side 1_0mm;Battery 2
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band IV (0); Frequency: 1752.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1753 MHz; σ = 1.435 S/m; ε_r = 53.517; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.20 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.54 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 1.71 W/kg
SAR(1 g) = 0.935 W/kg; SAR(10 g) = 0.463 W/kg
Maximum value of SAR (measured) = 1.41 W/kg



0 dB = 1.41 W/kg = 1.49 dBW/kg

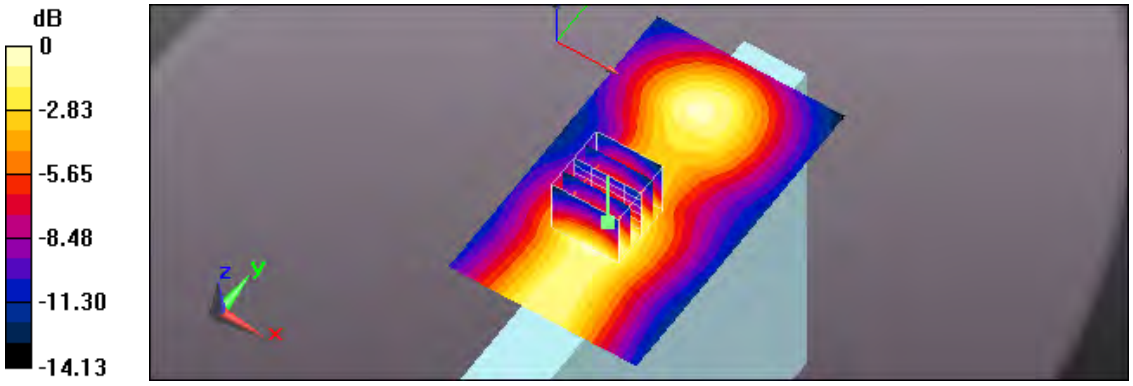
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/15 PM 10:45:38
56_WCDMA Band IV CH 1312_Side 1_10mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band IV (0); Frequency: 1712.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.398 S/m; ε_r = 53.613; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.395 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.04 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.455 W/kg
SAR(1 g) = 0.285 W/kg; SAR(10 g) = 0.177 W/kg
Maximum value of SAR (measured) = 0.393 W/kg



0 dB = 0.393 W/kg = -4.06 dBW/kg

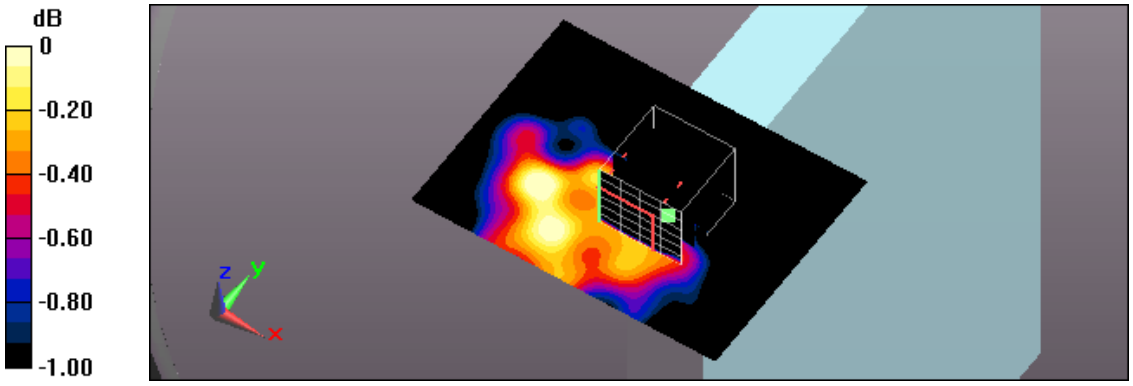
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/15 PM 11:53:28
58_WCDMA Band IV CH 1312_Side 2_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band IV (0); Frequency: 1712.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.398 S/m; ε_r = 53.613; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0183 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.732 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.0200 W/kg
SAR(1 g) = 0.013 W/kg; SAR(10 g) = 0.00952 W/kg
Maximum value of SAR (measured) = 0.0179 W/kg



0 dB = 0.0179 W/kg = -17.47 dBW/kg

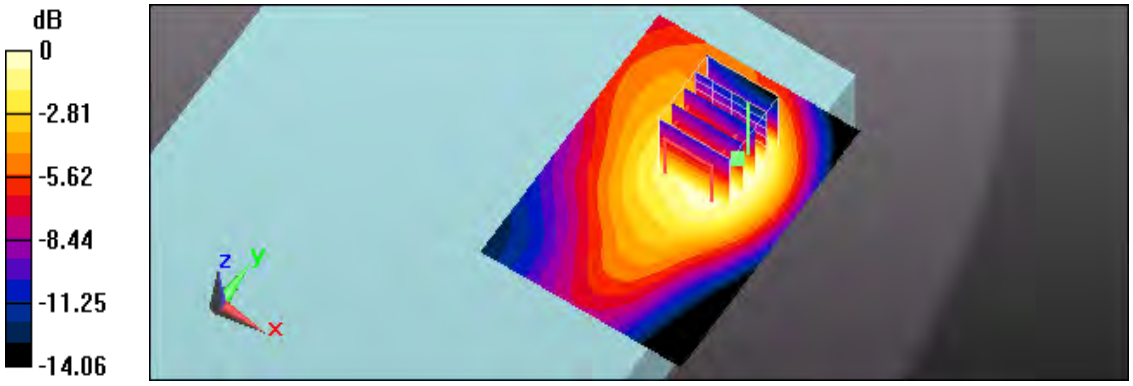
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 PM 12:14:55
134_WCDMA Band V CH 4132_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band V (0); Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 826.4 MHz; σ = 1.007 S/m; ε_r = 57.526; 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(9.48, 9.48, 9.48); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.923 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.86 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 1.08 W/kg
SAR(1 g) = 0.626 W/kg; SAR(10 g) = 0.403 W/kg
Maximum value of SAR (measured) = 0.858 W/kg



0 dB = 0.858 W/kg = -0.67 dBW/kg

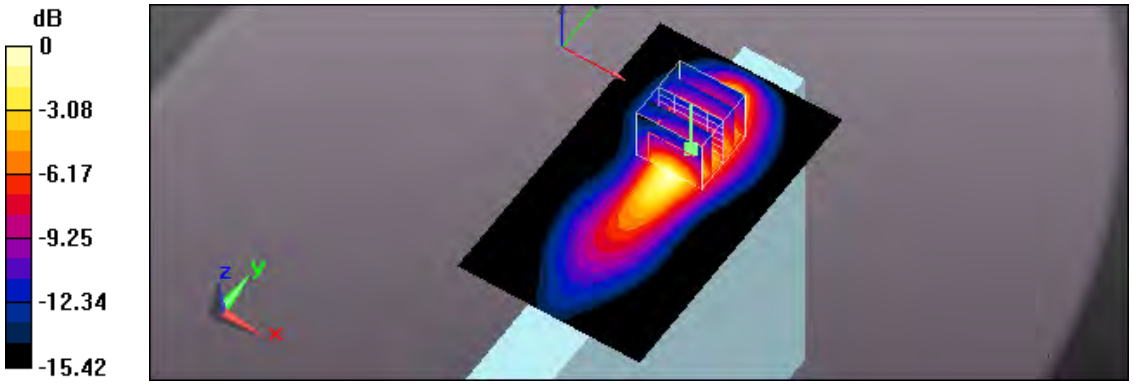
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 AM 03:01:26
129_WCDMA Band V CH 4132_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band V (0); Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 826.4 MHz; σ = 1.007 S/m; ε_r = 57.526; 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(9.48, 9.48, 9.48); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.39 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.31 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 1.73 W/kg
SAR(1 g) = 0.845 W/kg; SAR(10 g) = 0.446 W/kg
Maximum value of SAR (measured) = 1.32 W/kg



0 dB = 1.32 W/kg = 1.21 dBW/kg

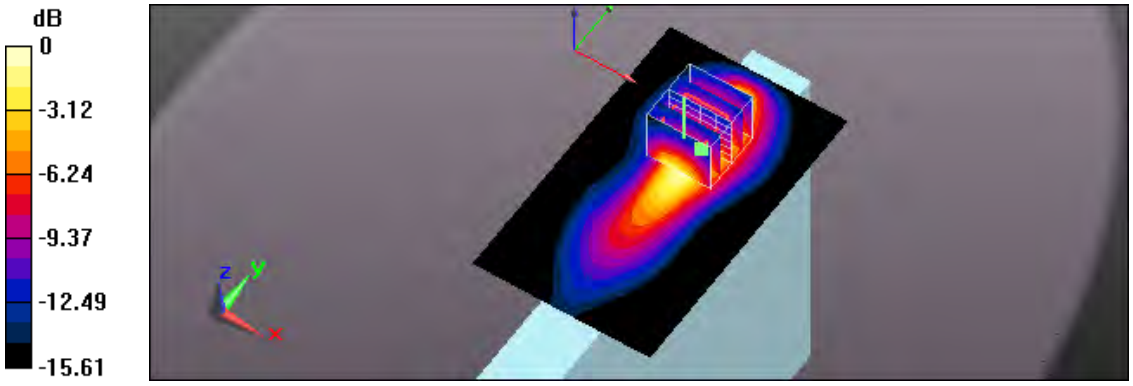
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 AM 03:20:47
130_WCDMA Band V CH 4183_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band V (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 837 MHz; σ = 1.017 S/m; ε_r = 57.429; 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(9.48, 9.48, 9.48); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.43 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.01 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 2.11 W/kg
SAR(1 g) = 0.905 W/kg; SAR(10 g) = 0.464 W/kg
Maximum value of SAR (measured) = 1.42 W/kg



0 dB = 1.42 W/kg = 1.52 dBW/kg

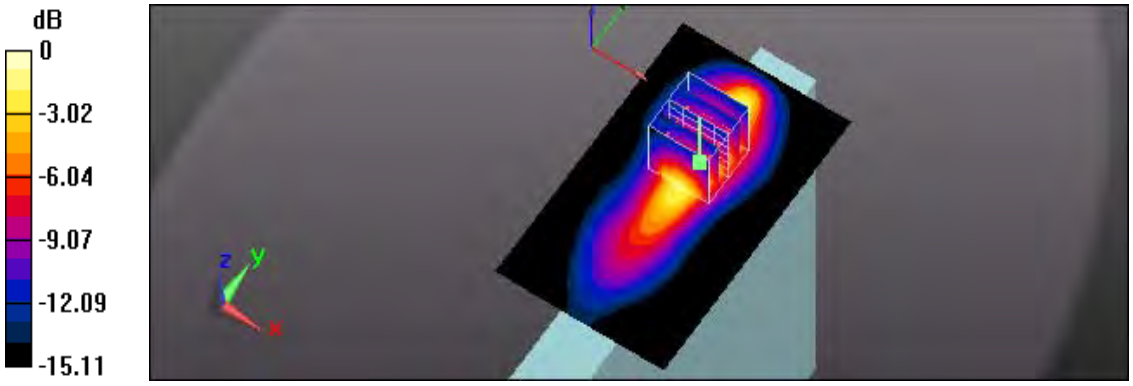
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 PM 12:37:06
135_WCDMA Band V CH 4183_Side 1_0mm;Repeat
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band V (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 837 MHz; σ = 1.017 S/m; ε_r = 57.429; 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(9.48, 9.48, 9.48); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.08 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 31.56 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 1.78 W/kg
SAR(1 g) = 0.866 W/kg; SAR(10 g) = 0.457 W/kg
Maximum value of SAR (measured) = 1.29 W/kg



0 dB = 1.29 W/kg = 1.11 dBW/kg

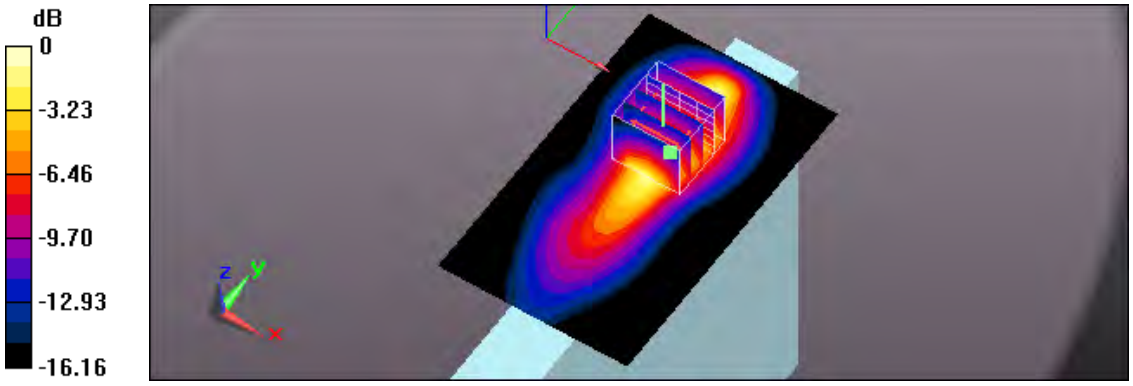
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 AM 06:06:29
136_WCDMA Band V CH 4183_Side 1_0mm;Battery 2
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band V (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 837 MHz; σ = 1.017 S/m; ε_r = 57.429; 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(9.48, 9.48, 9.48); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.02 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 31.73 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 1.87 W/kg
SAR(1 g) = 0.849 W/kg; SAR(10 g) = 0.436 W/kg
Maximum value of SAR (measured) = 1.18 W/kg



0 dB = 1.18 W/kg = 0.72 dBW/kg

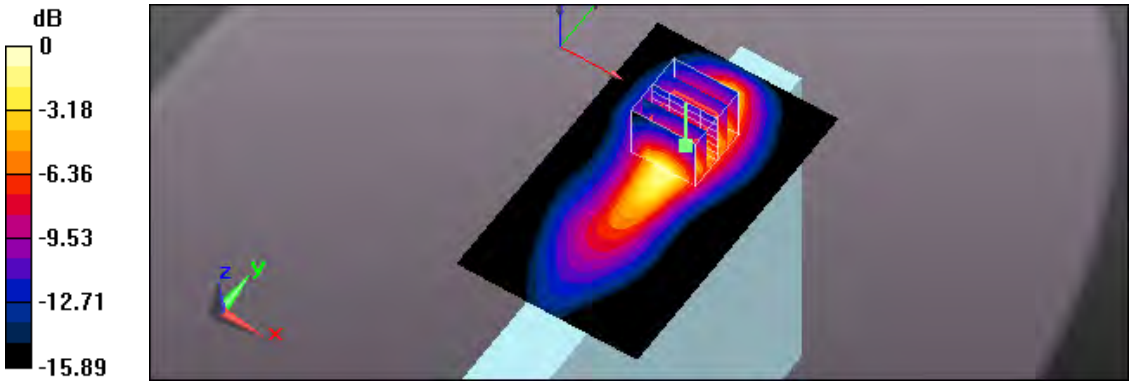
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 AM 03:57:39
131_WCDMA Band V CH 4233_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band V (0); Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 847 MHz; σ = 1.027 S/m; ε_r = 57.341; 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(9.48, 9.48, 9.48); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.13 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.17 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 1.83 W/kg
SAR(1 g) = 0.839 W/kg; SAR(10 g) = 0.437 W/kg
Maximum value of SAR (measured) = 1.23 W/kg



0 dB = 1.23 W/kg = 0.90 dBW/kg

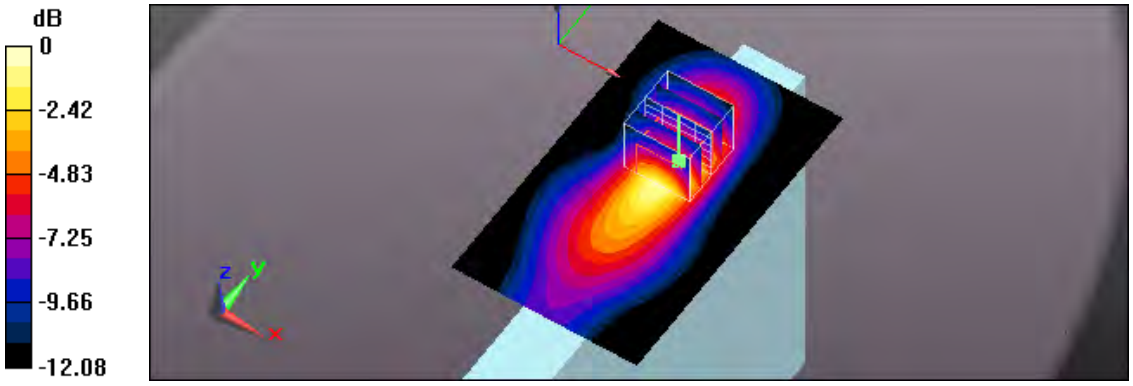
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 AM 04:15:42
132_WCDMA Band V CH 4132_Side 1_10mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band V (0); Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 826.4 MHz; σ = 1.007 S/m; ε_r = 57.526; 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(9.48, 9.48, 9.48); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.562 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 24.02 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.650 W/kg
SAR(1 g) = 0.400 W/kg; SAR(10 g) = 0.243 W/kg
Maximum value of SAR (measured) = 0.558 W/kg



0 dB = 0.558 W/kg = -2.53 dBW/kg

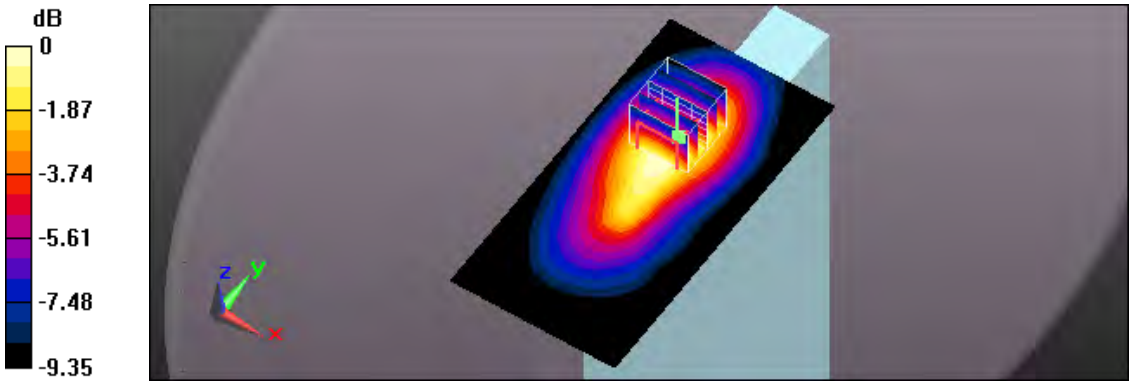
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 AM 04:44:12
133_WCDMA Band V CH 4132_Side 2_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, WCDMA Band V (0); Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 826.4 MHz; σ = 1.007 S/m; ε_r = 57.526; 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(9.48, 9.48, 9.48); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0950 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.03 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.106 W/kg
SAR(1 g) = 0.074 W/kg; SAR(10 g) = 0.052 W/kg
Maximum value of SAR (measured) = 0.0948 W/kg



0 dB = 0.0948 W/kg = -10.23 dBW/kg

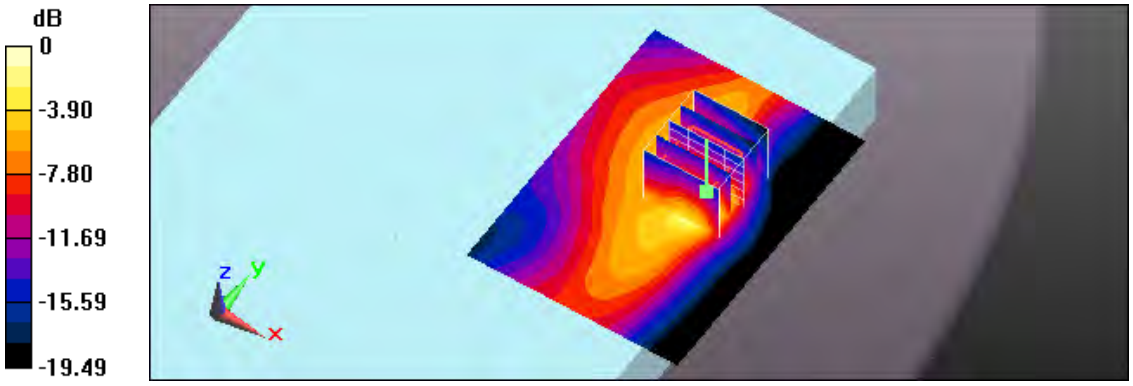
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 AM 07:36:59
68_LTE Band 4 CH 20175_QPSK_BW 20M_1RB Size 49RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.416 S/m; ε_r = 53.566; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.24 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.43 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 1.45 W/kg
SAR(1 g) = 0.715 W/kg; SAR(10 g) = 0.349 W/kg
Maximum value of SAR (measured) = 1.20 W/kg



0 dB = 1.20 W/kg = 0.79 dBW/kg

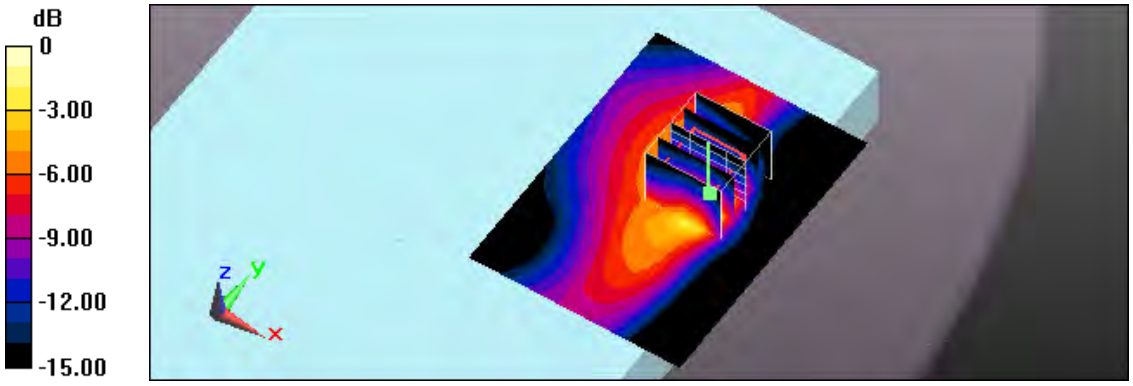
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 AM 06:12:17
69_LTE Band 4 CH 20175_QPSK_BW 20M_50RB Size 50RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.416 S/m; ε_r = 53.566; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.22 W/kg

Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.38 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 1.45 W/kg
SAR(1 g) = 0.712 W/kg; SAR(10 g) = 0.346 W/kg
Maximum value of SAR (measured) = 1.20 W/kg



0 dB = 1.20 W/kg = 0.79 dBW/kg

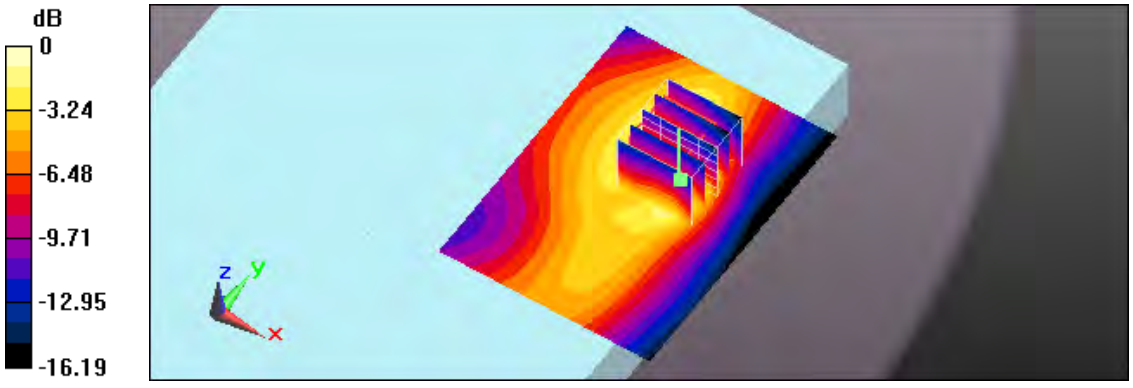
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 AM 04:49:31
66_LTE Band 4 CH 20175_QPSK_BW 20M_1RB Size 49RB Offset_Back_7mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.416 S/m; ε_r = 53.566; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.801 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.10 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.962 W/kg
SAR(1 g) = 0.539 W/kg; SAR(10 g) = 0.319 W/kg
Maximum value of SAR (measured) = 0.797 W/kg



0 dB = 0.797 W/kg = -0.99 dBW/kg

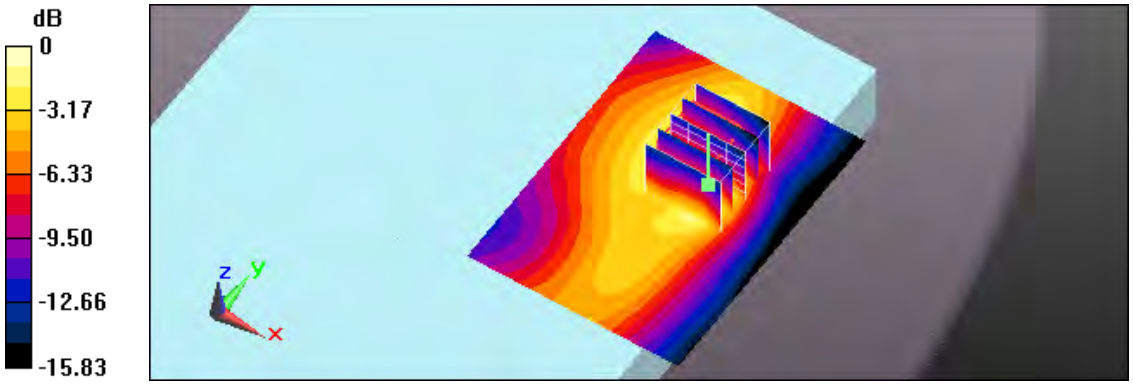
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 AM 05:06:09
67_LTE Band 4 CH 20175_QPSK_BW 20M_50RB Size 50RB Offset_Back_7mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.416 S/m; ε_r = 53.566; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.637 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.50 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.757 W/kg
SAR(1 g) = 0.424 W/kg; SAR(10 g) = 0.250 W/kg
Maximum value of SAR (measured) = 0.628 W/kg



0 dB = 0.628 W/kg = -2.02 dBW/kg

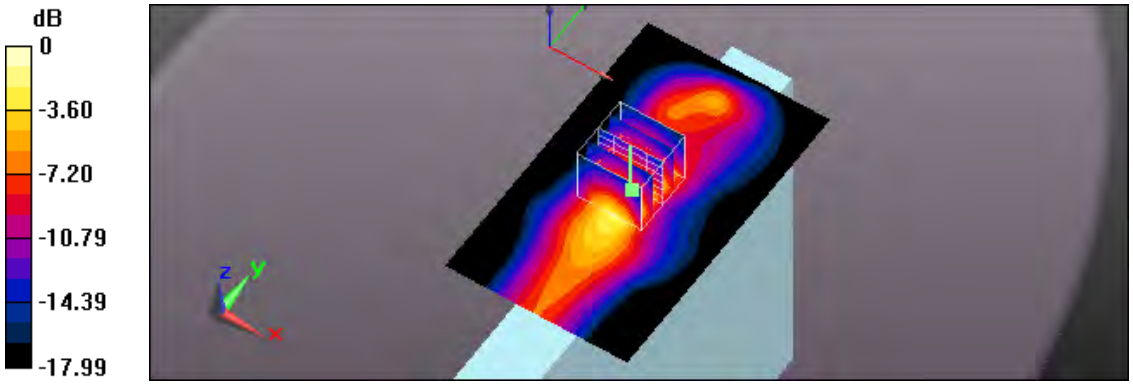
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 AM 01:13:58
61_LTE Band 4 CH 20175_QPSK_BW 20M_1RB Size 49RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.416 S/m; ε_r = 53.566; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.32 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.71 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 1.69 W/kg
SAR(1 g) = 0.945 W/kg; SAR(10 g) = 0.472 W/kg
Maximum value of SAR (measured) = 1.41 W/kg



0 dB = 1.41 W/kg = 1.49 dBW/kg

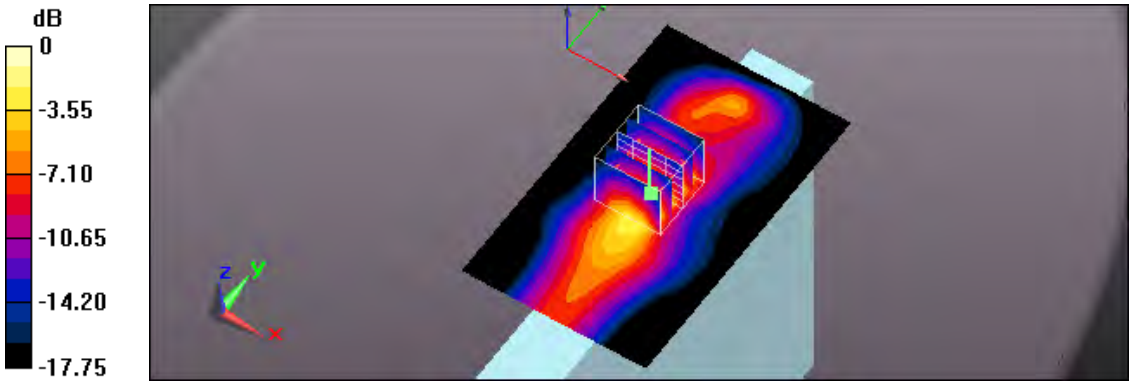
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 AM 01:30:48
62_LTE Band 4 CH 20175_QPSK_BW 20M_50RB Size 50RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.416 S/m; ε_r = 53.566; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.33 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.51 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 1.70 W/kg
SAR(1 g) = 0.945 W/kg; SAR(10 g) = 0.471 W/kg
Maximum value of SAR (measured) = 1.42 W/kg



0 dB = 1.42 W/kg = 1.52 dBW/kg

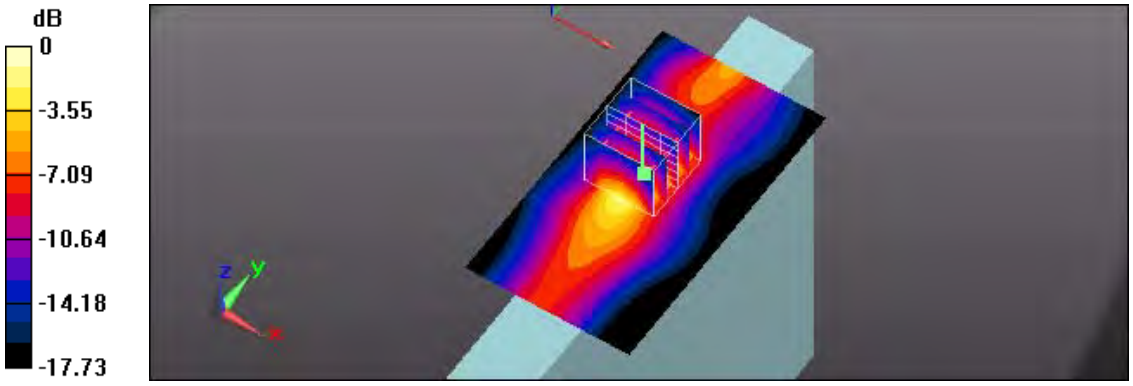
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 AM 09:44:24
77_LTE Band 4 CH 20175_QPSK_BW 20M_50RB Size 50RB Offset_Side 1_0mm;Battery 2
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.416 S/m; ε_r = 53.566; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (51x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.45 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.95 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.71 W/kg
SAR(1 g) = 0.943 W/kg; SAR(10 g) = 0.470 W/kg
Maximum value of SAR (measured) = 1.42 W/kg



0 dB = 1.42 W/kg = 1.52 dBW/kg

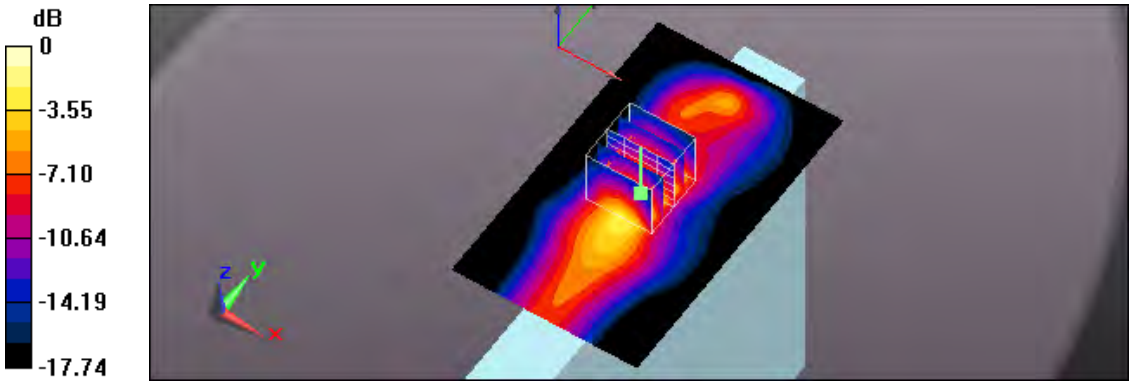
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 AM 01:45:31
63_LTE Band 4 CH 20175_QPSK_BW 20M_100RB Size 0RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.416 S/m; ε_r = 53.566; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.35 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.79 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 1.71 W/kg
SAR(1 g) = 0.955 W/kg; SAR(10 g) = 0.476 W/kg
Maximum value of SAR (measured) = 1.44 W/kg



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

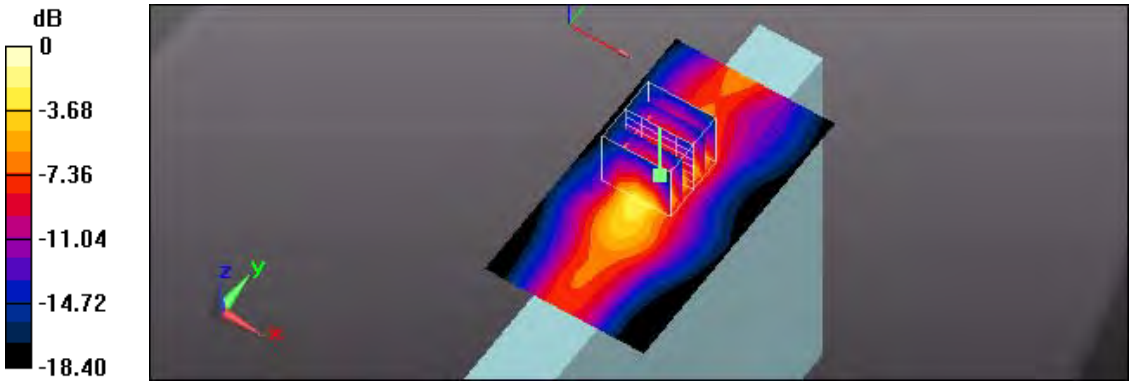
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 AM 10:29:54
78_LTE Band 4 CH 20175_QPSK_BW 20M_100RB Size 0RB Offset_Side 1_0mm;Repeat
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.416 S/m; ε_r = 53.566; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (51x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.47 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.21 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.70 W/kg
SAR(1 g) = 0.943 W/kg; SAR(10 g) = 0.468 W/kg
Maximum value of SAR (measured) = 1.44 W/kg



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

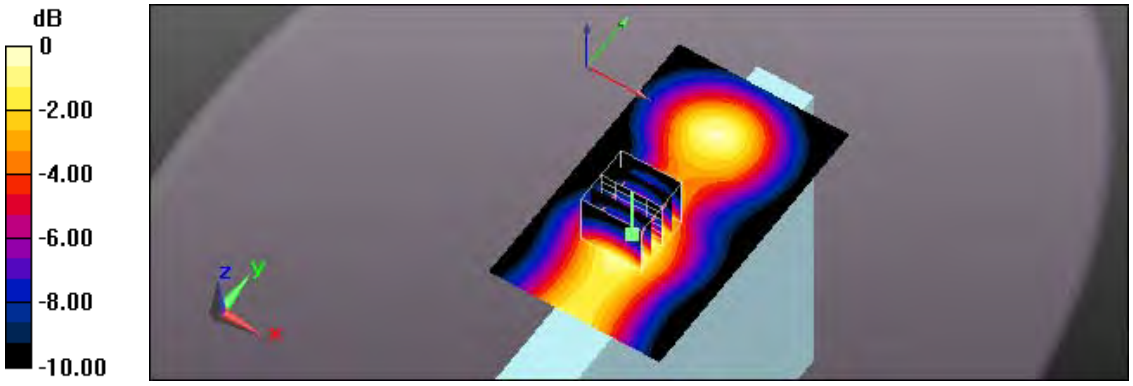
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 AM 02:10:32
64_LTE Band 4 CH 20175_QPSK_BW 20M_1RB Size 49RB Offset_Side 1_10mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.416 S/m; ε_r = 53.566; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.479 W/kg

Flat/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.72 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.546 W/kg
SAR(1 g) = 0.342 W/kg; SAR(10 g) = 0.213 W/kg
Maximum value of SAR (measured) = 0.470 W/kg



0 dB = 0.470 W/kg = -3.28 dBW/kg

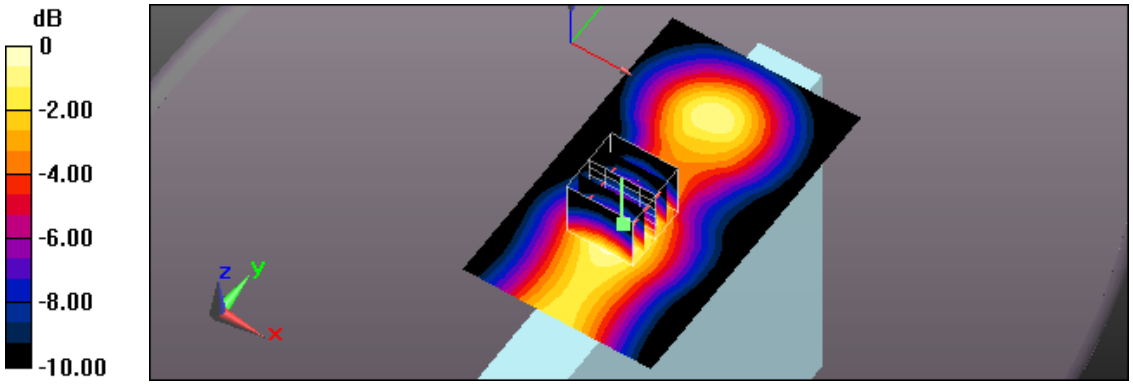
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 AM 04:19:27
65_LTE Band 4 CH 20175_QPSK_BW 20M_50RB Size 50RB Offset_Side 1_10mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.416 S/m; ε_r = 53.566; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.393 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.93 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.444 W/kg
SAR(1 g) = 0.277 W/kg; SAR(10 g) = 0.171 W/kg
Maximum value of SAR (measured) = 0.382 W/kg



0 dB = 0.382 W/kg = -4.18 dBW/kg

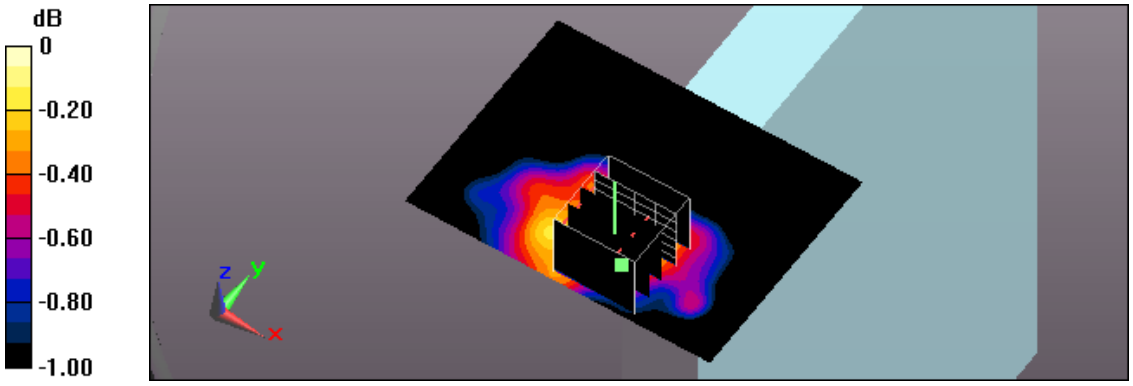
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 AM 12:15:43
59_LTE Band 4 CH 20175_QPSK_BW 20M_1RB Size 49RB Offset_Side 2_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.416 S/m; ε_r = 53.566; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0224 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.073 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 0.0260 W/kg
SAR(1 g) = 0.018 W/kg; SAR(10 g) = 0.013 W/kg
Maximum value of SAR (measured) = 0.0231 W/kg



0 dB = 0.0231 W/kg = -16.36 dBW/kg

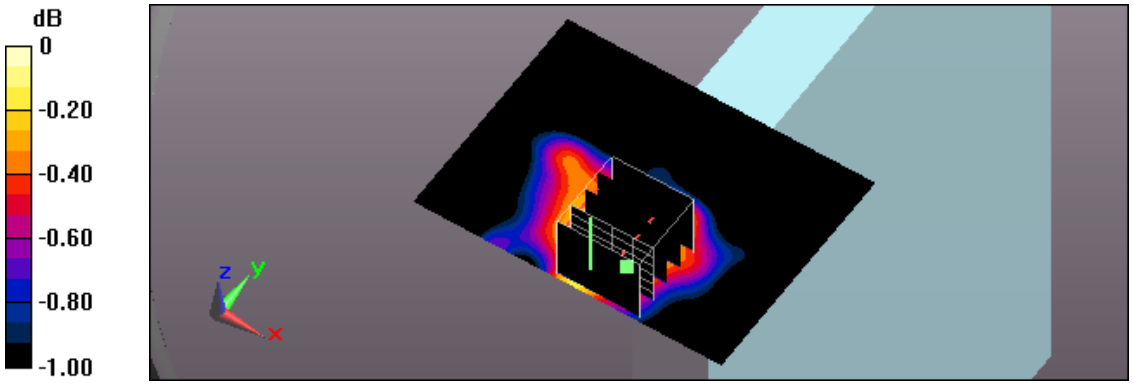
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 AM 12:34:31
60_LTE Band 4 CH 20175_QPSK_BW 20M_50RB Size 50RB Offset_Side 2_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.416 S/m; ε_r = 53.566; 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(7.91, 7.91, 7.91); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0183 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.632 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.0210 W/kg
SAR(1 g) = 0.014 W/kg; SAR(10 g) = 0.010 W/kg
Maximum value of SAR (measured) = 0.0185 W/kg



0 dB = 0.0185 W/kg = -17.33 dBW/kg

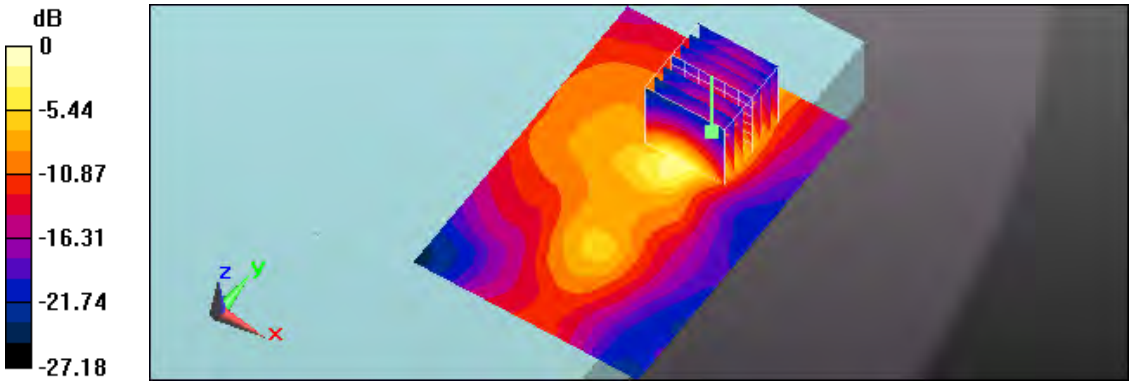
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/18 PM 03:04:07
112_LTE Band 7 CH 21350_QPSK_BW 20M_1RB Size 49RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2560 MHz; σ = 2.142 S/m; ε_r = 51.493; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.29 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.67 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 1.87 W/kg
SAR(1 g) = 0.780 W/kg; SAR(10 g) = 0.304 W/kg
Maximum value of SAR (measured) = 1.42 W/kg



0 dB = 1.42 W/kg = 1.52 dBW/kg

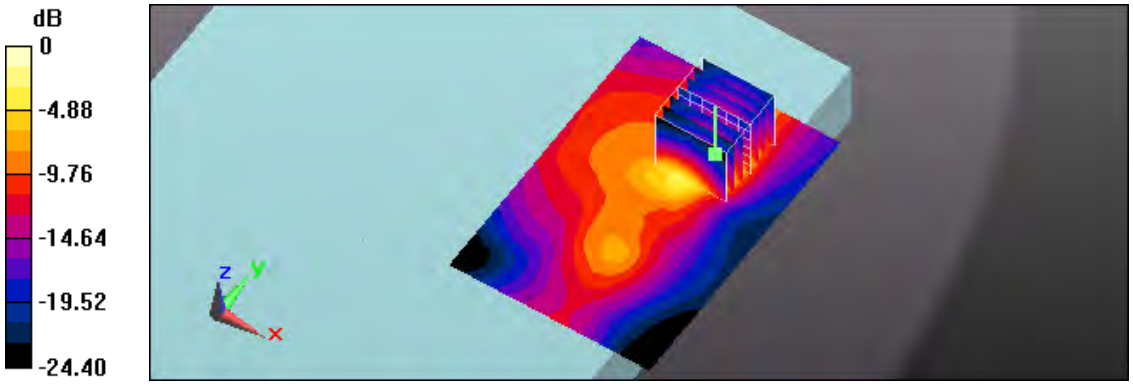
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/18 PM 03:25:12
113_LTE Band 7 CH 20850_QPSK_BW 20M_1RB Size 49RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2510 MHz; σ = 2.081 S/m; ε_r = 51.634; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.71 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.49 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 2.35 W/kg
SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.396 W/kg
Maximum value of SAR (measured) = 1.87 W/kg



0 dB = 1.87 W/kg = 2.72 dBW/kg

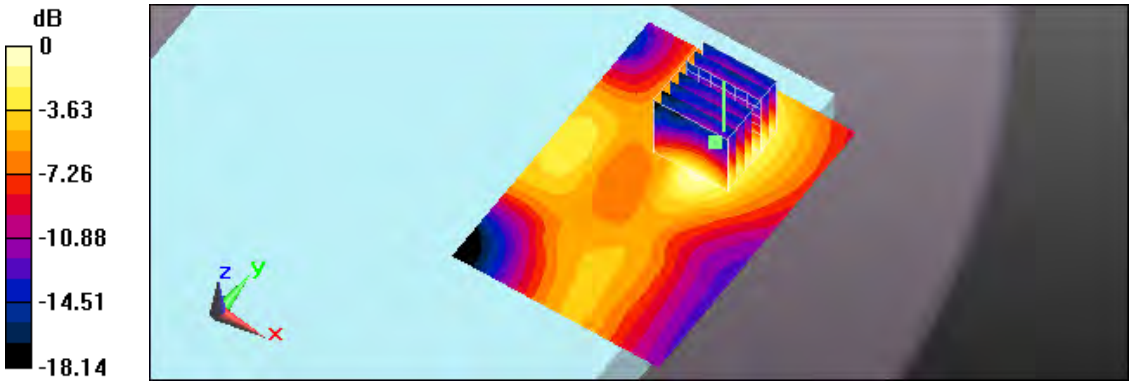
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/18 PM 10:14:12
127_LTE Band 7 CH 20850_QPSK_BW 20M_1RB Size 49RB Offset_Back_0mm;Battery 2
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2510 MHz; σ = 2.081 S/m; ε_r = 51.634; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.272 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.74 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 0.325 W/kg
SAR(1 g) = 0.179 W/kg; SAR(10 g) = 0.101 W/kg
Maximum value of SAR (measured) = 0.268 W/kg



0 dB = 0.268 W/kg = -5.72 dBW/kg

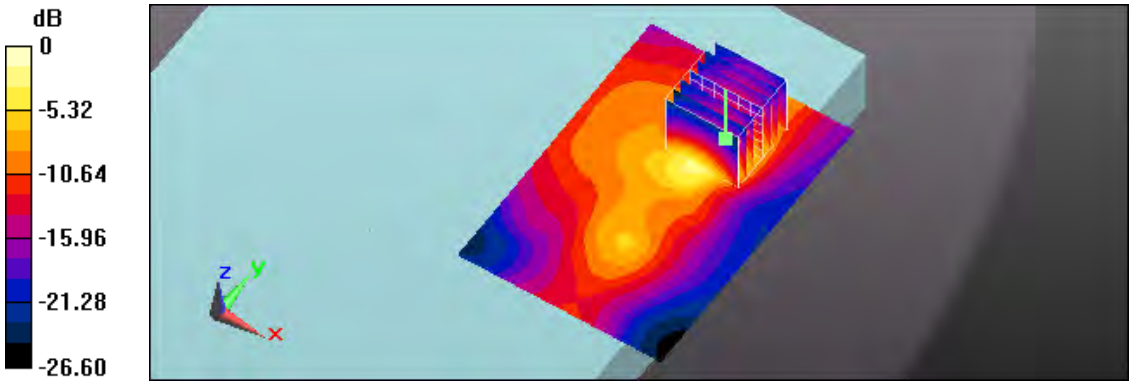
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/18 PM 03:46:32
114_LTE Band 7 CH 21100_QPSK_BW 20M_1RB Size 49RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2535 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2535 MHz; σ = 2.111 S/m; ε_r = 51.564; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.54 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.23 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 2.15 W/kg
SAR(1 g) = 0.913 W/kg; SAR(10 g) = 0.357 W/kg
Maximum value of SAR (measured) = 1.65 W/kg



0 dB = 1.65 W/kg = 2.17 dBW/kg

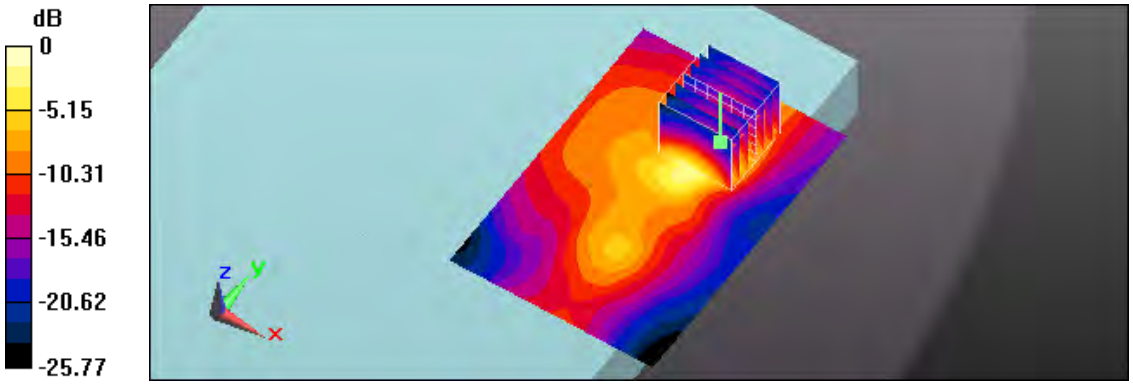
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/18 PM 04:08:49
115_LTE Band 7 CH 21350_QPSK_BW 20M_50RB Size 0RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2560 MHz; σ = 2.142 S/m; ε_r = 51.493; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.31 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.59 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 1.84 W/kg
SAR(1 g) = 0.780 W/kg; SAR(10 g) = 0.305 W/kg
Maximum value of SAR (measured) = 1.39 W/kg



0 dB = 1.39 W/kg = 1.43 dBW/kg

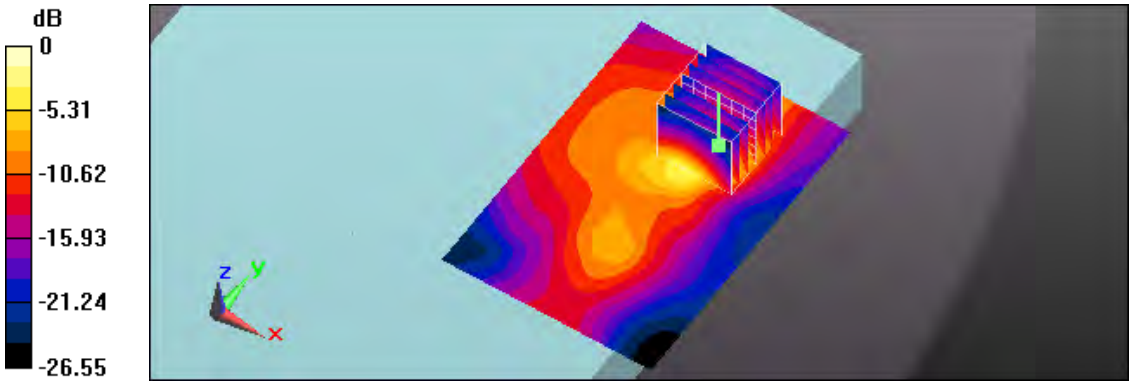
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/18 PM 04:30:17
116_LTE Band 7 CH 20850_QPSK_BW 20M_50RB Size 0RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2510 MHz; σ = 2.081 S/m; ε_r = 51.634; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.76 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.59 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 2.41 W/kg
SAR(1 g) = 1.01 W/kg; SAR(10 g) = 0.412 W/kg
Maximum value of SAR (measured) = 1.92 W/kg



0 dB = 1.92 W/kg = 2.83 dBW/kg

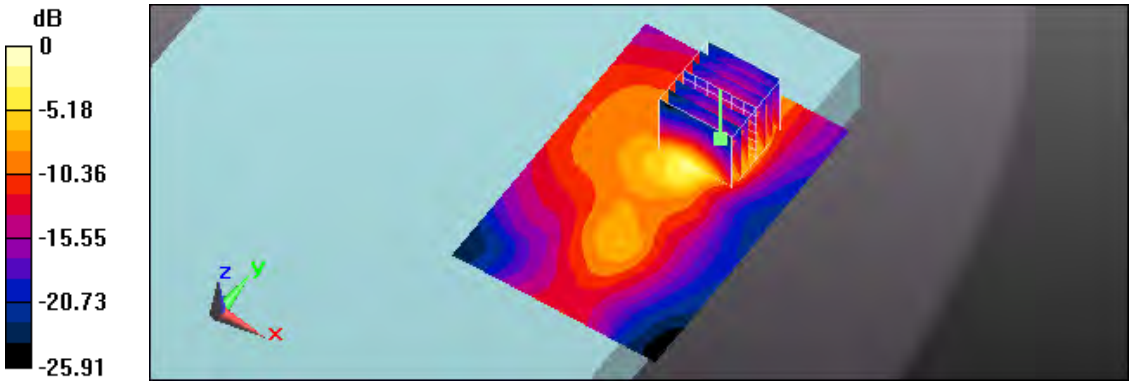
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/18 PM 05:01:50
117_LTE Band 7 CH 21100_QPSK_BW 20M_50RB Size 0RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2535 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2535 MHz; σ = 2.111 S/m; ε_r = 51.564; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.57 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.31 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 2.19 W/kg
SAR(1 g) = 0.936 W/kg; SAR(10 g) = 0.368 W/kg
Maximum value of SAR (measured) = 1.69 W/kg



0 dB = 1.69 W/kg = 2.28 dBW/kg

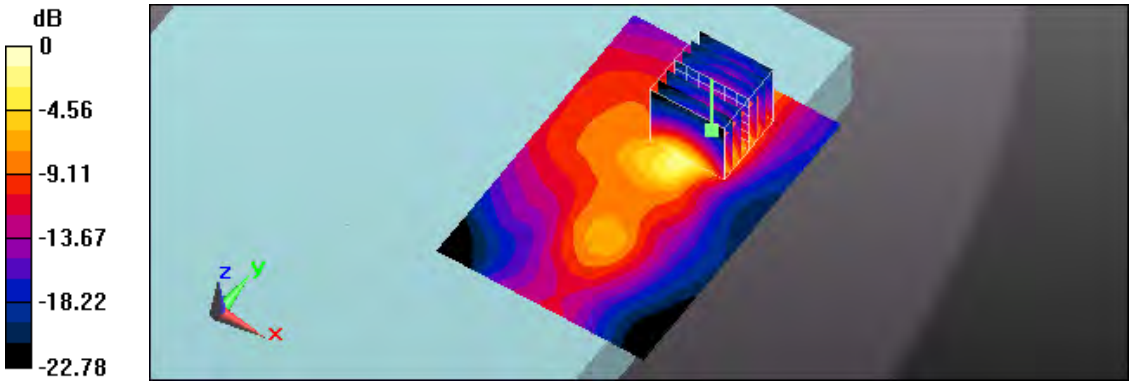
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/18 PM 05:22:11
118_LTE Band 7 CH 21350_QPSK_BW 20M_100RB Size 0RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2560 MHz; σ = 2.142 S/m; ε_r = 51.493; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.29 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.63 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 1.82 W/kg
SAR(1 g) = 0.770 W/kg; SAR(10 g) = 0.302 W/kg
Maximum value of SAR (measured) = 1.38 W/kg



0 dB = 1.38 W/kg = 1.40 dBW/kg

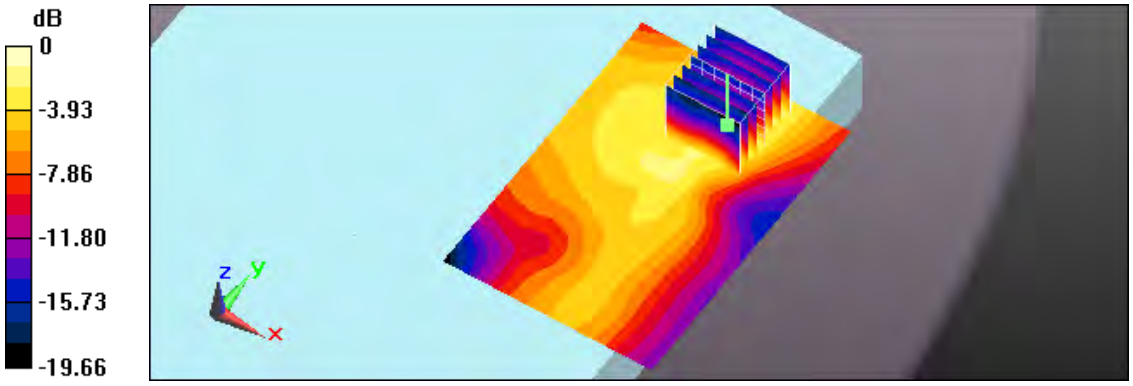
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/18 PM 05:48:22
119_LTE Band 7 CH 21350_QPSK_BW 20M_1RB Size 49RB Offset_Back_7mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2560 MHz; σ = 2.142 S/m; ε_r = 51.493; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.544 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.46 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.675 W/kg
SAR(1 g) = 0.347 W/kg; SAR(10 g) = 0.188 W/kg
Maximum value of SAR (measured) = 0.548 W/kg



0 dB = 0.548 W/kg = -2.61 dBW/kg

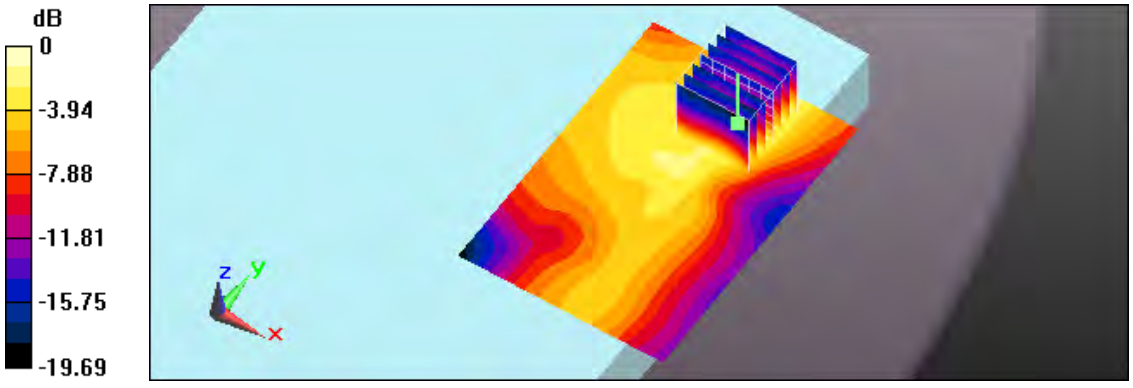
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/18 PM 06:15:19
120_LTE Band 7 CH 21350_QPSK_BW 20M_50RB Size 0RB Offset_Back_7mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2560 MHz; σ = 2.142 S/m; ε_r = 51.493; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.432 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.75 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.536 W/kg
SAR(1 g) = 0.275 W/kg; SAR(10 g) = 0.149 W/kg
Maximum value of SAR (measured) = 0.435 W/kg



0 dB = 0.435 W/kg = -3.62 dBW/kg

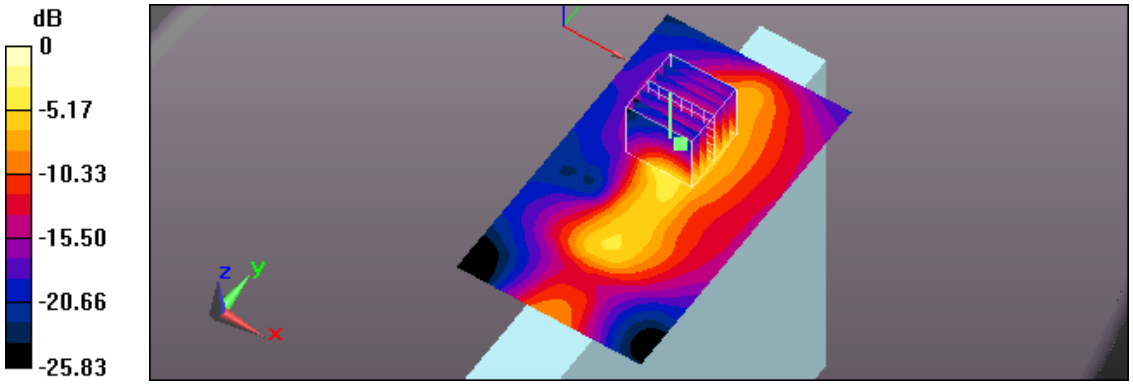
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/18 PM 06:50:42
121_LTE Band 7 CH 21350_QPSK_BW 20M_1RB Size 49RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2560 MHz; σ = 2.142 S/m; ε_r = 51.493; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.40 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.73 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 1.72 W/kg
SAR(1 g) = 0.652 W/kg; SAR(10 g) = 0.272 W/kg
Maximum value of SAR (measured) = 1.18 W/kg



0 dB = 1.18 W/kg = 0.72 dBW/kg

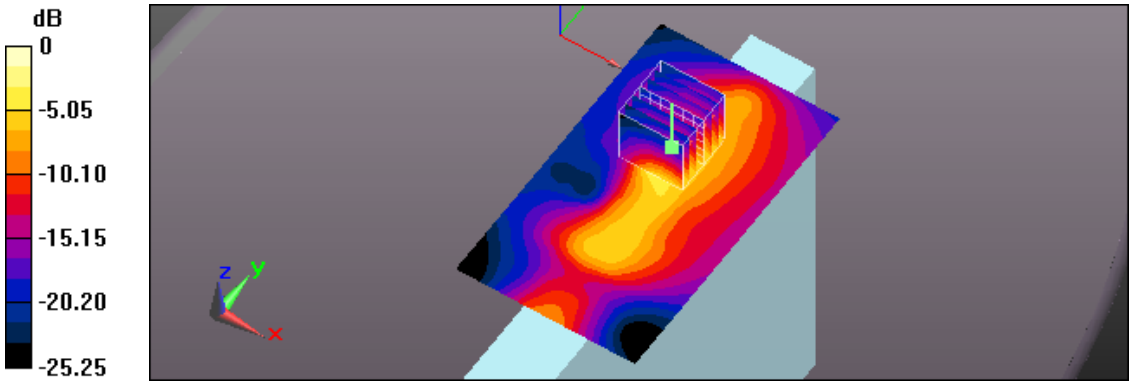
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/18 PM 07:14:49
122_LTE Band 7 CH 21350_QPSK_BW 20M_50RB Size 0RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2560 MHz; σ = 2.142 S/m; ε_r = 51.493; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.40 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.78 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 1.72 W/kg
SAR(1 g) = 0.660 W/kg; SAR(10 g) = 0.273 W/kg
Maximum value of SAR (measured) = 1.24 W/kg



0 dB = 1.24 W/kg = 0.93 dBW/kg

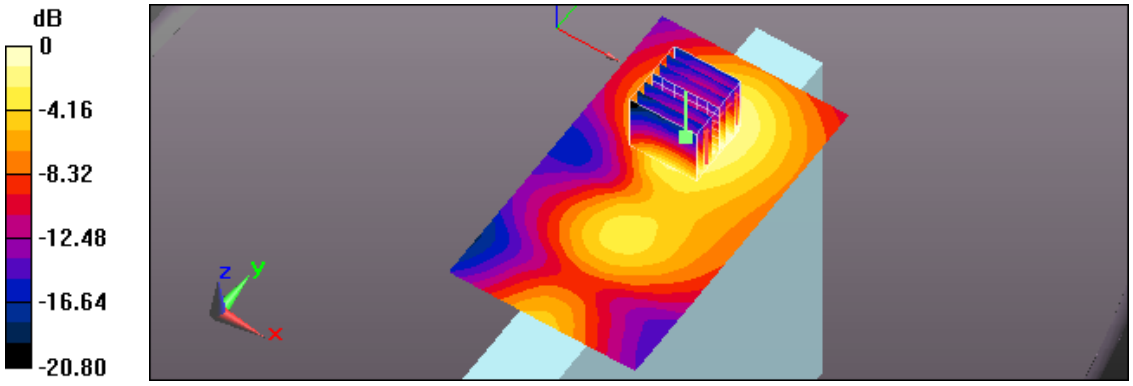
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/18 PM 08:00:16
123_LTE Band 7 CH 21350_QPSK_BW 20M_1RB Size 49RB Offset_Side 1_10mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2560 MHz; σ = 2.142 S/m; ε_r = 51.493; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.662 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.40 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 0.792 W/kg
SAR(1 g) = 0.419 W/kg; SAR(10 g) = 0.233 W/kg
Maximum value of SAR (measured) = 0.639 W/kg



0 dB = 0.639 W/kg = -1.94 dBW/kg

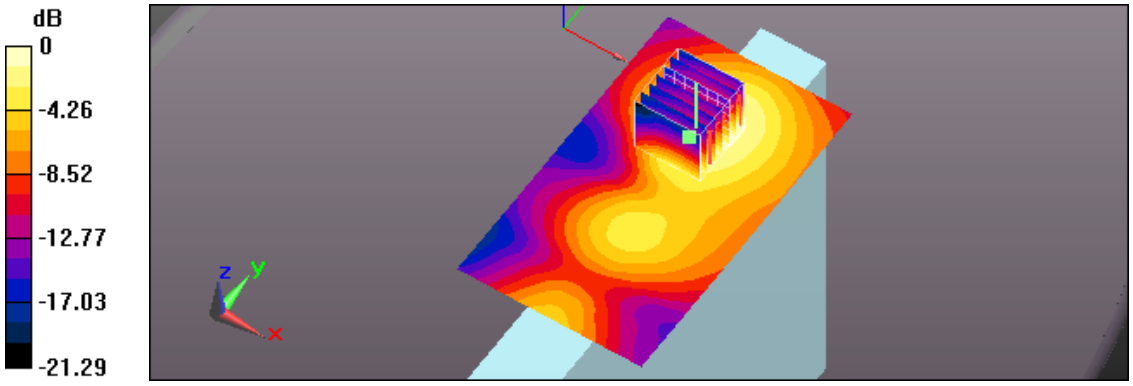
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/18 PM 08:22:45
124_LTE Band 7 CH 21350_QPSK_BW 20M_50RB Size 0RB Offset_Side 1_10mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2560 MHz; σ = 2.142 S/m; ε_r = 51.493; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.534 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.47 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.622 W/kg
SAR(1 g) = 0.330 W/kg; SAR(10 g) = 0.184 W/kg
Maximum value of SAR (measured) = 0.503 W/kg



0 dB = 0.503 W/kg = -2.98 dBW/kg

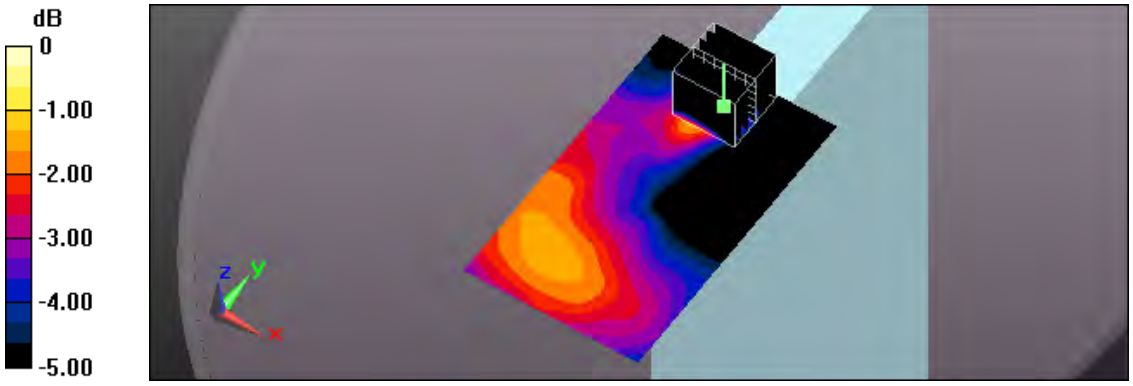
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/18 PM 09:02:26
125_LTE Band 7 CH 21350_QPSK_BW 20M_1RB Size 49RB Offset_Side 2_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2560 MHz; σ = 2.142 S/m; ε_r = 51.493; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0783 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.356 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.0990 W/kg
SAR(1 g) = 0.049 W/kg; SAR(10 g) = 0.026 W/kg
Maximum value of SAR (measured) = 0.0792 W/kg



0 dB = 0.0792 W/kg = -11.01 dBW/kg

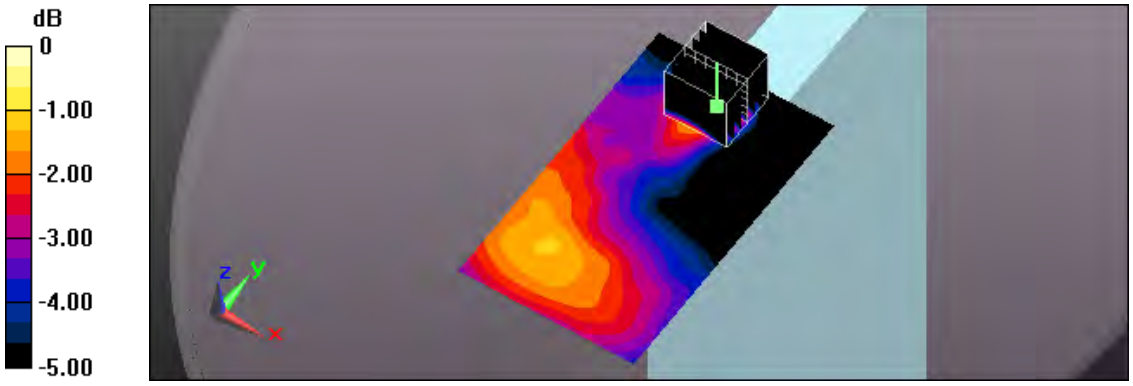
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/18 PM 09:25:32
126_LTE Band 7 CH 21350_QPSK_BW 20M_50RB Size 0RB Offset_Side 2_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2560 MHz; σ = 2.142 S/m; ε_r = 51.493; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0600 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.756 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.0760 W/kg
SAR(1 g) = 0.039 W/kg; SAR(10 g) = 0.021 W/kg
Maximum value of SAR (measured) = 0.0603 W/kg



0 dB = 0.0603 W/kg = -12.20 dBW/kg

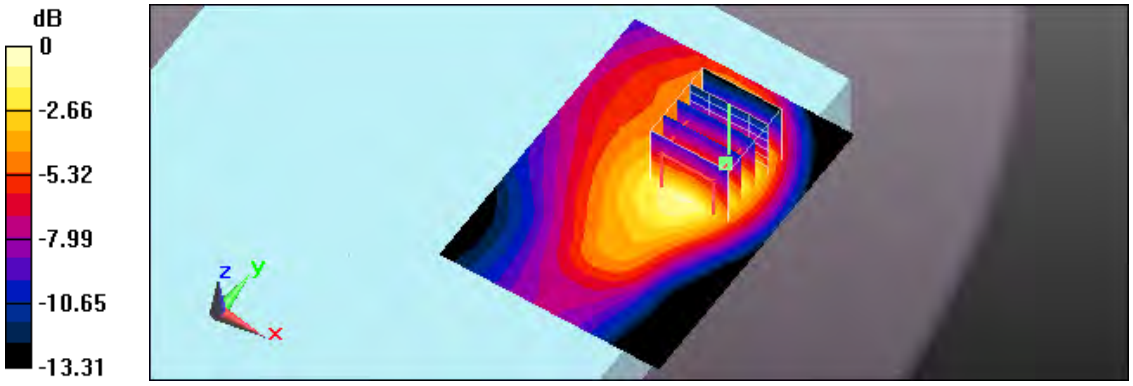
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 PM 09:34:48
161_LTE Band 12 CH 23095_QPSK_BW 10M_1RB Size 0RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.919 S/m; ε_r = 57.503; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.33 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 38.63 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 1.66 W/kg
SAR(1 g) = 0.907 W/kg; SAR(10 g) = 0.578 W/kg
Maximum value of SAR (measured) = 1.28 W/kg



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

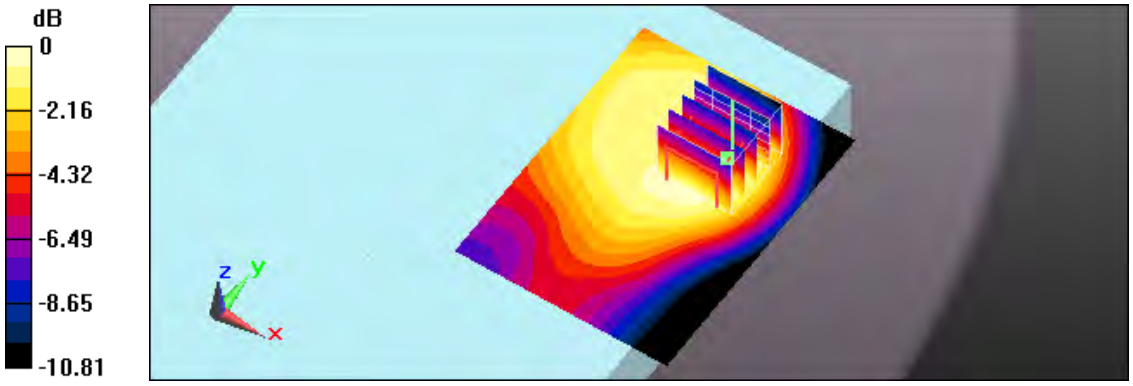
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/20 AM 05:38:15
181_LTE Band 12 CH 23095_QPSK_BW 10M_1RB Size 0RB Offset_Back_0mm;Battery 2
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.919 S/m; ε_r = 57.503; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.302 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.24 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 0.337 W/kg
SAR(1 g) = 0.226 W/kg; SAR(10 g) = 0.160 W/kg
Maximum value of SAR (measured) = 0.287 W/kg



0 dB = 0.287 W/kg = -5.42 dBW/kg

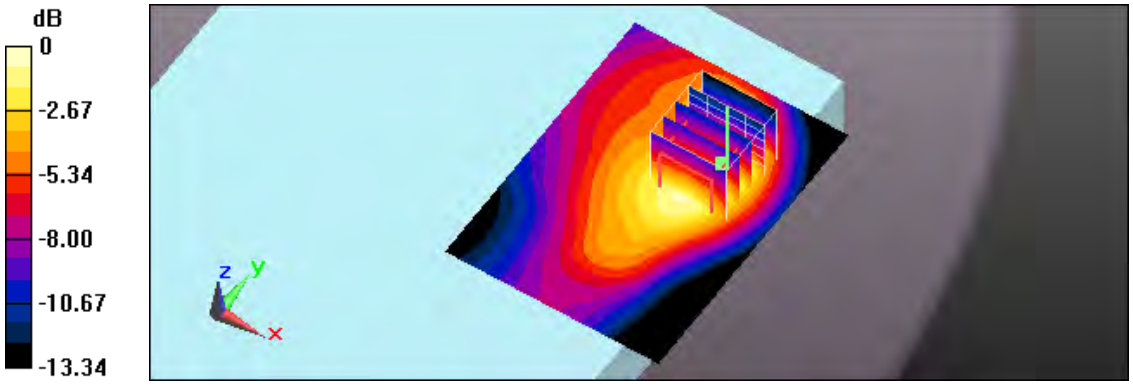
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 PM 09:54:49
162_LTE Band 12 CH 23095_QPSK_BW 10M_25RB Size 0RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.919 S/m; ε_r = 57.503; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): 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 = 33.40 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 1.23 W/kg
SAR(1 g) = 0.672 W/kg; SAR(10 g) = 0.427 W/kg
Maximum value of SAR (measured) = 0.939 W/kg



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

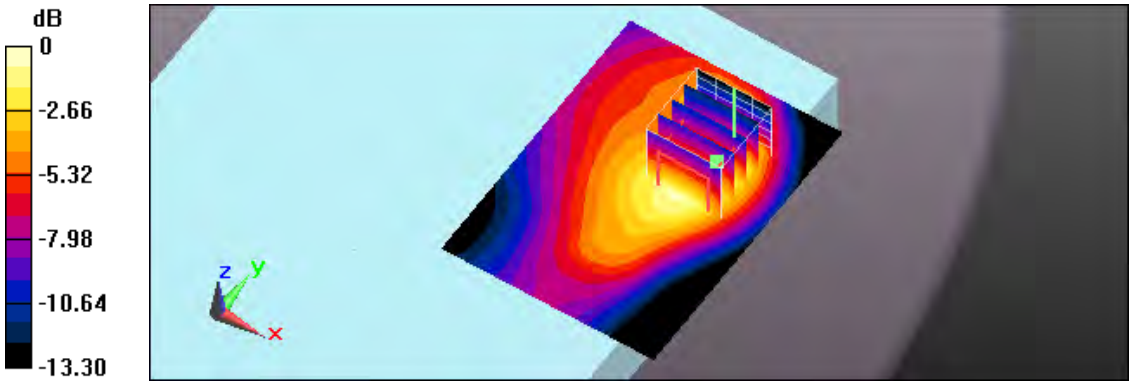
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 PM 10:08:20
163_LTE Band 12 CH 23095_QPSK_BW 10M_50RB Size 0RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.919 S/m; ε_r = 57.503; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.00 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 33.28 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.25 W/kg
SAR(1 g) = 0.679 W/kg; SAR(10 g) = 0.432 W/kg
Maximum value of SAR (measured) = 0.954 W/kg



0 dB = 0.954 W/kg = -0.20 dBW/kg

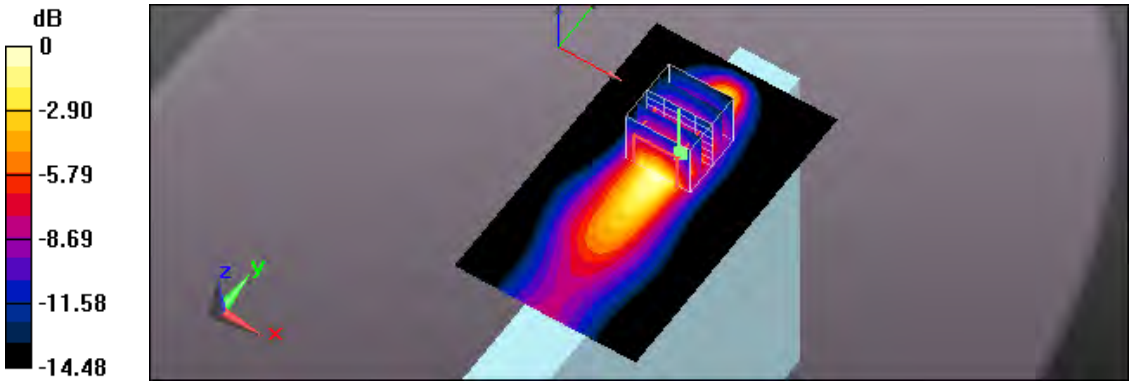
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/20 AM 02:05:57
170_LTE Band 12 CH 23095_QPSK_BW 10M_1RB Size 0RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.919 S/m; ε_r = 57.503; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.19 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.24 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 1.69 W/kg
SAR(1 g) = 0.836 W/kg; SAR(10 g) = 0.445 W/kg
Maximum value of SAR (measured) = 1.25 W/kg



0 dB = 1.25 W/kg = 0.97 dBW/kg

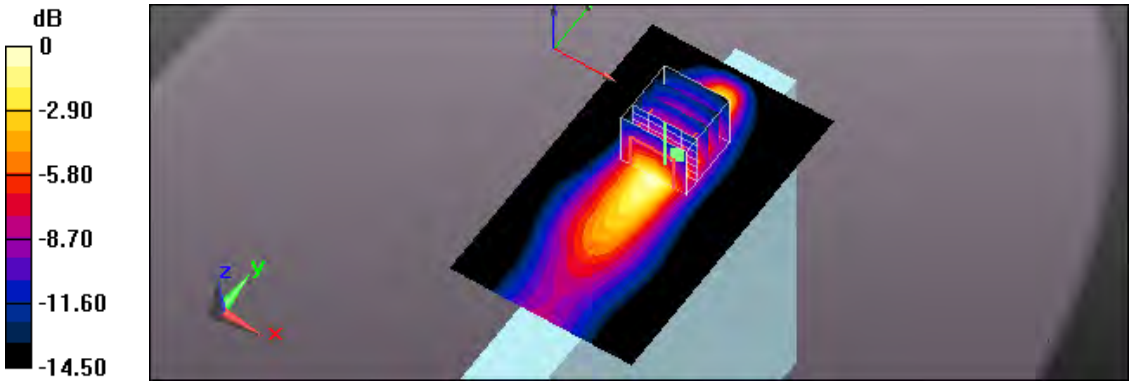
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/20 AM 02:26:35
171_LTE Band 12 CH 23095_QPSK_BW 10M_25RB Size 0RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.919 S/m; ε_r = 57.503; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.14 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.44 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 1.58 W/kg
SAR(1 g) = 0.795 W/kg; SAR(10 g) = 0.422 W/kg
Maximum value of SAR (measured) = 1.19 W/kg



0 dB = 1.19 W/kg = 0.76 dBW/kg

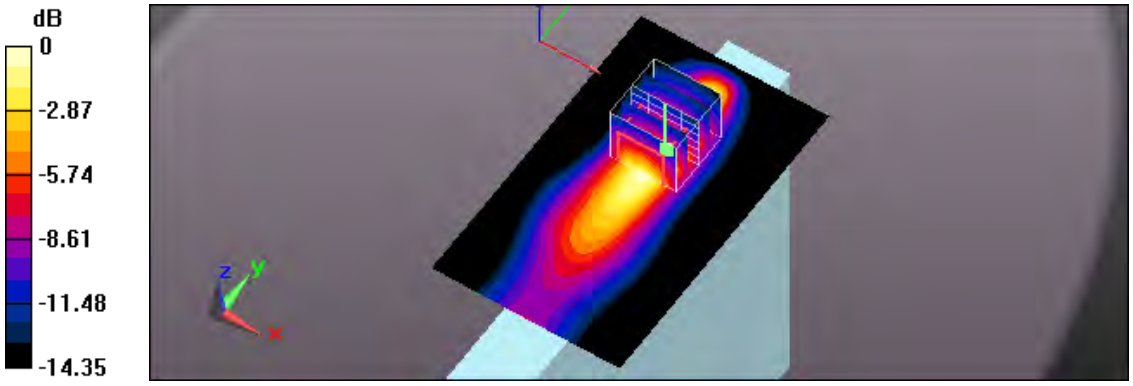
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/20 AM 02:41:04
172_LTE Band 12 CH 23095_QPSK_BW 10M_50RB Size 0RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.919 S/m; ε_r = 57.503; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.16 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.54 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 1.63 W/kg
SAR(1 g) = 0.812 W/kg; SAR(10 g) = 0.431 W/kg
Maximum value of SAR (measured) = 1.21 W/kg



0 dB = 1.21 W/kg = 0.83 dBW/kg

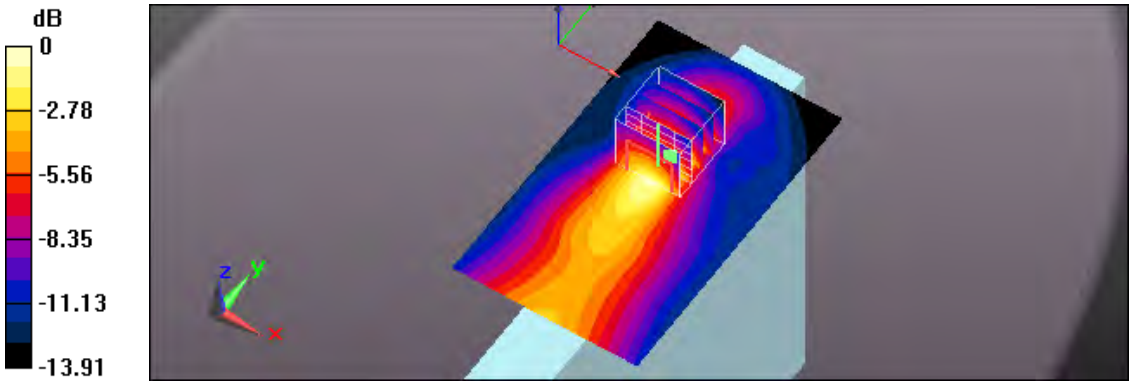
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/20 AM 03:00:33
173_LTE Band 12 CH 23095_QPSK_BW 10M_1RB Size 0RB Offset_Side 1_10mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.919 S/m; ε_r = 57.503; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.338 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.56 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 0.415 W/kg
SAR(1 g) = 0.251 W/kg; SAR(10 g) = 0.151 W/kg
Maximum value of SAR (measured) = 0.340 W/kg



0 dB = 0.340 W/kg = -4.69 dBW/kg

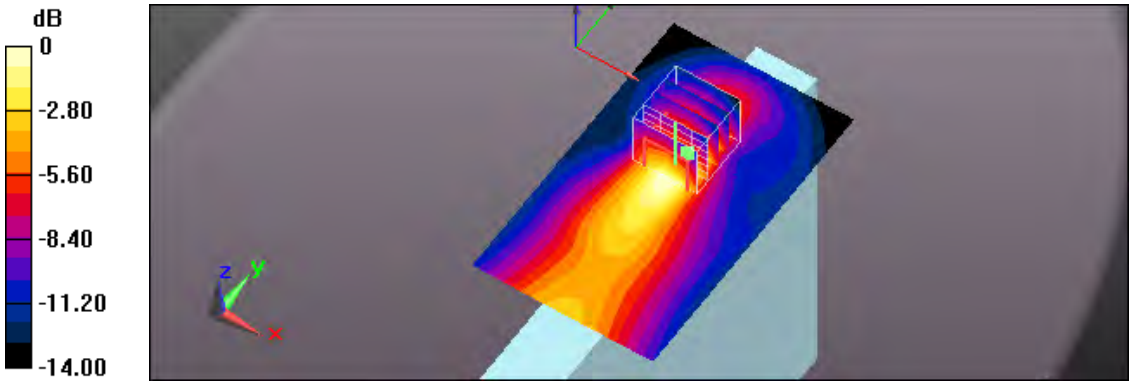
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/20 AM 03:15:35
174_LTE Band 12 CH 23095_QPSK_BW 10M_25RB Size 0RB Offset_Side 1_10mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.919 S/m; ε_r = 57.503; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.279 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.85 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.312 W/kg
SAR(1 g) = 0.189 W/kg; SAR(10 g) = 0.113 W/kg
Maximum value of SAR (measured) = 0.254 W/kg



0 dB = 0.254 W/kg = -5.95 dBW/kg

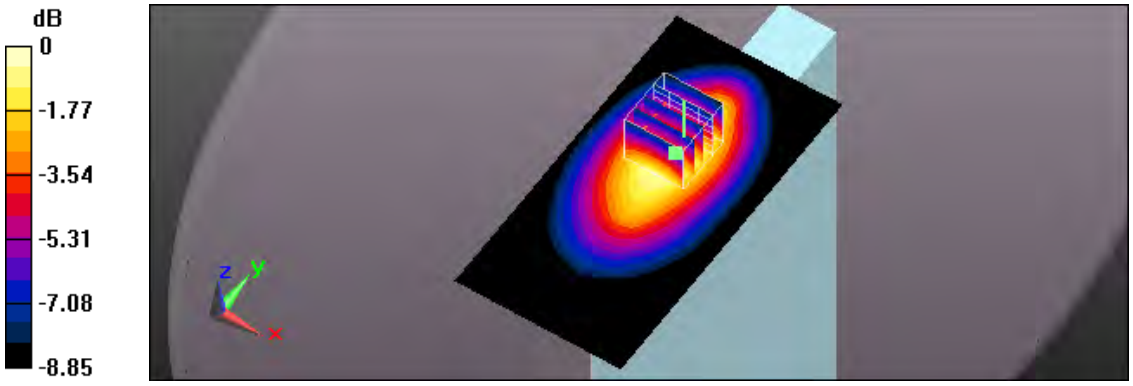
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/20 AM 04:55:30
179_LTE Band 12 CH 23095_QPSK_BW 10M_1RB Size 0RB Offset_Side 2_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.919 S/m; ε_r = 57.503; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0954 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.52 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 0.107 W/kg
SAR(1 g) = 0.076 W/kg; SAR(10 g) = 0.055 W/kg
Maximum value of SAR (measured) = 0.0962 W/kg



0 dB = 0.0962 W/kg = -10.17 dBW/kg

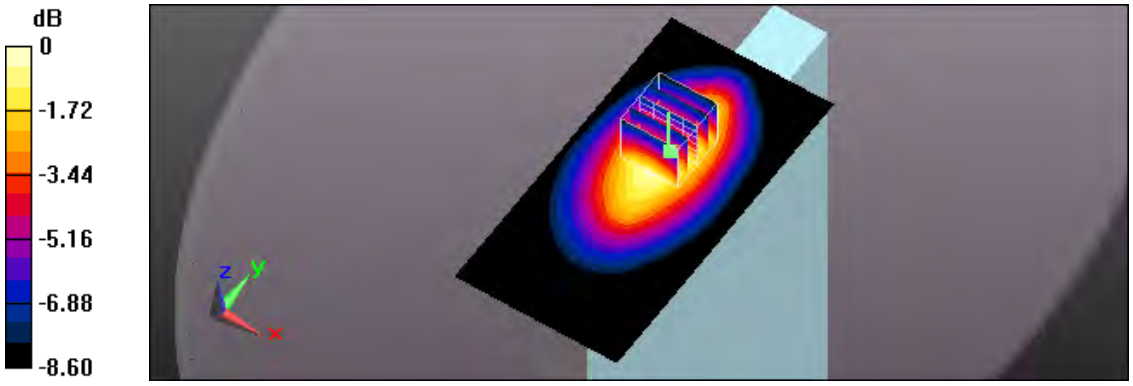
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/20 AM 05:14:56
180_LTE Band 12 CH 23095_QPSK_BW 10M_25RB Size 0RB Offset_Side 2_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.919 S/m; ε_r = 57.503; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0763 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.387 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.0840 W/kg
SAR(1 g) = 0.061 W/kg; SAR(10 g) = 0.044 W/kg
Maximum value of SAR (measured) = 0.0759 W/kg



0 dB = 0.0759 W/kg = -11.20 dBW/kg

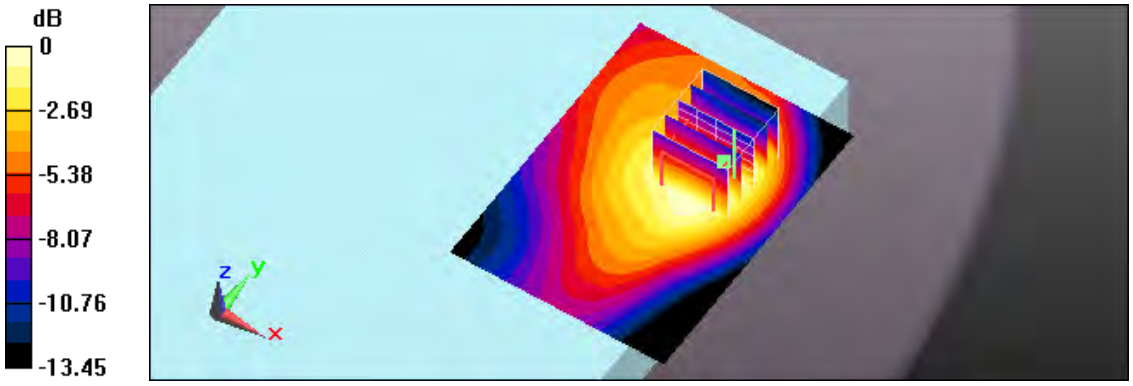
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 PM 10:24:31
164_LTE Band 13 CH 23230_QPSK_BW 10M_1RB Size 24RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used: f = 782 MHz; σ = 1.004 S/m; ε_r = 56.653; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.16 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 33.34 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 1.35 W/kg
SAR(1 g) = 0.769 W/kg; SAR(10 g) = 0.507 W/kg
Maximum value of SAR (measured) = 1.03 W/kg



0 dB = 1.03 W/kg = 0.13 dBW/kg

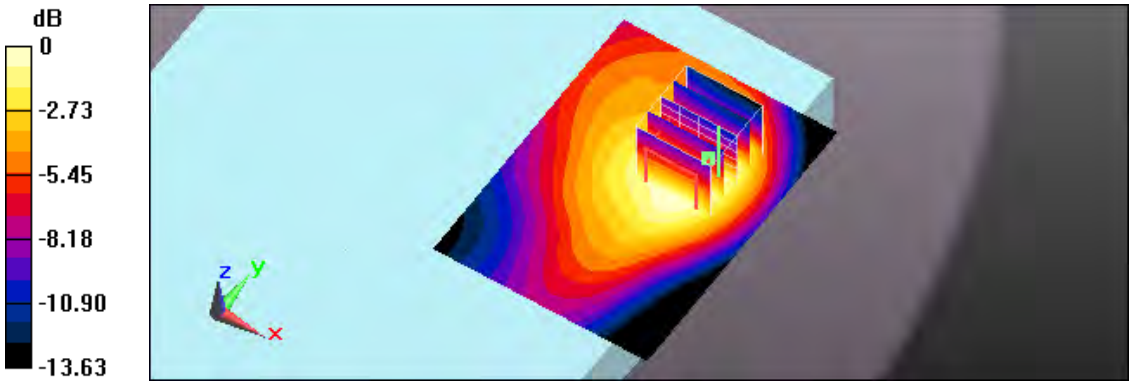
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 PM 10:44:52
165_LTE Band 13 CH 23230_QPSK_BW 10M_25RB Size 12RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used: f = 782 MHz; σ = 1.004 S/m; ε_r = 56.653; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.899 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 29.24 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 1.01 W/kg
SAR(1 g) = 0.587 W/kg; SAR(10 g) = 0.389 W/kg
Maximum value of SAR (measured) = 0.797 W/kg



0 dB = 0.797 W/kg = -0.99 dBW/kg

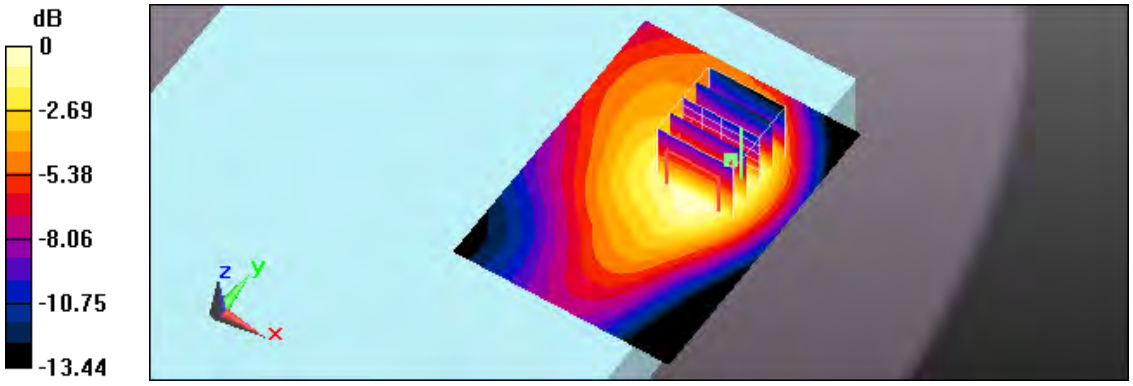
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 PM 11:26:13
166_LTE Band 13 CH 23230_QPSK_BW 10M_50RB Size 0RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used: f = 782 MHz; σ = 1.004 S/m; ε_r = 56.653; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.897 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 29.45 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 1.03 W/kg
SAR(1 g) = 0.592 W/kg; SAR(10 g) = 0.392 W/kg
Maximum value of SAR (measured) = 0.801 W/kg



0 dB = 0.801 W/kg = -0.96 dBW/kg

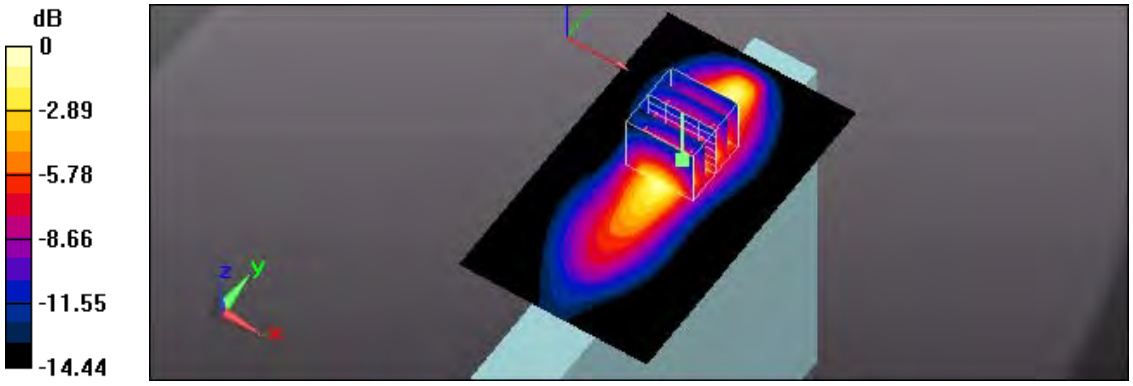
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/20 AM 06:50:36
167_LTE Band 13 CH 23230_QPSK_BW 10M_1RB Size 24RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used: f = 782 MHz; σ = 1.004 S/m; ε_r = 56.653; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.26 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 30.92 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 2.00 W/kg
SAR(1 g) = 0.943 W/kg; SAR(10 g) = 0.498 W/kg
Maximum value of SAR (measured) = 1.35 W/kg



0 dB = 1.35 W/kg = 1.30 dBW/kg

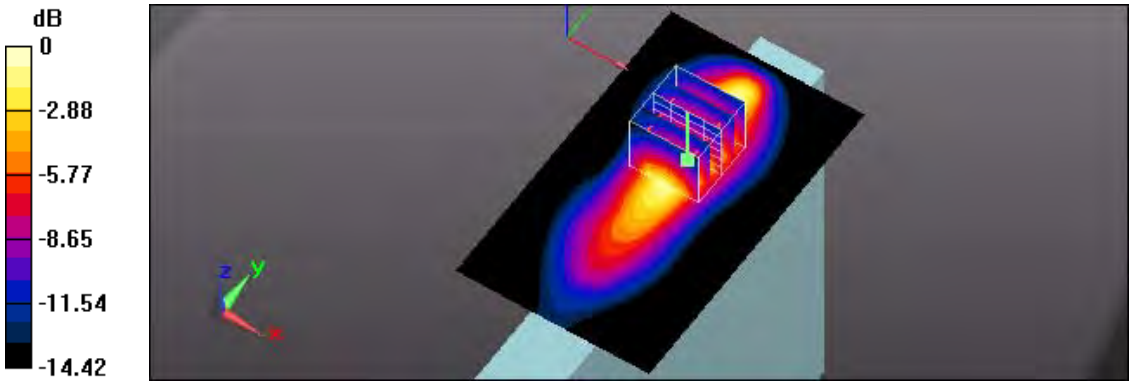
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/20 AM 07:16:37
168_LTE Band 13 CH 23230_QPSK_BW 10M_25RB Size 12RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used: f = 782 MHz; σ = 1.004 S/m; ε_r = 56.653; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.23 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 30.43 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 1.96 W/kg
SAR(1 g) = 0.926 W/kg; SAR(10 g) = 0.488 W/kg
Maximum value of SAR (measured) = 1.33 W/kg



0 dB = 1.33 W/kg = 1.24 dBW/kg

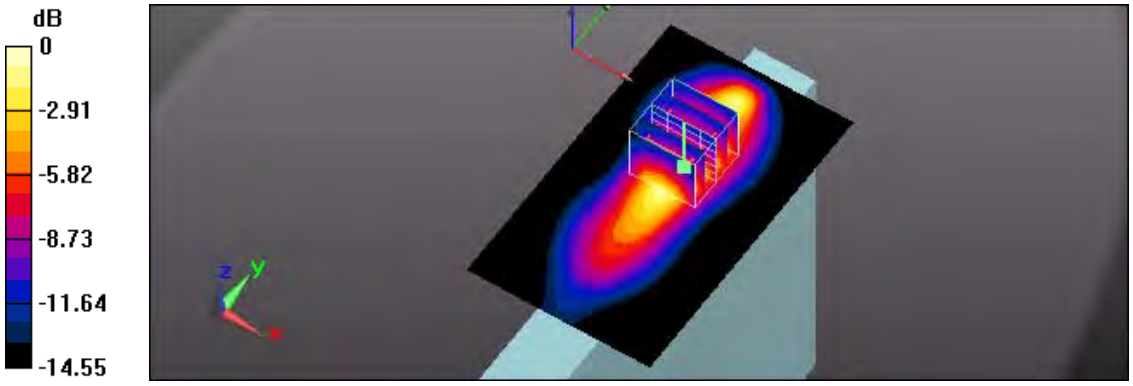
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/20 AM 07:39:16
169_LTE Band 13 CH 23230_QPSK_BW 10M_50RB Size 0RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used: f = 782 MHz; σ = 1.004 S/m; ε_r = 56.653; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.26 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 30.73 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 2.00 W/kg
SAR(1 g) = 0.946 W/kg; SAR(10 g) = 0.499 W/kg
Maximum value of SAR (measured) = 1.35 W/kg



0 dB = 1.35 W/kg = 1.30 dBW/kg

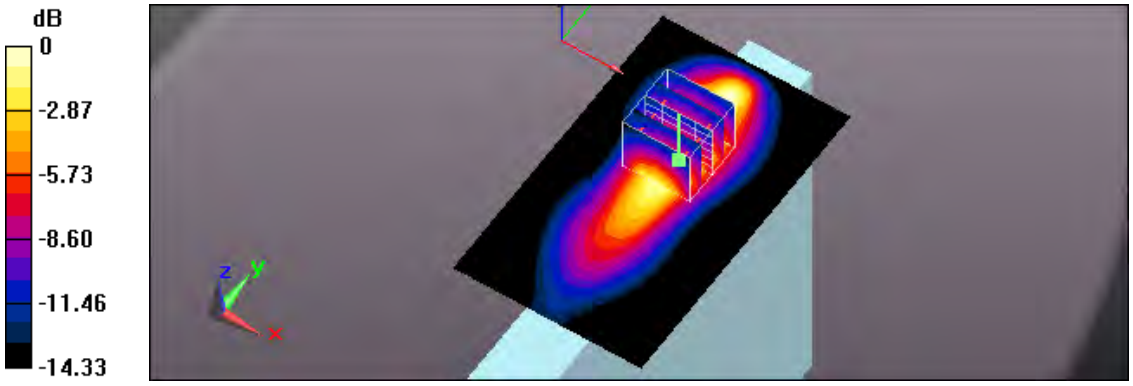
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/20 AM 06:30:06
183_LTE Band 13 CH 23230_QPSK_BW 10M_50RB Size 0RB Offset_Side 1_0mm;Repeat
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used: f = 782 MHz; σ = 1.004 S/m; ε_r = 56.653; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.35 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 32.37 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 1.98 W/kg
SAR(1 g) = 0.937 W/kg; SAR(10 g) = 0.496 W/kg
Maximum value of SAR (measured) = 1.35 W/kg



0 dB = 1.35 W/kg = 1.30 dBW/kg

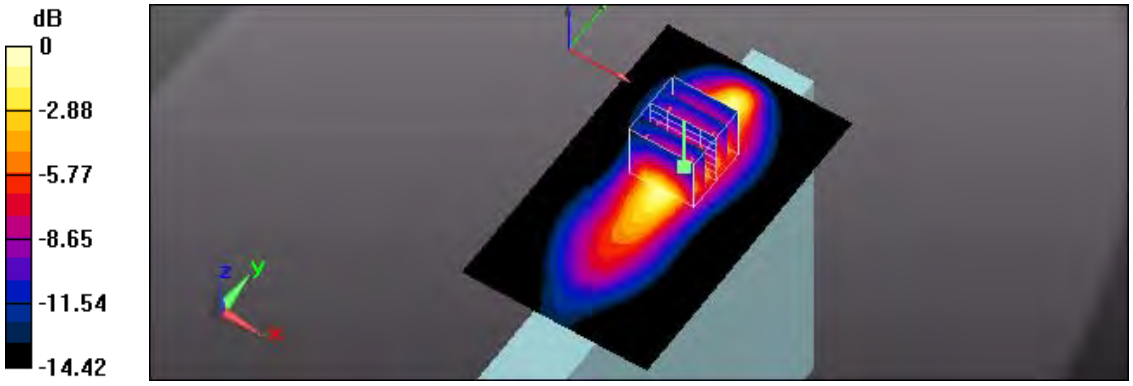
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/20 AM 07:54:08
182_LTE Band 13 CH 23230_QPSK_BW 10M_50RB Size 0RB Offset_Side 1_0mm;Battery 2
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used: f = 782 MHz; σ = 1.004 S/m; ε_r = 56.653; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.27 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 31.05 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 2.01 W/kg
SAR(1 g) = 0.936 W/kg; SAR(10 g) = 0.491 W/kg
Maximum value of SAR (measured) = 1.35 W/kg



0 dB = 1.35 W/kg = 1.30 dBW/kg

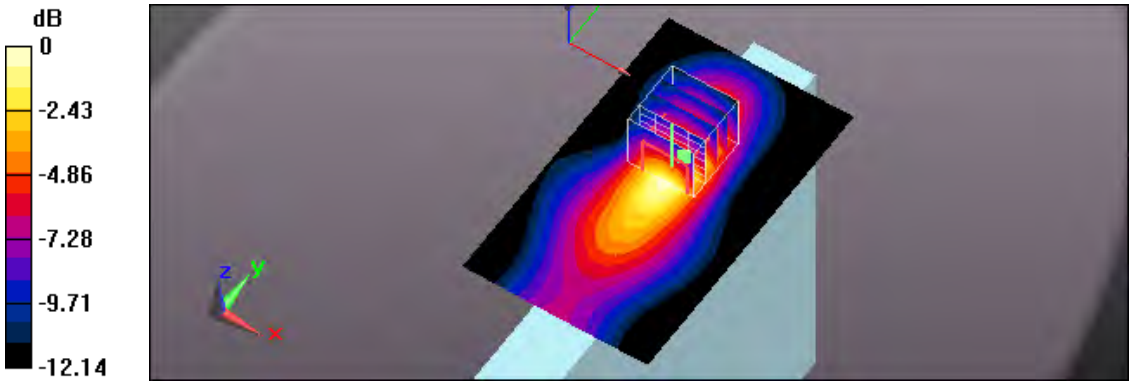
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/20 AM 03:33:46
175_LTE Band 13 CH 23230_QPSK_BW 10M_1RB Size 24RB Offset_Side 1_10mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used: f = 782 MHz; σ = 1.004 S/m; ε_r = 56.653; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.530 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 23.54 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.618 W/kg
SAR(1 g) = 0.382 W/kg; SAR(10 g) = 0.234 W/kg
Maximum value of SAR (measured) = 0.517 W/kg



0 dB = 0.517 W/kg = -2.87 dBW/kg

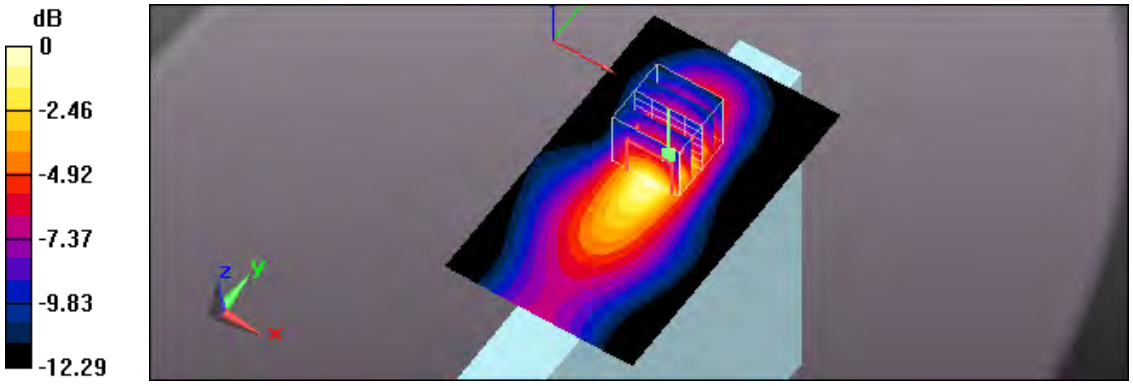
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/20 AM 03:47:59
176_LTE Band 13 CH 23230_QPSK_BW 10M_25RB Size 12RB Offset_Side 1_10mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used: f = 782 MHz; σ = 1.004 S/m; ε_r = 56.653; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): 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 = 20.57 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.468 W/kg
SAR(1 g) = 0.289 W/kg; SAR(10 g) = 0.177 W/kg
Maximum value of SAR (measured) = 0.395 W/kg



0 dB = 0.395 W/kg = -4.03 dBW/kg

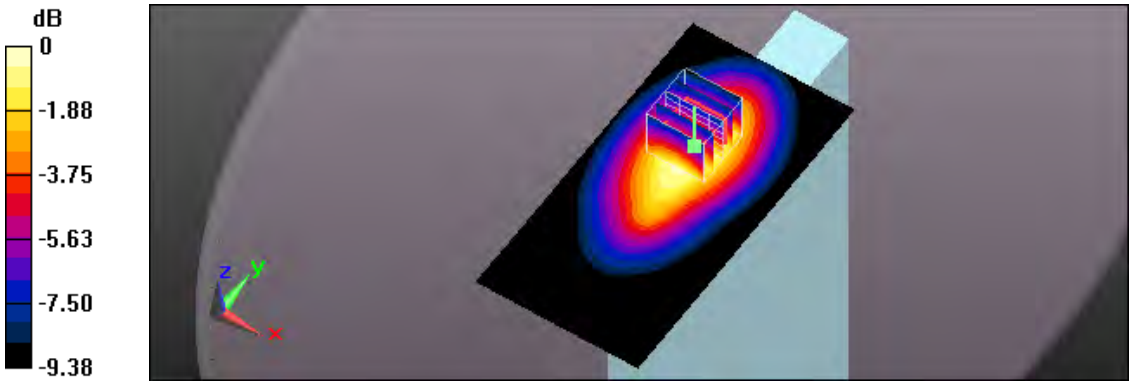
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/20 AM 04:14:01
177_LTE Band 13 CH 23230_QPSK_BW 10M_1RB Size 24RB Offset_Side 2_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used: f = 782 MHz; σ = 1.004 S/m; ε_r = 56.653; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.109 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.83 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.123 W/kg
SAR(1 g) = 0.086 W/kg; SAR(10 g) = 0.060 W/kg
Maximum value of SAR (measured) = 0.111 W/kg



0 dB = 0.111 W/kg = -9.55 dBW/kg

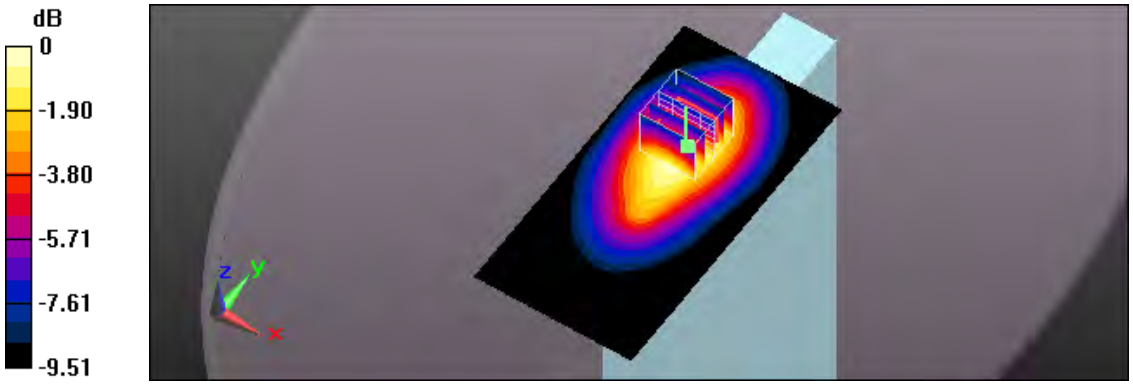
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/20 AM 04:32:33
178_LTE Band 13 CH 23230_QPSK_BW 10M_25RB Size 12RB Offset_Side 2_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used: f = 782 MHz; σ = 1.004 S/m; ε_r = 56.653; 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(9.71, 9.71, 9.71); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0821 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.377 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.0930 W/kg
SAR(1 g) = 0.065 W/kg; SAR(10 g) = 0.045 W/kg
Maximum value of SAR (measured) = 0.0834 W/kg



0 dB = 0.0834 W/kg = -10.79 dBW/kg

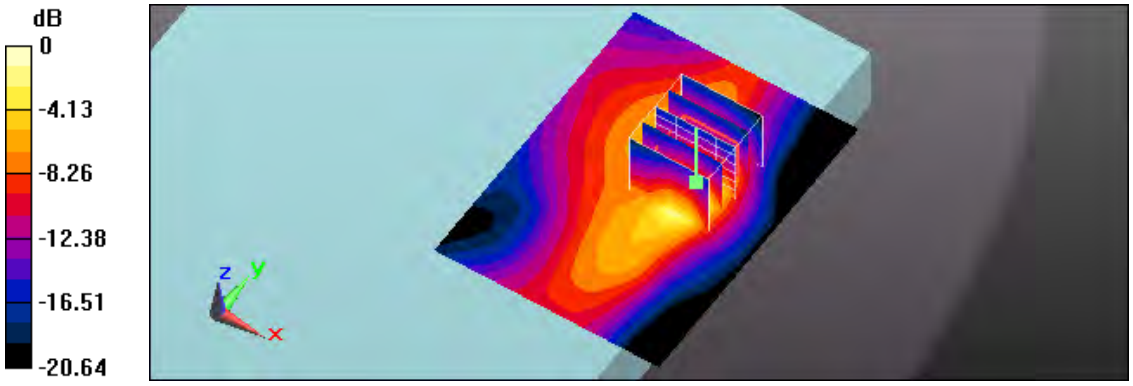
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 02:07:42
01_LTE Band 25 CH 26365_QPSK_BW 20M_1RB Size 0RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1882.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1882.5 MHz; σ = 1.557 S/m; ε_r = 53.2; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.63 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.98 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 1.95 W/kg
SAR(1 g) = 0.941 W/kg; SAR(10 g) = 0.437 W/kg
Maximum value of SAR (measured) = 1.59 W/kg



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

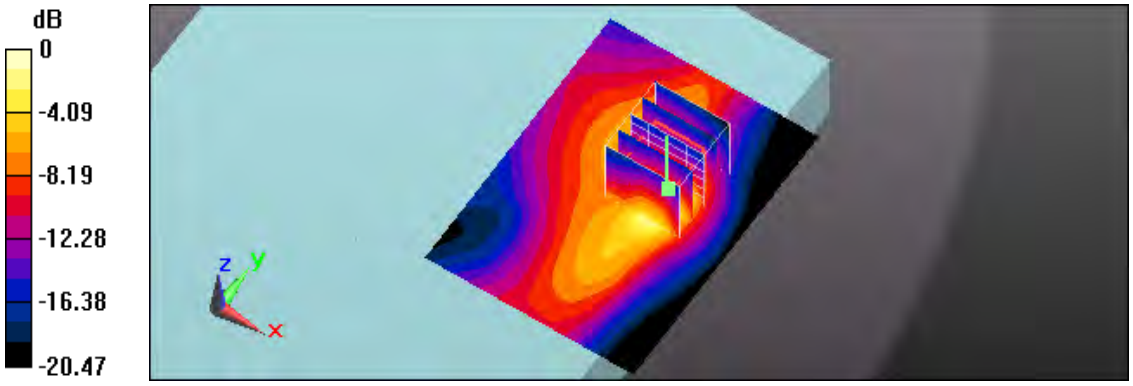
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 02:24:48
02_LTE Band 25 CH 26140_QPSK_BW 20M_1RB Size 0RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1860 MHz; σ = 1.536 S/m; ε_r = 53.254; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.54 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.67 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.80 W/kg
SAR(1 g) = 0.873 W/kg; SAR(10 g) = 0.408 W/kg
Maximum value of SAR (measured) = 1.48 W/kg



0 dB = 1.48 W/kg = 1.70 dBW/kg

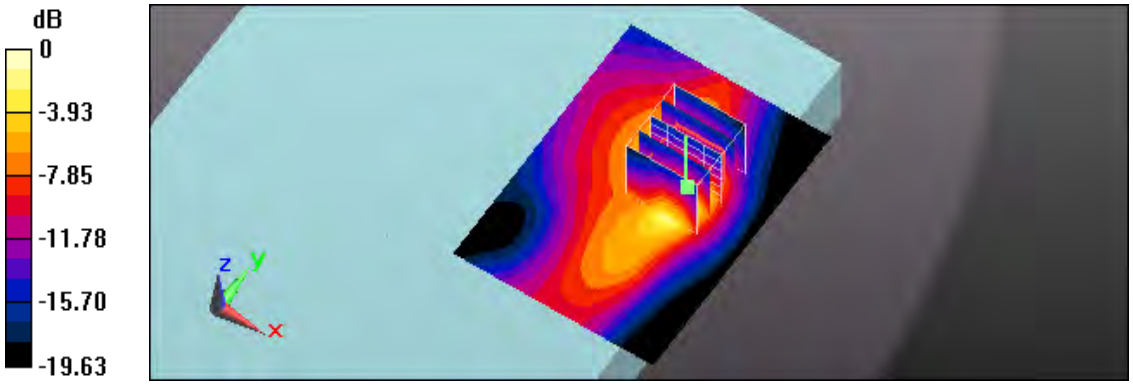
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 02:40:34
03_LTE Band 25 CH 26590_QPSK_BW 20M_1RB Size 0RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1905 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1905 MHz; σ = 1.58 S/m; ε_r = 53.144; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.67 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.25 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.98 W/kg
SAR(1 g) = 0.955 W/kg; SAR(10 g) = 0.446 W/kg
Maximum value of SAR (measured) = 1.61 W/kg



0 dB = 1.61 W/kg = 2.07 dBW/kg

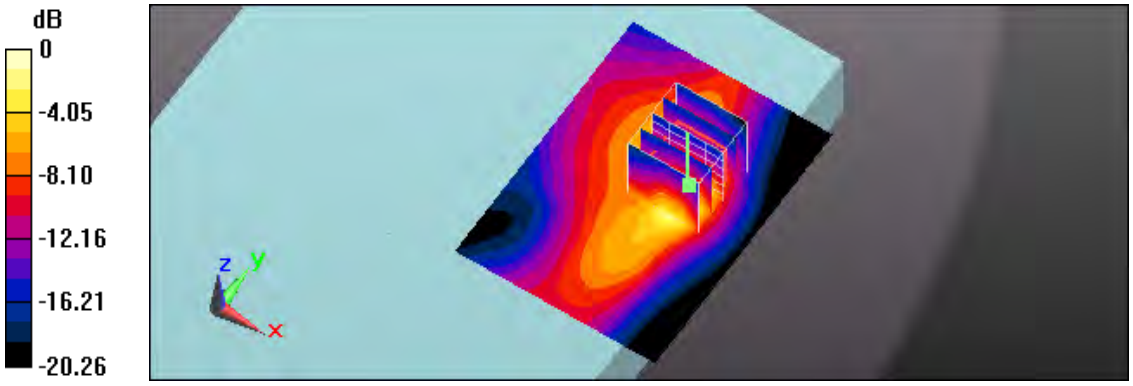
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 02:59:07
04_LTE Band 25 CH 26365_QPSK_BW 20M_50RB Size 25RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1882.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1882.5 MHz; σ = 1.557 S/m; ε_r = 53.2; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.68 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.40 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 2.01 W/kg
SAR(1 g) = 0.970 W/kg; SAR(10 g) = 0.452 W/kg
Maximum value of SAR (measured) = 1.64 W/kg



0 dB = 1.64 W/kg = 2.15 dBW/kg

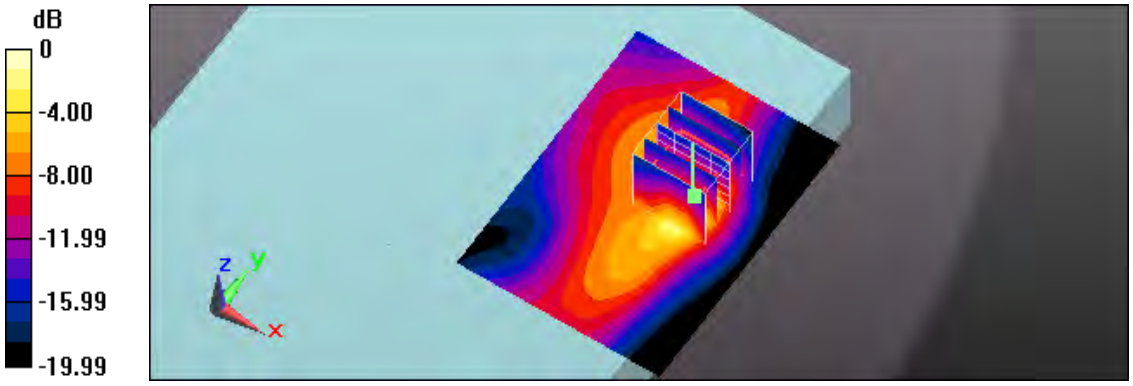
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 03:14:34
05_LTE Band 25 CH 26140_QPSK_BW 20M_50RB Size 25RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1860 MHz; σ = 1.536 S/m; ε_r = 53.254; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.62 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.14 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.91 W/kg
SAR(1 g) = 0.921 W/kg; SAR(10 g) = 0.431 W/kg
Maximum value of SAR (measured) = 1.56 W/kg



0 dB = 1.56 W/kg = 1.93 dBW/kg

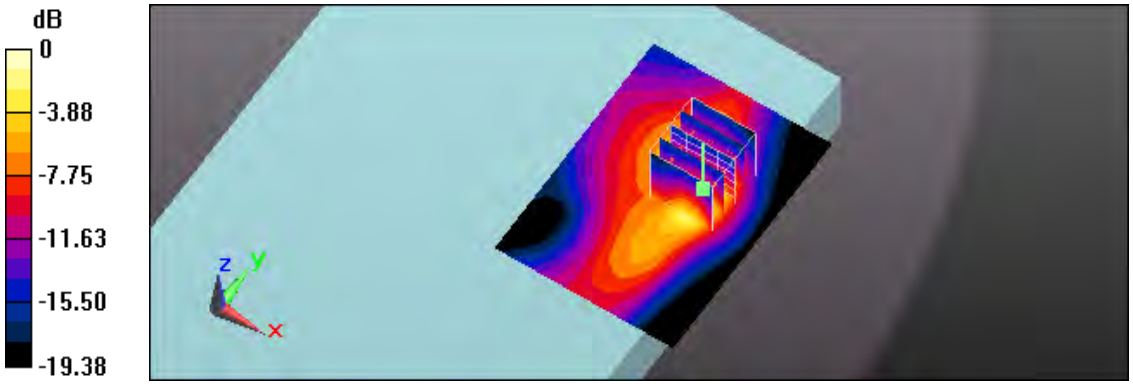
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 03:43:25
06_LTE Band 25 CH 26590_QPSK_BW 20M_50RB Size 25RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1905 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1905 MHz; σ = 1.58 S/m; ε_r = 53.144; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.70 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.74 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 2.08 W/kg
SAR(1 g) = 0.997 W/kg; SAR(10 g) = 0.467 W/kg
Maximum value of SAR (measured) = 1.70 W/kg



0 dB = 1.70 W/kg = 2.30 dBW/kg

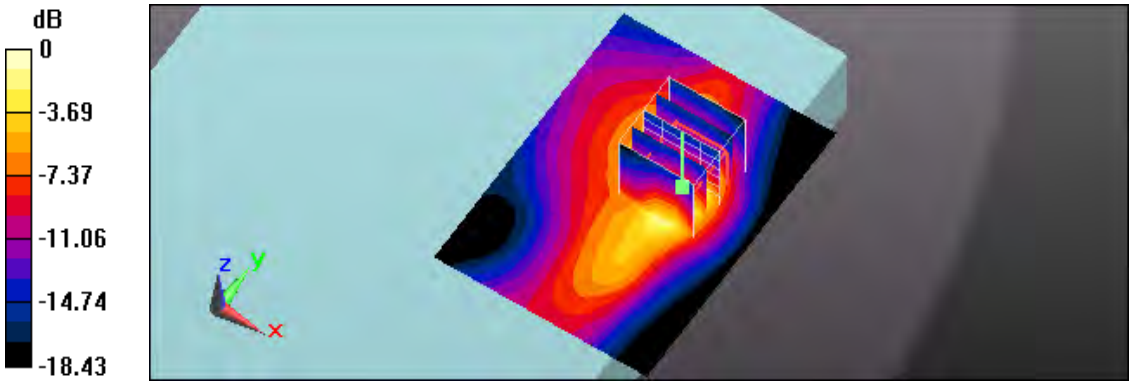
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 PM 07:42:10
44_LTE Band 25 CH 26590_QPSK_BW 20M_50RB Size 25RB Offset_Back_0mm;Repeat
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1905 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1905 MHz; σ = 1.58 S/m; ε_r = 53.144; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.77 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.29 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 2.00 W/kg
SAR(1 g) = 0.978 W/kg; SAR(10 g) = 0.463 W/kg
Maximum value of SAR (measured) = 1.53 W/kg



0 dB = 1.53 W/kg = 1.85 dBW/kg

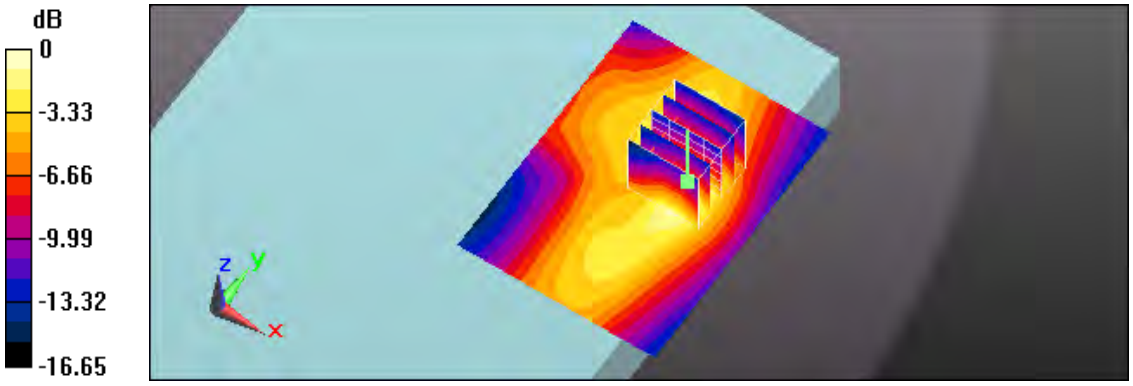
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 PM 07:01:46
43_LTE Band 25 CH 26590_QPSK_BW 20M_50RB Size 25RB Offset_Back_0mm;Battery 2
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1905 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1905 MHz; σ = 1.58 S/m; ε_r = 53.144; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.253 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.78 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.302 W/kg
SAR(1 g) = 0.175 W/kg; SAR(10 g) = 0.099 W/kg
Maximum value of SAR (measured) = 0.257 W/kg



0 dB = 0.257 W/kg = -5.90 dBW/kg

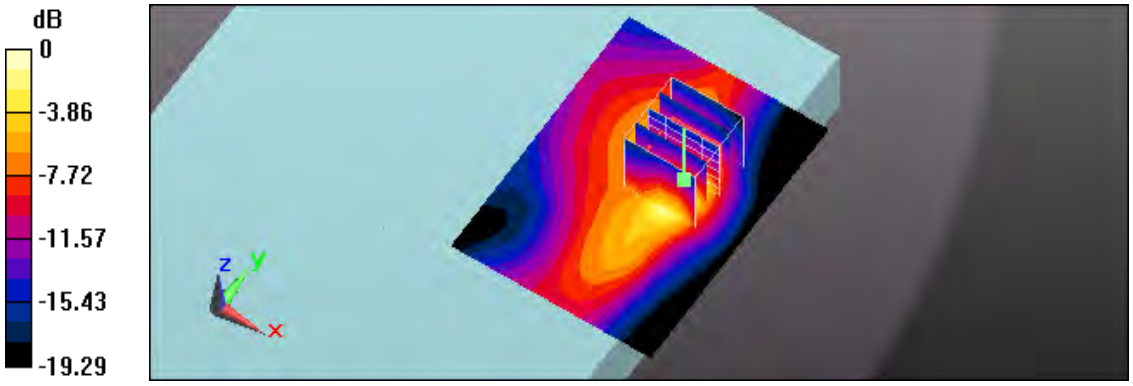
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 05:32:52
07_LTE Band 25 CH 26140_QPSK_BW 20M_100RB Size 0RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1860 MHz; σ = 1.536 S/m; ε_r = 53.254; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.62 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.16 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 1.88 W/kg
SAR(1 g) = 0.925 W/kg; SAR(10 g) = 0.435 W/kg
Maximum value of SAR (measured) = 1.51 W/kg



0 dB = 1.51 W/kg = 1.79 dBW/kg

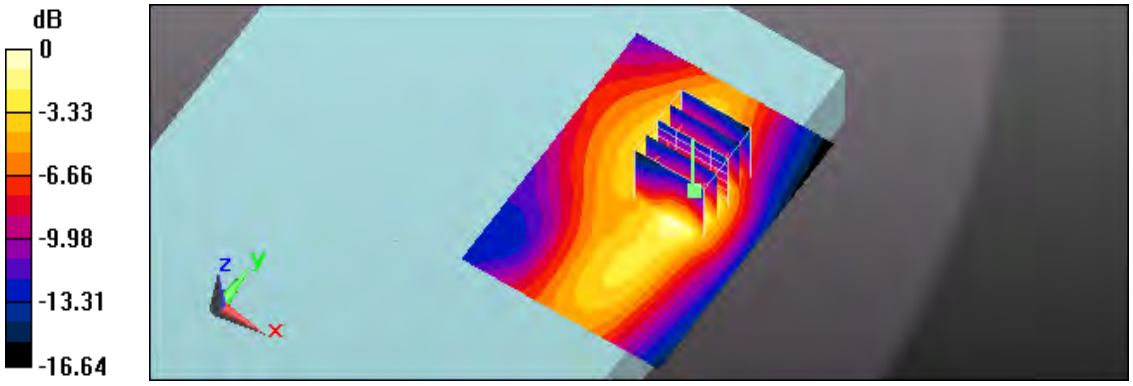
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 05:57:15
09_LTE Band 25 CH 26365_QPSK_BW 20M_1RB Size 0RB Offset_Back_7mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1882.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1882.5 MHz; σ = 1.557 S/m; ε_r = 53.2; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.53 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.83 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 1.46 W/kg
SAR(1 g) = 0.816 W/kg; SAR(10 g) = 0.451 W/kg
Maximum value of SAR (measured) = 1.23 W/kg



0 dB = 1.23 W/kg = 0.90 dBW/kg

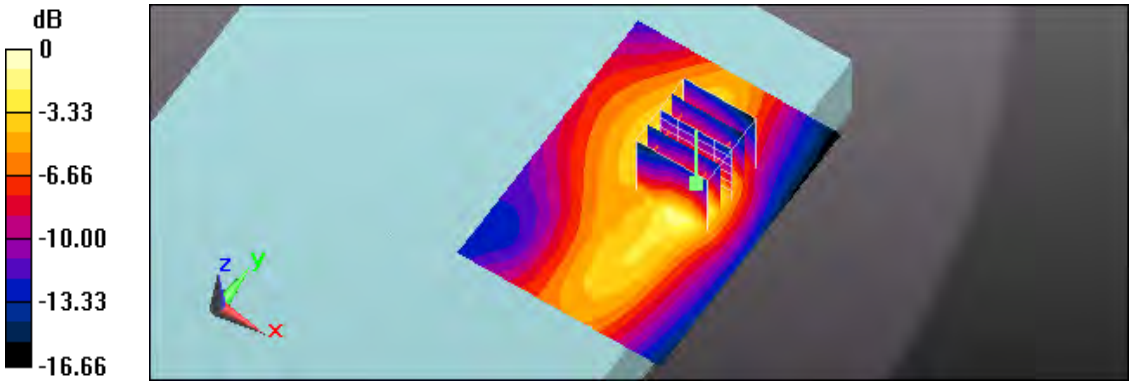
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 06:42:13
10_LTE Band 25 CH 26140_QPSK_BW 20M_1RB Size 0RB Offset_Back_7mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1860 MHz; σ = 1.536 S/m; ε_r = 53.254; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.19 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.09 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 1.34 W/kg
SAR(1 g) = 0.742 W/kg; SAR(10 g) = 0.412 W/kg
Maximum value of SAR (measured) = 1.13 W/kg



0 dB = 1.13 W/kg = 0.53 dBW/kg

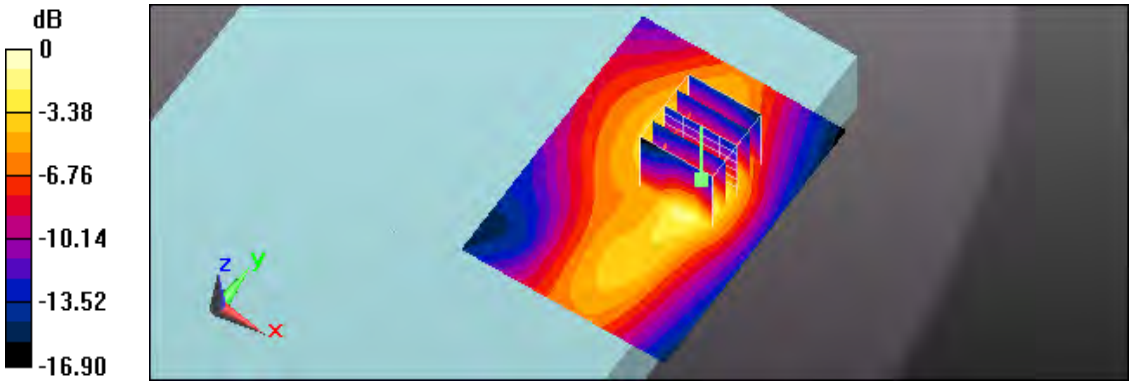
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 07:06:33
11_LTE Band 25 CH 26590_QPSK_BW 20M_1RB Size 0RB Offset_Back_7mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1905 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1905 MHz; σ = 1.58 S/m; ε_r = 53.144; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.39 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.17 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 1.58 W/kg
SAR(1 g) = 0.884 W/kg; SAR(10 g) = 0.484 W/kg
Maximum value of SAR (measured) = 1.32 W/kg



0 dB = 1.32 W/kg = 1.21 dBW/kg

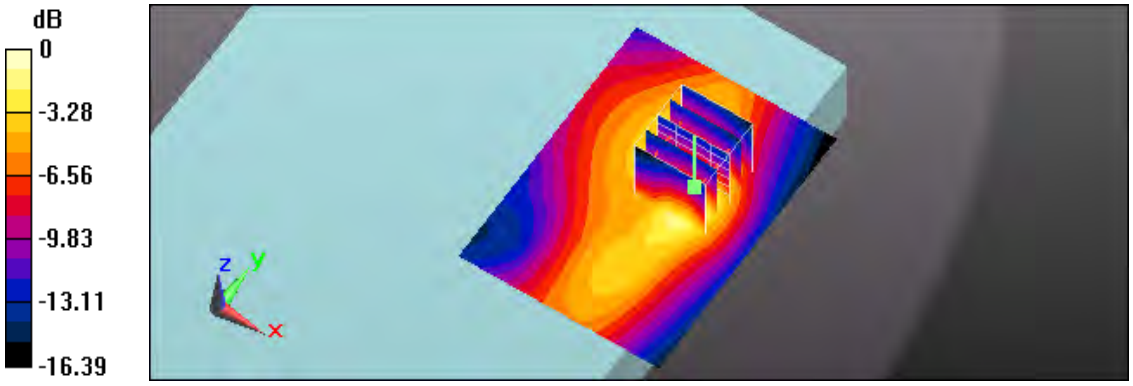
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 07:22:34
12_LTE Band 25 CH 26365_QPSK_BW 20M_50RB Size 25RB Offset_Back_7mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1882.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1882.5 MHz; σ = 1.557 S/m; ε_r = 53.2; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.09 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 23.42 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 1.23 W/kg
SAR(1 g) = 0.688 W/kg; SAR(10 g) = 0.378 W/kg
Maximum value of SAR (measured) = 1.03 W/kg



0 dB = 1.03 W/kg = 0.13 dBW/kg

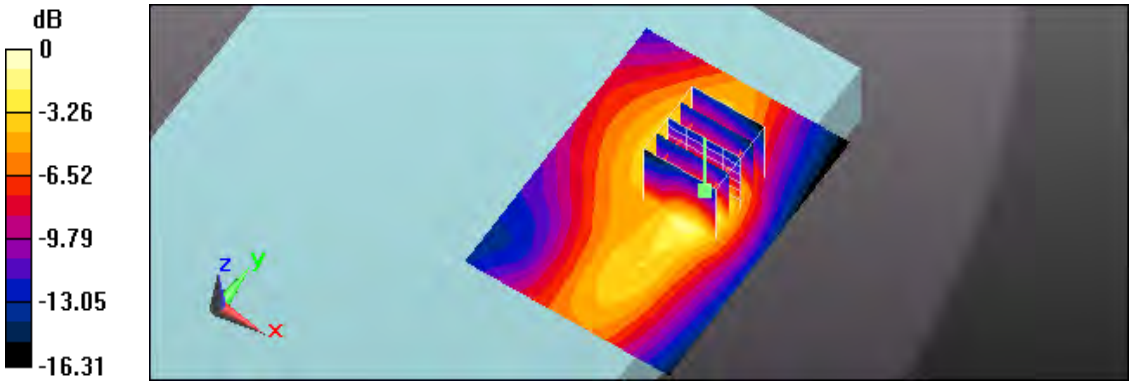
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 07:43:47
13_LTE Band 25 CH 26140_QPSK_BW 20M_100RB Size 0RB Offset_Back_7mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1860 MHz; σ = 1.536 S/m; ε_r = 53.254; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.00 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.98 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 1.13 W/kg
SAR(1 g) = 0.630 W/kg; SAR(10 g) = 0.348 W/kg
Maximum value of SAR (measured) = 0.951 W/kg



0 dB = 0.951 W/kg = -0.22 dBW/kg

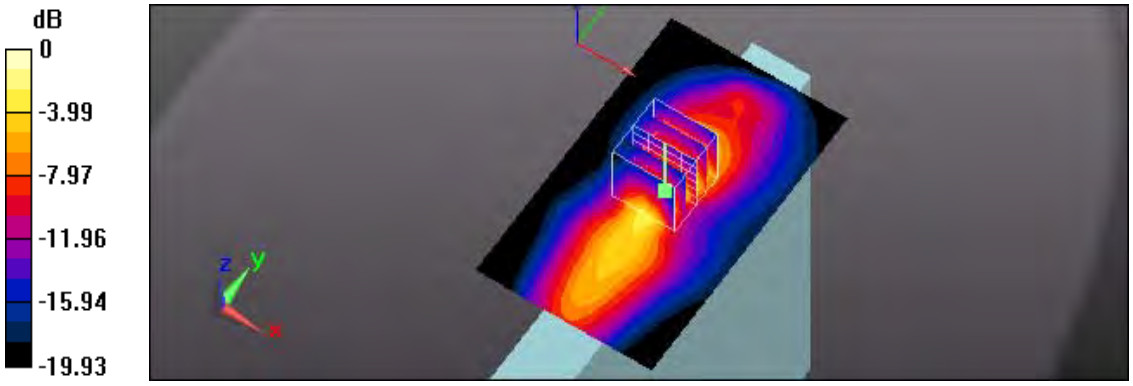
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 08:05:33
14_LTE Band 25 CH 26365_QPSK_BW 20M_1RB Size 0RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1882.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1882.5 MHz; σ = 1.557 S/m; ε_r = 53.2; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.36 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 24.56 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 1.72 W/kg
SAR(1 g) = 0.900 W/kg; SAR(10 g) = 0.443 W/kg
Maximum value of SAR (measured) = 1.42 W/kg



0 dB = 1.42 W/kg = 1.52 dBW/kg

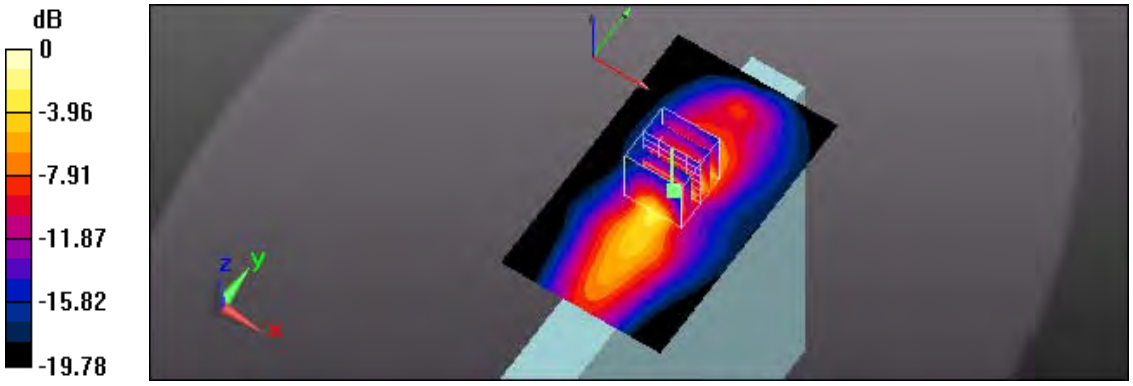
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 08:21:09
15_LTE Band 25 CH 26140_QPSK_BW 20M_1RB Size 0RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1860 MHz; σ = 1.536 S/m; ε_r = 53.254; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.45 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 24.57 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.80 W/kg
SAR(1 g) = 0.953 W/kg; SAR(10 g) = 0.469 W/kg
Maximum value of SAR (measured) = 1.50 W/kg



0 dB = 1.50 W/kg = 1.76 dBW/kg

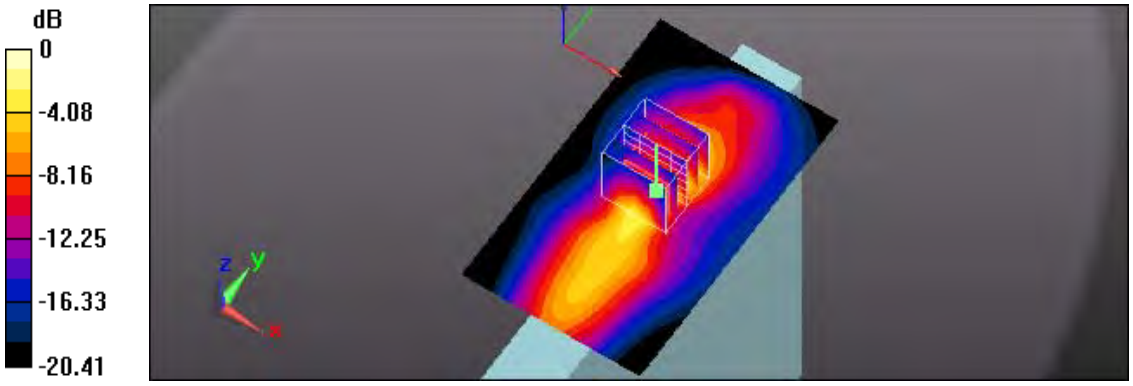
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 08:44:23
16_LTE Band 25 CH 26590_QPSK_BW 20M_1RB Size 0RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1905 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1905 MHz; σ = 1.58 S/m; ε_r = 53.144; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.31 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.10 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 1.65 W/kg
SAR(1 g) = 0.863 W/kg; SAR(10 g) = 0.425 W/kg
Maximum value of SAR (measured) = 1.38 W/kg



0 dB = 1.38 W/kg = 1.40 dBW/kg

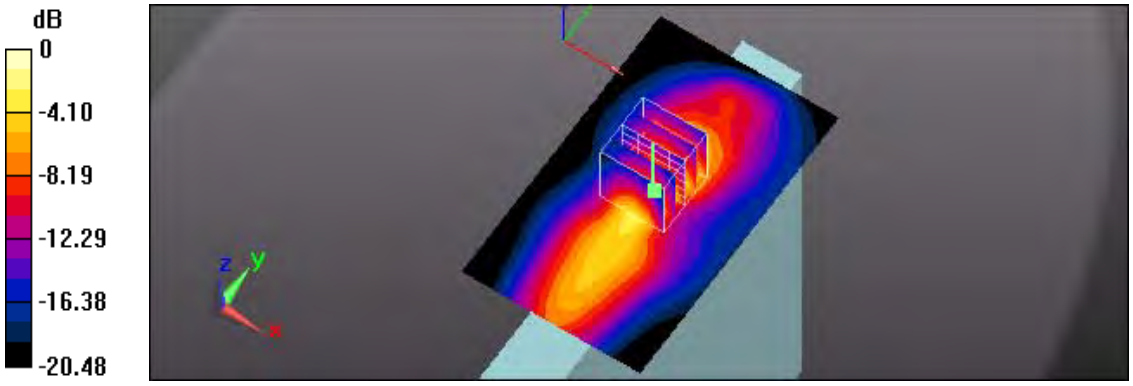
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 09:12:07
17_LTE Band 25 CH 26365_QPSK_BW 20M_50RB Size 25RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1882.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1882.5 MHz; σ = 1.557 S/m; ε_r = 53.2; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.40 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.10 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.76 W/kg
SAR(1 g) = 0.922 W/kg; SAR(10 g) = 0.453 W/kg
Maximum value of SAR (measured) = 1.46 W/kg



0 dB = 1.46 W/kg = 1.64 dBW/kg

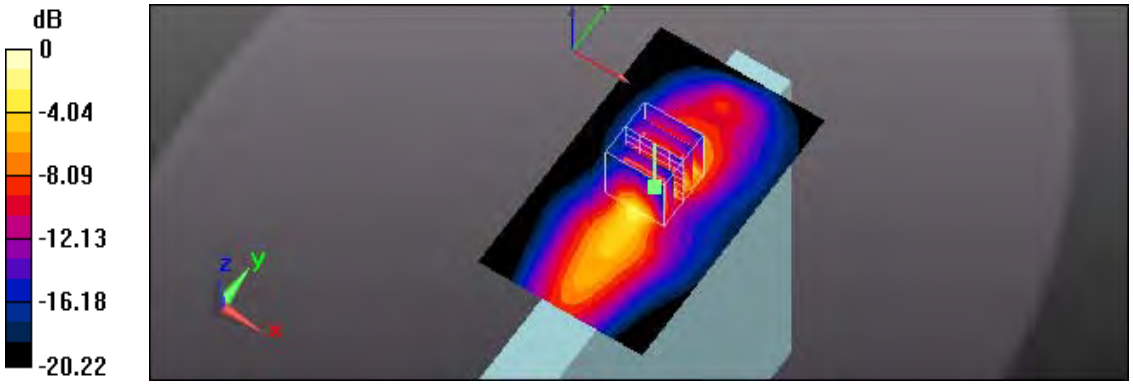
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 09:27:53
18_LTE Band 25 CH 26140_QPSK_BW 20M_50RB Size 25RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1860 MHz; σ = 1.536 S/m; ε_r = 53.254; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.51 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.98 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.86 W/kg
SAR(1 g) = 0.979 W/kg; SAR(10 g) = 0.481 W/kg
Maximum value of SAR (measured) = 1.55 W/kg



0 dB = 1.55 W/kg = 1.90 dBW/kg

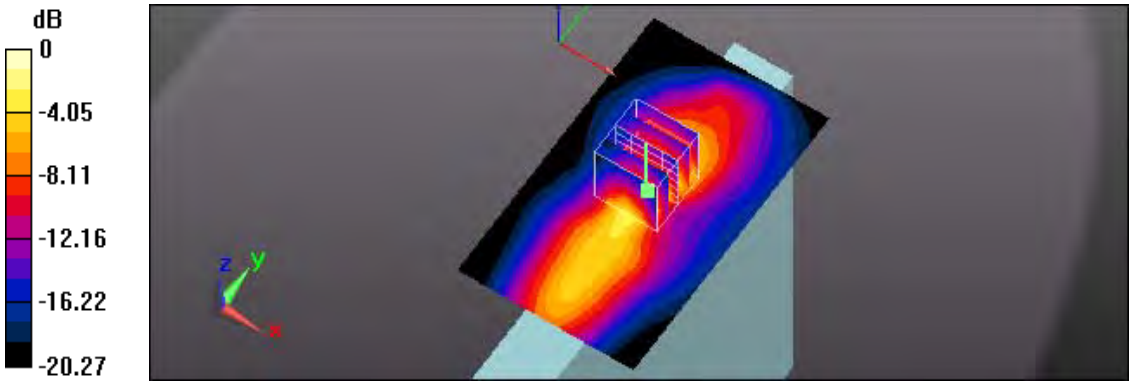
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 09:45:59
19_LTE Band 25 CH 26590_QPSK_BW 20M_50RB Size 25RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1905 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1905 MHz; σ = 1.58 S/m; ε_r = 53.144; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.32 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.21 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 1.67 W/kg
SAR(1 g) = 0.867 W/kg; SAR(10 g) = 0.426 W/kg
Maximum value of SAR (measured) = 1.38 W/kg



0 dB = 1.38 W/kg = 1.40 dBW/kg

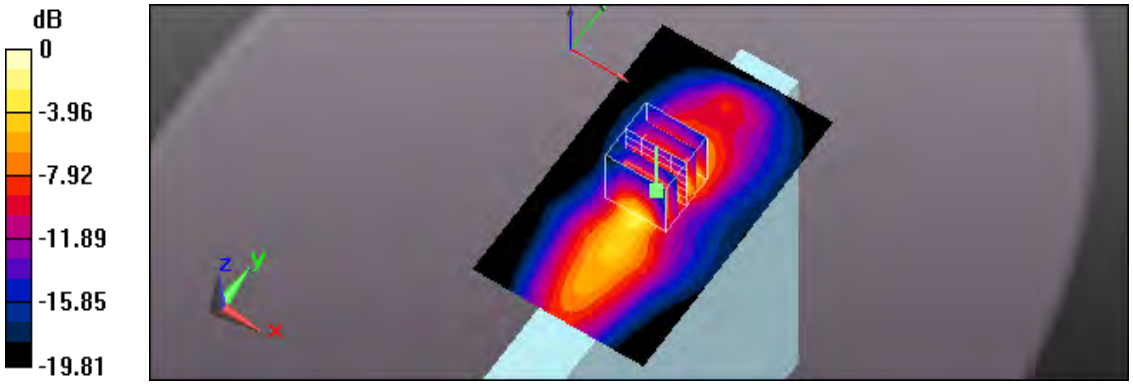
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 10:00:51
20_LTE Band 25 CH 26140_QPSK_BW 20M_100RB Size 0RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1860 MHz; σ = 1.536 S/m; ε_r = 53.254; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.46 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.00 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 1.81 W/kg
SAR(1 g) = 0.958 W/kg; SAR(10 g) = 0.471 W/kg
Maximum value of SAR (measured) = 1.51 W/kg



0 dB = 1.51 W/kg = 1.79 dBW/kg

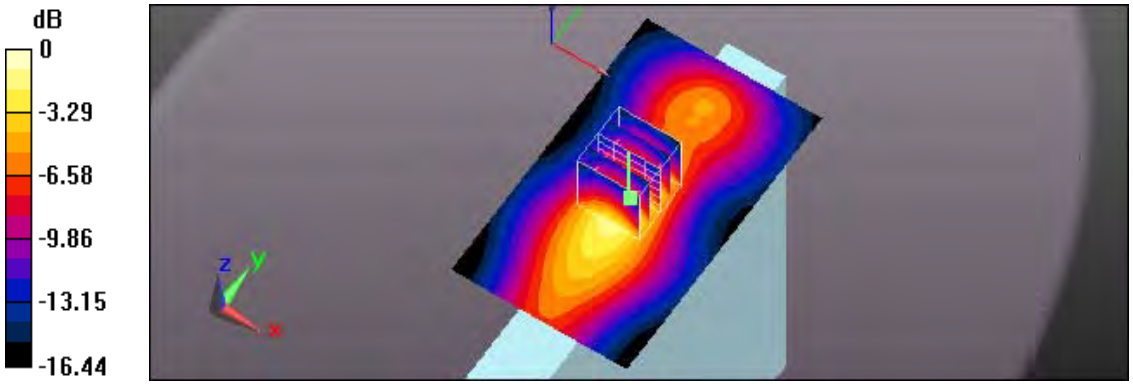
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 10:54:32
22_LTE Band 25 CH 26365_QPSK_BW 20M_1RB Size 0RB Offset_Side 1_10mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1882.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1882.5 MHz; σ = 1.557 S/m; ε_r = 53.2; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.42 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.92 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 1.68 W/kg
SAR(1 g) = 0.978 W/kg; SAR(10 g) = 0.542 W/kg
Maximum value of SAR (measured) = 1.43 W/kg



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

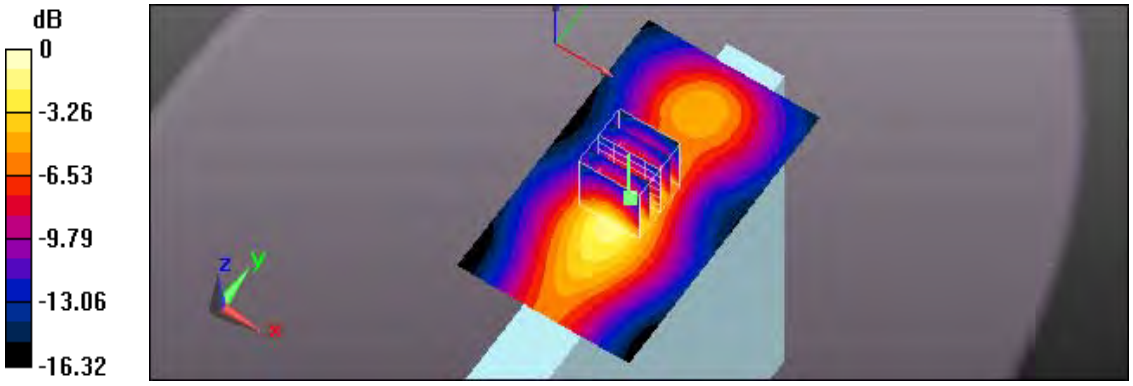
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 11:10:27
23_LTE Band 25 CH 26140_QPSK_BW 20M_1RB Size 0RB Offset_Side 1_10mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1860 MHz; σ = 1.536 S/m; ε_r = 53.254; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.22 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.46 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 1.42 W/kg
SAR(1 g) = 0.836 W/kg; SAR(10 g) = 0.472 W/kg
Maximum value of SAR (measured) = 1.21 W/kg



0 dB = 1.21 W/kg = 0.83 dBW/kg

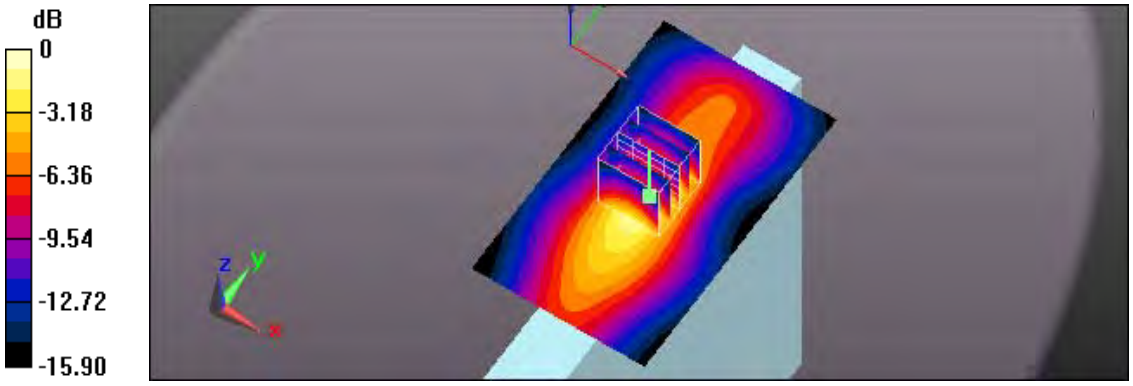
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 AM 11:50:53
25_LTE Band 25 CH 26590_QPSK_BW 20M_1RB Size 0RB Offset_Side 1_10mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1905 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1905 MHz; σ = 1.58 S/m; ε_r = 53.144; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.30 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.76 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 1.50 W/kg
SAR(1 g) = 0.890 W/kg; SAR(10 g) = 0.503 W/kg
Maximum value of SAR (measured) = 1.28 W/kg



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

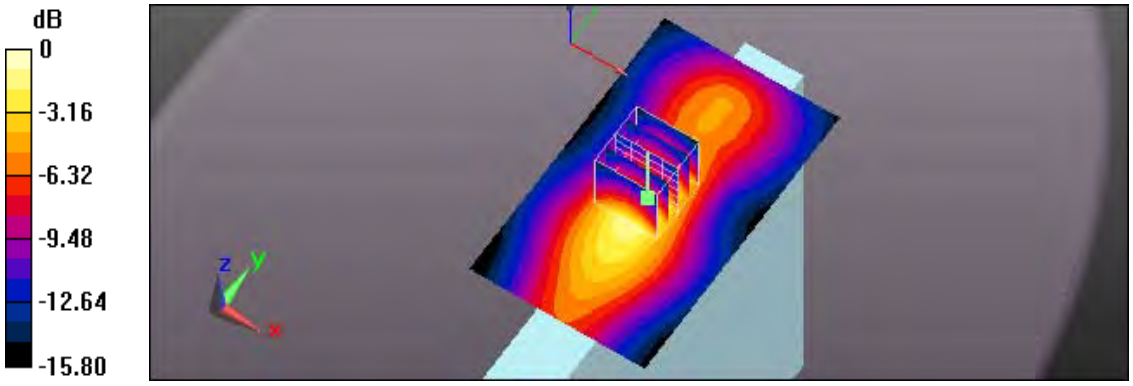
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 PM 12:05:51
26_LTE Band 25 CH 26365_QPSK_BW 20M_50RB Size 25RB Offset_Side 1_10mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1882.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1882.5 MHz; σ = 1.557 S/m; ε_r = 53.2; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.923 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.65 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 1.08 W/kg
SAR(1 g) = 0.637 W/kg; SAR(10 g) = 0.363 W/kg
Maximum value of SAR (measured) = 0.917 W/kg



0 dB = 0.917 W/kg = -0.38 dBW/kg

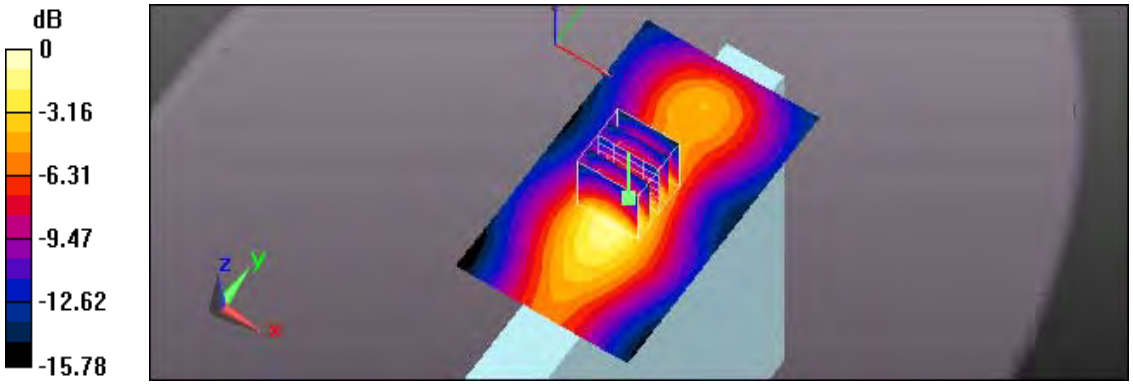
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 PM 12:19:42
27_LTE Band 25 CH 26140_QPSK_BW 20M_100RB Size 0RB Offset_Side 1_10mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1860 MHz; σ = 1.536 S/m; ε_r = 53.254; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.793 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.64 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.916 W/kg
SAR(1 g) = 0.547 W/kg; SAR(10 g) = 0.316 W/kg
Maximum value of SAR (measured) = 0.783 W/kg



0 dB = 0.783 W/kg = -1.06 dBW/kg

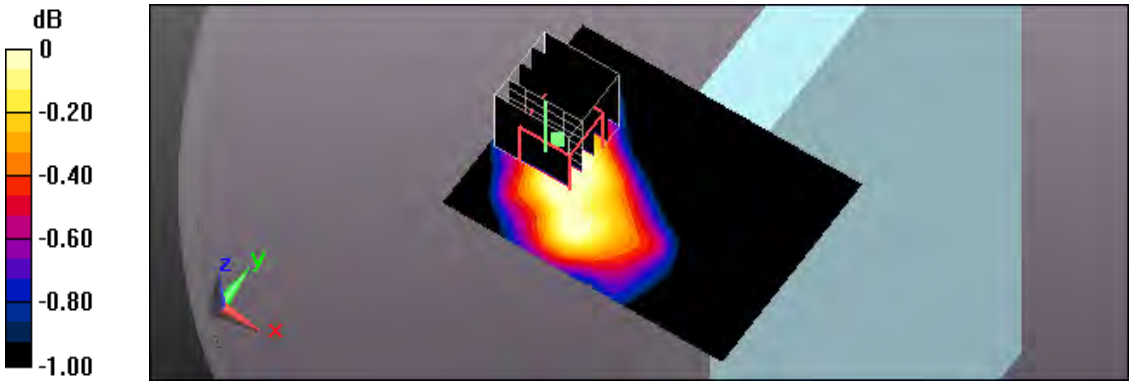
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 PM 12:49:09
28_LTE Band 25 CH 26365_QPSK_BW 20M_1RB Size 0RB Offset_Side 2_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1882.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1882.5 MHz; σ = 1.557 S/m; ε_r = 53.2; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0374 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.947 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.0420 W/kg
SAR(1 g) = 0.028 W/kg; SAR(10 g) = 0.019 W/kg
Maximum value of SAR (measured) = 0.0364 W/kg



0 dB = 0.0364 W/kg = -14.39 dBW/kg

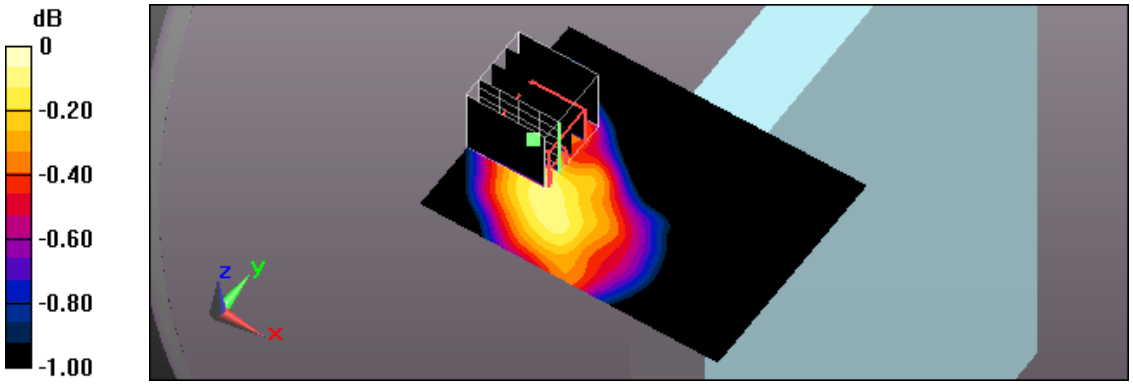
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/14 PM 01:07:01
29_LTE Band 25 CH 26365_QPSK_BW 20M_50RB Size 25RB Offset_Side 2_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 1882.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1882.5 MHz; σ = 1.557 S/m; ε_r = 53.2; 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(7.7, 7.7, 7.7); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0391 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.123 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.0460 W/kg
SAR(1 g) = 0.030 W/kg; SAR(10 g) = 0.021 W/kg
Maximum value of SAR (measured) = 0.0399 W/kg



0 dB = 0.0399 W/kg = -13.99 dBW/kg

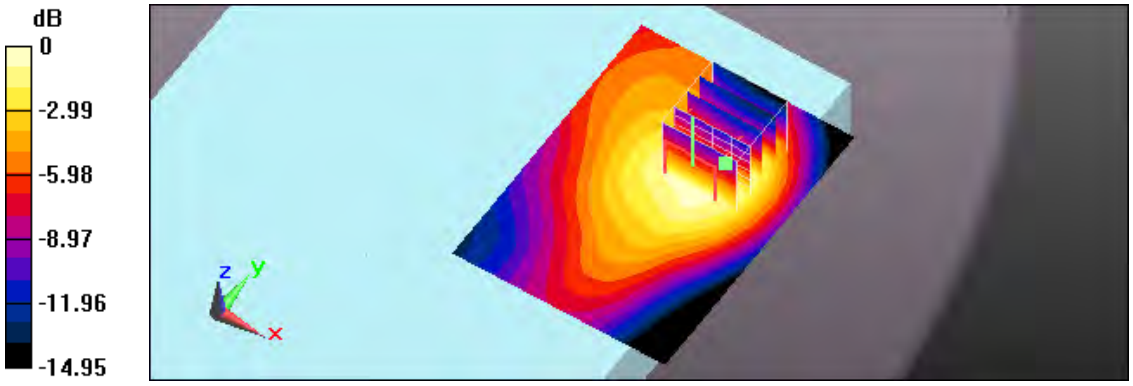
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 PM 07:54:36
150_LTE Band 26 CH 26865_QPSK_BW 15M_1RB Size 0RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 1.012 S/m; ε_r = 57.479; 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(9.48, 9.48, 9.48); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.00 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 30.07 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 1.22 W/kg
SAR(1 g) = 0.687 W/kg; SAR(10 g) = 0.424 W/kg
Maximum value of SAR (measured) = 1.00 W/kg



0 dB = 1.00 W/kg = 0.00 dBW/kg

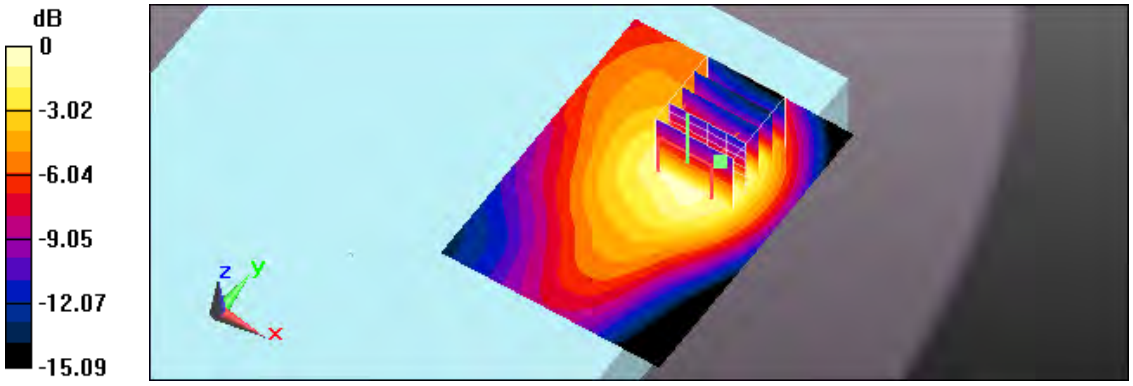
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 PM 08:22:34
151_LTE Band 26 CH 26865_QPSK_BW 15M_36RB Size 19RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 1.012 S/m; ε_r = 57.479; 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(9.48, 9.48, 9.48); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.847 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.11 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 1.01 W/kg
SAR(1 g) = 0.571 W/kg; SAR(10 g) = 0.347 W/kg
Maximum value of SAR (measured) = 0.849 W/kg



0 dB = 0.849 W/kg = -0.71 dBW/kg

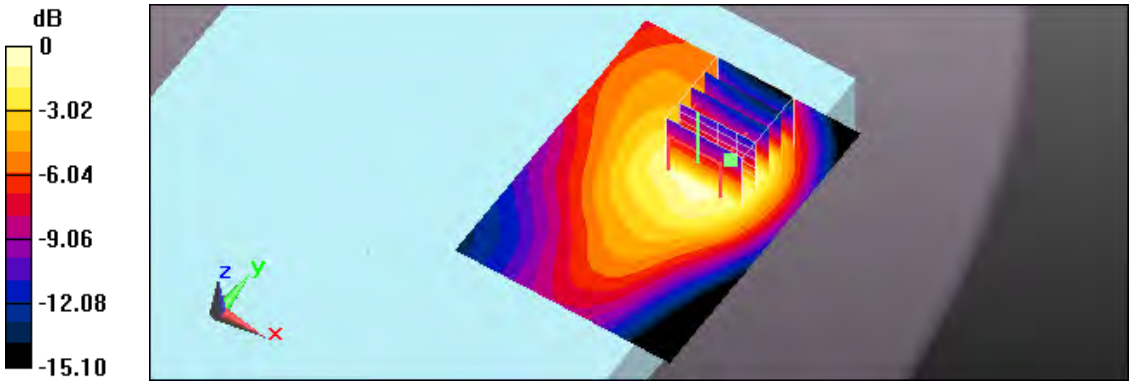
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 PM 08:34:59
152_LTE Band 26 CH 26865_QPSK_BW 15M_75RB Size 0RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 1.012 S/m; ε_r = 57.479; 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(9.48, 9.48, 9.48); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.826 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.92 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.984 W/kg
SAR(1 g) = 0.559 W/kg; SAR(10 g) = 0.340 W/kg
Maximum value of SAR (measured) = 0.830 W/kg



0 dB = 0.830 W/kg = -0.81 dBW/kg

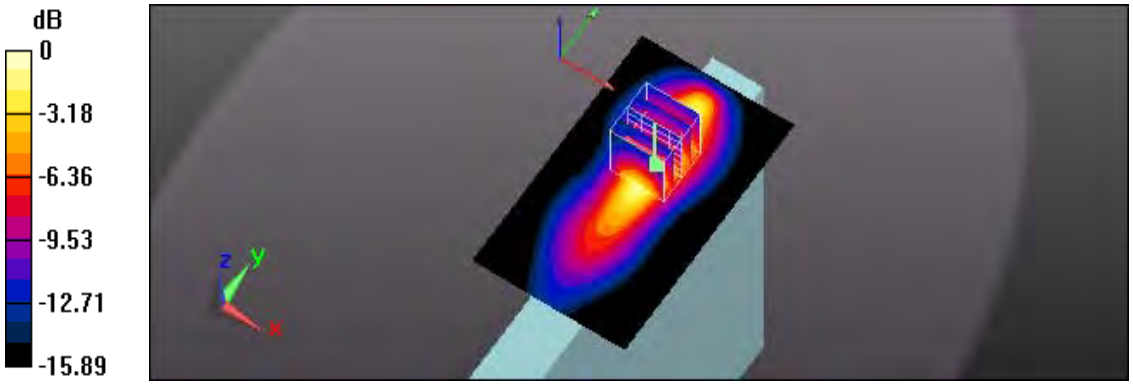
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 PM 03:59:34
153_LTE Band 26 CH 26865_QPSK_BW 15M_1RB Size 0RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 1.012 S/m; ε_r = 57.479; 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(9.48, 9.48, 9.48); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.19 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 31.34 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 1.75 W/kg
SAR(1 g) = 0.844 W/kg; SAR(10 g) = 0.447 W/kg
Maximum value of SAR (measured) = 1.29 W/kg



0 dB = 1.29 W/kg = 1.11 dBW/kg

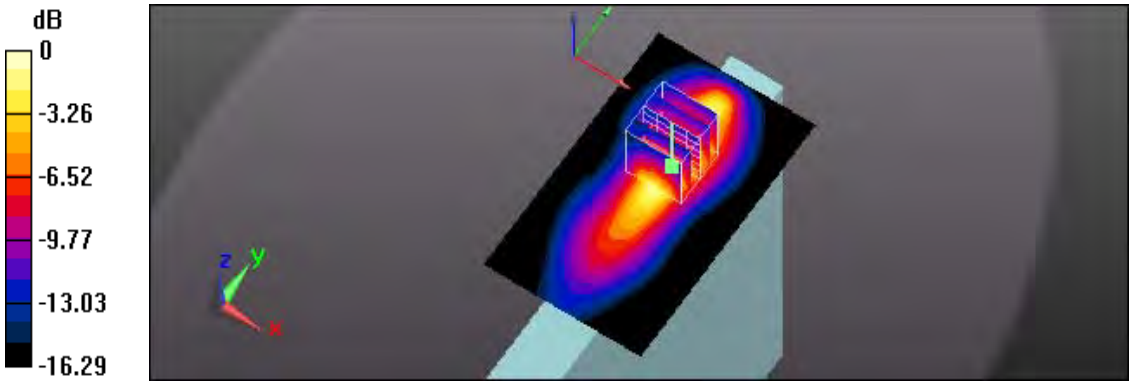
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 PM 04:12:34
154_LTE Band 26 CH 26865_QPSK_BW 15M_36RB Size 19RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 1.012 S/m; ε_r = 57.479; 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(9.48, 9.48, 9.48); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.19 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 31.43 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 1.78 W/kg
SAR(1 g) = 0.857 W/kg; SAR(10 g) = 0.451 W/kg
Maximum value of SAR (measured) = 1.31 W/kg



0 dB = 1.31 W/kg = 1.17 dBW/kg

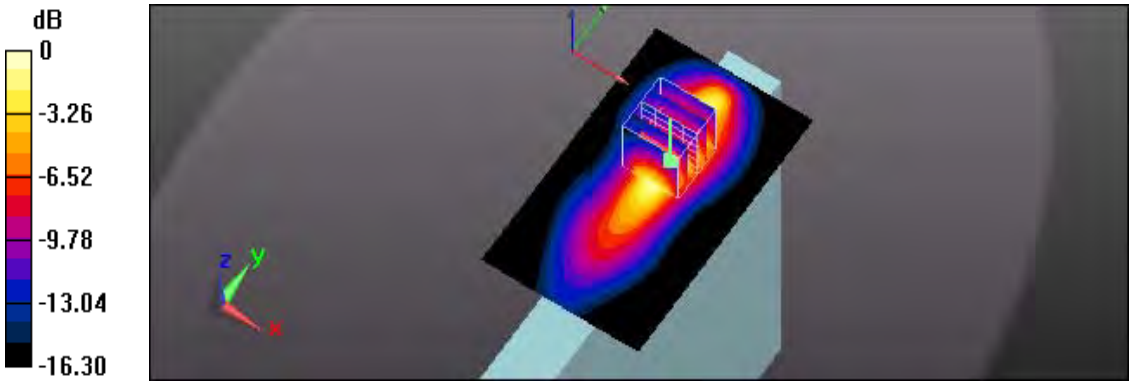
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 PM 04:39:34
156_LTE Band 26 CH 26865_QPSK_BW 15M_36RB Size 19RB Offset_Side 1_0mm;Battery 2
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 1.012 S/m; ε_r = 57.479; 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(9.48, 9.48, 9.48); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.24 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 31.47 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 1.81 W/kg
SAR(1 g) = 0.854 W/kg; SAR(10 g) = 0.443 W/kg
Maximum value of SAR (measured) = 1.34 W/kg



0 dB = 1.34 W/kg = 1.27 dBW/kg

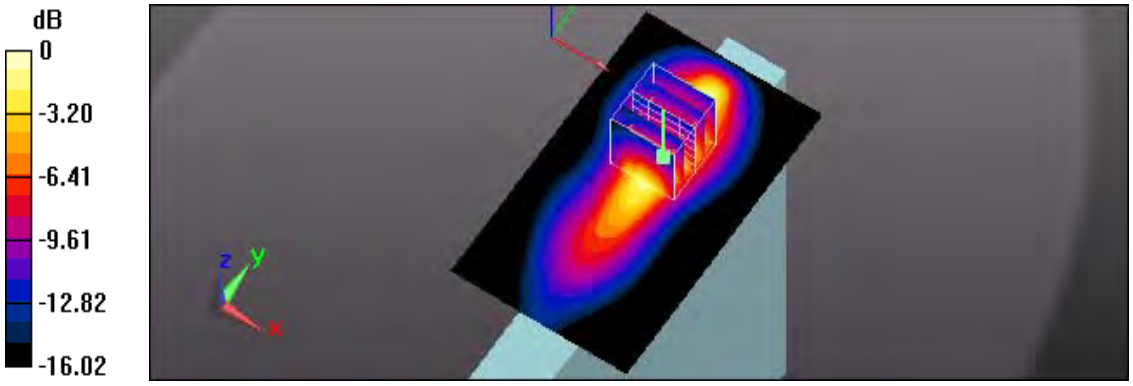
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 PM 03:48:12
155_LTE Band 26 CH 26865_QPSK_BW 15M_75RB Size 0RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 1.012 S/m; ε_r = 57.479; 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(9.48, 9.48, 9.48); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.12 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 29.98 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 1.79 W/kg
SAR(1 g) = 0.855 W/kg; SAR(10 g) = 0.449 W/kg
Maximum value of SAR (measured) = 1.32 W/kg



0 dB = 1.32 W/kg = 1.21 dBW/kg

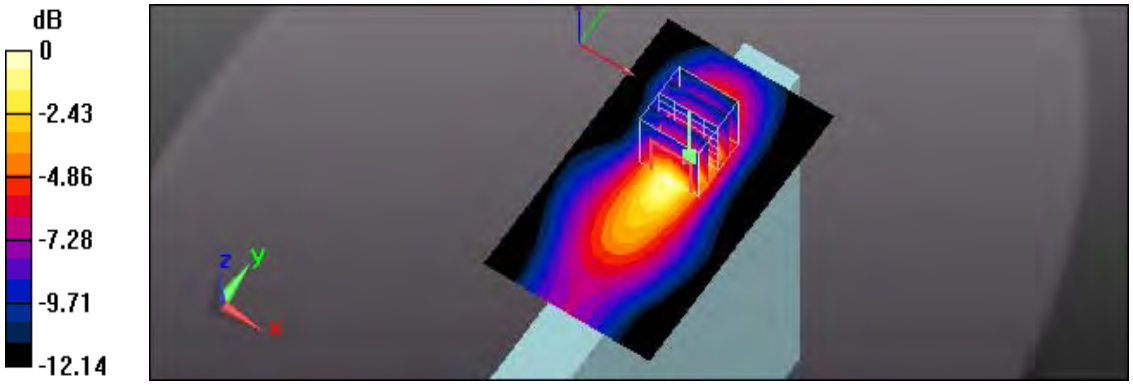
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 PM 05:28:17
157_LTE Band 26 CH 26865_QPSK_BW 15M_1RB Size 0RB Offset_Side 1_10mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 1.012 S/m; ε_r = 57.479; 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(9.48, 9.48, 9.48); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.482 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.36 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.552 W/kg
SAR(1 g) = 0.339 W/kg; SAR(10 g) = 0.208 W/kg
Maximum value of SAR (measured) = 0.471 W/kg



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

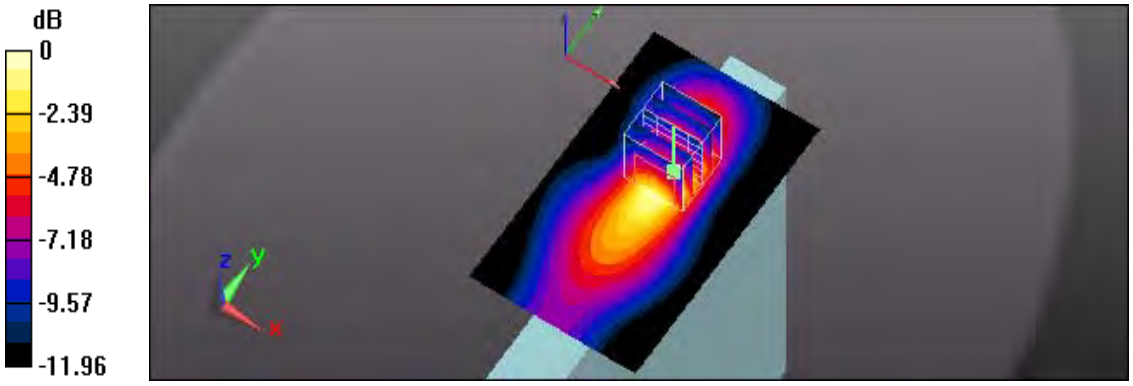
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 PM 05:09:05
158_LTE Band 26 CH 26865_QPSK_BW 15M_36RB Size 19RB Offset_Side 1_10mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 1.012 S/m; ε_r = 57.479; 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(9.48, 9.48, 9.48); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.389 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.86 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.446 W/kg
SAR(1 g) = 0.277 W/kg; SAR(10 g) = 0.169 W/kg
Maximum value of SAR (measured) = 0.382 W/kg



0 dB = 0.382 W/kg = -4.18 dBW/kg

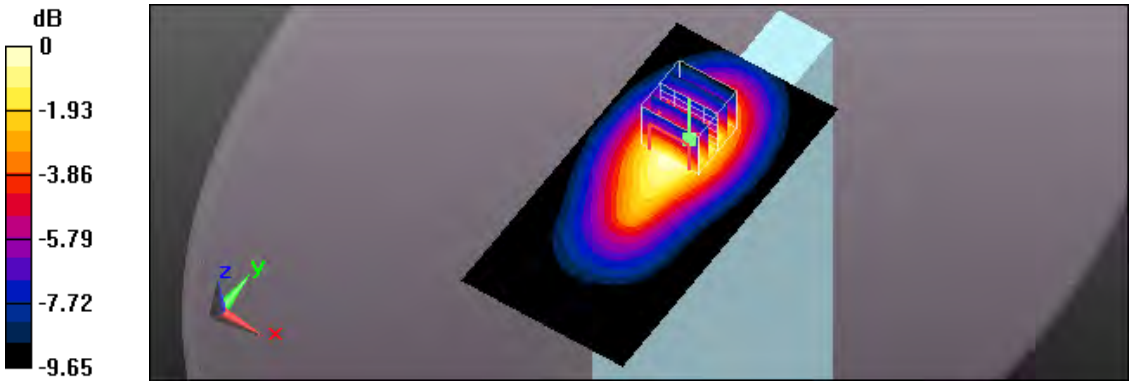
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 PM 07:15:30
159_LTE Band 26 CH 26865_QPSK_BW 15M_1RB Size 0RB Offset_Side 2_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 1.012 S/m; ε_r = 57.479; 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(9.48, 9.48, 9.48); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.101 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.33 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.115 W/kg
SAR(1 g) = 0.079 W/kg; SAR(10 g) = 0.055 W/kg
Maximum value of SAR (measured) = 0.102 W/kg



0 dB = 0.102 W/kg = -9.91 dBW/kg

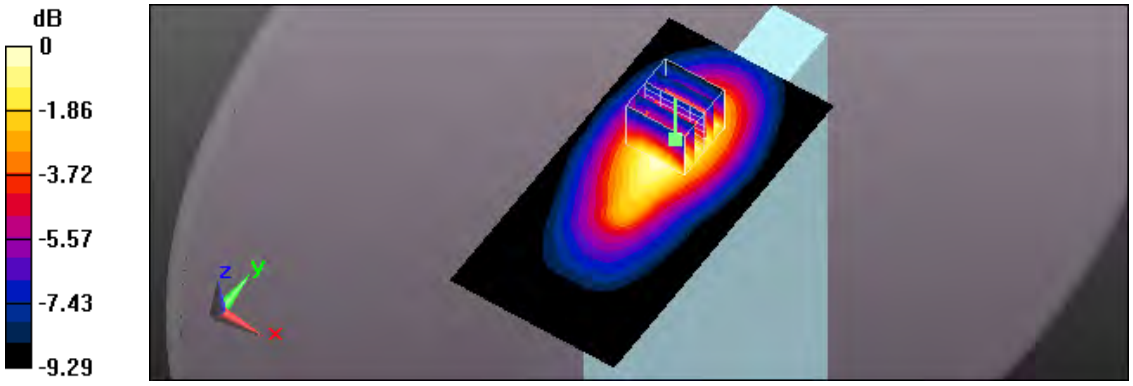
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/19 PM 07:32:02
160_LTE Band 26 CH 26865_QPSK_BW 15M_36RB Size 19RB Offset_Side 2_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 1.012 S/m; ε_r = 57.479; 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(9.48, 9.48, 9.48); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0789 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.135 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.0890 W/kg
SAR(1 g) = 0.062 W/kg; SAR(10 g) = 0.043 W/kg
Maximum value of SAR (measured) = 0.0789 W/kg



0 dB = 0.0789 W/kg = -11.03 dBW/kg

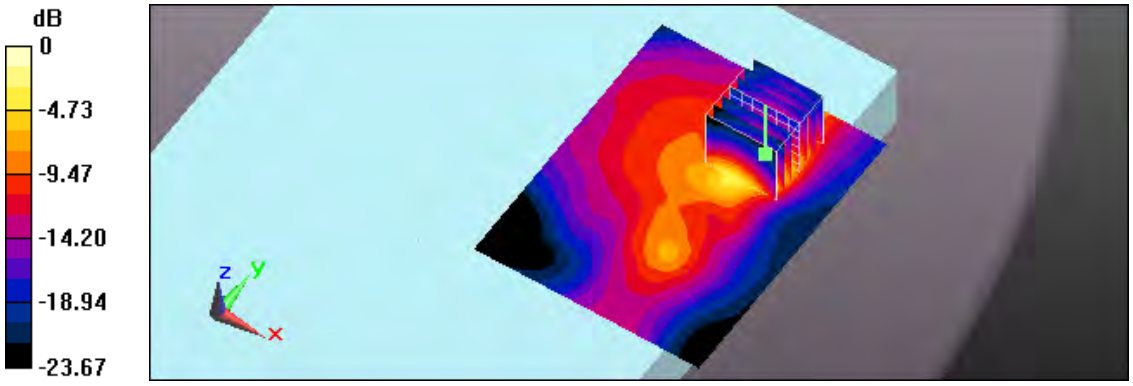
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 PM 10:39:41
92_LTE Band 41 CH 39750_QPSK_BW 20M_1RB Size 49RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2506 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2506 MHz; σ = 2.076 S/m; ε_r = 50.633; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.50 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.90 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 2.09 W/kg
SAR(1 g) = 0.917 W/kg; SAR(10 g) = 0.361 W/kg
Maximum value of SAR (measured) = 1.65 W/kg



0 dB = 1.65 W/kg = 2.17 dBW/kg

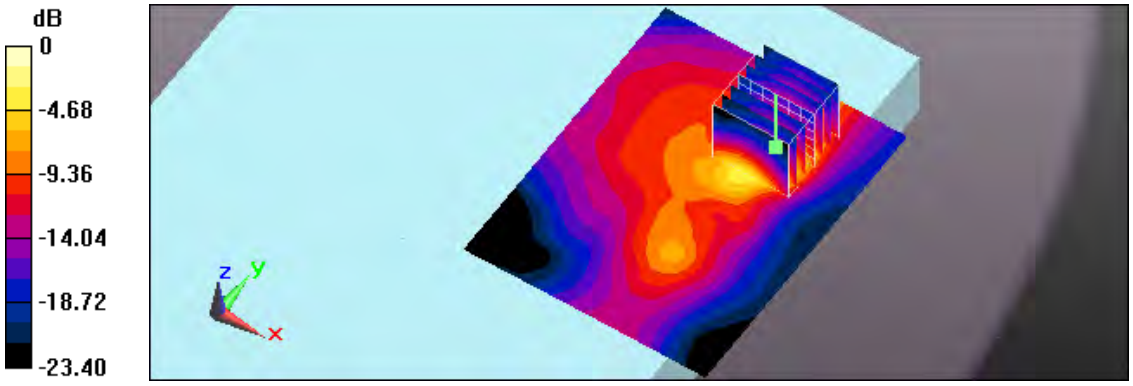
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 PM 11:12:35
93_LTE Band 41 CH 39790_QPSK_BW 20M_1RB Size 49RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2510 MHz; σ = 2.08 S/m; ε_r = 50.616; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.48 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.68 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 2.03 W/kg
SAR(1 g) = 0.894 W/kg; SAR(10 g) = 0.352 W/kg
Maximum value of SAR (measured) = 1.60 W/kg



0 dB = 1.60 W/kg = 2.04 dBW/kg

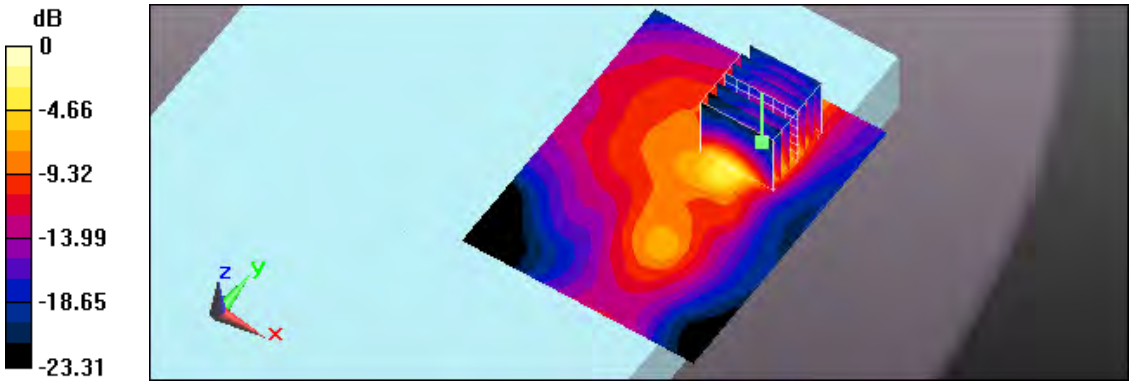
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 PM 11:36:12
94_LTE Band 41 CH 40185_QPSK_BW 20M_1RB Size 49RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2549.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2550 MHz; σ = 2.124 S/m; ε_r = 50.479; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.18 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.50 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 1.68 W/kg
SAR(1 g) = 0.730 W/kg; SAR(10 g) = 0.287 W/kg
Maximum value of SAR (measured) = 1.33 W/kg



0 dB = 1.33 W/kg = 1.24 dBW/kg

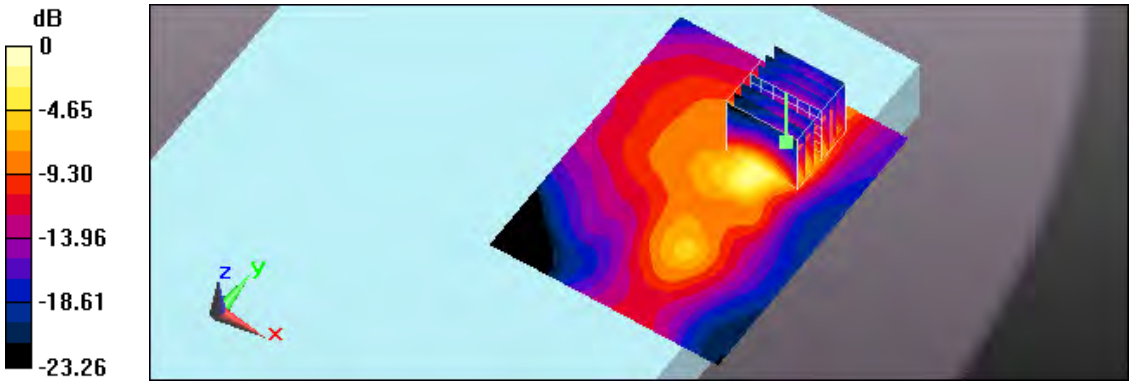
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/17 AM 12:00:14
95_LTE Band 41 CH 40620_QPSK_BW 20M_1RB Size 49RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2593 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2593 MHz; σ = 2.178 S/m; ε_r = 50.364; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.10 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.001 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 1.61 W/kg
SAR(1 g) = 0.676 W/kg; SAR(10 g) = 0.265 W/kg
Maximum value of SAR (measured) = 1.18 W/kg



0 dB = 1.18 W/kg = 0.72 dBW/kg

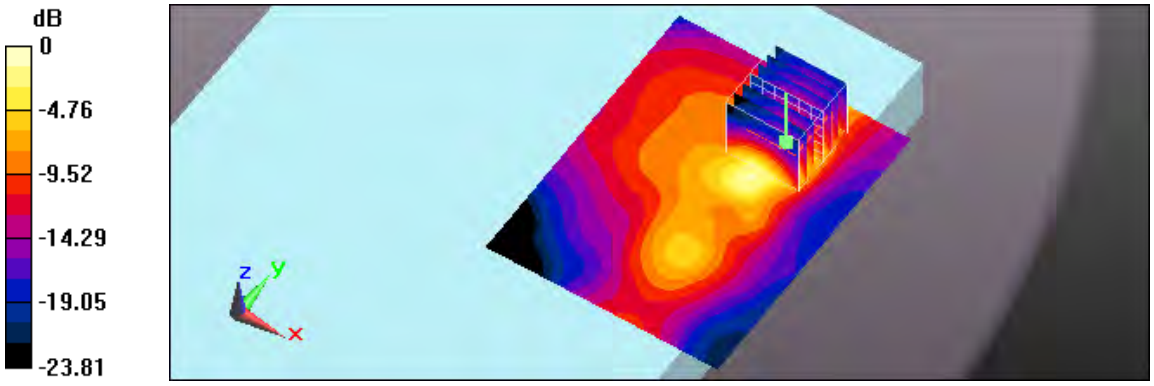
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/17 AM 12:43:50
96_LTE Band 41 CH 41055_QPSK_BW 20M_1RB Size 49RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2636.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2636.5 MHz; σ = 2.226 S/m; ε_r = 50.243; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.02 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.35 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 1.48 W/kg
SAR(1 g) = 0.619 W/kg; SAR(10 g) = 0.243 W/kg
Maximum value of SAR (measured) = 1.09 W/kg



0 dB = 1.09 W/kg = 0.37 dBW/kg

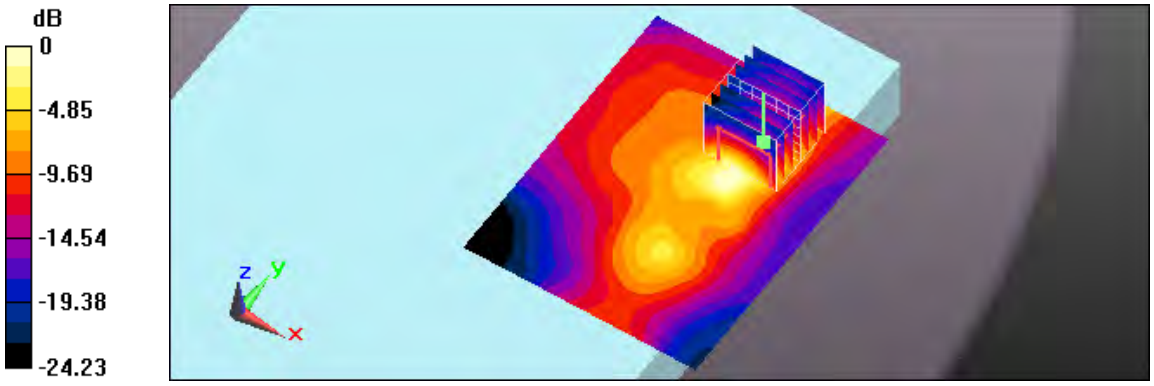
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/17 AM 01:07:50
97_LTE Band 41 CH 41490_QPSK_BW 20M_1RB Size 49RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2680 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2680 MHz; σ = 2.283 S/m; ε_r = 50.11; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.08 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.39 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 1.55 W/kg
SAR(1 g) = 0.646 W/kg; SAR(10 g) = 0.256 W/kg
Maximum value of SAR (measured) = 1.15 W/kg



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

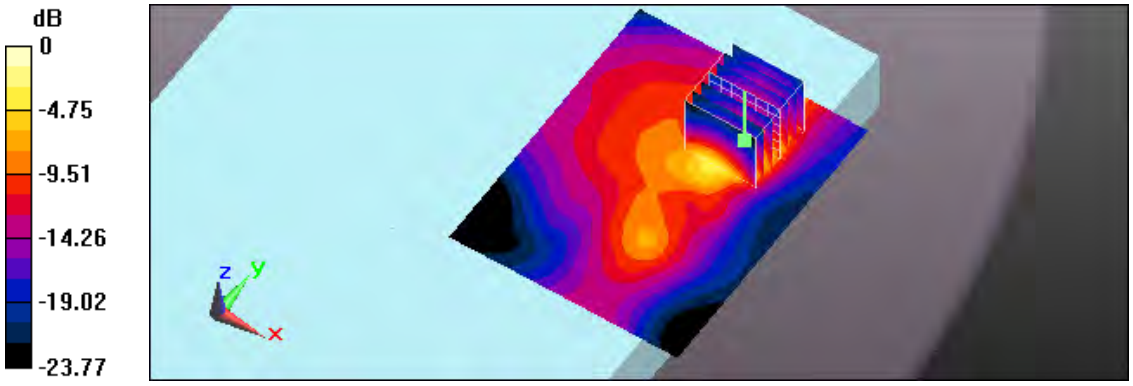
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/17 AM 02:01:18
99_LTE Band 41 CH 39750_QPSK_BW 20M_50RB Size 25RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2506 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2506 MHz; σ = 2.076 S/m; ε_r = 50.633; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.53 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.27 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 2.12 W/kg
SAR(1 g) = 0.933 W/kg; SAR(10 g) = 0.370 W/kg
Maximum value of SAR (measured) = 1.68 W/kg



0 dB = 1.68 W/kg = 2.25 dBW/kg

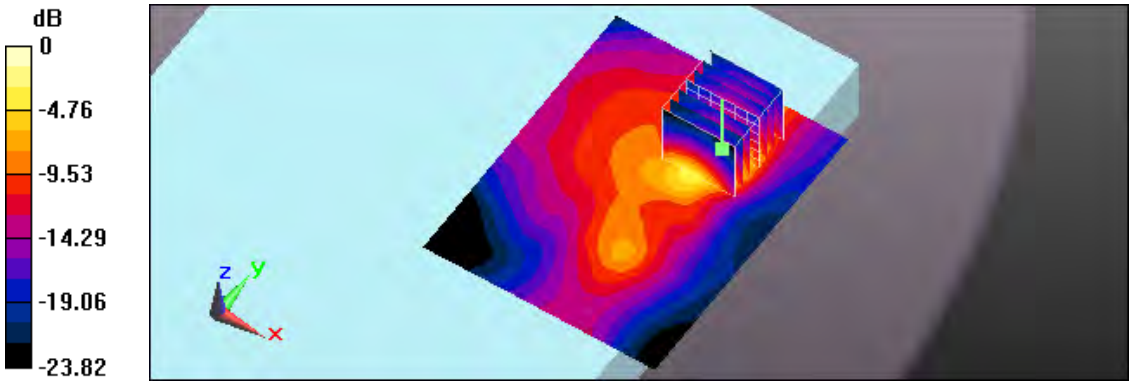
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/17 AM 02:25:45
100_LTE Band 41 CH 39790_QPSK_BW 20M_50RB Size 25RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2510 MHz; σ = 2.08 S/m; ε_r = 50.616; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.50 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.96 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 2.06 W/kg
SAR(1 g) = 0.912 W/kg; SAR(10 g) = 0.362 W/kg
Maximum value of SAR (measured) = 1.64 W/kg



0 dB = 1.64 W/kg = 2.15 dBW/kg

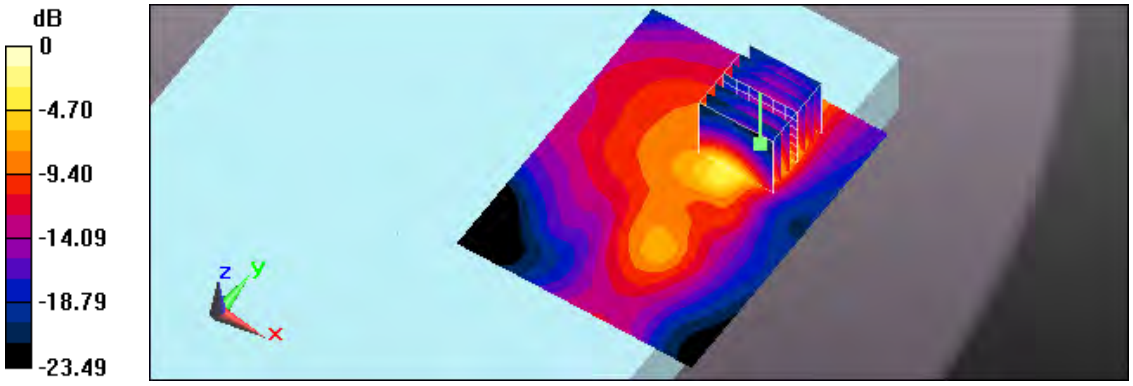
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/17 AM 02:48:49
101_LTE Band 41 CH 40185_QPSK_BW 20M_50RB Size 25RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2549.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2550 MHz; σ = 2.124 S/m; ε_r = 50.479; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.18 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.42 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.66 W/kg
SAR(1 g) = 0.723 W/kg; SAR(10 g) = 0.286 W/kg
Maximum value of SAR (measured) = 1.31 W/kg



0 dB = 1.31 W/kg = 1.17 dBW/kg

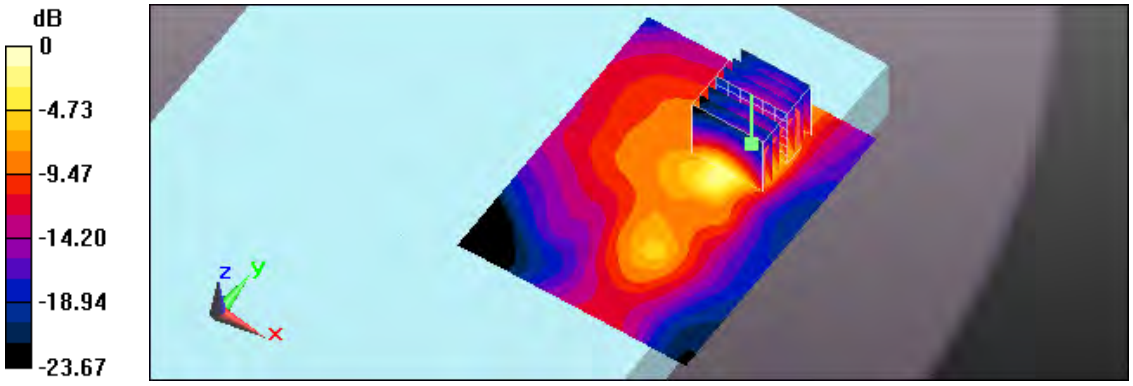
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/17 AM 01:32:52
98_LTE Band 41 CH 40620_QPSK_BW 20M_50RB Size 25RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2593 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2593 MHz; σ = 2.178 S/m; ε_r = 50.364; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.10 W/kg

20181031/Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.072 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 1.63 W/kg
SAR(1 g) = 0.685 W/kg; SAR(10 g) = 0.269 W/kg
Maximum value of SAR (measured) = 1.21 W/kg



0 dB = 1.21 W/kg = 0.83 dBW/kg

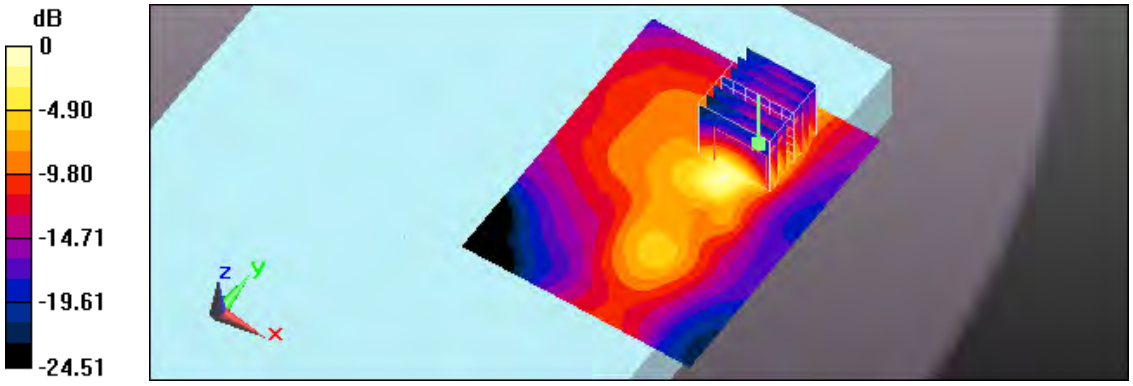
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/17 AM 03:14:07
102_LTE Band 41 CH 41055_QPSK_BW 20M_50RB Size 25RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2636.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2636.5 MHz; σ = 2.226 S/m; ε_r = 50.243; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.02 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.38 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 1.50 W/kg
SAR(1 g) = 0.627 W/kg; SAR(10 g) = 0.247 W/kg
Maximum value of SAR (measured) = 1.10 W/kg



0 dB = 1.10 W/kg = 0.41 dBW/kg

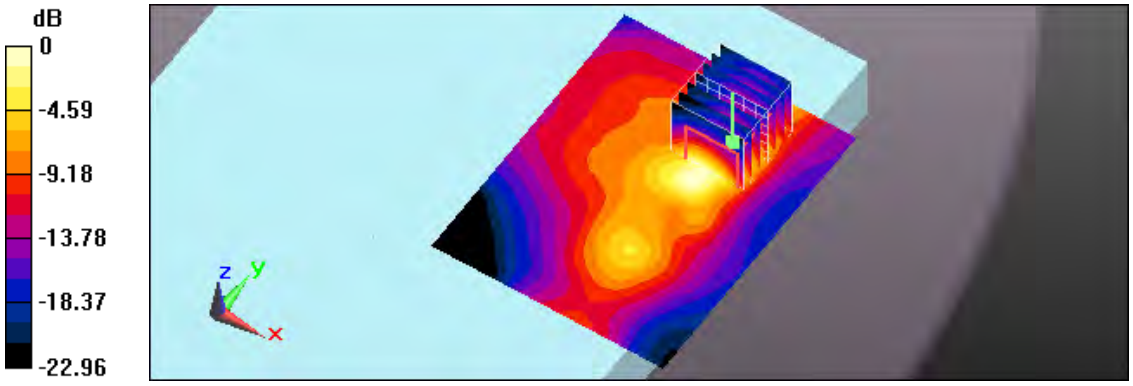
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/17 AM 03:37:41
103_LTE Band 41 CH 41490_QPSK_BW 20M_50RB Size 25RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2680 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2680 MHz; σ = 2.283 S/m; ε_r = 50.11; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.07 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.32 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 1.55 W/kg
SAR(1 g) = 0.645 W/kg; SAR(10 g) = 0.256 W/kg
Maximum value of SAR (measured) = 1.15 W/kg



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

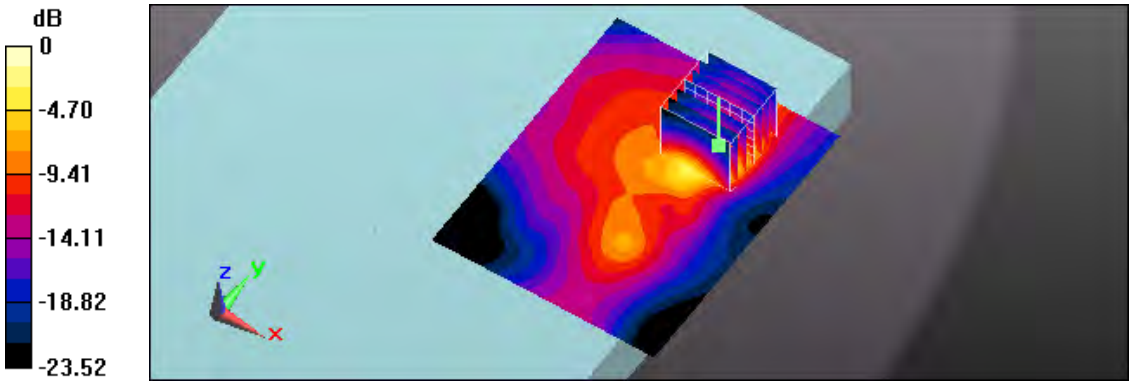
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/17 AM 04:01:39
104_LTE Band 41 CH 39750_QPSK_BW 20M_100RB Size 0RB Offset_Back_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2506 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2506 MHz; σ = 2.076 S/m; ε_r = 50.633; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.50 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.03 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 2.06 W/kg
SAR(1 g) = 0.913 W/kg; SAR(10 g) = 0.363 W/kg
Maximum value of SAR (measured) = 1.63 W/kg



0 dB = 1.63 W/kg = 2.12 dBW/kg

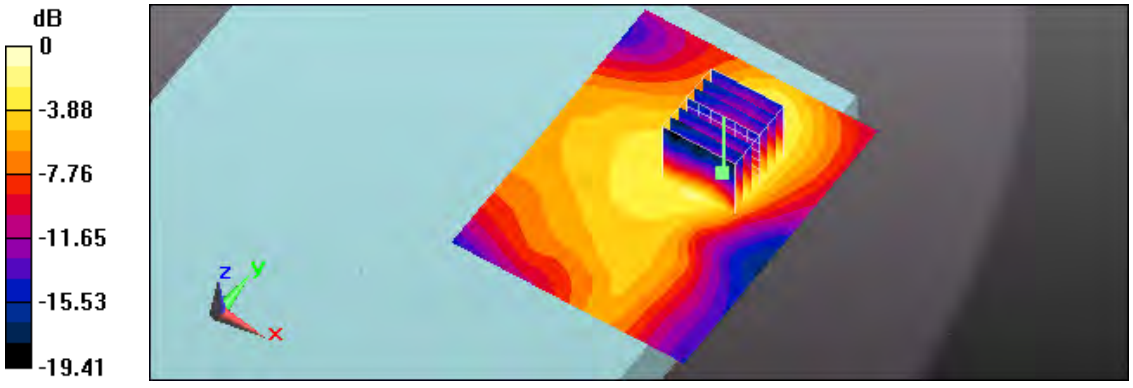
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/17 AM 04:43:59
105_LTE Band 41 CH 39750_QPSK_BW 20M_1RB Size 49RB Offset_Back_7mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2506 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2506 MHz; σ = 2.076 S/m; ε_r = 50.633; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.388 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.16 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.479 W/kg
SAR(1 g) = 0.252 W/kg; SAR(10 g) = 0.132 W/kg
Maximum value of SAR (measured) = 0.391 W/kg



0 dB = 0.391 W/kg = -4.08 dBW/kg

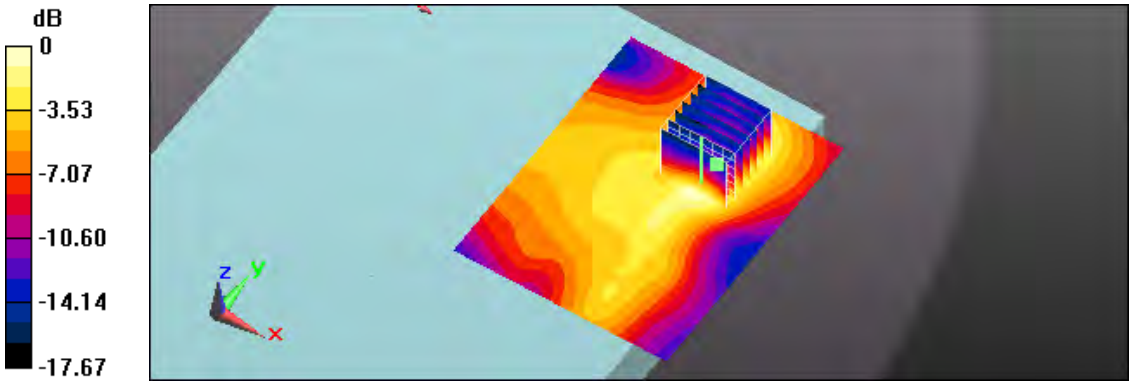
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/17 AM 05:00:45
106_LTE Band 41 CH 40620_QPSK_BW 20M_50RB Size 25RB Offset_Back_7mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2593 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2593 MHz; σ = 2.178 S/m; ε_r = 50.364; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (81x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.267 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.88 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.339 W/kg
SAR(1 g) = 0.173 W/kg; SAR(10 g) = 0.095 W/kg
Maximum value of SAR (measured) = 0.271 W/kg



0 dB = 0.271 W/kg = -5.67 dBW/kg

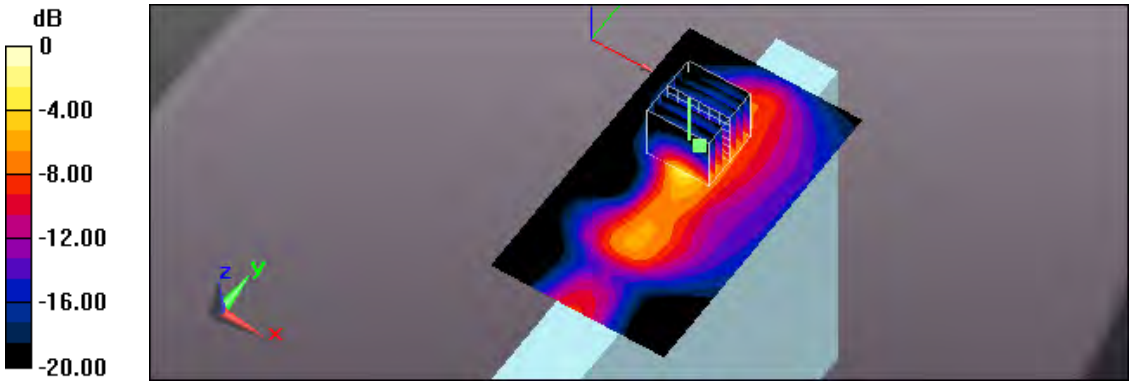
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 PM 12:36:31
79_LTE Band 41 CH 39750_QPSK_BW 20M_1RB Size 49RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2506 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2506 MHz; σ = 2.076 S/m; ε_r = 50.633; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): 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 = 23.73 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 2.78 W/kg
SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.421 W/kg
Maximum value of SAR (measured) = 1.90 W/kg



0 dB = 1.90 W/kg = 2.79 dBW/kg

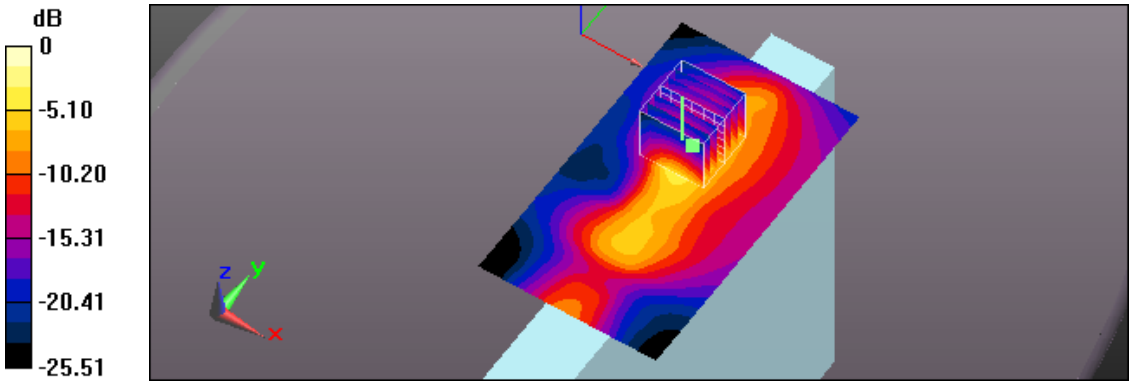
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/18 PM 10:45:42
128_LTE Band 41 CH 39750_QPSK_BW 20M_1RB Size 49RB Offset_Side 1_0mm;Repeat
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2506 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2506 MHz; σ = 2.076 S/m; ε_r = 51.646; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.87 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.02 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 2.62 W/kg
SAR(1 g) = 1.01 W/kg; SAR(10 g) = 0.415 W/kg
Maximum value of SAR (measured) = 1.94 W/kg



0 dB = 1.94 W/kg = 2.88 dBW/kg

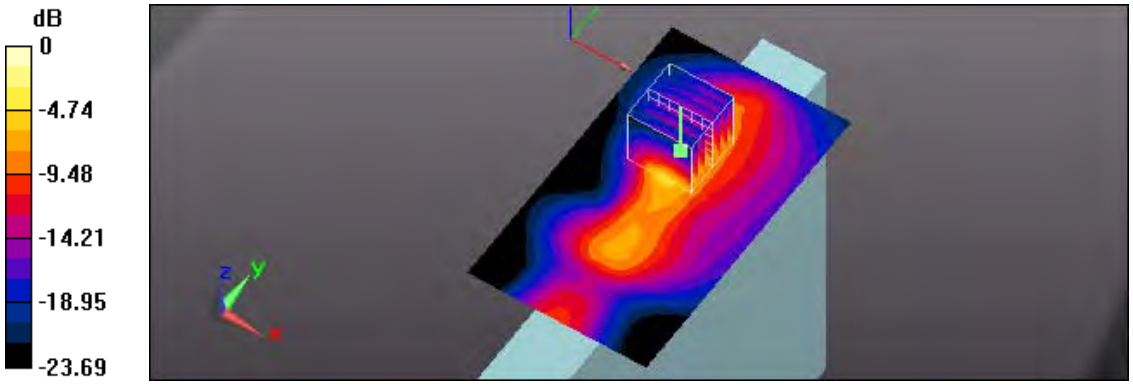
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/17 AM 09:24:24
111_LTE Band 41 CH 39750_QPSK_BW 20M_1RB Size 49RB Offset_Side 1_0mm;Battery 2
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2506 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2506 MHz; σ = 2.076 S/m; ε_r = 50.633; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.23 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.03 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 2.68 W/kg
SAR(1 g) = 1.05 W/kg; SAR(10 g) = 0.440 W/kg
Maximum value of SAR (measured) = 1.87 W/kg



0 dB = 1.87 W/kg = 2.72 dBW/kg

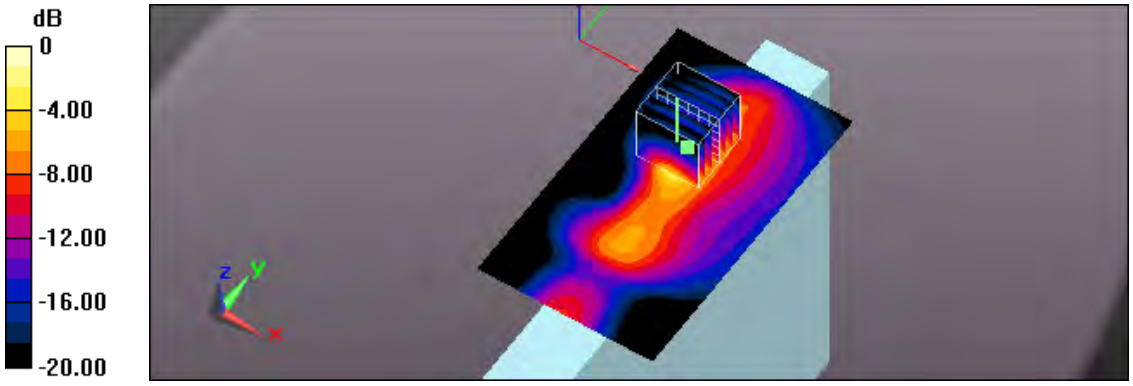
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 PM 01:04:21
80_LTE Band 41 CH 39790_QPSK_BW 20M_1RB Size 49RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2510 MHz; σ = 2.08 S/m; ε_r = 50.616; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.81 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.34 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 2.75 W/kg
SAR(1 g) = 1.05 W/kg; SAR(10 g) = 0.418 W/kg
Maximum value of SAR (measured) = 1.88 W/kg



0 dB = 1.88 W/kg = 2.74 dBW/kg

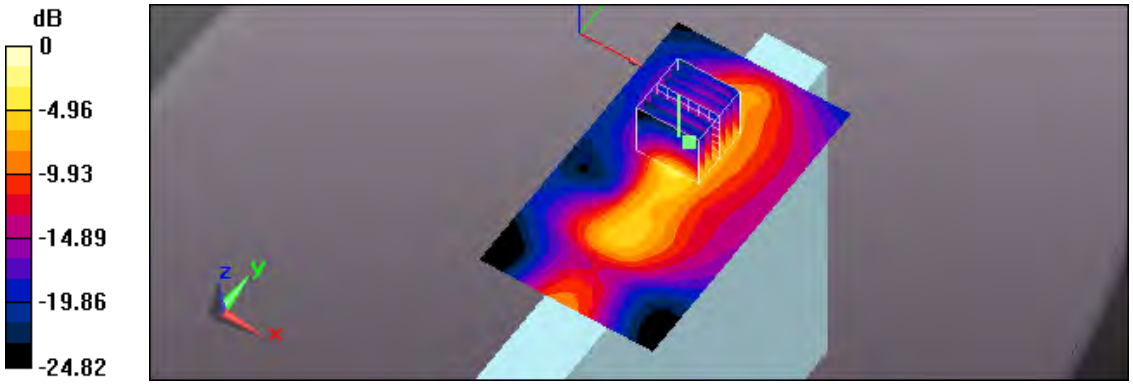
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 PM 01:36:46
81_LTE Band 41 CH 40185_QPSK_BW 20M_1RB Size 49RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2549.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2550 MHz; σ = 2.124 S/m; ε_r = 50.479; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.61 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.94 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 2.42 W/kg
SAR(1 g) = 0.912 W/kg; SAR(10 g) = 0.375 W/kg
Maximum value of SAR (measured) = 1.78 W/kg



0 dB = 1.78 W/kg = 2.50 dBW/kg

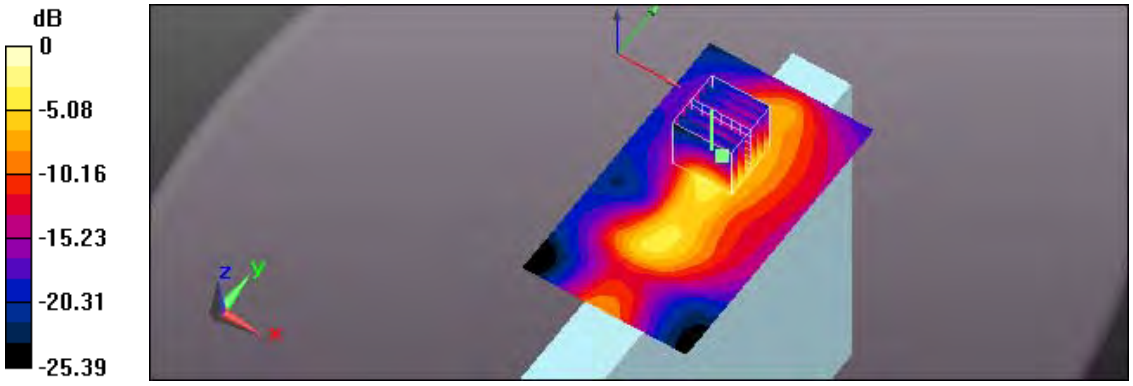
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 PM 02:02:05
82_LTE Band 41 CH 40620_QPSK_BW 20M_1RB Size 49RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2593 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2593 MHz; σ = 2.178 S/m; ε_r = 50.364; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.57 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.04 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 2.29 W/kg
SAR(1 g) = 0.860 W/kg; SAR(10 g) = 0.368 W/kg
Maximum value of SAR (measured) = 1.67 W/kg



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

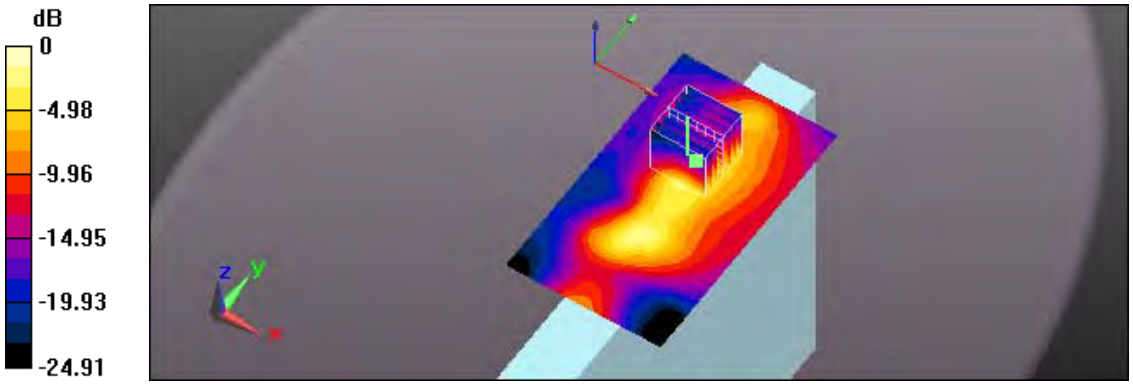
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 PM 02:31:17
83_LTE Band 41 CH 41055_QPSK_BW 20M_1RB Size 49RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2636.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2636.5 MHz; σ = 2.226 S/m; ε_r = 50.243; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.09 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.20 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 1.53 W/kg
SAR(1 g) = 0.583 W/kg; SAR(10 g) = 0.274 W/kg
Maximum value of SAR (measured) = 1.15 W/kg



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

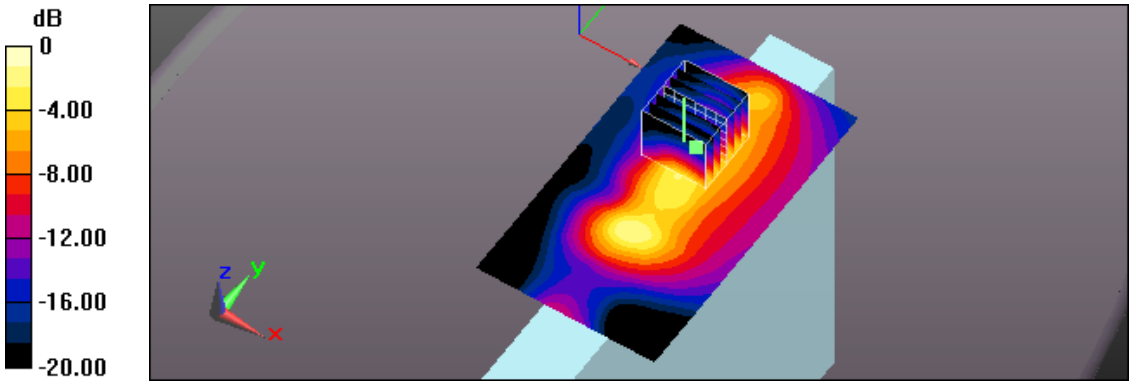
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 PM 02:56:22
84_LTE Band 41 CH 41490_QPSK_BW 20M_1RB Size 49RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2680 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2680 MHz; σ = 2.283 S/m; ε_r = 50.11; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.928 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.85 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 1.34 W/kg
SAR(1 g) = 0.497 W/kg; SAR(10 g) = 0.240 W/kg
Maximum value of SAR (measured) = 0.997 W/kg



0 dB = 0.997 W/kg = -0.01 dBW/kg

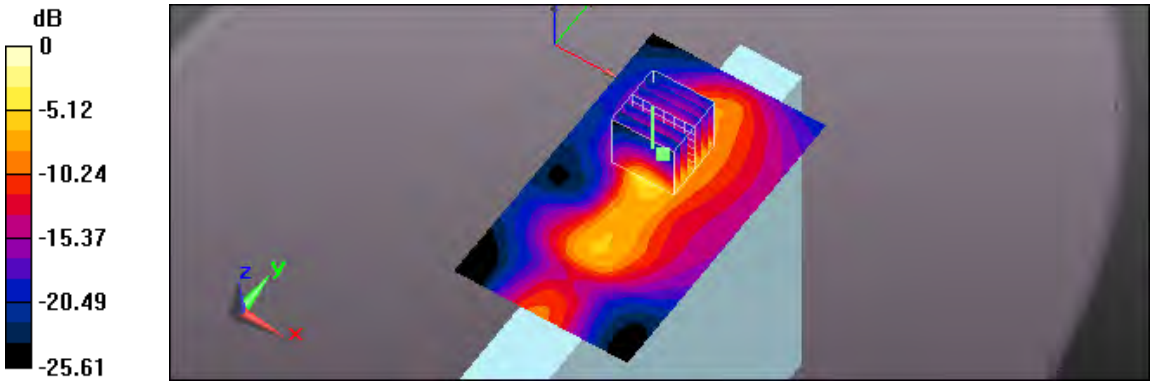
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 PM 04:06:38
86_LTE Band 41 CH 39750_QPSK_BW 20M_50RB Size 25RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2506 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2506 MHz; σ = 2.076 S/m; ε_r = 50.633; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.67 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.42 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 2.48 W/kg
SAR(1 g) = 0.950 W/kg; SAR(10 g) = 0.380 W/kg
Maximum value of SAR (measured) = 1.83 W/kg



0 dB = 1.83 W/kg = 2.62 dBW/kg

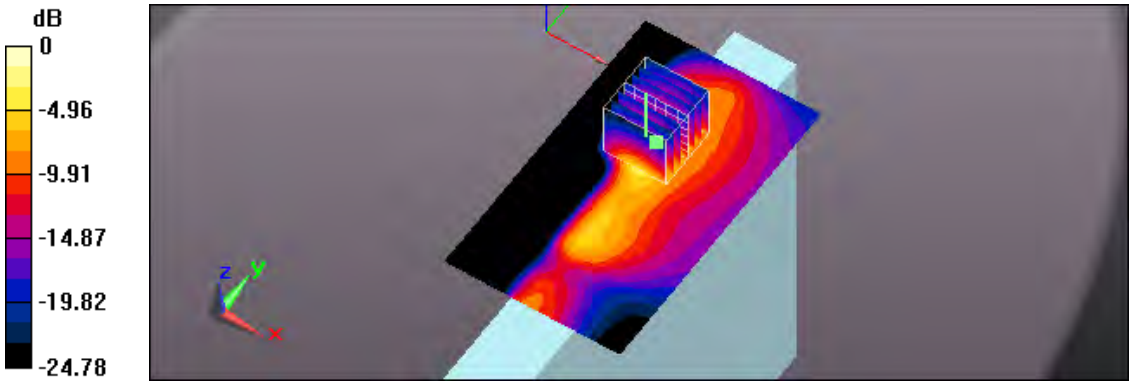
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 PM 04:34:06
87_LTE Band 41 CH 39790_QPSK_BW 20M_50RB Size 25RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2510 MHz; σ = 2.08 S/m; ε_r = 50.616; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.61 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.73 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 2.36 W/kg
SAR(1 g) = 0.915 W/kg; SAR(10 g) = 0.368 W/kg
Maximum value of SAR (measured) = 1.81 W/kg



0 dB = 1.81 W/kg = 2.58 dBW/kg

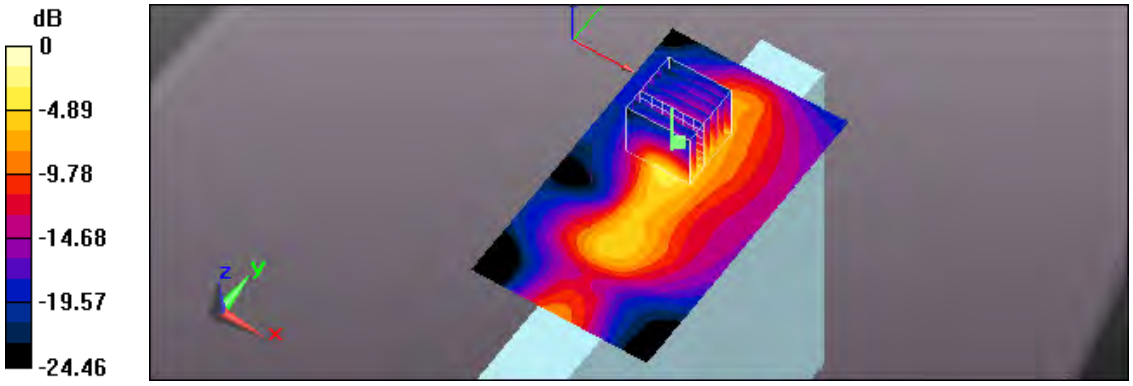
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 PM 05:12:54
88_LTE Band 41 CH 40185_QPSK_BW 20M_50RB Size 25RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2549.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2550 MHz; σ = 2.124 S/m; ε_r = 50.479; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.04 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.86 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 1.93 W/kg
SAR(1 g) = 0.733 W/kg; SAR(10 g) = 0.301 W/kg
Maximum value of SAR (measured) = 1.35 W/kg



0 dB = 1.35 W/kg = 1.30 dBW/kg

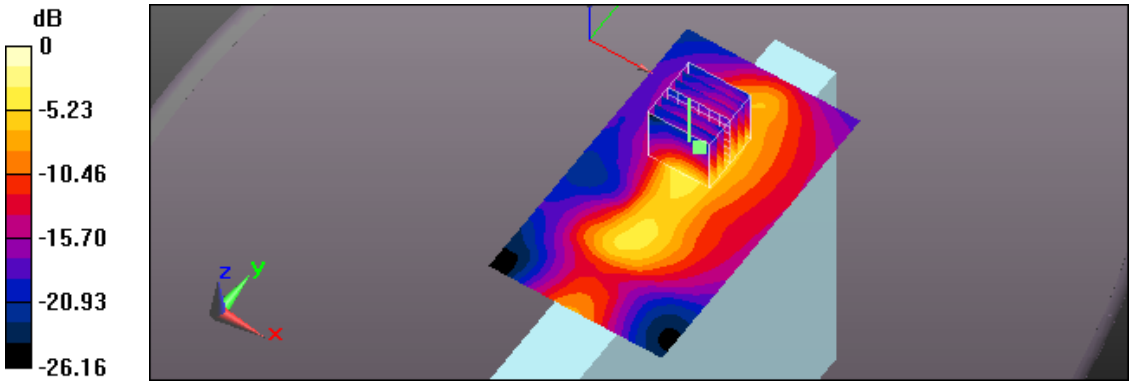
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 PM 03:21:43
85_LTE Band 41 CH 40620_QPSK_BW 20M_50RB Size 25RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2593 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2593 MHz; σ = 2.178 S/m; ε_r = 50.364; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.19 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.26 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 1.75 W/kg
SAR(1 g) = 0.655 W/kg; SAR(10 g) = 0.281 W/kg
Maximum value of SAR (measured) = 1.28 W/kg



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

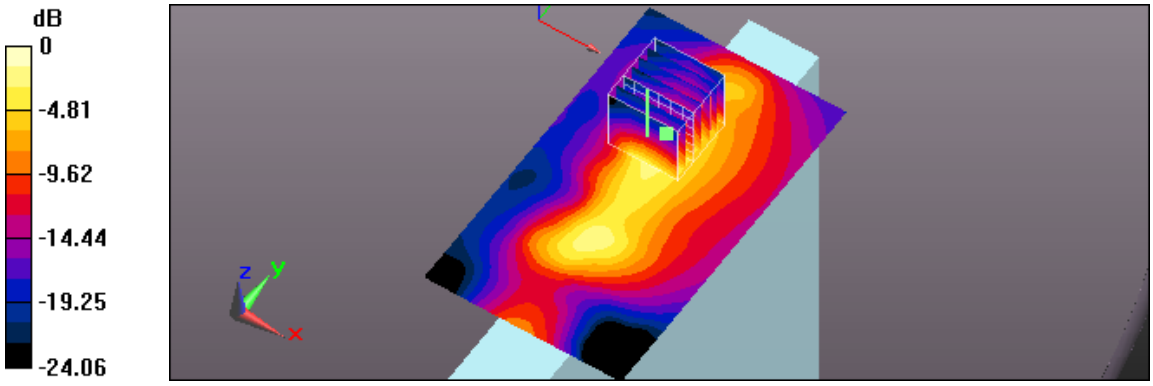
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 PM 05:37:57
89_LTE Band 41 CH 41055_QPSK_BW 20M_50RB Size 25RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2636.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2636.5 MHz; σ = 2.226 S/m; ε_r = 50.243; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.843 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.91 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 1.43 W/kg
SAR(1 g) = 0.530 W/kg; SAR(10 g) = 0.249 W/kg
Maximum value of SAR (measured) = 1.04 W/kg



0 dB = 1.04 W/kg = 0.17 dBW/kg

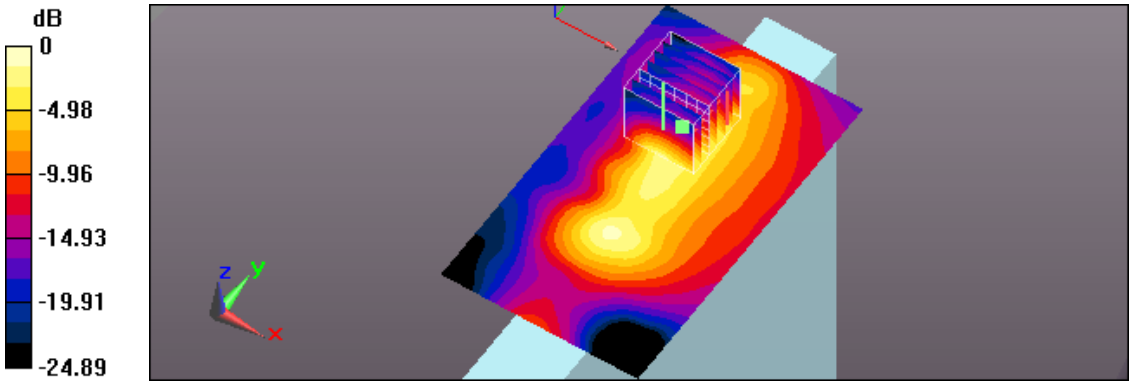
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 PM 06:22:43
90_LTE Band 41 CH 41490_QPSK_BW 20M_50RB Size 25RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2680 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2680 MHz; σ = 2.283 S/m; ε_r = 50.11; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.754 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.91 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 1.25 W/kg
SAR(1 g) = 0.465 W/kg; SAR(10 g) = 0.225 W/kg
Maximum value of SAR (measured) = 0.893 W/kg



0 dB = 0.893 W/kg = -0.49 dBW/kg

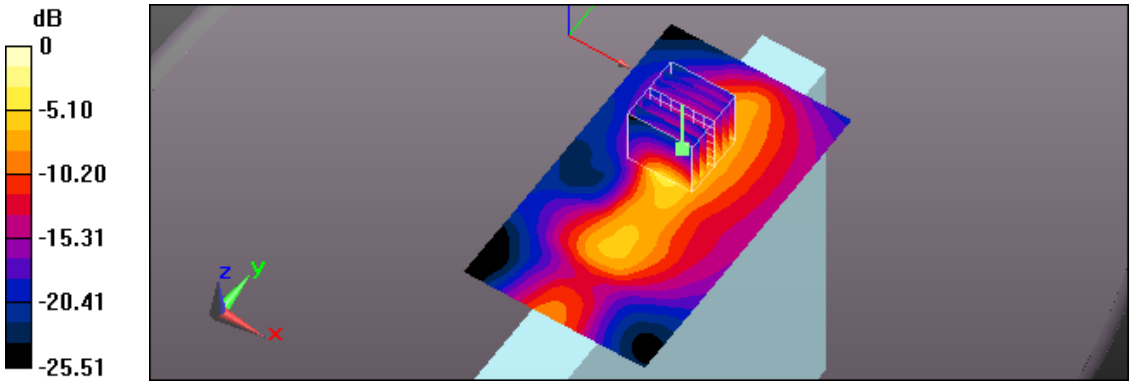
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/16 PM 07:03:55
91_LTE Band 41 CH 39750_QPSK_BW 20M_100RB Size 0RB Offset_Side 1_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2506 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2506 MHz; σ = 2.076 S/m; ε_r = 50.633; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.83 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.94 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 2.34 W/kg
SAR(1 g) = 0.915 W/kg; SAR(10 g) = 0.368 W/kg
Maximum value of SAR (measured) = 1.60 W/kg



0 dB = 1.60 W/kg = 2.04 dBW/kg

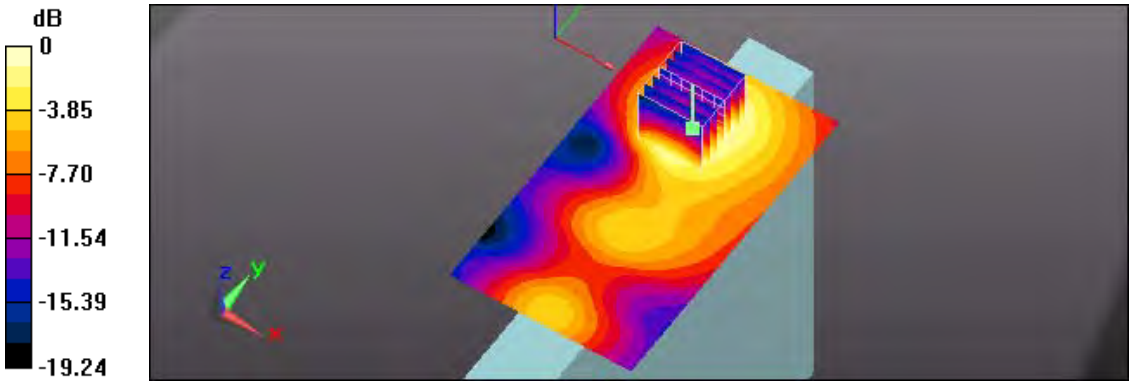
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/17 AM 08:19:16
109_LTE Band 41 CH 39750_QPSK_BW 20M_1RB Size 49RB Offset_Side 1_10mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2506 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2506 MHz; σ = 2.076 S/m; ε_r = 50.633; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.378 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.24 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.446 W/kg
SAR(1 g) = 0.241 W/kg; SAR(10 g) = 0.136 W/kg
Maximum value of SAR (measured) = 0.363 W/kg



0 dB = 0.363 W/kg = -4.40 dBW/kg

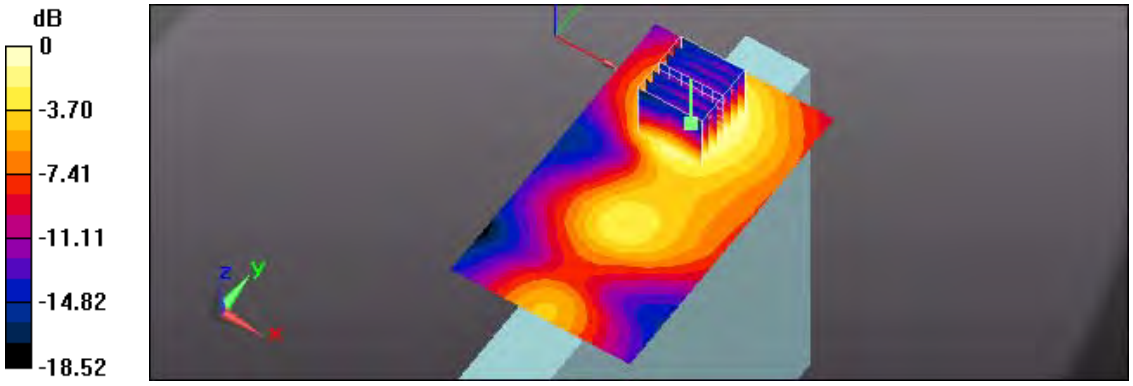
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/17 AM 08:54:21
110_LTE Band 41 CH 40620_QPSK_BW 20M_50RB Size 25RB Offset_Side 1_10mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2593 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2593 MHz; σ = 2.178 S/m; ε_r = 50.364; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.301 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.62 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.361 W/kg
SAR(1 g) = 0.191 W/kg; SAR(10 g) = 0.108 W/kg
Maximum value of SAR (measured) = 0.292 W/kg



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

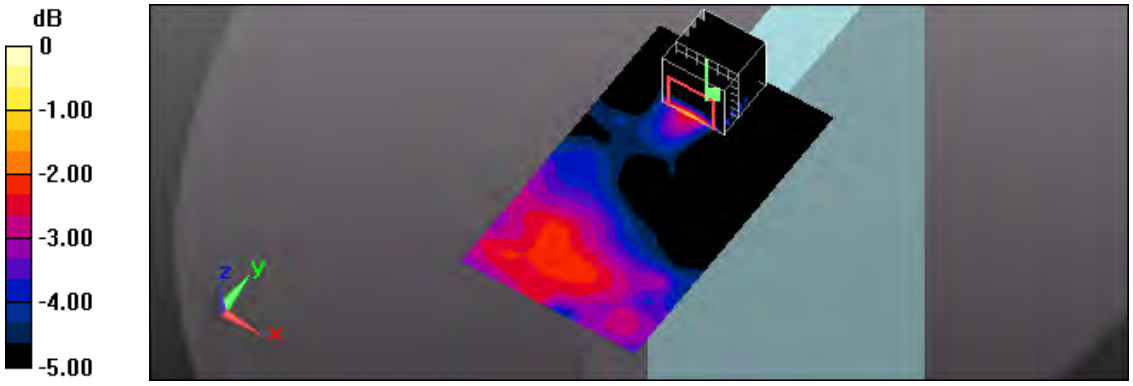
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/17 AM 06:54:09
107_LTE Band 41 CH 39750_QPSK_BW 20M_1RB Size 49RB Offset_Side 2_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2506 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2506 MHz; σ = 2.076 S/m; ε_r = 50.633; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0276 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.457 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.0440 W/kg
SAR(1 g) = 0.023 W/kg; SAR(10 g) = 0.013 W/kg
Maximum value of SAR (measured) = 0.0349 W/kg



0 dB = 0.0349 W/kg = -14.57 dBW/kg

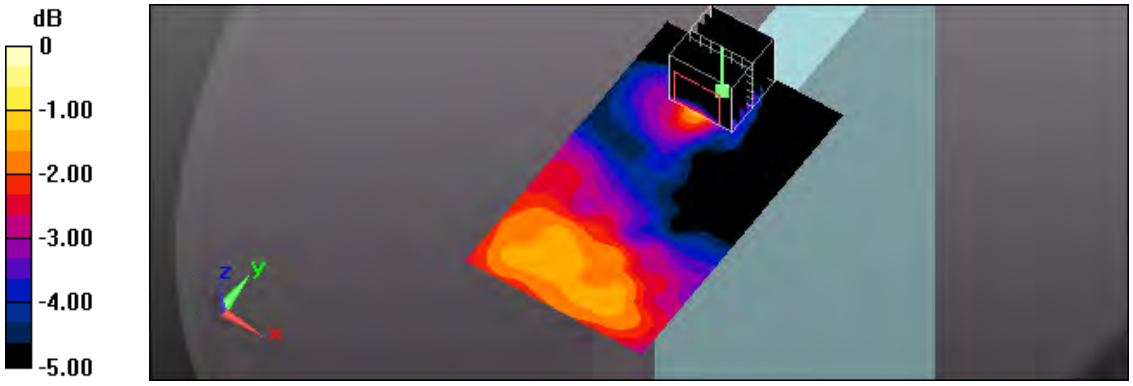
Test Laboratory: A Test Lab Techno Corp.
Date/Time: 2019/3/17 AM 07:30:33
108_LTE Band 41 CH 40620_QPSK_BW 20M_50RB Size 25RB Offset_Side 2_0mm
DUT: EM7455; Type: Wireless Module

Communication System: UID 0, Generic LTE (0); Frequency: 2593 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2593 MHz; σ = 2.178 S/m; ε_r = 50.364; 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(7.18, 7.18, 7.18); Calibrated: 2018/4/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2018/12/7
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1036
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

Area Scan (71x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0275 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.357 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.0400 W/kg
SAR(1 g) = 0.019 W/kg; SAR(10 g) = 0.011 W/kg
Maximum value of SAR (measured) = 0.0312 W/kg



0 dB = 0.0312 W/kg = -15.06 dBW/kg