

FCC SAR Test Report

FCC ID: QISM2-801W

Project No. : 1504C091A
Equipment : HUAWEI MediaPad M2 8.0
Model Name : M2-801W
Applicant : Huawei Technologies Co., Ltd.
Address : Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District Shenzhen China

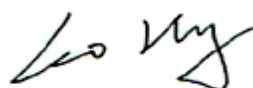
Date of Receipt : Apr. 13, 2015
Date of Test : Apr. 28, 2015~ May. 11, 2015
Issued Date : May.17, 2015
Tested by : BTL Inc.

Testing Engineer :



(Super Jiang)

Technical Manager :



(Leo Hung)

Authorized Signatory :



(Steven Lu)

B T L I N C .

No.3,Jinshagang 1st Road, Shixia,Dalang Town, Dongguan, China.
TEL: +86-769-8318-3000FAX: +86-769-8319-6000

Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with the standards traceable to National Measurement Laboratory (**NML**), or National Institute of Standards and Technology (**NIST**) .

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

BTL's reports must not be used by the client to claim product endorsement by the authorities or any agency of the Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and **BTL-self**, extracts from the test report shall not be reproduced except in full with **BTL's** authorized written approval.

BTL's laboratory quality assurance procedures are in compliance with the **ISO Guide17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Table of Contents	Page
1 . GENERAL SUMMARY	6
2 . RF EMISSIONS MEASUREMENT	8
2.1 TEST FACILITY	8
2.2 MEASUREMENT UNCERTAINTY	8
3 . GENERAL INFORMATION	9
3.1 STATEMENT OF COMPLIANCE	9
3.2 LABORATORY ENVIRONMENT	11
3.3 MAIN TEST INSTRUMENTS	12
4 .SAR MEASUREMENTS SYSTEM CONFIGURATION	13
4.1 SAR MEASUREMENT SET-UP	13
4.2 DASY5E-FIELDPROBESYSTEM	14
5 . SYSTEM VERIFICATION PROCEDURE	22
5.1 TISSUE VERIFICATION	22
5.2 SYSTEM CHECK	24
5.3 SYSTEM CHECK PROCEDURE	25
6 .SAR MEASUREMENT VARIABILITY AND UNCERTAINTY	26
6.1 SAR MEASUREMENT VARIABILITY	26
6.2 SAR MEASUREMENT UNCERTAINTY	26
7 . OPERATIONAL CONDITIONS DURING TEST	27
7.1 SAR TEST CONFIGURATION	27
7.1.4 WIFI TEST CONFIGURATION	27
7.2 TEST POSITION	28
7.2.1 TEST POSITION REQUIREMENTS	28
7.2.2 SAR TEST REDUCTION AND EXCLUSION GUIDANCE	28
8 .TEST RESULT	31
8.1 CONDUCTED POWER RESULTS	31
8.2 SAR TEST RESULTS	36
8.3 MULTIPLE TRANSMITTER EVALUATION	39
APPENDIX	40
1. TEST LAYOUT	40
2. SYSTEM CHECK PLOTS	42

Table of Contents	Page
3.SAR MEASUREMENT PLOTS	48
4. CALIBRATION CERTIFICATE	87
5. EUT TESTING POSITION AND ANTENNA LOCATION	88

REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCC-SAR-1504C091A	Original Issue.	May.17, 2015

1. GENERAL SUMMARY

Equipment	HUAWEI MediaPad M2 8.0
Model Name	M2-801W
Brand Name	HUAWEI
Manufacturer	Huawei Technologies Co., Ltd.
Address	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District Shenzhen China
Factory	BYD Huizhou Electronics Co.,Ltd.
Address	Xiangshui River Daya Bay Economic Development Zone Huizhou Guangdong P.R China
Standard(s)	FCC 47CFR §2.1093 Radio frequency Radiation Exposure Evaluation: Portable Devices ANSI Std C95.1-1992 Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz – 300 GHz.(IEEE Std C95.1-1991) IEEE Std 1528-2003 Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques IEEE Std 1528a-2005 IEEE Recommended Practice for Determining the Peak Spatial-AvSpecific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques Amendment 1: CAD File for Human Head Model (SAM Phantom) KDB616217 D04 SAR for laptop and tablets v01r01 KDB447498 D01 General RF Exposure Guidance v05r02 KDB248227 D01 SAR meas for 802.11 a/b/g v01r02 KDB865664 D01 SAR measurement 100 MHz to 6 GHz v01r03 KDB865664 D02 SAR Reporting v01r01 KDB690783 D01 SAR Listings on Grants v01r03

Note: M2-801W and M2-802L Share The Test Results according to the differences between the models, shown in the following table.

	M2-802L	M2-801w
PCB	the same	the same
GPS	the same	the same
WIFI/BT 2.4G	the same	the same
WIFI 5G(remark : wifi 5G support 11ac)	the same	the same
GSM850/1900	support	Not support
WCDMA1900/850	support	Not support
LTE band 2/4/5/7/26	support	Not support

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCC-SAR-1504C091A) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

2. RF EMISSIONS MEASUREMENT

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **SAR room** at the location of No.3,Jinshagang 1st Road, ShiXia, Dalang Town,Dong Guan, China.523792

2.2 MEASUREMENT UNCERTAINTY

Note: Per KDB865664 D01 SAR Measurement 100 MHz to 6 GHz v01r03,when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2003 is not required in SAR reports submitted for equipment approval. The equivalent ratio (1.5/1.6) is applied to extremity and occupational exposure conditions.

3. GENERAL INFORMATION

3.1 STATEMENT OF COMPLIANCE

The maximum results of Specific Absorption Rate (SAR) found during testing for HUAWEI MediaPad M2 8.0 are as below Table.

Band	Max Reported SAR(W/kg)
	1-g Body (0mm) *
WiFi 2.4G	0.777
WiFi 5G	1.196

Note:

The device is in compliance with Specific Absorption Rate (SAR) for general population/ uncontrolled exposure limits according to the FCC rule §2.1093, the ANSI/IEEE C95.1:1992, the NCRP Report Number 86 for uncontrolled environment, according to the Industry Canada Radio Standards Specification RSS-102 for General Population/Uncontrolled exposure, and had been tested in accordance with the measurement methods and procedures specified in IEEE Std 1528-2003 & IEEE Std 1528a-2005.

3.1.1 GENERAL DESCRIPTION OF EUT

Tested Mode(s)	2.4G/5GWiFi (tested),BT				
Test Modulation	WiFi(DSSS/OFDM)				
	Bluetooth		2400 ~2483.5		
	WIFI		2412 ~2462 5150 ~5250 5250 ~5350 5470 ~5725 5725 ~5850		
Test Channels (low-mid-high):	1-6 -11 (2.4G WIFI 802.11b/g/n HT20)				
	3-6 - 9 (2.4G WIFI 802.11n HT40)				
	5G WIFI	Band 1	Band 2	Band 3	Band 4
	a/n20/ ac20	36-40-44- 48	52-56-60-64	100-104-108- 112 -116-120-124- 128 -132-136-140	149-153-157 -161-165
	n40/ ac40	38-46	54-62	102-110-118- 126 -134	151-159
	ac80	42	58	106-122	155
Antenna Gain	BT/2.4GWiFi: 0.02 dBi				
	5GWiFi: Band1: 0.03 dBi; Band2:0.35 dBi; Band3: 2.10 dBi; Band4:0.90 dBi				
Power Source	#1 DC voltage supplied from AC adapter. Brand: HUAWEI Model: HW-050200U3W S/N: HWHKA5E32707819 S/N: HWBYA32DC1600019 #2.Supplied from Li-ion Battery Brand /Model: HUAWEI / HB3080G1EBW				
Power Rating	#1 I/P: 100-240V~ 50/60Hz 0.5A O/P: DC 5.0V 2.0A #2 I/P: DC 3.8V 4800mAh				
Earphone	Brand/Model: HUAWEI/ EMC323-001-01 Manufacturer: MERRY ELECTRONICS(SHANG HAI) CO., LTD.				
Hardware	SH1M2803LM				
Software	M2-801WV100R001C001				

3.2 LABORATORY ENVIRONMENT

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

3.3 MAIN TEST INSTRUMENTS

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Data Acquisition Electronics	Speag	DAE4	1390	Sep. 15, 2015
2	E-field Probe	Speag	EX3DV4	3932	Jan. 30, 2016
3	Electro Optical Converter	Speag	ECO90	1151	N/A
4	ELI4 Phantom	Speag	ELI4 Phantom V5.0	1222	N/A
8	System Validation Dipole	Speag	D2450V2	919	Sep. 17, 2015
10	Power Amplifier	Mini-Circuits	ZHL-42W	N/A	N/A
11	Power Amplifier	Mini-Circuits	ZVE-8G	N/A	N/A
12	ENA Network Analyzer	Agilent	E5071C	MY46102965	Mar. 29, 2016
13	Dielectric Probe Kit	Agilent	85070E	2593	N/A
14	P-series power meter	Agilent	N1911A	MY45100473	Mar. 29, 2016
15	wideband power sensor	Agilent	N1921A	MY51100041	Mar. 29, 2016
16	Power Meter	Anritsu	ML2487A	6K00004714	Mar. 16, 2016
17	Power Meter Sensor	Anritsu	MA2491A	34138	Mar. 16, 2016
18	MXG Analog Signal Generator	Agilent	N5181A	MY49060710	Nov. 02, 2015
19	Low pass filter	Mini-Circuits	SLP-2950+	M108294	Mar. 29, 2016
20	Attenuator	Mini-Circuits	VAT-10+	31317-1	Mar. 29, 2016
21	Attenuator	Mini-Circuits	VAT-10+	31317-2	Mar. 29, 2016
22	Attenuator	MEB	300-affn-03	314	Mar. 29, 2016
23	Dual directional coupler	Agilent	777D	50208	Mar. 29, 2016
25	System Validation Dipole	Speag	D5GHzV2	1160	Nov. 04, 2015

Remark: " N/A" denotes no model name, serial No. or calibration specified.
All calibration period of equipment list is one year.

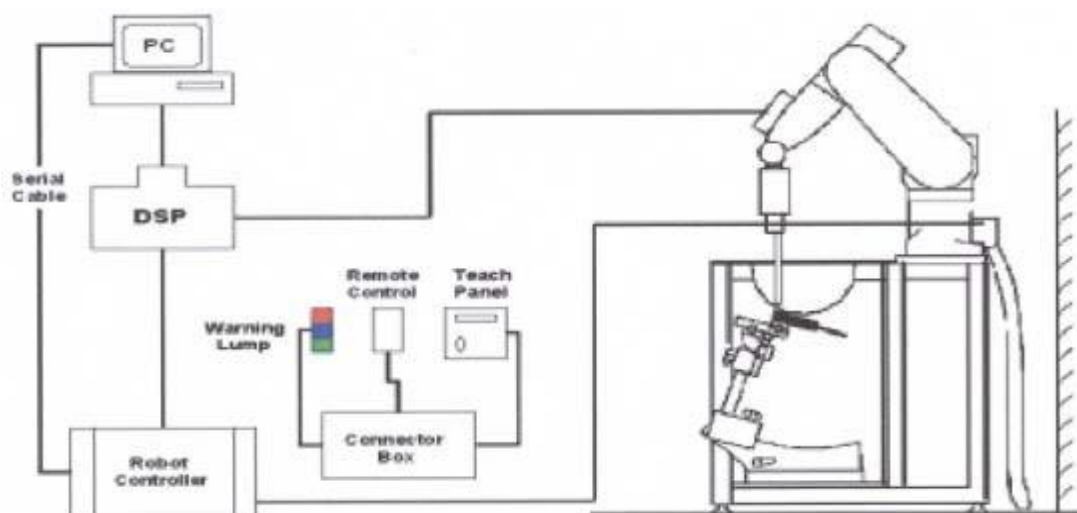
4.SAR MEASUREMENTS SYSTEM CONFIGURATION

4.1SAR MEASUREMENT SET-UP

The DASY5 system for performing compliance tests consists of the following items:

1. A standard high precision 6-axis robot (Stäubli RX family) with controller 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 electronic (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. A unit to operate the optical surface detector which is connected to the EOC.
5. The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DASY5 measurement server.
6. The DASY5 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation. A computer operating Windows 7
7. DASY5 software and SEMCAD data evaluation software.
8. Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
9. The generic twin phantom enabling the testing of 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. System validation dipoles allowing to validate the proper functioning of the system.

4.1.1Test Setup Layout



4.2 DASY5 E-FIELD PROBE SYSTEM

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

4.2.1 EX3DV4 PROBE SPECIFICATION

Construction	Symmetrical design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)
Dynamic Range	10 μ W/g to > 100 mW/g Linearity: ± 0.2 dB
Dimensions	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Distance from probe tip to dipole centers: 1.0 mm



EX3DV4 E-field Probe

4.2.2E-FIELD PROBE CALIBRATION

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

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

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

$$\text{SAR} = C \frac{\Delta T}{\Delta t}$$

Where: Δt = Exposure time (30 seconds),

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

ΔT = Temperature increase due to RF exposure.

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

Where: σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m^3).

4.2.3 OTHER TEST EQUIPMENT

4.2.3.1. Device Holder for Transmitters

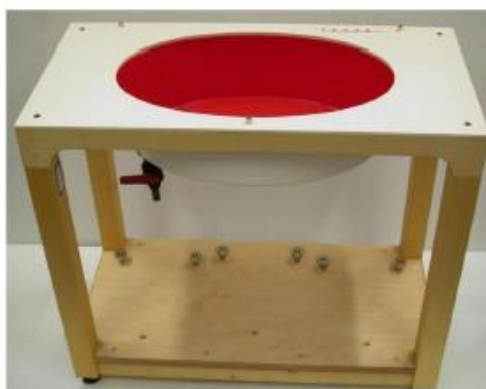
Construction: Simple but effective and easy-to-use extension for Mounting Device that facilitates the testing of larger devices (e.g., laptops, cameras, etc.) It is light weight and fits easily on the upper part of the Mounting Device in place of the phone positioner. The extension is fully compatible with the Twin SAM, ELI4 and SAM v6.0 Phantoms.

Material: POM, Acrylic glass, Foam

4.2.3.2 Phantom

Phantom for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI is fully compatible all known tissuesimulating liquids. ELI has been optimized regarding its performance and can be integrated into our standard phantom tables. A cover prevents evaporation of the liquid. Reference markings on the phantom allow installation of the complete setup, including all predefined phantom positions and measurement grids, by teaching three points. The phantom is compatible with all SPEAG dosimetric probes and dipoles.

Shell Thickness	2±0.1 mm
Filling Volume	Approx. 30 liters
Dimensions	190 X 600 X 0 mm (H x L x W)
Available	Special



ELI4 Phantom

4.2.4 SCANNING PROCEDURE

The DASY5 installation includes predefined files with recommended procedures for measurements and validation. They are read-only document files and destined as fully defined but unmeasured masks. All test positions (head or Body) are tested with the same configuration of test steps differing only in the grid definition for the different test positions.

The “reference” and “drift” measurements are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure. The indicated drift is mainly the variation of the DUT’s output power and should vary max. $\pm 5\%$.

The “surface check” measurement tests the optical surface detection system of the DASY5 system by repeatedly detecting the surface with the optical and mechanical surface detector and comparing the results. The output gives the detecting heights of both systems, the difference between the two systems and the standard deviation of the detection repeatability. Air bubbles or refraction in the liquid due to separation of the sugar-water mixture gives poor repeatability (above $\pm 0.1\text{mm}$). To prevent wrong results tests are only executed when the liquid is free of air bubbles. The difference between the optical surface detection and the actual surface depends on the probe and is specified with each probe. (It does not depend on the surface reflectivity or the probe angle to the surface within $\pm 30^\circ$.)

- Area Scan

The “area scan” measures the SAR above the DUT or verification dipole on a parallel plane to the surface. It is used to locate the approximate location of the peak SAR with 2D spline interpolation. The robot performs a stepped movement along one grid axis while the local electrical field strength is measured by the probe. The probe is touching the surface of the SAM during acquisition of measurement values. The standard scan uses large grid spacing for faster measurement.

Standard grid spacing for head measurements is 15 mm in x- and y- dimension ($\leq 2\text{GHz}$), 12 mm in x- and y- dimension (2-4 GHz) and 10mm in x- and y- dimension (4-6GHz). If a finer resolution is needed, the grid spacing can be reduced. Grid spacing and orientation have no influence on the SAR result. For special applications where the standard scan method does not find the peak SAR within the grid, e.g. mobile phones with flip cover, the grid can be adapted in orientation.

- Zoom Scan

A “zoom scan” measures the field in a volume around the 2D peak SAR value acquired in the previous “coarse” scan. This is a fine grid with maximum scan spatial resolution: $\Delta x_{\text{zoom}}, \Delta y_{\text{zoom}} \leq 2\text{GHz} - \leq 8\text{mm}$, 2-4GHz - $\leq 5\text{ mm}$ and 4-6 GHz - $\leq 4\text{mm}$; $\Delta z_{\text{zoom}} \leq 3\text{GHz} - \leq 5\text{ mm}$, 3-4 GHz - $\leq 4\text{mm}$ and 4-6GHz - $\leq 2\text{mm}$ where the robot additionally moves the probe along the z-axis away from the bottom of the Phantom. DASY is also able to perform repeated zoom scans if more than 1 peak is found during area scan. In this document, the evaluated peak 1g and 10g averaged SAR values are shown in the 2D-graphics in Appendix B. Test results relevant for the specified standard (see chapter 1.4.) are shown in table form in chapter 7.2.

A Z-axis scan measures the total SAR value at the x-and y-position of the maximum SAR value found during the cube scan. The probe is moved away in z-direction from the bottom of the SAM phantom in 2 mm steps. This measurement shows the continuity of the liquid and can - depending in the field strength – also show the liquid depth.

The following table summarizes the area scan and zoom scan resolutions per FCC KDB 865664D01:

Frequency	Maximum Area Scan resolution ($\Delta x_{\text{area}}, \Delta y_{\text{area}}$)	Maximum Zoom Scan spatial resolution ($\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$)	Maximum Zoom Scan spatial resolution			Minimum zoom scan volume (x,y,z)
			Uniform Grid	Graded Grad		
			$\Delta z_{\text{Zoom}}(n)$	$\Delta z_{\text{Zoom}}(1)^*$	$\Delta z_{\text{Zoom}}(n>1)^*$	
$\leq 2\text{GHz}$	$\leq 15\text{mm}$	$\leq 8\text{mm}$	$\leq 5\text{mm}$	$\leq 4\text{mm}$	$\leq 1.5^* \Delta z_{\text{Zoom}}(n-1)$	$\geq 30\text{mm}$
2-3GHz	$\leq 12\text{mm}$	$\leq 5\text{mm}$	$\leq 5\text{mm}$	$\leq 4\text{mm}$	$\leq 1.5^* \Delta z_{\text{Zoom}}(n-1)$	$\geq 30\text{mm}$
3-4GHz	$\leq 12\text{mm}$	$\leq 5\text{mm}$	$\leq 4\text{mm}$	$\leq 3\text{mm}$	$\leq 1.5^* \Delta z_{\text{Zoom}}(n-1)$	$\geq 28\text{mm}$
4-5GHz	$\leq 10\text{mm}$	$\leq 4\text{mm}$	$\leq 3\text{mm}$	$\leq 2.5\text{mm}$	$\leq 1.5^* \Delta z_{\text{Zoom}}(n-1)$	$\geq 25\text{mm}$
5-6GHz	$\leq 10\text{mm}$	$\leq 4\text{mm}$	$\leq 2\text{mm}$	$\leq 2\text{mm}$	$\leq 1.5^* \Delta z_{\text{Zoom}}(n-1)$	$\geq 22\text{mm}$

4.2.5 SPATIAL PEAK SAR EVALUATION

The spatial peak SAR - value for 1 and 10 g is evaluated after the Cube measurements have been done. The basis of the evaluation are the SAR values measured at the points of the fine cube grid consisting of 5 x 5 x 7 points (with 8mm horizontal resolution) or 7 x 7 x 7 points (with 5mm horizontal resolution) or 8 x 8 x 7 points (with 4mm horizontal resolution). The algorithm that finds the maximal averaged volume is separated into three different stages.

- The data between the dipole center of the probe and the surface of the phantom are extrapolated. This data cannot be measured since the center of the dipole is 2.7 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is about 1 mm (see probe calibration sheet). The extrapolated data from a cube measurement can be visualized by selecting "Graph Evaluated".
- The maximum interpolated value is searched with a straight-forward algorithm. Around this maximum the SAR - values averaged over the spatial volumes (1g or 10 g) are computed using the 3d-spline interpolation algorithm. If the volume cannot be evaluated (i.e., if a part of the grid was cut off by the boundary of the measurement area) the evaluation will be started on the corners of the bottom plane of the cube.
- All neighboring volumes are evaluated until no neighboring volume with a higher average value is found.

Extrapolation

The extrapolation is based on a least square algorithm [W. Gander, Computermathematik, p.168-180]. Through the points in the first 3 cm along the z-axis, polynomials of order four are calculated. These polynomials are then used to evaluate the points between the surface and the probe tip. The points, calculated from the surface, have a distance of 1 mm from each other.

Interpolation

The interpolation of the points is done with a 3d-Spline. The 3d-Spline is composed of three one-dimensional splines with the "Not a knot"-condition [W. Gander, Computermathematik, p.141-150] (x, y and z -direction) [Numerical Recipes in C, Second Edition, p.123ff].

Volume Averaging

At First the size of the cube is calculated. Then the volume is integrated with the trapezoidal algorithm. 8000 points (20x20x20) are interpolated to calculate the average.

Advanced Extrapolation

DASY5 uses the advanced extrapolation option which is able to compensate boundary effects on E-field probes.

4.2.6 DATA STORAGE AND EVALUATION

4.2.5.1 Data Storage

The DASY5 software stores the acquired data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension “.DAE4”. The software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of incorrect parameter settings. For example, if a measurement has been performed with a wrong crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be re-evaluated.

The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [mW/g], [mW/cm²], [dBrel], etc.). Some of these units are not available in certain situations or show meaningless results, e.g., a SAR output in a lossless media will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

4.4.2 Data Evaluation by SEMCAD

The SEMCAD software automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software:

Probe parameters:	Sensitivity	Normi, a_{i0} , a_{i1} , a_{i2}
	Conversion factor	ConvF _i
	Diode compression point	Dcp _i
Device parameters:	Frequency	f
	Crest factor	cf
Media parameters:	Conductivity	
	Density	

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY5 components. In the direct measuring mode of the multi meter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics.

If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as:

$$V_i = U_i + U_i^2 \cdot cf / dcp_i$$

With	V_i = compensated signal of channel i	(i = x, y, z)
	U_i = input signal of channel i	(i = x, y, z)
	cf = crest factor of exciting field	(DASY parameter)
	dcp _i = diode compression point	(DASY parameter)

From the compensated input signals the primary field data for each channel can be evaluated:

$$\text{E-field probes: } E_i = (V_i / \text{Norm}_i \cdot \text{ConvF})^{1/2}$$

$$\text{H-field probes: } H_i = (V_i)^{1/2} \cdot (a_{i0} + a_{i1}f + a_{i2}f^2) / f$$

With V_i = compensated signal of channel i (i = x, y, z)

Norm_i = sensor sensitivity of channel i (i = x, y, z)
[mV/(V/m)²] for E-field Probes

ConvF = sensitivity enhancement in solution

a_{ij} = sensor sensitivity factors for H-field probes

f = carrier frequency [GHz]

E_i = electric field strength of channel i in V/m

H_i = magnetic field strength of channel i in A/m

The RSS value of the field components gives the total field strength (Hermitian magnitude):

$$E_{\text{tot}} = (E_x^2 + E_y^2 + E_z^2)^{1/2}$$

The primary field data are used to calculate the derived field units.

$$\text{SAR} = (E_{\text{tot}})^2 \cdot \sigma / (\rho \cdot 1000)$$

With SAR = local specific absorption rate in mW/g

E_{tot} = total field strength in V/m
= conductivity in [mho/m] or [Siemens/m]
= equivalent tissue density in g/cm³

Note that the density is normally set to 1 (or 1.06), to account for actual brain density rather than the density of the simulation liquid. The power flow density is calculated assuming the excitation field to be a free space field.

$$P_{\text{pwe}} = E_{\text{tot}}^2 / 3770 \text{ or } P_{\text{pwe}} = H_{\text{tot}}^2 \cdot 37.7$$

With P_{pwe} = equivalent power density of a plane wave in mW/cm²

E_{tot} = total field strength in V/m

H_{tot} = total magnetic field strength in A/m

5. SYSTEM VERIFICATION PROCEDURE

5.1 TISSUE VERIFICATION

The simulating liquids should be checked at the beginning of a series of SAR measurements to determine if the dielectric parameters are within the tolerances of the specified target values. The measured conductivity and relative permittivity should be within $\pm 5\%$ of the target values.

The following materials are used for producing the tissue-equivalent materials.

Ingredients (% of weight)	Body Tissue	
Frequency Band	2450 MHz	5GHz
Water	73.2	60-80
Salt(NaCl)	0.04	0-1.5
Sugar	0.0	0.0
HEC	0.0	0.0
Bactericide	0.0	0.0
TritonX-100	0.0	0.0
DGBE	26.7	0.0
Esters, Emulsifiers, Inhibitors	0.0	20-40

Salt: 99+% Pure Sodium Chloride; Sugar: 98+% Pure Sucrose; Water: De-ionized, 16M + resistivity
 HEC: Hydroxyethyl Cellulose; DGBE: 99+% Di(ethylene glycol) butyl ether, [2-(2-butoxyethoxy)ethanol]
 Triton X-100(ultra pure): Polyethylene glycol mono [4-(1,1,3,3-tetramethylbutyl)phenyl]ether

	Measured Frequency (MHz)	Target Tissue		Measured Tissue		Liquid Temp. (°C)	Test Date
		ϵ_r (+/-5%)	σ (S/m) (+/-5%)	ϵ_r	σ (S/m)		
Tissue Type	2450	52.7 (50.07~55.35)	1.95 (1.85~2.05)	52.672	1.92	20.8	2015/4/28
	5200	49.02 (46.57~51.47)	5.29 (5.03~5.55)	49.018	5.25	20.7	2015/5/7
	5300	48.9 (46.46~51.35)	5.42 (5.15~5.69)	48.867	5.38	20.7	2015/5/7
	5500	48.6 (46.17~51.03)	5.65 (5.37~5.93)	48.565	5.62	20.7	2015/5/8
	5600	48.5 (46.08~50.93)	5.77 (5.48~6.06)	48.458	5.72	20.7	2015/5/8
	5800	48.2 (45.79~50.61)	6.00 (5.70~6.30)	48.168	5.95	20.7	2015/5/9

Note:

1)The dielectric parameters of the tissue-equivalent liquid should be measured under similar ambient conditions and within 2 °C of the conditions expected during the SAR evaluation to satisfy protocol requirements.

2)KDB 865664 was ensured to be applied for probe calibration frequencies greater than or equal to 50MHz of the EUT frequencies.

3)The above measured tissue parameters were used in the DASY software to perform interpolation via the DASY software to determine actual dielectric parameters at the test frequencies. The SAR test plots may slightly differ from the table above since the DASY rounds to three significant digits.

5.2 SYSTEM CHECK

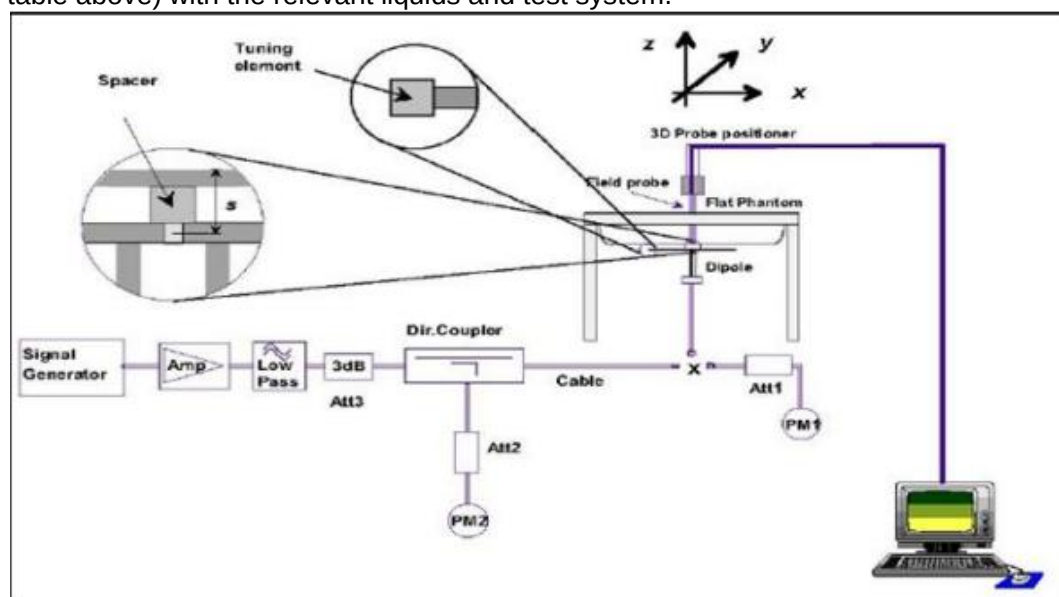
The system check is performed for verifying the accuracy of the complete measurement system and performance of the software. The system check is performed with tissue equivalent material according to IEEE P1528 (described above). The following table shows system check results for all frequency bands and tissue liquids used during the tests.

Frequency (MHz)	Test Date	Dielectric Parameters		Temp	250mW Measured SAR _{1g}	1W Normalized SAR _{1g}	1W Target SAR _{10g} (±10% deviation)
		ϵ_r	σ (s/m)	(°C)	(W/kg)		
2450B	2015/4/28	52.67	1.92	20.8	12.67	50.68	50.7 (45.63~55.77)
Frequency (MHz)	Test Date	Dielectric Parameters		Temp	100mW Measured SAR _{1g}	1W Normalized SAR _{1g}	1W Target SAR _{10g} (±10% deviation)
		ϵ_r	σ (s/m)	(°C)	(W/kg)		
5200B	2015/5/7	49.02	5.25	20.7	7.54	75.40	74.70 (67.23~82.17)
5300B	2015/5/7	48.87	5.38	20.7	7.59	75.90	76.30 (68.67~83.93)
5500B	2015/5/8	48.57	5.62	20.7	8.07	80.70	80.60 (72.54~88.66)
5600B	2015/5/8	48.46	5.72	20.7	8.45	84.50	83.00 (74.7~91.3)
5800B	2015/5/9	48.17	5.95	20.7	7.37	73.70	75.10 (67.59~82.61)

5.3 SYSTEM CHECK PROCEDURE

The system check is performed by using a system check dipole which is positioned parallel to the planar part of the SAM phantom at the reference point. The distance of the dipole to the SAM phantom is determined by a plexiglass spacer. The dipole is connected to the signal source consisting of signal generator and amplifier via a directional coupler, N-connector cable and adaption to SMA. It is fed with a power of 250 mW (below 5GHz) or 100mW (above 5GHz). To adjust this power a power meter is used. The power sensor is connected to the cable before the system check to measure the power at this point and do adjustments at the signal generator. At the outputs of the directional coupler both return loss as well as forward power are controlled during the system check to make sure that emitted power at the dipole is kept constant. This can also be checked by the power drift measurement after the test.

System check results have to be equal or near the values determined during dipole calibration (target SAR in table above) with the relevant liquids and test system.



6.SAR MEASUREMENT VARIABILITY AND UNCERTAINTY

6.1SAR MEASUREMENT VARIABILITY

Per KDB865664 D01 SAR measurement 100 MHz to 6 GHz v01r03, 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. The additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

- 1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .

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

The detailed repeated measurement results are shown in Section 8.2.

6.2SAR MEASUREMENT UNCERTAINTY

Per KDB865664 D01 SAR Measurement 100 MHz to 6 GHz v01r03, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis.

7. OPERATIONAL CONDITIONS DURING TEST

7.1 SAR TEST CONFIGURATION

7.1.4 WIFI TEST CONFIGURATION

For WLAN SAR testing, WLAN engineering testing software installed on the DUT can provide continuous transmitting RF signal.

Mode	802.11 a/b/g/n(20M/40M)/ac(20M/40M/80M)
Duty cycle	100%
Crest factor	1

For WLAN SAR tests, a communication link is set up with the test mode software for WIFI mode test. During the test, at the each test frequency channel, the EUT is operated at the RF continuous emission mode. Each channel should be tested at the lowest data rate. Testing at higher data rates is not required when the maximum average output power is less than 0.25dB higher than those measured at the lowest data rate.

For 2.4GHz,802.11b/g operating modes are tested independently according to the service requirements in each frequency band. 802.11b/g modes are tested on channel 1, 6, 11; however, if output power reduction is necessary for channels 1 and/or 11 to meet restricted band requirements the highest output channel closest to each of these channels must be tested instead.

SAR is not required for 802.11g/n channels when the maximum average output power is less than 0.25dB higher than that measured on the corresponding 802.11b channels.

Mode	Band	GHz	Channel	“Default Test Channels”	
				802.11b	802.11g
802.11b /g	2.4 GHz	2.412	1#	√	△
		2.437	6#	√	△
		2.462	11#	√	△

Notes:

√ = “default test channels”

△= possible 802.11g channels with maximum average output ¼ dB the “default test channels”

= when output power is reduced for channel 1 and /or 11 to meet restricted band requirements the highest output channels closest to each of these channels should be tested.

According to FCC KDB 248227, when the maximum output channel (maximum tune-up tolerance limit power) in each 802.11a frequency band is not included in the “default test channels”, the maximum output channel should be tested instead of an adjacent “default test channel”. These are referred to as the “required test channels”.

According to FCC KDB 248227 and October 10, 2012 TCB Workshop, SAR is not required for 802.11n(20M)/ n(40M)/ ac(80M) channels when the maximum average output power is less than 1/4dB higher than that measured on the corresponding 802.11a channels.

For 5GHz, SAR is not required for 802.11n(20M)/ n(40M)/ ac(80M), due to the maximum average output power is less than 1/4dB higher than that measured on the corresponding 802.11a channels.

The device supports 802.11ac(20M), ac(40M), ac(80M) and transmitting one channel at one time, not simultaneously, in different 5GHz bands. According to April 2013 TCB Workshop, apply usual 802.11 test exclusion considerations, but include 802.11ac SAR for highest 802.11a configuration in each 5GHz band and each exposure condition. Therefore, 802.11ac SAR is required for the highest SAR configuration in each 5GHz band.

7.2 TEST POSITION

7.2.1 Test Position Requirements

The overall diagonal dimension of the display section of a tablet is 24cm>20cm, Per FCC KDB 616217, the back surface and edges of the tablet should be tested for SAR compliance with the Tablet touching the phantom. SAR evaluation for the front surface of tablet display screens are generally not necessary. The SAR Exclusion Threshold in KDB 447498 D01 can be applied to determine SAR test exclusion for adjacent edge configurations. The closest distance from the antenna to an adjacent tablet edge is used to determine if SAR testing is required for the adjacent edges, with the adjacent edge positioned adjacent the phantom and the edge containing the antenna positioned perpendicular to the phantom.

7.2.2 SAR test reduction and exclusion guidance

(1) The SAR exclusion threshold for distances < 50mm is defined by the following equation:

$$\frac{(\text{max. power of channel, including tune-up tolerance, mW})}{(\text{min. test separation distance, mm})} \sqrt{\text{Frequency (GHz)}} \leq 3.0$$

(2) The SAR exclusion threshold for distances > 50mm is defined by the following equation, as illustrated in KDB 447498 D01 Appendix B:

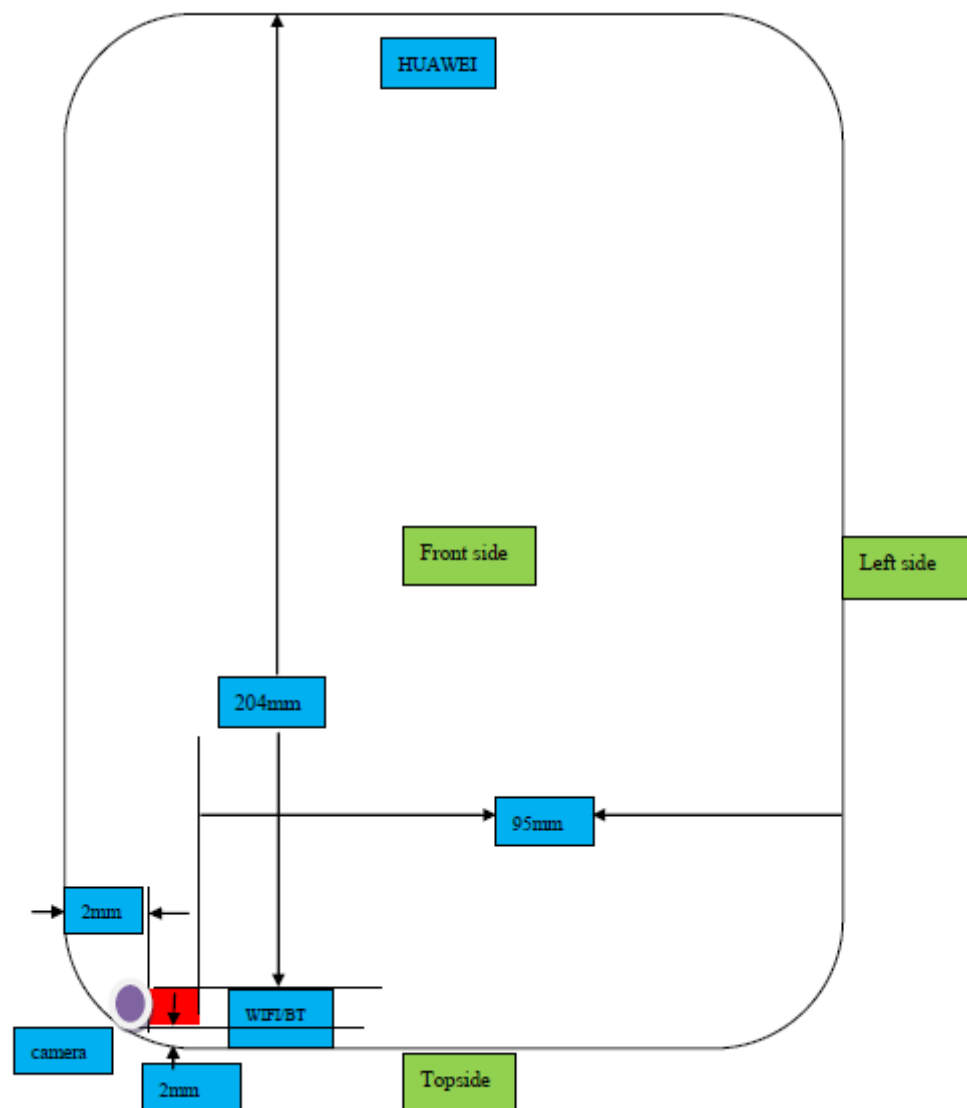
a) at 100 MHz to 1500 MHz

$$[\text{Power allowed at numeric Threshold at 50 mm in step 1}) + (\text{test separation distance} - 50 \text{ mm}) \cdot (f_{\text{(MHz)}}/150)] \text{ mW}$$

b) at >1500MHz and ≤6GHz

$$[\text{Power allowed at numeric Threshold at 50 mm in step 1}) + (\text{test separation distance} - 50 \text{ mm}) \cdot 10] \text{ mW}$$

The location of the antenna inside EUT is as below.



Note:

1) Diversity antenna is used to improve the acceptance of performance of the main antenna, it does not have a transmitter function.

Test Position 1: The front side of the EUT towards the bottom of the flat phantom.

SAR is not required for BT/WiFi antenna in this position.

Test Position2: The back side of the EUT towards the bottom of the flat phantom.

SAR is required for WiFi antenna in this position.

SAR is not required for BT antenna in this position.

$$\text{Evaluation}_{(\text{BT})} = [10^{(6/10)}/5] * (2.480^{1/2}) = 1.25 < 3.0$$

$$\text{Evaluation}_{(2.4\text{GWiFi})} = [10^{(18/10)}/5] * (2.462^{1/2}) = 19.80 > 3.0$$

$$\text{Evaluation}_{(5\text{GWiFi})} = [10^{(13/10)}/5] * (5.825^{1/2}) = 4.30 > 3.0$$

Test Position 3: The left side of the EUT towards the bottom of the flat phantom.

SAR is not required for BT/WiFi antenna in this position.

$$\text{Evaluation}_{(\text{BT})} = 95.25 + (95 - 50) * 10 = 545.25\text{mW} = 27.37\text{dBm} > 6\text{dBm}(\text{max.power})$$

$$\text{Evaluation}_{(2.4\text{GWiFi})} = 95.6 + (95 - 50) * 10 = 545.6\text{mW} = 27.37\text{dBm} > 18\text{dBm}(\text{max.power})$$

$$\text{Evaluation}_{(5\text{GWiFi})} = 62.15 + (95 - 50) * 10 = 512.15\text{mW} = 27.09\text{dBm} > 13\text{dBm}(\text{max.power})$$

Test Position 4: The right side of the EUT towards the bottom of the flat phantom.

SAR is required for WiFi antenna in this position.

SAR is not required for BT antenna in this position.

$$\text{Evaluation}_{(\text{BT})} = [10^{(6/10)}/5] * (2.480^{1/2}) = 1.25 < 3.0$$

$$\text{Evaluation}_{(2.4\text{GWiFi})} = [10^{(18/10)}/5] * (2.462^{1/2}) = 19.80 > 3.0$$

$$\text{Evaluation}_{(5\text{GWiFi})} = [10^{(13/10)}/5] * (5.825^{1/2}) = 4.30 > 3.0$$

Test Position 5: The top side of the EUT towards the bottom of the flat phantom.

SAR is required for WiFi antenna in this position

SAR is not required for BT antenna in this position.

$$\text{Evaluation}_{(\text{BT})} = [10^{(6/10)}/5] * (2.480^{1/2}) = 1.25 < 3.0$$

$$\text{Evaluation}_{(2.4\text{GWiFi})} = [10^{(18/10)}/5] * (2.462^{1/2}) = 19.80 > 3.0$$

$$\text{Evaluation}_{(5\text{GWiFi})} = [10^{(13/10)}/5] * (5.825^{1/2}) = 4.30 > 3.0$$

Test Position 6: The bottom side of the EUT towards the bottom of the flat phantom.

SAR is not required for BT/ WiFi antenna in this position.

$$\text{Evaluation}_{(\text{BT})} = 95.25 + (204 - 50) * 10 = 1635.25\text{mW} = 32.14\text{dBm} > 6\text{dBm}(\text{max.power})$$

$$\begin{aligned} \text{Evaluation}_{(2.4\text{G WiFi})} &= 95.60 + (204 - 50) * 10 = 1635.60\text{Mw} \\ &= 32.14\text{dBm} > 18\text{dBm}(\text{max.power}) \end{aligned}$$

$$\begin{aligned} \text{Evaluation}_{(5\text{G WiFi})} &= 62.15 + (204 - 50) * 10 = 1602.15\text{Mw} \\ &= 32.05\text{dBm} > 13\text{dBm}(\text{max.power}) \end{aligned}$$

8.TEST RESULT

8.1CONDUCTED POWER RESULTS

8.1.1 CONDUCTED POWER MEASUREMENTS OF WiFi 2.4G

WiFi 2.4G	Frequency (MHz)	Tune-up	Average Power (dBm) for Data Rates (Mbps)			
			1	2	5.5	11
802.11b	2412	18.00	16.49	16.41	16.68	16.31
	2437	18.00	17.41	17.32	17.52	17.30
	2462	18.00	17.76	17.71	17.91	17.65

WiFi 2.4G	Frequency (MHz)	Tune-up	Average Power (dBm) for Data Rates (Mbps)							
			6	9	12	18	24	36	48	54
802.11g	2412	19.00	16.92	16.82	16.49	16.41	16.18	15.87	15.72	15.56
	2437	19.00	17.54	17.48	17.37	17.26	17.39	17.14	16.97	16.77
	2462	19.00	17.81	17.75	17.7	17.66	17.46	17.15	17.01	16.76

WiFi 2.4G	Frequency (MHz)	Tune-up	Average Power (dBm) for Data Rates (Mbps)							
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11n HT20	2412	16.00	14.66	14.47	14.37	14.23	14.96	14.79	14.63	14.56
	2437	16.00	15.58	15.45	15.43	15.35	14.90	14.68	14.60	14.48
	2462	16.00	15.72	15.60	15.38	15.27	15.00	14.79	14.71	14.57

WiFi 2.4G	Frequency (MHz)	Tune-up	Average Power (dBm) for Data Rates (Mbps)							
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11n HT40	2422	16.00	15.22	14.93	14.65	14.43	14.04	14.66	14.53	14.47
	2437	16.00	15.68	15.33	15.06	14.88	14.35	14.95	14.89	14.70
	2452	16.00	15.76	15.47	15.18	14.96	14.52	14.15	14.97	14.84

Note:

- 1) The Average conducted power of WiFi is measured with RMS detector.
- 2) Per KDB248227, for WiFi 2.4GHz, highest average RF output power channel for the lowest data rate of 802.11b mode was selected for SAR evaluation. SAR test at higher data rates and higher order modulations (including 802.11g/n) were not required since the maximum average output power for each of these configurations is not more than 1/4dB higher than the tested channel for the lowest data rate of 802.11b mode.

8.1.2 CONDUCTED POWER MEASUREMENTS OF WiFi 5G

WiFi 5G	Frequency (MHz)	Tune-up	Average Power (dBm) for Data Rates (Mbps)							
			6	9	12	18	24	36	48	54
802.11a	5180	11.00	10.71	10.65	10.58	10.44	10.37	10.25	10.23	10.17
	5200	11.00	10.82	10.75	10.63	10.57	10.54	10.43	10.33	10.28
	5220	11.00	10.73	10.64	10.56	10.54	10.43	10.42	10.34	10.24
	5240	11.00	10.76	10.67	10.65	10.59	10.55	10.46	10.36	10.29
	5260	11.00	10.62	10.56	10.45	10.43	10.35	10.32	10.31	10.16
	5280	11.00	10.57	10.55	10.53	10.45	10.35	10.33	10.22	10.19
	5300	11.00	10.68	10.61	10.58	10.47	10.44	10.35	10.24	10.18
	5320	11.00	10.69	10.57	10.54	10.45	10.38	10.35	10.26	10.17
	5500	11.00	10.43	10.42	10.39	10.36	10.34	10.27	10.26	10.18
	5520	11.00	10.38	10.35	10.31	10.28	10.26	10.22	10.19	10.15
	5540	11.00	10.32	10.25	10.23	10.21	10.17	10.15	10.14	10.05
	5560	11.00	10.21	10.19	10.15	10.13	10.11	10.08	10.07	10.03
	5580	11.00	10.37	10.34	10.32	10.28	10.19	10.13	10.09	10.05
	5600	11.00	10.32	10.30	10.28	10.23	10.16	10.12	10.09	10.05
	5620	11.00	10.31	10.29	10.26	10.22	10.19	10.16	10.08	10.05
	5640	11.00	10.28	10.25	10.23	10.20	10.22	10.24	10.15	10.12
	5660	11.00	10.22	10.23	10.19	10.17	10.13	10.11	10.08	10.06
	5680	11.00	10.33	10.34	10.22	10.19	10.17	10.15	10.09	10.06
	5700	11.00	10.31	10.27	10.26	10.22	10.28	10.19	10.12	10.05
	5745	11.00	10.30	10.25	10.21	10.19	10.18	10.12	10.07	10.02
	5785	11.00	10.38	10.34	10.31	10.28	10.23	10.19	10.12	10.06
	5825	11.00	10.39	10.29	10.28	10.26	10.22	10.18	10.16	10.14

WiFi 5G	Frequency (MHz)	Tune-up	Average Power (dBm) for Data Rates (Mbps)							
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11 N20	5180	11.00	10.67	10.62	10.55	10.53	10.46	10.39	10.37	10.26
	5200	11.00	10.62	10.54	10.52	10.46	10.43	10.38	10.35	10.24
	5220	11.00	10.48	10.44	10.39	10.38	10.27	10.24	10.17	10.05
	5240	11.00	10.26	10.24	10.21	10.19	10.16	10.13	10.10	10.07
	5260	11.00	10.28	10.25	10.22	10.18	10.14	10.12	10.08	10.02
	5280	11.00	10.32	10.29	10.25	10.21	10.18	10.16	10.12	10.09
	5300	11.00	10.58	10.47	10.34	10.32	10.29	10.24	10.22	10.12
	5320	11.00	10.43	10.36	10.28	10.24	10.21	10.17	10.13	10.08
	5500	11.00	10.41	10.37	10.34	10.28	10.22	10.14	10.11	10.03
	5520	11.00	10.19	10.15	10.12	10.08	10.05	10.03	10.07	10.03
	5540	11.00	10.28	10.25	10.21	10.17	10.13	10.09	10.04	10.01
	5560	11.00	10.18	10.12	10.13	10.08	10.11	10.06	10.04	10.00
	5580	11.00	10.30	10.28	10.27	10.24	10.18	10.12	10.06	10.03
	5600	11.00	10.13	10.15	10.12	10.17	10.09	10.08	10.04	10.02
	5620	11.00	10.21	10.22	10.18	10.17	10.13	10.14	10.06	10.05
	5640	11.00	10.26	10.23	10.24	10.23	10.17	10.14	10.13	10.07
	5660	11.00	10.20	10.25	10.21	10.17	10.12	10.08	10.07	10.04
	5680	11.00	10.25	10.23	10.18	10.15	10.12	10.06	10.03	10.02
	5700	11.00	10.21	10.24	10.22	10.16	10.13	10.17	10.08	10.06
	5745	11.00	10.29	10.24	10.28	10.23	10.22	10.19	10.12	10.06
	5785	11.00	10.31	10.28	10.24	10.26	10.23	10.16	10.09	10.04
	5825	11.00	10.36	10.32	10.26	10.22	10.12	10.14	10.08	10.06

WiFi 5G	Frequency (MHz)	Tune-up	Average Power (dBm) for Data Rates (Mbps)							
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11 N40	5190	11.00	10.29	10.25	10.19	10.15	10.13	10.11	10.08	10.07
	5230	11.00	10.28	10.24	10.23	10.21	10.14	10.11	10.06	10.04
	5270	11.00	10.02	9.98	9.76	9.69	9.57	9.46	9.35	9.28
	5310	11.00	10.15	10.04	9.89	9.72	9.66	9.52	9.46	9.38
	5510	11.00	10.51	10.38	10.23	10.19	10.01	9.83	9.76	9.59
	5550	11.00	10.29	10.12	10.01	9.84	9.76	9.63	9.52	9.41
	5590	11.00	10.13	10.03	9.98	9.82	9.71	9.68	9.52	9.38
	5630	11.00	10.01	9.87	9.63	9.51	9.38	9.23	9.15	9.01
	5670	11.00	9.57	9.36	9.21	9.16	9.01	8.97	8.76	8.59
	5755	11.00	10.29	10.27	10.21	10.17	10.15	10.12	10.09	10.02
	5795	11.00	10.30	10.17	10.02	9.92	9.83	9.71	9.66	9.53

WiFi 5G	Frequency (MHz)	Tune-up	Average Power (dBm) for Data Rates (Mbps)							
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11 AC20	5180	11.00	10.60	10.56	10.52	10.47	10.42	10.35	10.31	10.21
	5200	11.00	10.61	10.57	10.54	10.43	10.41	10.35	10.32	10.27
	5220	11.00	10.68	10.63	10.56	10.47	10.42	10.37	10.32	10.24
	5240	11.00	10.58	10.55	10.46	10.43	10.39	10.35	10.27	10.23
	5260	11.00	10.51	10.45	10.34	10.31	10.23	10.19	10.12	10.03
	5280	11.00	10.32	10.28	10.23	10.18	10.13	10.08	10.02	9.97
	5300	11.00	10.60	10.54	10.43	10.35	10.32	10.26	10.21	10.13
	5320	11.00	10.38	10.34	10.25	10.21	10.14	10.12	10.04	9.93
	5500	11.00	10.39	10.34	10.29	10.22	10.18	10.14	10.07	10.02
	5520	11.00	10.27	10.24	10.21	10.16	10.13	10.06	10.02	9.94
	5540	11.00	10.32	10.28	10.25	10.21	10.18	10.14	10.11	10.04
	5560	11.00	10.35	10.32	10.25	10.21	10.15	10.12	10.06	10.02
	5580	11.00	10.16	10.12	10.08	10.05	10.02	10.00	9.96	9.93
	5600	11.00	10.21	10.18	10.15	10.12	10.09	10.05	10.01	9.92
	5620	11.00	10.25	10.22	10.19	10.15	10.11	10.06	10.03	10.00
	5640	11.00	10.18	10.15	10.11	10.08	10.04	10.01	9.97	9.93
	5660	11.00	10.12	10.10	10.06	10.02	10.01	9.98	9.96	9.93
	5680	11.00	10.23	10.21	10.19	10.15	10.12	10.07	10.04	10.02
	5700	11.00	10.00	10.08	10.04	10.02	9.97	9.94	9.93	9.91
	5745	11.00	10.32	10.31	10.28	10.25	10.23	10.21	10.18	10.12
	5785	11.00	10.13	10.11	10.08	10.04	10.01	9.97	9.94	9.92
	5825	11.00	10.19	10.15	10.12	10.07	10.05	10.03	10.01	9.98

WiFi 5G	Frequency (MHz)	Tune-up	Average Power (dBm) for Data Rates (Mbps)							
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11 AC40	5190	11.00	10.35	10.32	10.28	10.25	10.20	10.16	10.12	10.06
	5230	11.00	10.54	10.38	10.21	10.16	10.02	9.88	9.76	9.63
	5270	11.00	10.05	9.89	9.60	9.45	9.32	9.27	9.15	9.08
	5310	11.00	10.18	10.03	9.93	9.86	9.63	9.49	9.32	9.20
	5510	11.00	10.28	10.11	10.02	9.86	9.63	9.37	9.21	9.03
	5550	11.00	10.33	10.21	10.14	10.01	9.88	9.64	9.52	9.39
	5590	11.00	10.30	10.18	10.03	9.93	9.79	9.64	9.52	9.39
	5630	11.00	10.15	10.02	9.93	9.59	9.35	9.27	9.16	9.03
	5670	11.00	9.71	9.58	9.39	9.23	9.16	9.05	8.97	8.79
	5755	11.00	10.22	10.12	10.01	9.79	9.65	9.38	9.20	9.19
	5795	11.00	10.25	10.13	10.01	9.88	9.63	9.51	9.38	9.22

WiFi 5G	Frequency (MHz)	Tune-up	Average Power (dBm) for Data Rates (Mbps)							
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11 AC80	5210	11.00	9.64	9.56	9.53	9.43	9.47	9.36	9.34	9.32
	5290	11.00	9.74	9.72	9.67	9.63	9.57	9.55	9.43	9.41
	5530	11.00	9.98	9.89	9.85	9.82	9.76	9.74	9.72	9.67
	5610	11.00	10.12	10.07	10.03	10.01	9.98	9.84	9.83	9.78
	5775	11.00	10.25	10.23	10.18	10.15	10.12	10.04	10.02	9.93

8.1.3 CONDUCTED POWER MEASUREMENTS OF BT

BT 2450 MHz	Average Conducted Power (dBm)			Tune Up
	CH0	CH39	CH78	
DH5	4.1	4.58	2.42	6
2DH5	2.65	2.82	0.5	6
3DH5	3.09	3.32	1.06	6

BT 2450 MHz	Average Conducted Power (dBm)			Tune Up
	CH0	CH19	CH39	
BT (4.0)	5.28	5.92	3.31	6

Note:

1) The conducted power of BT is measured with RMS detector.

8.2 SAR TEST RESULTS

General Notes:

- 1) Per KDB447498 D01v05r02, all measurement SAR results are scaled to the maximum tune-up tolerance limit to demonstrate compliant.
- 2) Per KDB447498 D01v05r02, testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is: ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz. When the maximum output power variation across the required test channels is $> \frac{1}{2}$ dB, instead of the middle channel, the highest output power channel must be used.
- 3) Per KDB865664 D01v01r03, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/Kg; if the deviation among the repeated measurement is $\leq 20\%$, and the measured SAR < 1.45 W/Kg, only one repeated measurement is required.
- 4) Per KDB648474 D04v01r02, SAR is evaluated without a headset connected to the device. When the standalone reported Body SAR is ≤ 1.2 W/kg, no additional SAR evaluations using a headset are required.
- 5) Per KDB865664 D02v01r01, SAR plot is only required for the highest measured SAR in each exposure configuration, wireless mode and frequency band combination; Plots are also required when the measured SAR is > 1.5 W/kg, or > 7.0 W/kg for occupational exposure. The published RF exposure KDB procedures may require additional plots; for example, to support SAR to peak location separation ratio test exclusion and/or volume scan post-processing.

WLAN Notes:

Per KDB248227D01v01r02 and October 2012/April 2013 FCC/TCB workshop meeting notes:

- 1) For WiFi 2.4GHz, highest average RF output power channel for the lowest data rate of 802.11b mode was selected for SAR evaluation. SAR test at higher data rates and higher order modulations (including 802.11g/n) were not required since the maximum average output power for each of these configurations is not more than 1/4dB higher than the tested channel for the lowest data rate of 802.11b mode.
- 2) For 5GHz, SAR is not required for 802.11n(20M)/ n(40M)/ ac(80M), due to the maximum average output power is less than 1/4dB higher than that measured on the corresponding 802.11a channels.

8.2.1 SAR MEASUREMENT RESULT OF WiFi 2.4G

Body SAR test results of WiFi 2.4G Distance=0mm									
Mode	Test Position	CH	Freq.	Drift (dB)	Power(dBm)		SAR Value (W/kg)1-g	Reported SAR	Graph Results
					Tune up	Conducted			
802.11b	2 Back	11	2462	0	18	17.76	0.526	0.556	1
	4 Right	11	2462	0.09	18	17.76	0.727	0.768	2
	5 Top	11	2462	0.06	18	17.76	0.735	0.777	3

8.2.2 SAR MEASUREMENT RESULT OF WiFi 5G

Body SAR test results of WiFi 5G Distance=0mm									
Mode	Test Position	CH	Freq.	Drift (dB)	Power(dBm)		SAR Value (W/kg)1-g	Reported SAR	Graph Results
					Tune up	Conducted			
802.11a Band1	2 Back	44	5200	0	11	10.82	0.063	0.066	4
	4 Right	44	5200	0.01	11	10.82	0.024	0.025	5
	5 Top	44	5200	0.05	11	10.82	0.762	0.794	6
802.11a Band2	2 Back	64	5320	0	11	10.69	0.067	0.072	7
	4 Right	64	5320	0.01	11	10.69	0.039	0.042	8
	5 Top	64	5320	0.04	11	10.69	0.92	0.988	9
	5 Top	52	5260	0.01	11	10.62	0.703	0.767	10
	5 Top	56	5280	0.09	11	10.57	0.826	0.912	11
	5 Top	60	5300	0.05	11	10.68	0.823	0.886	12
802.11a Band3	2 Back	100	5500	0	11	10.43	0.068	0.078	13
	4 Right	100	5500	0.01	11	10.43	0.042	0.048	14

	5 Top	100	5500	0.06	11	10.43	0.966	1.101	15
	5 Top	104	5520	0.07	11	10.38	0.957	1.104	17
	5 Top	108	5540	0.08	11	10.32	0.998	1.167	18
	5 Top	112	5560	0.04	11	10.21	0.974	1.168	19
	5 Top	116	5580	0.04	11	10.37	0.987	1.141	20
	5 Top	120	5600	0	11	10.32	0.996	1.165	21
	5 Top	124	5620	0.02	11	10.31	1.01	1.184	22
	5 Top	128	5640	0.03	11	10.28	0.999	1.179	23
	5 Top	132	5660	0.09	11	10.22	0.947	1.133	24
	5 Top	136	5680	0.08	11	10.33	0.964	1.125	25
	5 Top	140	5700	0.09	11	10.31	1.02	1.196	26
802.11a Band4	2 Back	165	5825	0	11	10.52	0.118	0.132	27
	4 Right	165	5825	0	11	10.52	0.079	0.088	28
	5 Top	165	5825	0.04	11	10.52	0.829	0.926	29
	5 Top	149	5745	0.01	11	10.3	0.831	0.976	30
	5 Top	153	5765	0.07	11	10.38	0.908	1.047	31
	5 Top	157	5785	0.09	11	10.39	0.563	0.648	32
	5 Top	161	5805	0.08	11	10.43	0.885	1.009	33
Repeat SAR Test at worst position									
802.11a Band2	5 Top	64	5320	0.02	11	10.69	0.861	0.925	34
802.11a Band3	5 Top	140	5700	0.01	11	10.31	0.935	1.096	35
802.11a Band4	5 Top	153	5765	0.07	11	10.38	0.822	0.948	37
Worst condition with 802.11 AC80									
802.11AC80 Band1	5 Top	42	5210	0.09	11	9.64	0.252	0.345	38
802.11AC80 Band2	5 Top	58	5290	0.08	11	9.74	0.338	0.452	39
802.11AC80 Band3	5 Top	122	5610	0.02	11	10.12	0.644	0.789	40
802.11AC80 Band4	5 Top	155	5775	0.01	11	10.25	0.646	0.768	41

8.3 MULTIPLE TRANSMITTER EVALUATION

8.3.1 About BT and WiFi antenna

WiFi antenna and BT antenna cannot transmit simultaneously, so the simultaneous SAR are not required for WIFI and BT antenna.

APPENDIX

1. Test Layout

Specific Absorption Rate Test Layout

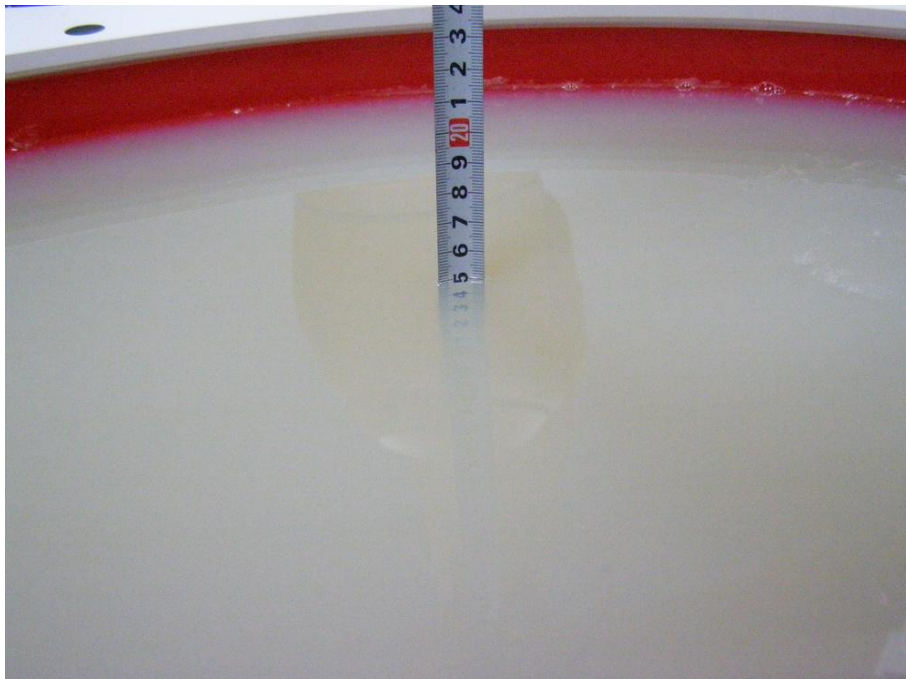


Liquid depth in the flat Phantom ($\geq 15\text{cm}$ depth)

Body 2450MHz 15.3cm



Body 5GHz 15.1cm



2. System Check Plots

Date/Time: 04/28/2015 16:06:35

Test Laboratory: BTL Inc.

System Performance Check Body 2450 MHz

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:919

Communication System: UID 0, CW (0); Frequency: 2450 MHz

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.92$ S/m; $\epsilon_r = 52.672$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.60, 7.60, 7.60); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

System Performance Check at 2450MHz/d=10mm, Pin=250 mW, dist=2.0mm (EX-Probe)/Area Scan (5x7x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 18.87 W/kg

System Performance Check at 2450MHz/d=10mm, Pin=250 mW, dist=2.0mm

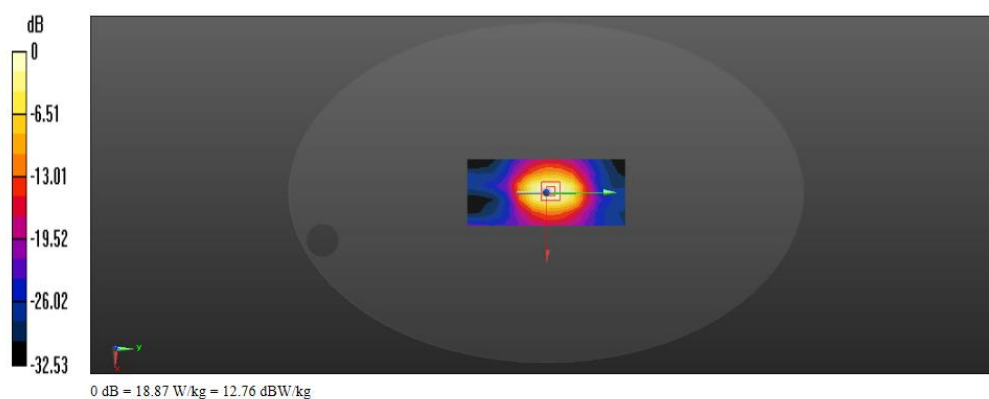
(EX-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 97.264 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 25.56 W/kg

SAR(1 g) = 12.67 W/kg; SAR(10 g) = 5.96 W/kg

Maximum value of SAR (measured) = 19.25 W/kg



Date/Time: 05/07/2015 08:15:21

Test Laboratory: BTL Inc.

SystemPerformanceCheck-5200MHz Body

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1160

Communication System: UID 0, CW (0); Frequency: 5200 MHz

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.25$ S/m; $\epsilon_r = 49.018$; $\rho = 996$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(5.17, 5.17, 5.17); Calibrated: 01/30/2015;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

System Check MSL 5200/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 12.26 W/kg

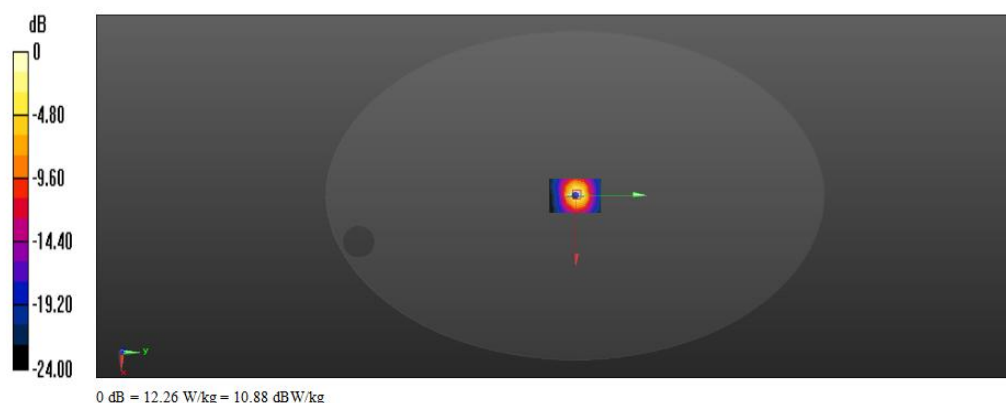
System Check MSL 5200/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 37.254 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 27.54 W/kg

SAR(1 g) = 7.54 W/kg; SAR(10 g) = 2.10 W/kg

Maximum value of SAR (measured) = 14.25 W/kg



Date/Time: 05/07/2015 20:42:32

Test Laboratory: BTL Inc.

SystemPerformanceCheck-5300MHz Body

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1160

Communication System: UID 0, CW (0); Frequency: 5300 MHz
 Medium parameters used: $f = 5300$ MHz; $\sigma = 5.38$ S/m; $\epsilon_r = 48.867$; $\rho = 996$ kg/m³
 Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.97, 4.97, 4.97); Calibrated: 01/30/2015;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

System Check MSL 5300/Area Scan (6x6x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
 Maximum value of SAR (measured) = 13.56 W/kg

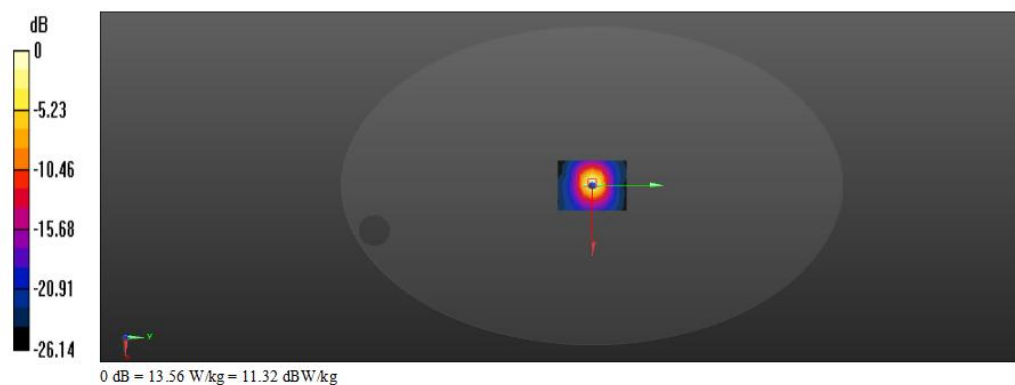
System Check MSL 5200/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 37.651 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 25.54 W/kg

SAR(1 g) = 7.59 W/kg; SAR(10 g) = 2.16 W/kg

Maximum value of SAR (measured) = 13.72 W/kg



Date/Time: 05/08/2015 07:19:26

Test Laboratory: BTL Inc.

SystemPerformanceCheck-5500 Body

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1160

Communication System: UID 0, CW (0); Frequency: 5500 MHz
Medium parameters used: $f = 5500$ MHz; $\sigma = 5.62$ S/m; $\epsilon_r = 48.565$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.54, 4.54, 4.54); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Configuration 2/System Check MSL 5500/Area Scan (6x6x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 12.28 W/kg

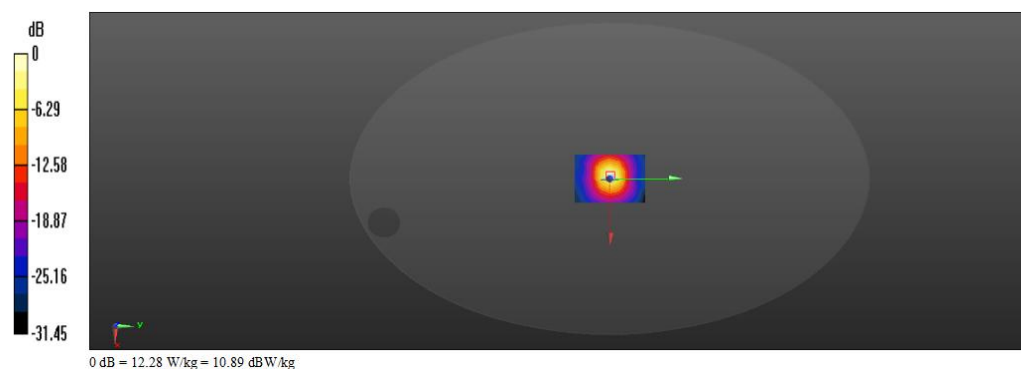
Configuration 2/System Check MSL 5500/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 33.628 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 28.87 W/kg

SAR(1 g) = 8.07 W/kg; SAR(10 g) = 2.24 W/kg

Maximum value of SAR (measured) = 13.54 W/kg



Date/Time: 05/08/2015 17:45:37

Test Laboratory: BTL Inc.

SystemPerformanceCheck-5600MHz Body

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1160

Communication System: UID 0, CW (0); Frequency: 5600 MHz
Medium parameters used: $f = 5600$ MHz; $\sigma = 5.72$ S/m; $\epsilon_r = 48.458$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.47, 4.47, 4.47); Calibrated: 01/30/2014;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Configuration 2/System Check MSL 5600/Area Scan (6x6x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 12.35 W/kg

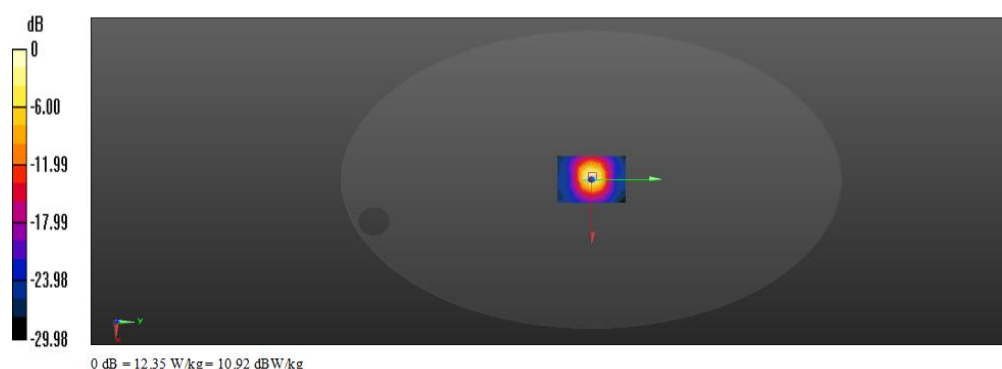
Configuration 2/System Check MSL 5600/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 33.548 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 32.586W/kg

SAR(1 g) = 8.45 W/kg; SAR(10 g) = 2.35 W/kg

Maximum value of SAR (measured) = 15.4 W/kg



Date/Time: 05/09/2015 08:25:55

Test Laboratory: BTL Inc.

SystemPerformanceCheck-5800MHz Body

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1160

Communication System: UID 0, CW (0); Frequency: 5800 MHz

Medium parameters used: $f = 5800$ MHz; $\sigma = 5.95$ S/m; $\epsilon_r = 48.168$; $\rho = 996$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.50, 4.50, 4.50); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Configuration 2/System Check MSL 5800GHz/Area Scan (8x8x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 12.27 W/kg

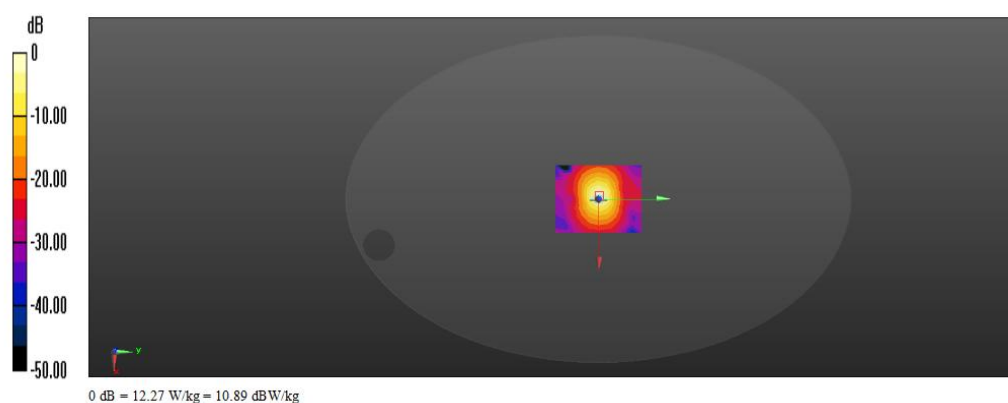
Configuration 2/System Check MSL 5800GHz/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 31.568V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 29.1 W/kg

SAR(1 g) = 7.37 W/kg; SAR(10 g) = 2.05 W/kg

Maximum value of SAR (measured) = 12.54 W/kg



3.SAR Measurement Plots

Date/Time: 04/28/2015 16:38:46

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11b 2462MHz CH 11 Test Position 2 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11b WiFi 2.4GHz (DSSS,1Mbps) (0); Frequency: 2462 MHz

Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 2.048$ S/m; $\epsilon_r = 50.622$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.6, 7.6, 7.6); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 2 0mm/M2-801W/Area Scan (17x26x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 0.711 W/kg

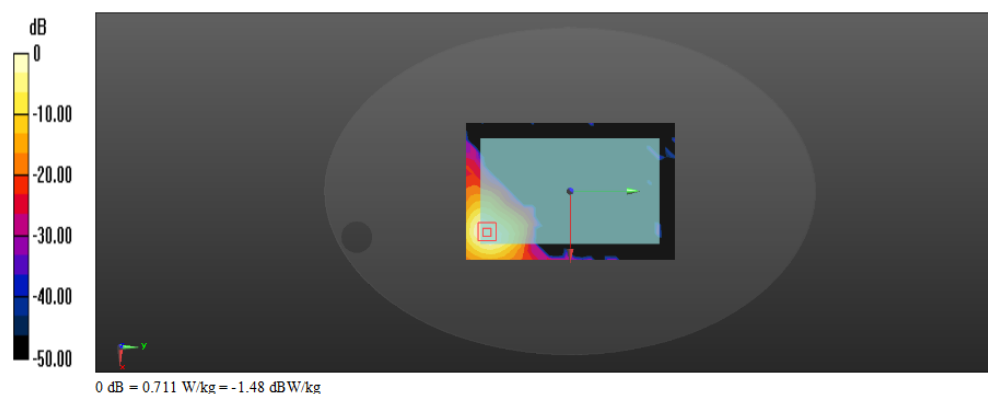
Test Position 2 0mm/M2-801W/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 0 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.21 W/kg

SAR(1 g) = 0.526 W/kg; SAR(10 g) = 0.244 W/kg

Maximum value of SAR (measured) = 0.965 W/kg



Date/Time: 04/28/2015 17:43:22

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11b 2462MHz CH 11 Test Position 4 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11b WiFi 2.4GHz (DSSS,1Mbps) (0); Frequency: 2462 MHz

Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 2.048$ S/m; $\epsilon_r = 50.622$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.6, 7.6, 7.6); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 4 0mm/M2-801W/Area Scan (6x26x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 1.03 W/kg

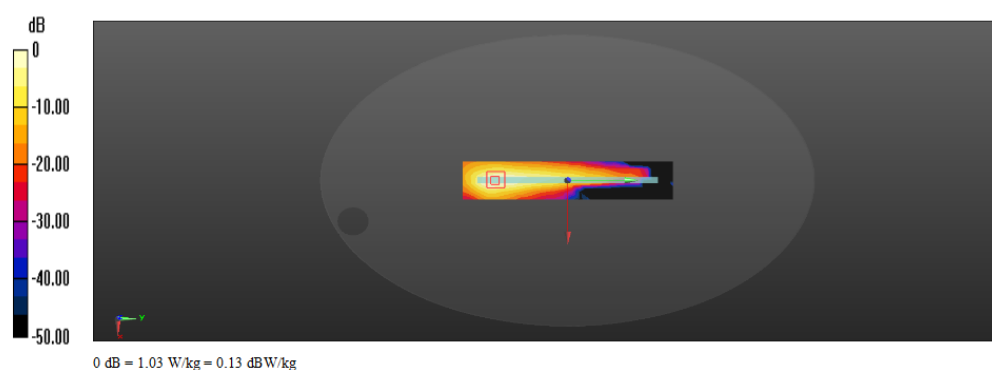
Test Position 4 0mm/M2-801W/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 7.589 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 2.36 W/kg

SAR(1 g) = 0.727 W/kg; SAR(10 g) = 0.383 W/kg

Maximum value of SAR (measured) = 1.79 W/kg



Date/Time: 04/28/2015 19:35:42

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11b 2462MHz CH 11 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

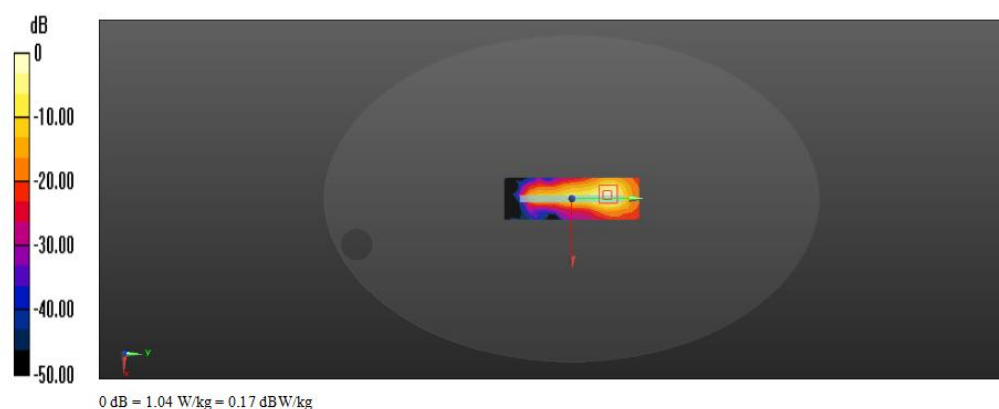
Communication System: UID 0, IEEE 802.11b WiFi 2.4GHz (DSSS,1Mbps) (0); Frequency: 2462 MHz
Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 2.048$ S/m; $\epsilon_r = 50.622$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.6, 7.6, 7.6); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5 0mm/M2-801W/Area Scan (6x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 1.04 W/kg

Test Position 5 0mm/M2-801W/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm
Reference Value = 9.887 V/m; Power Drift = 0.36 dB
Peak SAR (extrapolated) = 3.86 W/kg
SAR(1 g) = 0.735 W/kg; SAR(10 g) = 0.441 W/kg
Maximum value of SAR (measured) = 2.72 W/kg



Date/Time: 05/07/2015 15:11:35

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band1 5200MHz CH44 Test Position 2 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

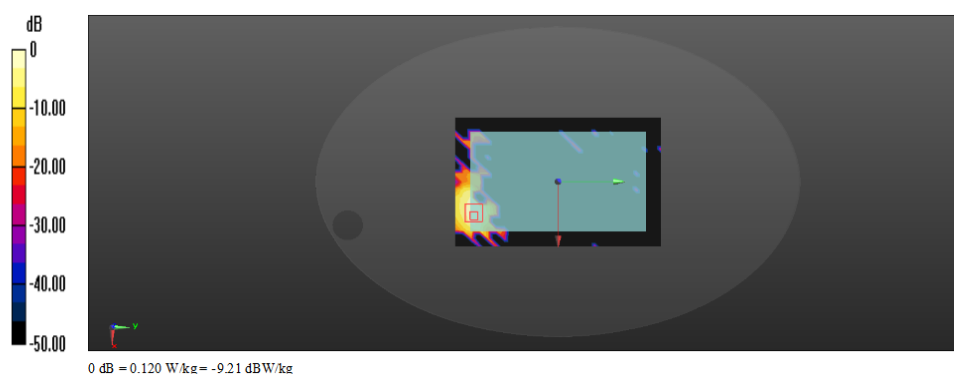
Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5200 MHz
Medium parameters used: $f = 5200 \text{ MHz}$; $\sigma = 5.4 \text{ S/m}$; $\epsilon_r = 51$; $\rho = 996 \text{ kg/m}^3$
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(5.17, 5.17, 5.17); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 2/M2-801W/Area Scan (17x26x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 0.120 W/kg

Test Position 2/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$
Reference Value = 0 V/m ; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.324 W/kg
SAR(1 g) = 0.063 W/kg ; SAR(10 g) = 0.020 W/kg
Maximum value of SAR (measured) = 0.167 W/kg



Date/Time: 05/07/2015 16:38:39

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band1 5200MHz CH44 Test Position 4 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

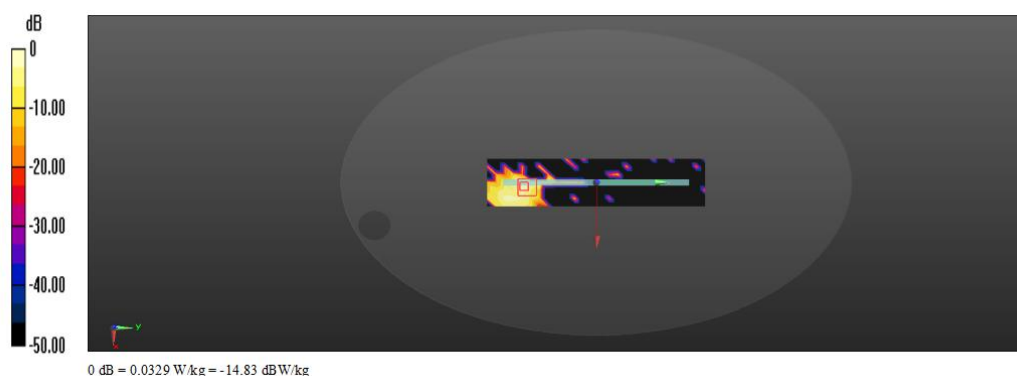
Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5200 MHz
Medium parameters used: $f = 5200$ MHz; $\sigma = 5.4$ S/m; $\epsilon_r = 51$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(5.17, 5.17, 5.17); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 4/M2-801W/Area Scan (7x26x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 0.0329 W/kg

Test Position 4/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm
Reference Value = 0 V/m; Power Drift =0.01 dB
Peak SAR (extrapolated) = 0.147 W/kg
SAR(1 g) = 0.024 W/kg; SAR(10 g) = 0.00541 W/kg
Maximum value of SAR (measured) = 0.0941 W/kg



Date/Time: 05/07/2015 08:49:51

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band1 5200MHz CH44 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

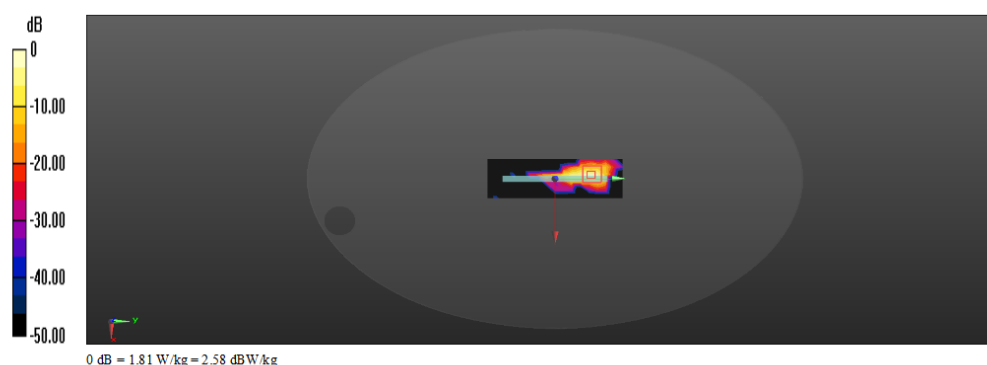
Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5200 MHz
Medium parameters used: $f = 5200 \text{ MHz}$; $\sigma = 5.4 \text{ S/m}$; $\epsilon_r = 51$; $\rho = 996 \text{ kg/m}^3$
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(5.17, 5.17, 5.17); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (6x17x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 1.81 W/kg

Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$,
 $dz=2\text{mm}$
Reference Value = 2.062 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 5.24 W/kg
SAR(1 g) = 0.762 W/kg; SAR(10 g) = 0.185 W/kg
Maximum value of SAR (measured) = 2.35 W/kg



Date/Time: 05/07/2015 17:39:52

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 2 5320MHz CH64 Test Position 2 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

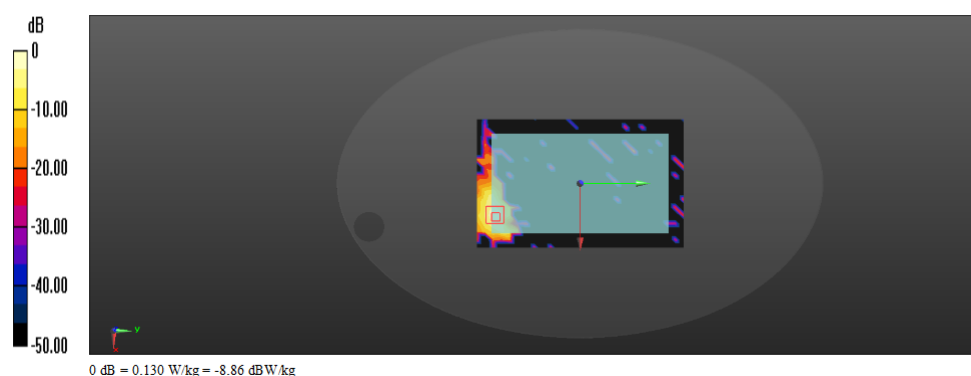
Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5320 MHz
Medium parameters used (interpolated): $f = 5320$ MHz; $\sigma = 5.572$ S/m; $\epsilon_r = 50.04$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.97, 4.97, 4.97); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 2/M2-801W/Area Scan (17x26x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 0.130 W/kg

Test Position 2/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm
Reference Value = 0 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.315 W/kg
SAR(1 g) = 0.067 W/kg; SAR(10 g) = 0.019 W/kg
Maximum value of SAR (measured) = 0.194 W/kg



Date/Time: 05/07/2015 19:12:16

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 2 5320MHz CH64 Test Position 4 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

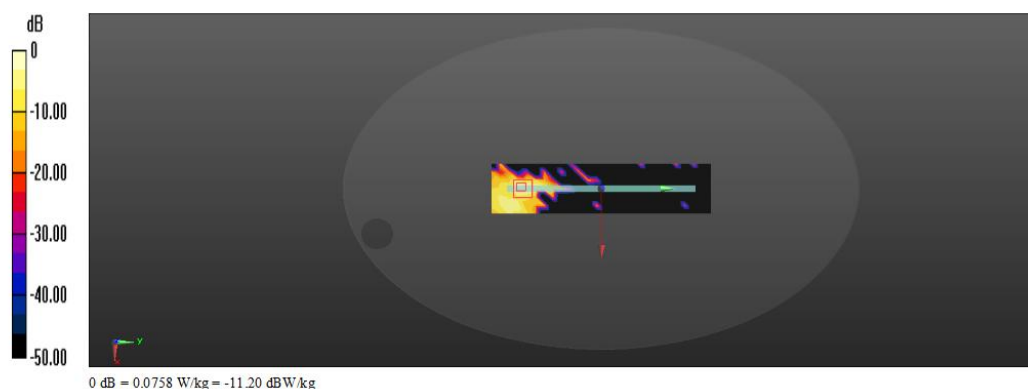
Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5320 MHz
Medium parameters used (interpolated): $f = 5320$ MHz; $\sigma = 5.572$ S/m; $\epsilon_r = 50.04$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.97, 4.97, 4.97); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 4/M2-801W/Area Scan (7x26x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 0.0758 W/kg

Test Position 4/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm
Reference Value = 0.154 V/m; Power Drift =0.01 dB
Peak SAR (extrapolated) = 0.216 W/kg
SAR(1 g) = 0.039 W/kg; SAR(10 g) = 0.00878 W/kg
Maximum value of SAR (measured) = 0.131 W/kg



Date/Time: 05/07/2015 11:00:11

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 2 5320MHz CH64 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

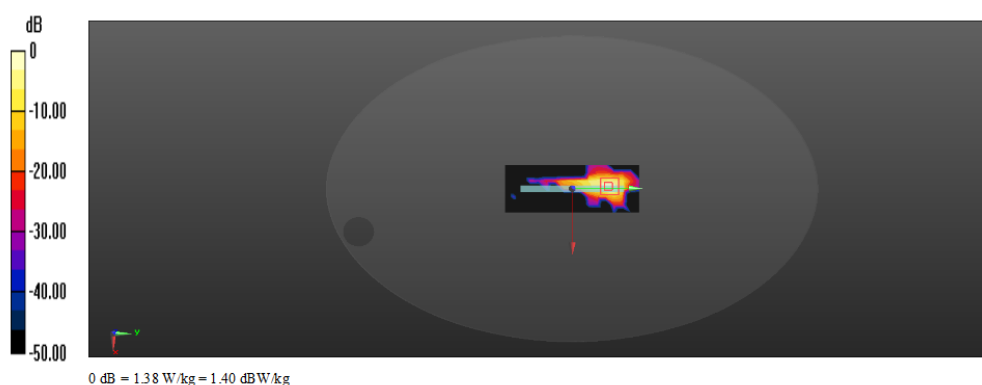
Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5320 MHz
Medium parameters used (interpolated): $f = 5320$ MHz; $\sigma = 5.572$ S/m; $\epsilon_r = 50.04$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.97, 4.97, 4.97); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 1.38 W/kg

Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm
Reference Value = 1.270 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 6.08 W/kg
SAR(1 g) = 0.920 W/kg; SAR(10 g) = 0.227 W/kg
Maximum value of SAR (measured) = 2.80 W/kg



Date/Time: 05/08/2015 10:34:20

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 2 5320MHz CH 64 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5320 MHz
Medium parameters used (interpolated): $f = 5320$ MHz; $\sigma = 5.572$ S/m; $\epsilon_r = 50.04$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.97, 4.97, 4.97); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 0.976 W/kg

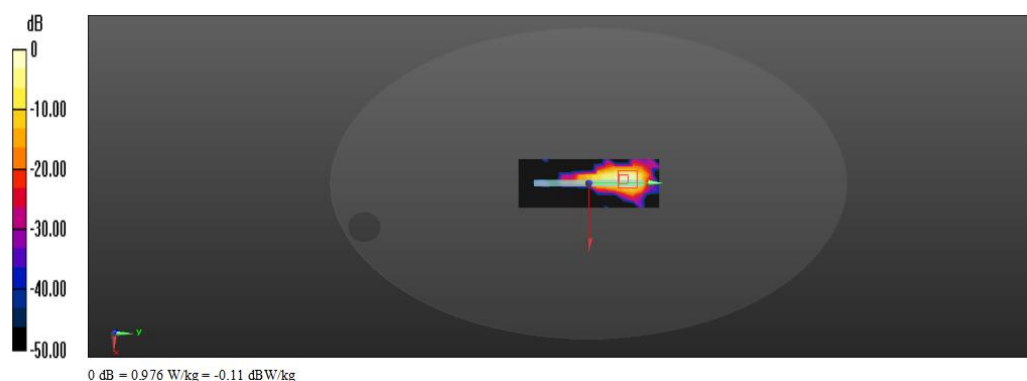
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 1.718 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 5.20 W/kg

SAR(1 g) = 0.861 W/kg; SAR(10 g) = 0.200 W/kg

Maximum value of SAR (measured) = 2.74 W/kg



Date/Time: 05/07/2015 20:09:31

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 2 5260MHz CH 52 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5260 MHz
Medium parameters used (interpolated): $f = 5260$ MHz; $\sigma = 5.472$ S/m; $\epsilon_r = 50.76$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.97, 4.97, 4.97); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 0.953 W/kg

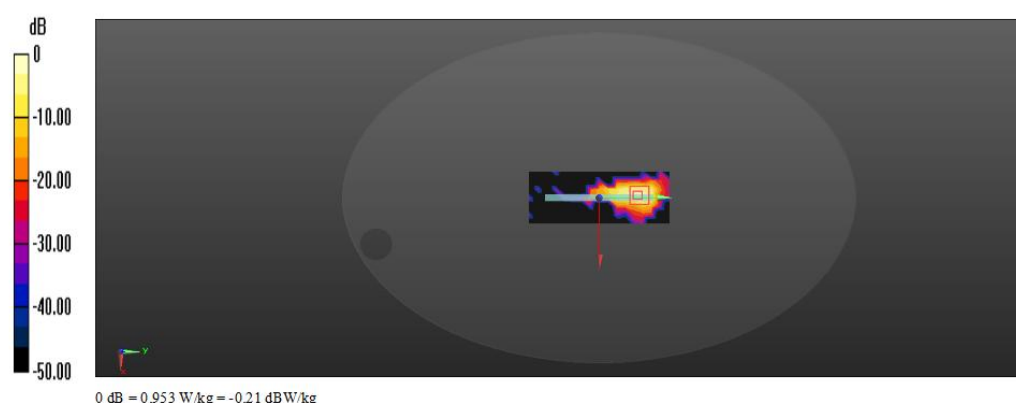
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 1.859 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 4.49 W/kg

SAR(1 g) = 0.703 W/kg; SAR(10 g) = 0.172 W/kg

Maximum value of SAR (measured) = 2.01 W/kg



Date/Time: 05/08/2015 08:23:35

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 2 5280MHz CH 56 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5280 MHz
Medium parameters used (interpolated): $f = 5280$ MHz; $\sigma = 5.516$ S/m; $\epsilon_r = 50.68$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.97, 4.97, 4.97); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 0.914 W/kg

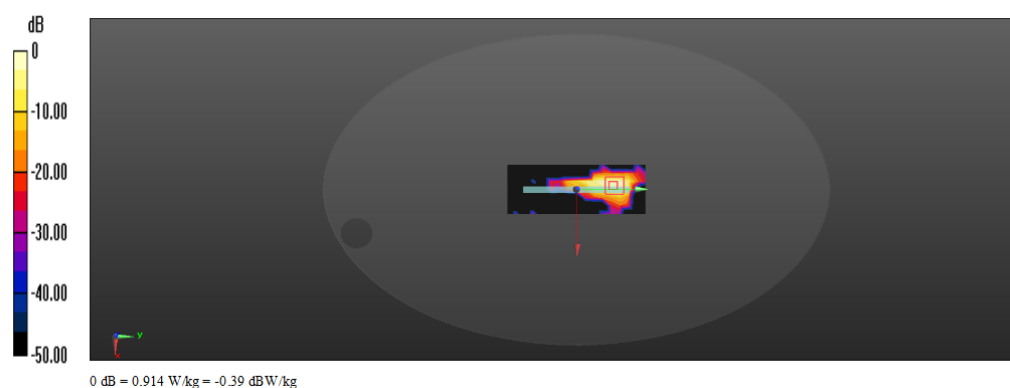
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 1.661 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 5.26 W/kg

SAR(1 g) = 0.826 W/kg; SAR(10 g) = 0.205 W/kg

Maximum value of SAR (measured) = 2.25 W/kg



Date/Time: 05/08/2015 09:14:09

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 2 5300MHz CH 60 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5300 MHz
Medium parameters used: $f = 5300 \text{ MHz}$; $\sigma = 5.56 \text{ S/m}$; $\epsilon_r = 50.6$; $\rho = 996 \text{ kg/m}^3$
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.97, 4.97, 4.97); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 1.50 W/kg

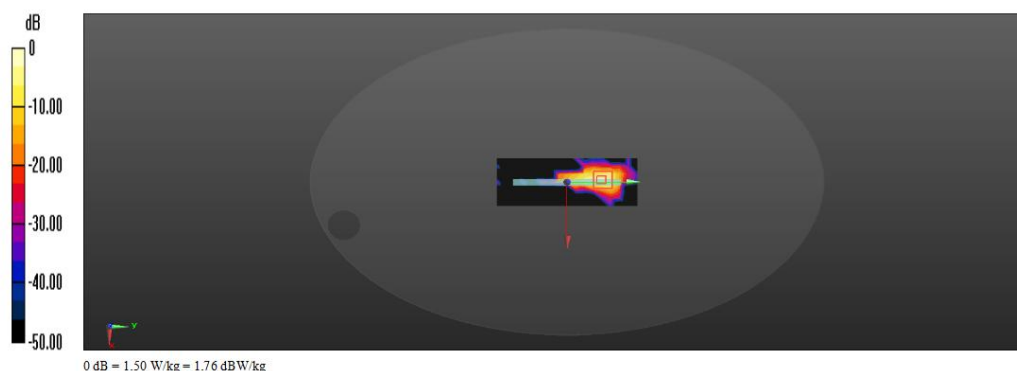
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$,
 $dz=2\text{mm}$

Reference Value = 2.029 V/m ; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 5.25 W/kg

SAR(1 g) = 0.823 W/kg ; SAR(10 g) = 0.195 W/kg

Maximum value of SAR (measured) = 2.63 W/kg



Date/Time: 05/08/2015 11:18:09

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 3 5500MHz CH 100 Test Position 2 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5500 MHz
Medium parameters used: $f = 5500$ MHz; $\sigma = 5.79$ S/m; $\epsilon_r = 48.6$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.54, 4.54, 4.54); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 2/M2-801W/Area Scan (17x26x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 0.132 W/kg

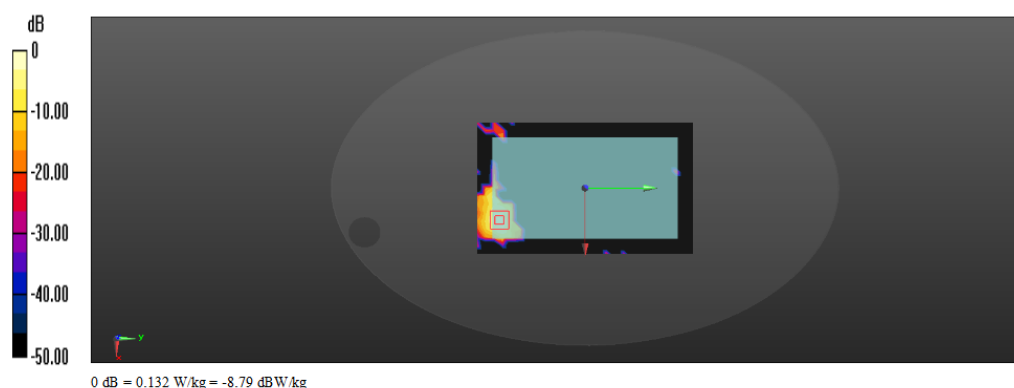
Test Position 2/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 0 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.752 W/kg

SAR(1 g) = 0.068 W/kg; SAR(10 g) = 0.017 W/kg

Maximum value of SAR (measured) = 0.207 W/kg



Date/Time: 05/08/2015 12:34:52

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 3 5500MHz CH 100 Test Position 4 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5500 MHz
Medium parameters used: $f = 5500$ MHz; $\sigma = 5.79$ S/m; $\epsilon_r = 48.6$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.54, 4.54, 4.54); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 4/M2-801W/Area Scan (7x26x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 0.113 W/kg

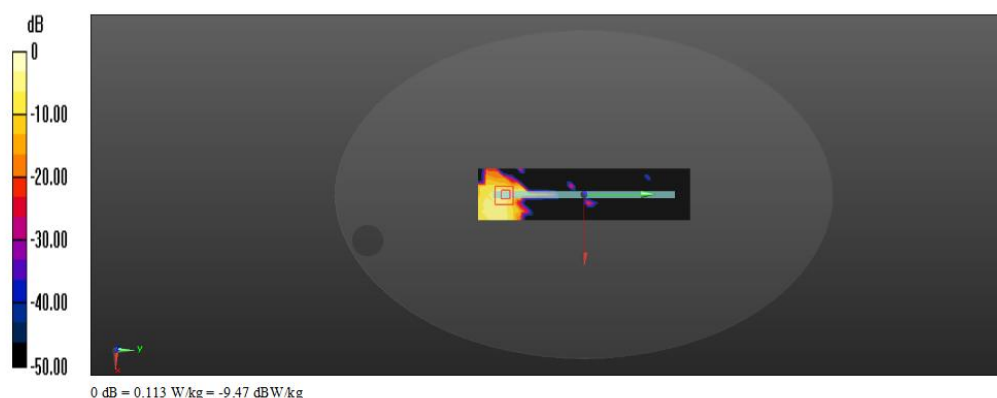
Test Position 4/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 0 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.238 W/kg

SAR(1 g) = 0.042 W/kg; SAR(10 g) = 0.00947 W/kg

Maximum value of SAR (measured) = 0.144 W/kg



Date/Time: 05/09/2015 17:46:34

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 3 5500MHz CH 100 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5500 MHz
Medium parameters used: $f = 5500$ MHz; $\sigma = 5.79$ S/m; $\epsilon_r = 48.6$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.54, 4.54, 4.54); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 1.72 W/kg

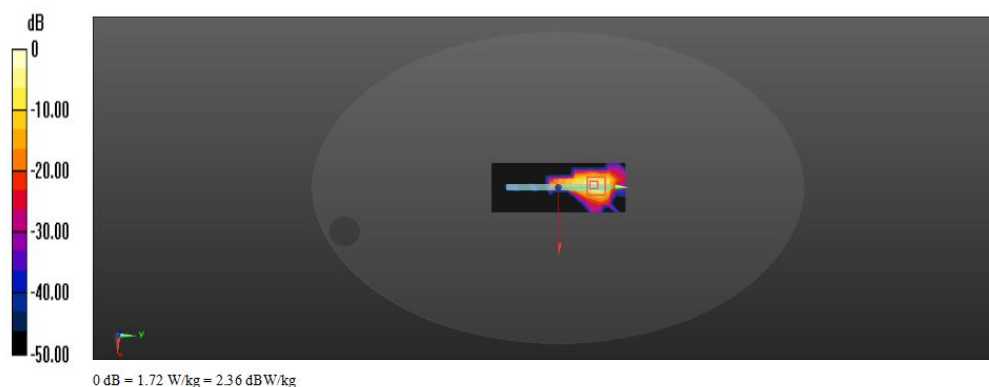
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 1.731 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 6.54 W/kg

SAR(1 g) = 0.966 W/kg; SAR(10 g) = 0.229 W/kg

Maximum value of SAR (measured) = 3.04 W/kg



Date/Time: 05/09/2015 12:34:26

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 3 5500MHz CH 100 Test Position 5 distance=0mm Repeat

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5700 MHz
Medium parameters used: $f = 5700 \text{ MHz}$; $\sigma = 6.08 \text{ S/m}$; $\epsilon_r = 48.5$; $\rho = 996 \text{ kg/m}^3$
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.54, 4.54, 4.54); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 1.52 W/kg

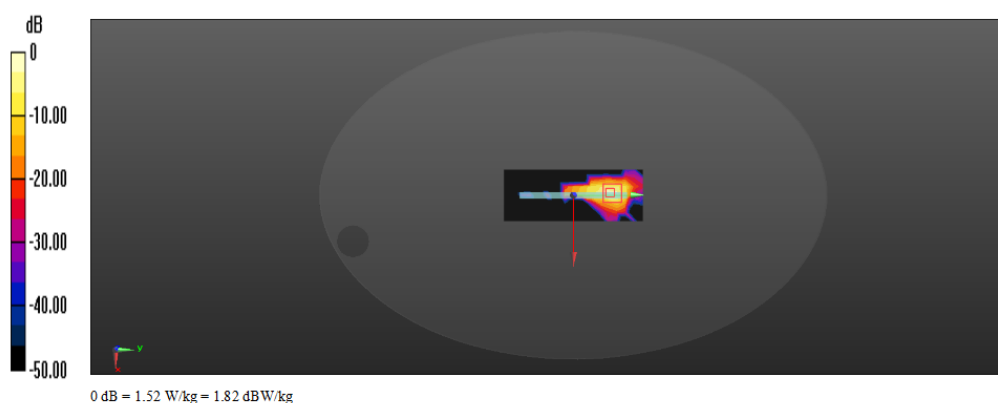
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$,
 $dz=2\text{mm}$

Reference Value = 1.652 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 6.44 W/kg

SAR(1 g) = 0.935 W/kg; SAR(10 g) = 0.252 W/kg

Maximum value of SAR (measured) = 3.21 W/kg



Date/Time: 05/08/2015 13:22:15

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 3 5520MHz CH 104 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5520 MHz
Medium parameters used (interpolated): $f = 5520$ MHz; $\sigma = 5.822$ S/m; $\epsilon_r = 48.52$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.54, 4.54, 4.54); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 1.72 W/kg

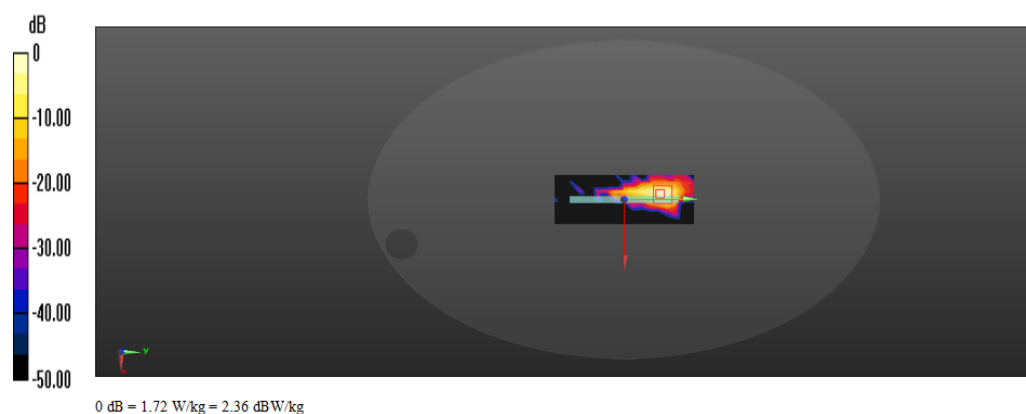
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 0.685 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 6.35 W/kg

SAR(1 g) = 0.957 W/kg; SAR(10 g) = 0.241 W/kg

Maximum value of SAR (measured) = 3.42 W/kg



Date/Time: 05/08/2015 14:02:54

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 3 5540MHz CH 108 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5540 MHz
Medium parameters used (interpolated): $f = 5540$ MHz; $\sigma = 5.854$ S/m; $\epsilon_r = 48.44$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.54, 4.54, 4.54); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 1.67 W/kg

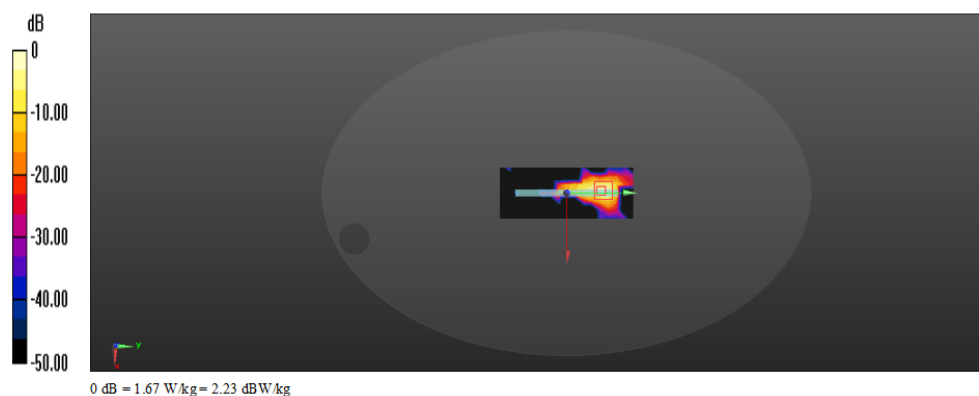
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 2.432 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 6.27 W/kg

SAR(1 g) = 0.998 W/kg; SAR(10 g) = 0.245 W/kg

Maximum value of SAR (measured) = 3.25 W/kg



Date/Time: 05/08/2015 14:47:11

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 3 5560MHz CH 112 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5560 MHz
Medium parameters used (interpolated): $f = 5560$ MHz; $\sigma = 5.902$ S/m; $\epsilon_r = 48.38$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.47, 4.47, 4.47); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 1.78 W/kg

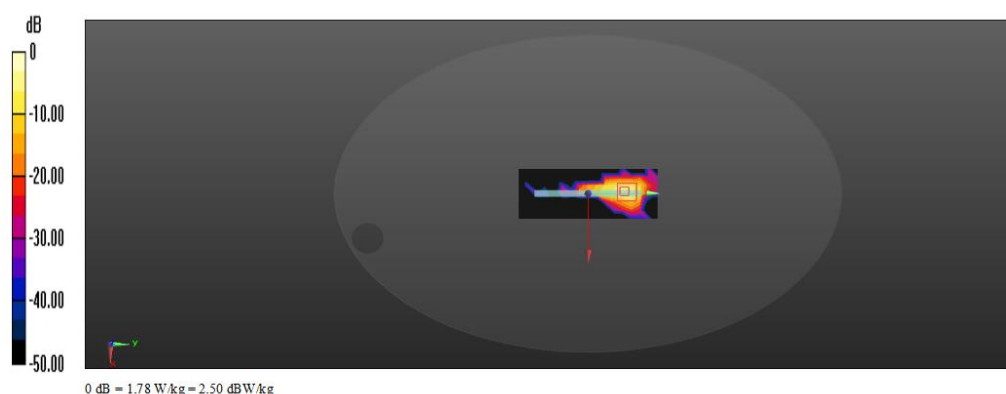
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 1.728 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 6.18 W/kg

SAR(1 g) = 0.974 W/kg; SAR(10 g) = 0.237 W/kg

Maximum value of SAR (measured) = 3.19 W/kg



Date/Time: 05/08/2015 15:35:07

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 3 5580MHz CH 116 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5580 MHz
Medium parameters used (interpolated): $f = 5580$ MHz; $\sigma = 5.966$ S/m; $\epsilon_r = 48.34$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.47, 4.47, 4.47); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 1.11 W/kg

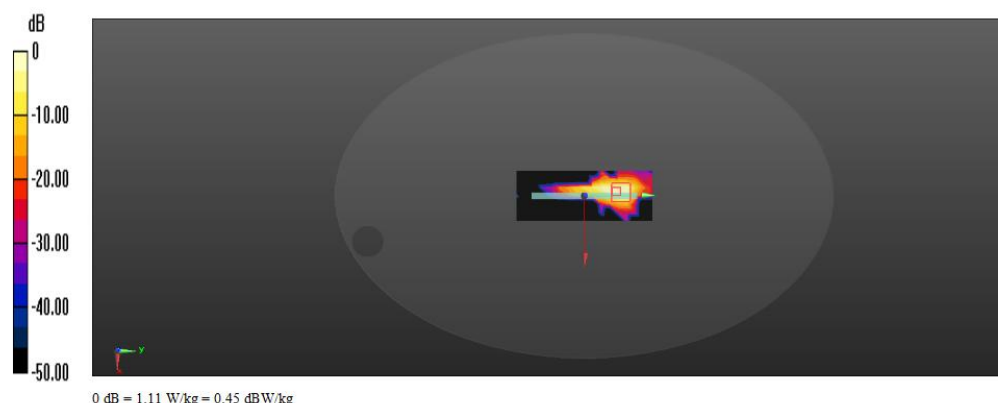
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 1.463 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 6.60 W/kg

SAR(1 g) = 0.987 W/kg; SAR(10 g) = 0.245 W/kg

Maximum value of SAR (measured) = 2.83 W/kg



Date/Time: 05/08/2015 16:23:06

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 3 5600MHz CH 120 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5600 MHz
Medium parameters used: $f = 5600$ MHz; $\sigma = 6.03$ S/m; $\epsilon_r = 48.3$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.47, 4.47, 4.47); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 1.73 W/kg

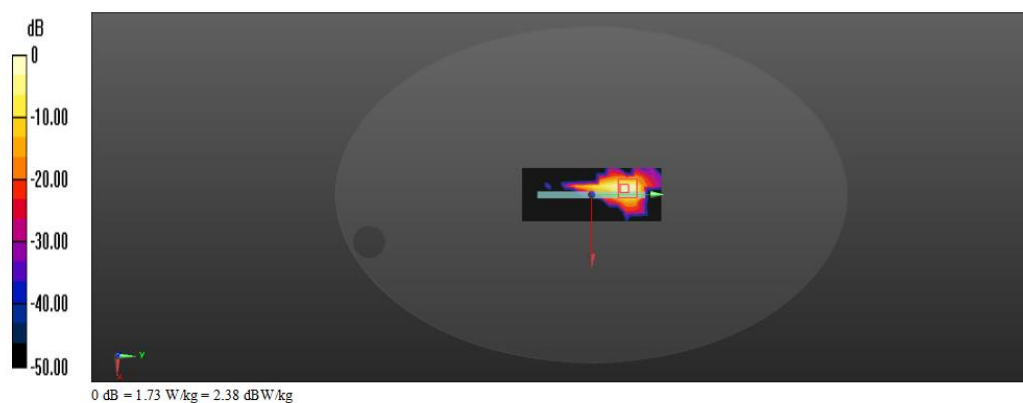
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 0 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 6.94 W/kg

SAR(1 g) = 0.996 W/kg; SAR(10 g) = 0.256 W/kg

Maximum value of SAR (measured) = 3.12 W/kg



Date/Time: 05/08/2015 17:10:59

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 3 5620MHz CH 124 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5620 MHz
Medium parameters used (interpolated): $f = 5620$ MHz; $\sigma = 6.038$ S/m; $\epsilon_r = 48.22$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.47, 4.47, 4.47); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 2.41 W/kg

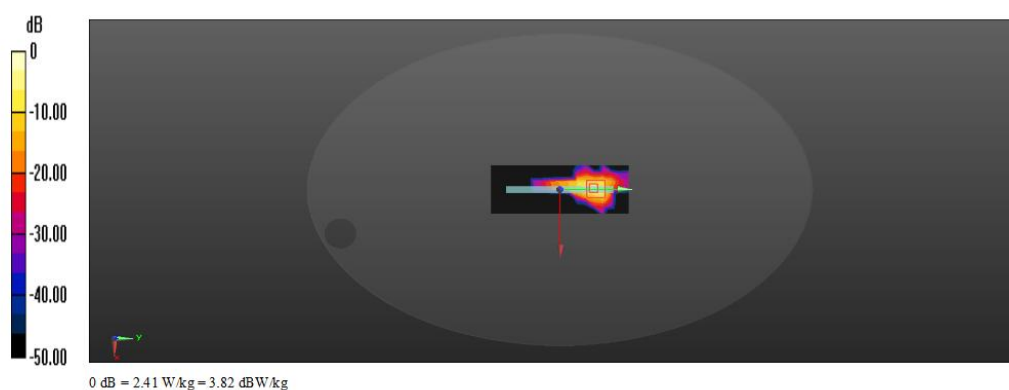
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 1.626 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 7.00 W/kg

SAR(1 g) = 1.01 W/kg; SAR(10 g) = 0.257 W/kg

Maximum value of SAR (measured) = 3.54 W/kg



Date/Time: 05/09/2015 09:02:30

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 3 5640MHz CH 128 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5640 MHz
Medium parameters used (interpolated): $f = 5640$ MHz; $\sigma = 6.046$ S/m; $\epsilon_r = 48.14$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.47, 4.47, 4.47); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 1.24 W/kg

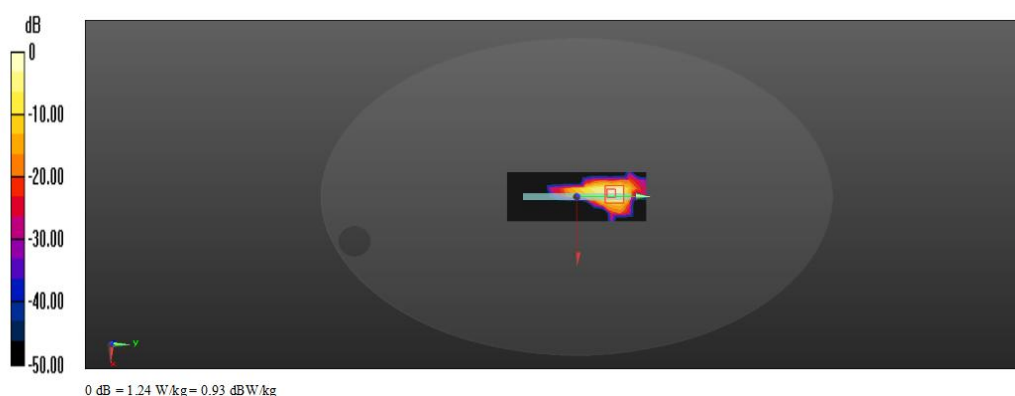
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 1.177 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 6.79 W/kg

SAR(1 g) = 0.999 W/kg; SAR(10 g) = 0.242 W/kg

Maximum value of SAR (measured) = 3.03 W/kg



Date/Time: 05/09/2015 09:52:36

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 3 5660MHz CH 132 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5660 MHz
Medium parameters used (interpolated): $f = 5660$ MHz; $\sigma = 6.056$ S/m; $\epsilon_r = 48.18$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.47, 4.47, 4.47); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 1.45 W/kg

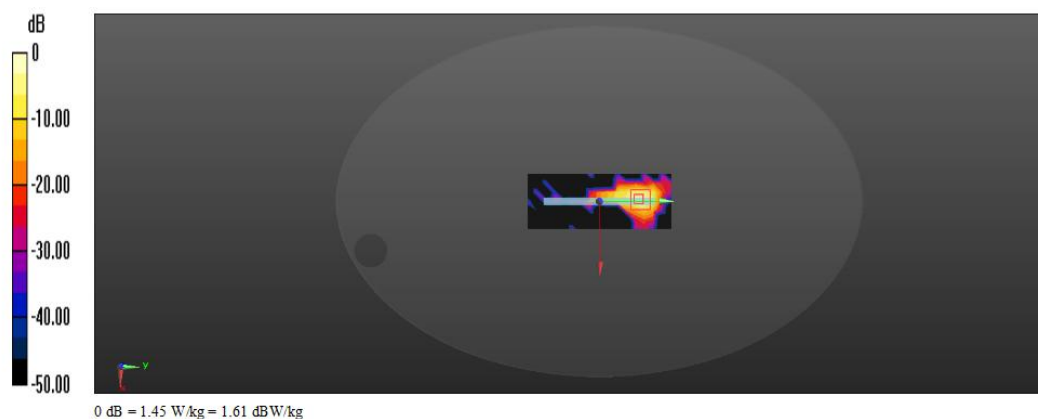
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 1.198 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 6.05 W/kg

SAR(1 g) = 0.947 W/kg; SAR(10 g) = 0.228 W/kg

Maximum value of SAR (measured) = 3.20 W/kg



Date/Time: 05/09/2015 10:54:03

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 3 5680MHz CH 136 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5680 MHz
Medium parameters used: $f = 5680$ MHz; $\sigma = 6.072$ S/m; $\epsilon_r = 48.25$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.5, 4.5, 4.5); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 1.51 W/kg

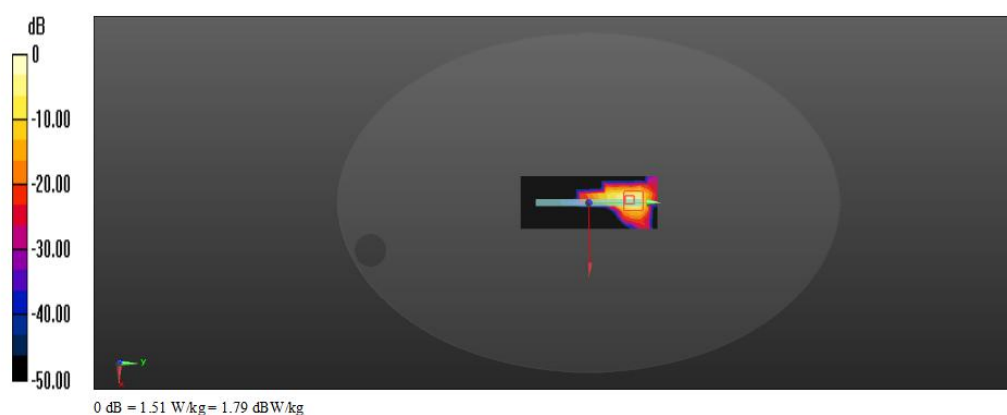
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 0.837 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 7.15 W/kg

SAR(1 g) = 0.964 W/kg; SAR(10 g) = 0.228 W/kg

Maximum value of SAR (measured) = 2.93 W/kg



Date/Time: 05/09/2015 11:42:18

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 3 5700MHz CH 140 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5700 MHz
Medium parameters used: $f = 5700$ MHz; $\sigma = 6.08$ S/m; $\epsilon_r = 48.5$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.5, 4.5, 4.5); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 1.70 W/kg

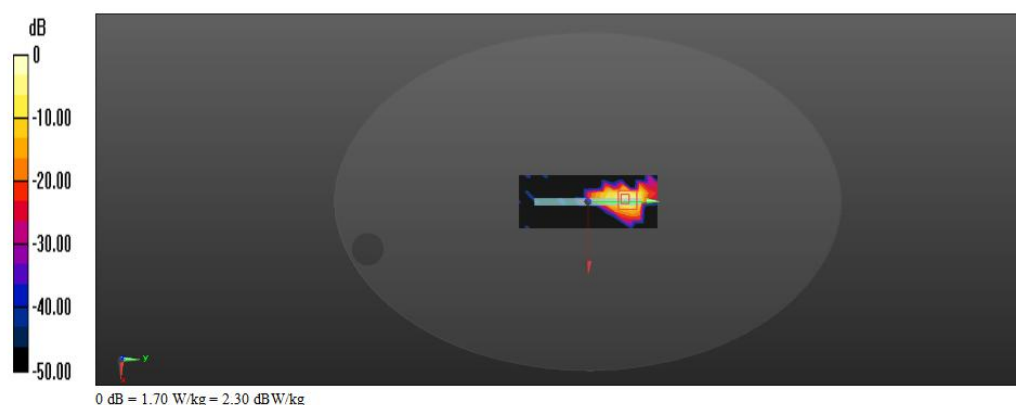
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 0.480 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 7.54 W/kg

SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.242 W/kg

Maximum value of SAR (measured) = 3.38 W/kg



Date/Time: 05/09/2015 13:55:21

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 4 5825MHz CH 165 Test Position 2 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5825 MHz
Medium parameters used (interpolated): $f = 5825$ MHz; $\sigma = 6.22$ S/m; $\epsilon_r = 48.35$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.5, 4.5, 4.5); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 2/M2-801W/Area Scan (17x26x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 0.270 W/kg

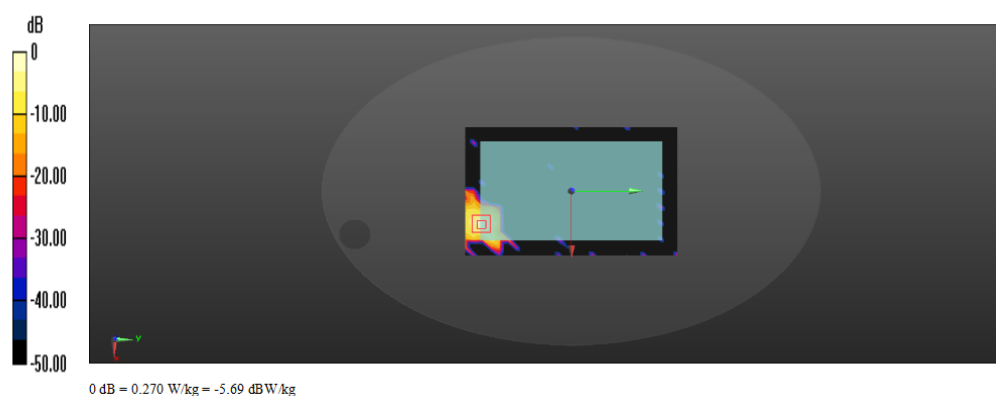
Test Position 2/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 0 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.623 W/kg

SAR(1 g) = 0.118 W/kg; SAR(10 g) = 0.031 W/kg

Maximum value of SAR (measured) = 0.353 W/kg



Date/Time: 05/09/2015 15:39:14

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 4 5825MHz CH 165 Test Position 4 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5825 MHz
Medium parameters used (interpolated): $f = 5825$ MHz; $\sigma = 6.22$ S/m; $\epsilon_r = 48.35$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.5, 4.5, 4.5); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 4/M2-801W/Area Scan (7x26x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 0.139 W/kg

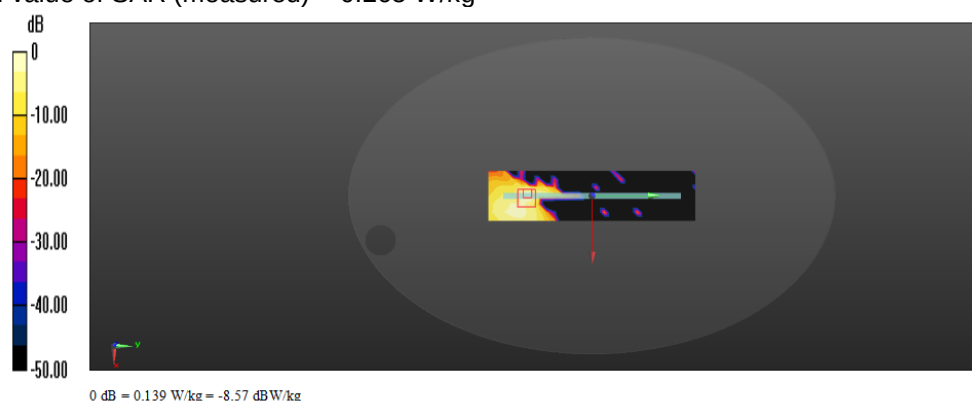
Test Position 4/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 0 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.445 W/kg

SAR(1 g) = 0.079 W/kg; SAR(10 g) = 0.020 W/kg

Maximum value of SAR (measured) = 0.265 W/kg



Date/Time: 05/09/2015 16:40:53

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 4 5825MHz CH 165 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5825 MHz
Medium parameters used (interpolated): $f = 5825 \text{ MHz}$; $\sigma = 6.22 \text{ S/m}$; $\epsilon_r = 48.35$; $\rho = 996 \text{ kg/m}^3$
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.5, 4.5, 4.5); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (9x17x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 1.06 W/kg

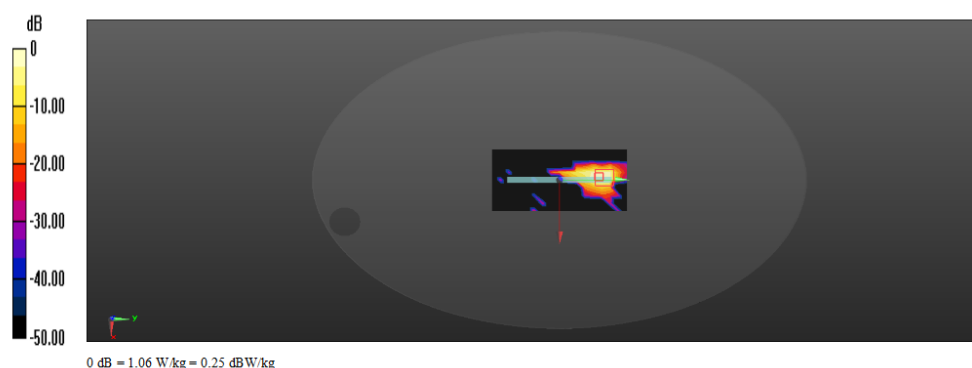
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$,
 $dz=2\text{mm}$

Reference Value = 1.865 V/m ; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 6.47 W/kg

SAR(1 g) = 0.829 W/kg ; SAR(10 g) = 0.182 W/kg

Maximum value of SAR (measured) = 2.82 W/kg



Date/Time: 05/10/2015 16:57:11

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 4 5825MHz CH 165 Test Position 5 distance=0mm Repeat

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5765 MHz
Medium parameters used (interpolated): $f = 5765$ MHz; $\sigma = 6.171$ S/m; $\epsilon_r = 48.4$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.5, 4.5, 4.5); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (9x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 1.10 W/kg

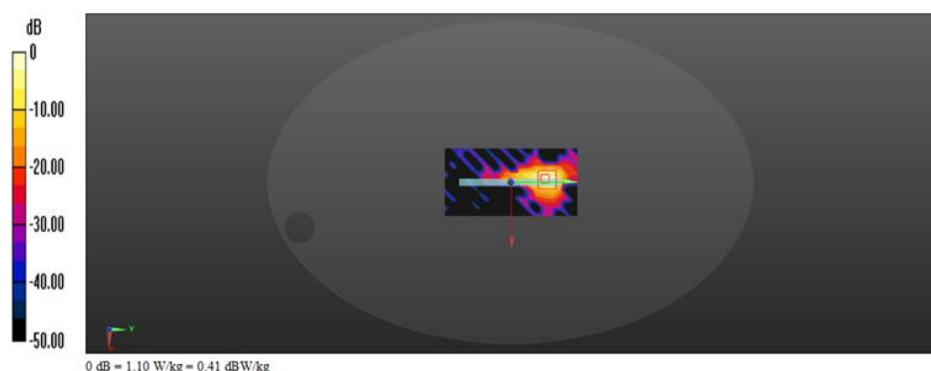
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 1.056 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 6.52 W/kg

SAR(1 g) = 0.822 W/kg; SAR(10 g) = 0.198 W/kg

Maximum value of SAR (measured) = 2.54 W/kg



Date/Time: 05/10/2015 17:34:00

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 4 5745MHz CH 149 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5745 MHz
Medium parameters used (interpolated): $f = 5745$ MHz; $\sigma = 6.143$ S/m; $\epsilon_r = 48.41$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.5, 4.5, 4.5); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (9x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 1.82 W/kg

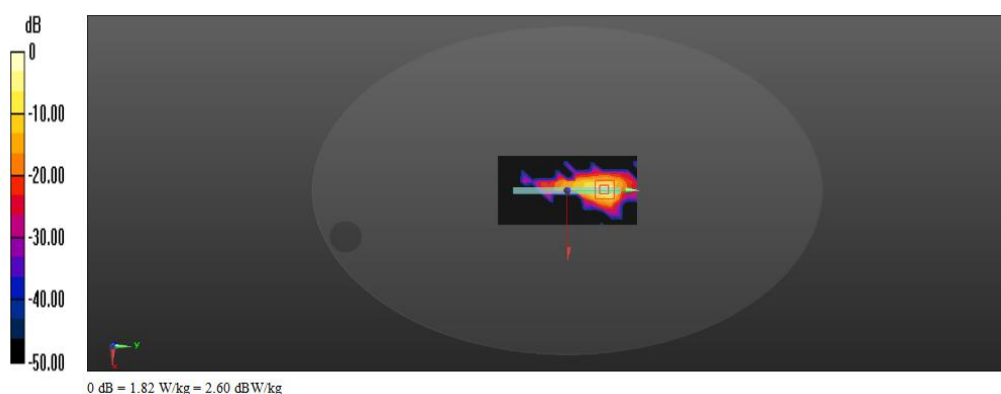
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 1.969 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 6.15 W/kg

SAR(1 g) = 0.831 W/kg; SAR(10 g) = 0.218 W/kg

Maximum value of SAR (measured) = 2.73 W/kg



Date/Time: 05/10/2015 14:59:31

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 4 5765MHz CH 153 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5765 MHz
Medium parameters used (interpolated): $f = 5765 \text{ MHz}$; $\sigma = 6.171 \text{ S/m}$; $\epsilon_r = 48.4$; $\rho = 996 \text{ kg/m}^3$
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.5, 4.5, 4.5); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 2.03 W/kg

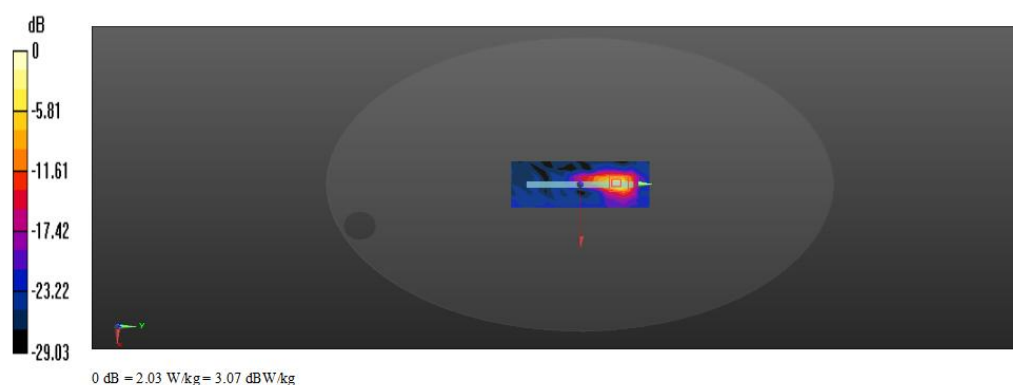
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 1.931 V/m ; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 6.52 W/kg

SAR(1 g) = 0.908 W/kg ; SAR(10 g) = 0.228 W/kg

Maximum value of SAR (measured) = 2.92 W/kg



Date/Time: 05/10/2015 10:48:07

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 4 5785MHz CH 157 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5785 MHz
Medium parameters used (interpolated): $f = 5785$ MHz; $\sigma = 6.199$ S/m; $\epsilon_r = 48.4$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.5, 4.5, 4.5); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 0.941 W/kg

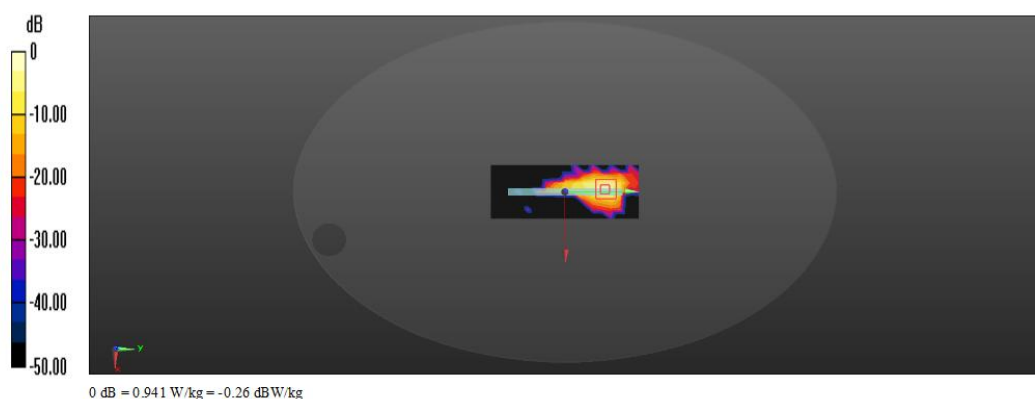
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 2.524 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 3.73 W/kg

SAR(1 g) = 0.563 W/kg; SAR(10 g) = 0.149 W/kg

Maximum value of SAR (measured) = 1.65 W/kg



Date/Time: 05/10/2015 15:53:05

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11a Band 4 5805MHz CH 161 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11a WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5805 MHz
Medium parameters used (interpolated): $f = 5805$ MHz; $\sigma = 6.22$ S/m; $\epsilon_r = 48.39$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.5, 4.5, 4.5); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 1.25 W/kg

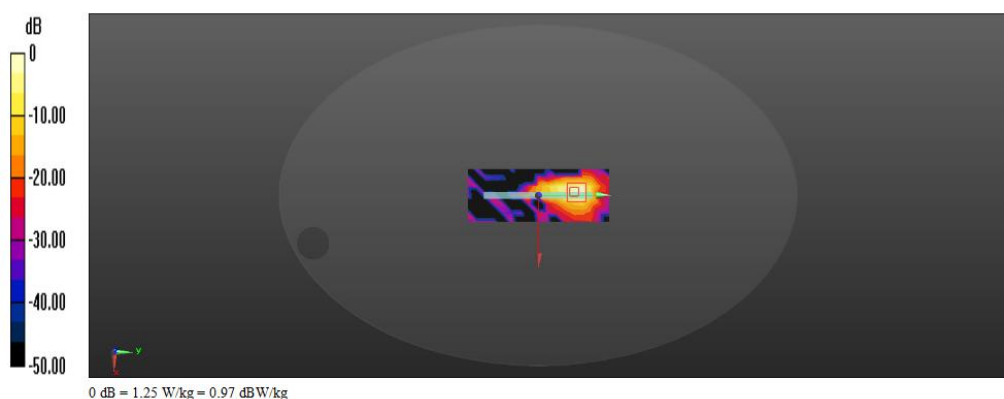
Test Position 5/M2-801W/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 1.781 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 6.72 W/kg

SAR(1 g) = 0.885 W/kg; SAR(10 g) = 0.221 W/kg

Maximum value of SAR (measured) = 2.71 W/kg



Date/Time: 05/07/2015 14:39:17

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11AC80 Band 1 5210MHz CH 42 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

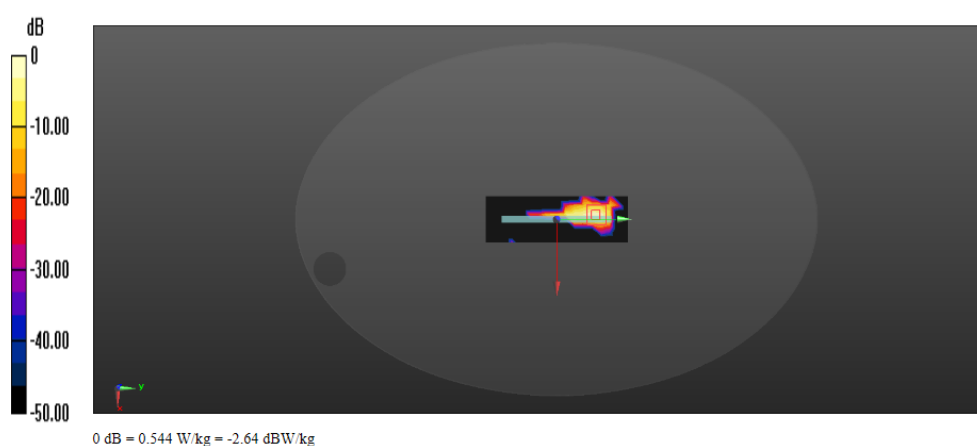
Communication System: UID 0, IEEE 802.11ac WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5210 MHz
 Medium parameters used (interpolated): $f = 5210$ MHz; $\sigma = 5.41$ S/m; $\epsilon_r = 50.96$; $\rho = 996$ kg/m³
 Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(5.17, 5.17, 5.17); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (6x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
 Maximum value of SAR (measured) = 0.544 W/kg

Test Position 5/M2-801W/Zoom Scan (7x7x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm
 Reference Value = 0.563 V/m; Power Drift = 0.09 dB
 Peak SAR (extrapolated) = 1.41 W/kg
SAR(1 g) = 0.252 W/kg; SAR(10 g) = 0.062 W/kg
 Maximum value of SAR (measured) = 0.784 W/kg



Date/Time: 05/08/2015 07:43:27

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11AC80 Band 2 5290MHz CH 58 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

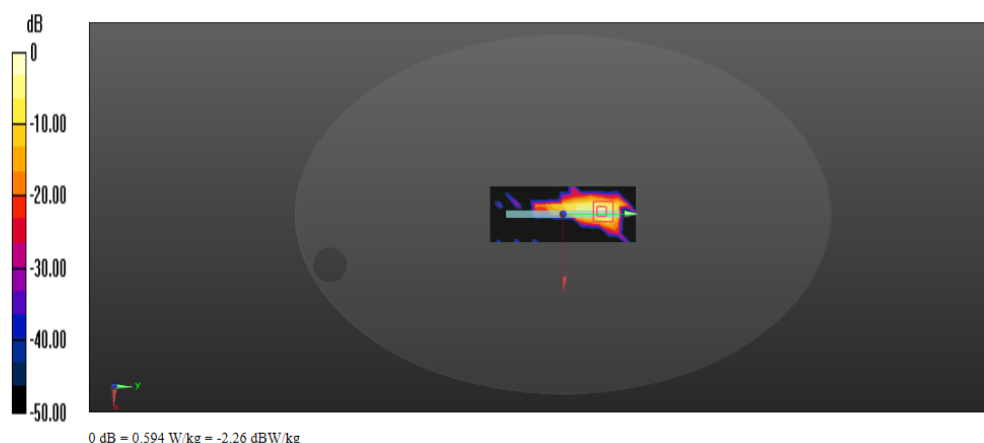
Communication System: UID 0, IEEE 802.11ac WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5290 MHz
Medium parameters used (interpolated): $f = 5290$ MHz; $\sigma = 5.538$ S/m; $\epsilon_r = 50.64$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.97, 4.97, 4.97); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 0.594 W/kg

Test Position 5/M2-801W/Zoom Scan (7x7x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm
Reference Value = 1.085 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.91 W/kg
SAR(1 g) = 0.338 W/kg; SAR(10 g) = 0.084 W/kg
Maximum value of SAR (measured) = 1.02 W/kg



Date/Time: 05/09/2015 08:32:12

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11AC80 Band 3 5610MHz CH 122 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

Communication System: UID 0, IEEE 802.11ac WiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5610 MHz
 Medium parameters used (interpolated): $f = 5610$ MHz; $\sigma = 6.034$ S/m; $\epsilon_r = 48.26$; $\rho = 996$ kg/m³
 Phantom section: Flat Section
 Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.47, 4.47, 4.47); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (7x17x1): Measurement grid: dx=10mm, dy=10mm.

Maximum value of SAR (measured) = 0.983 W/kg

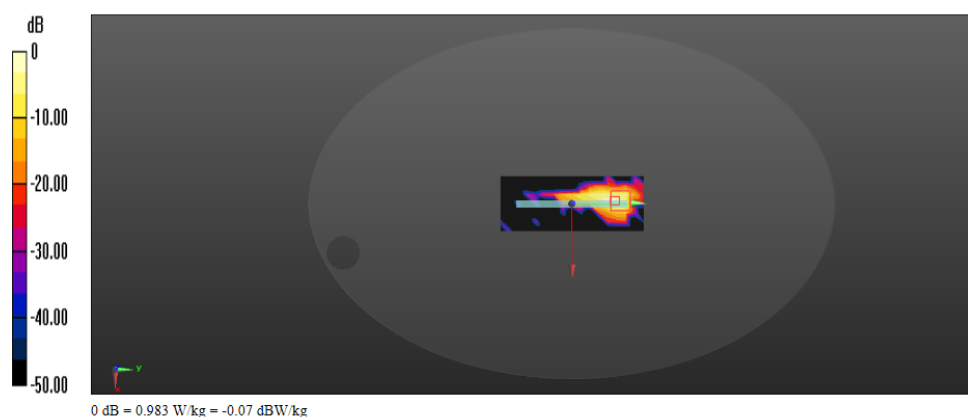
Test Position 5/M2-801W/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.272 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.68 W/kg

SAR(1 g) = 0.644 W/kg; SAR(10 g) = 0.149 W/kg

Maximum value of SAR (measured) = 2.00 W/kg



Date/Time: 05/10/2015 18:14:04

Test Laboratory: BTL Inc.

Huawei MediaPad M2-801W 802.11AC80 Band 4 5775MHz CH 155 Test Position 5 distance=0mm

DUT: Media Pad; Type: M2-801W; Serial: NA

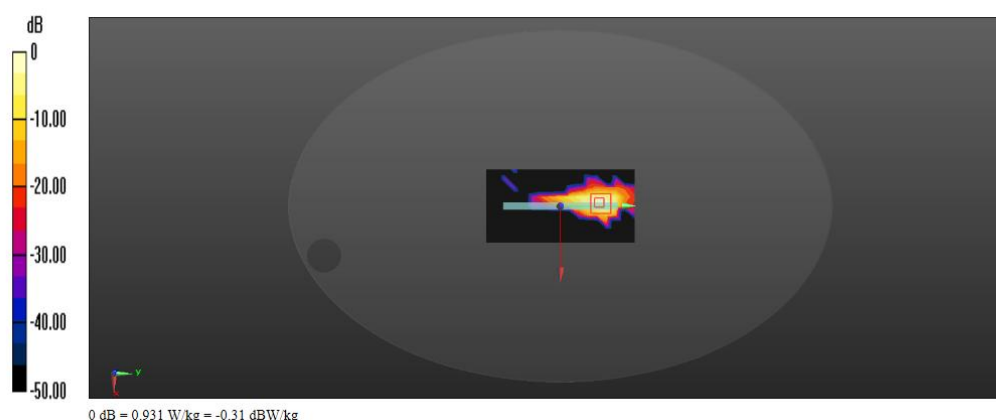
Communication System: UID 0, IEEE 802.11acWiFi 5G(OFDM, 6 Mbps,) (0); Frequency: 5775 MHz
Medium parameters used (interpolated): $f = 5775$ MHz; $\sigma = 6.185$ S/m; $\epsilon_r = 48.4$; $\rho = 996$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.5, 4.5, 4.5); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/15/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Test Position 5/M2-801W/Area Scan (9x17x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 0.931 W/kg

Test Position 5/M2-801W/Zoom Scan (7x7x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm
Reference Value = 1.161 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 4.78 W/kg
SAR(1 g) = 0.646 W/kg; SAR(10 g) = 0.170 W/kg
Maximum value of SAR (measured) = 2.29 W/kg



4. Calibration Certificate

(Pls See Appendix A.)