RF Exposure report

The following samples were submitted and identified on behalf of the client as:

Product Name	Notebook Computer
Brand Name	HP
Model No.	HSN-I54C
Applicant	HP Inc. 1501 Page Mill Road, Palo Alto, CA 94304, USA
Standards	IEEE/ANSI C95.1-1992, IEEE 1528-2013
FCC ID	B94QCNFA765L43
Date of EUT Receipt	Feb. 13, 2023
Date of Test(s)	May 26, 2023
Date of Issue	Jun. 13, 2023

In the configuration tested, the EUT complied with the standards specified above.

Remarks:

This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS Taiwan Ltd. Central RF Lab or testing done by SGS Taiwan Ltd. Central RF Lab in connection with distribution or use of the product described in this report must be approved by SGS Taiwan Ltd. Central RF Lab in writing.

Signed on behalf of SGS

Clerk / Kimmy Chiou	PM / Jasper Wang	Approved By / John Yeh
Kimmy Chiou	Jasper Wang	John Teh

Date: Jun. 13, 2023

Revision History

Report Number	Revision	Description	Issue Date	Revised By	Remark
TESA2305000314EN	00	Added UNII4 5.9G	Jun. 13, 2023	Kimmy Chiou	

Note:

1. The mark " * " is the revised version of the report due to comments submitted by the certification.
2. Measurement results in the original test report EN/2021/C0030 and EN/2021/C0030-01 are fully leveraged in this test report.
3. Added UNII4 5.9G to this report.

Contents

1 GENERAL INFORMATION

1.1 Test Methodology

The SAR testing method and procedure for this device is in accordance with the following standards:
IEEE/ANSI C95.1-1992
IEEE 1528-2013
KDB447498D01v06
KDB865664D01v01r04
KDB865664D02v01r02
KDB616217D04v01r02
KDB248227D01v02r01
IEC/IEEE 62209-1528:2020
SPEAG DASY6 System Handbook
SPEAG DASY6 Application Note (Interim Procedure for Device Operation at 6GHz-10GHz)
IEC TR 63170:2018
IEC 62479:2010

1.2 Description of EUT

Product Name	Notebook Computer	
Brand Name	HP	
Model No.	HSN-I54C	
FCC ID	B94QCNFA765L43	
Integrated WLAN Module	Brand Name: Qualcomm Model Name: QCNFA765	
Duty Cycle	WLAN802.11	Please refer to section 7
	Bluetooth	Please refer to section 7
Supported radios (TX Frequency Range, MHz)	802.11 b/g/n/ax	2.4GHz (2400.0 – 2483.5 MHz)
	802.11a/n/ac/ax	5.2GHz (5150.0 –5350.0 MHz) 5.6GHz (5470.0 – 5725.0 MHz) 5.8GHz (5725.0 – 5850.0 MHz) 5.9GHz (5850.0 – 5895.0 MHz)
	802.11ax	6.2GHz (5925.0 – 6425.0 MHz) 6.5GHz (6425.0 – 6525.0 MHz) 6.7GHz (6525.0 – 6875.0 MHz) 7.0GHz (6875.0 – 7125.0 MHz)
	Bluetooth 5.2	2.4GHz (2400.0 – 2483.5 MHz)

1.3 Maximum value

Vendor 1

Summary of Maximum SAR and Power Density Value			
Mode	Highest SAR1g Body (W/kg)	Highest APD (mW/cm^2)	Highest PD (mW/cm^2)
2.4G WLAN	0.69	N/A	N/A
5G WLAN	1.07	N/A	N/A
6E WLAN	0.13	0.10	0.11
Bluetooth(GFSK)	0.23	N/A	N/A

Vendor 2

Summary of Maximum SAR and Power Density Value			
Mode	Highest SAR1g Body (W/kg)	Highest APD (mW/cm^2)	Highest PD (mW/cm^2)
2.4G WLAN	0.49	N/A	N/A
5G WLAN	0.75	N/A	N/A
6E WLAN	0.11	0.09	0.06
Bluetooth(GFSK)	0.32	N/A	N/A

1.4 Antenna Information

Laptop mode_WLAN

Vendor	Vendor 1																	
Antenna	Tx1									Tx2								
Part Number	6036B0319601(00-2602752150)									6036B0319701(00-2602752250)								
Frequency(MHz)	2400~2500	5150~5350	5470~5725	5725~5850	5850~5895	5925-6425	6425-6525	6525-6875	6875-7125	2400~2500	5150~5350	5470~5725	5725~5850	5850~5895	5925-6425	6425-6525	6525-6875	6875-7125
Gain (dBi)	0.35	-2.07	0.43	1.88	1.88	2.66	1.36	1.01	0.70	0.26	0.39	1.04	0.33	0.33	2.38	-0.07	-0.44	0.69

Laptop mode_WLAN

Vendor	Vendor 2																	
Antenna	Tx1									Tx2								
Part Number	6036B0319801(81EABL15.G64)									6036B0319901(81EABL15.G65)								
Frequency(MHz)	2400~2500	5150~5350	5470~5725	5725~5850	5850~5895	5925-6425	6425-6525	6525-6875	6875-7125	2400~2500	5150~5350	5470~5725	5725~5850	5850~5895	5925-6425	6425-6525	6525-6875	6875-7125
Gain (dBi)	-2.64	-1.57	-0.52	-0.49	-0.49	-0.80	-1.18	0.18	0.18	-1.5	-1.52	1.56	1.56	0.72	0.08	0.08	0.35	0.35

Tablet mode_WLAN

Vendor	Vendor 1																	
Antenna	Tx1									Tx2								
Part Number	6036B0319601(00-2602752150)									6036B0319701(00-2602752250)								
Frequency(MHz)	2400~2500	5150~5350	5470~5725	5725~5850	5850~5895	5925-6425	6425-6525	6525-6875	6875-7125	2400~2500	5150~5350	5470~5725	5725~5850	5850~5895	5925-6425	6425-6525	6525-6875	6875-7125
Gain (dBi)	-1.05	0.46	0.91	1.28	1.28	2.49	1.99	1.49	0.36	-0.98	2.15	1.92	0.91	0.91	1.97	1.70	0.99	0.99

Tablet mode_WLAN

Vendor	Vendor 2																	
Antenna	Tx1									Tx2								
Part Number	6036B0319801(81EABL15.G64)									6036B0319901(81EABL15.G65)								
Frequency(MHz)	2400~2500	5150~5350	5470~5725	5725~5850	5850~5895	5925-6425	6425-6525	6525-6875	6875-7125	2400~2500	5150~5350	5470~5725	5725~5850	5850~5895	5925-6425	6425-6525	6525-6875	6875-7125
Gain (dBi)	-2.48	-0.42	0.24	-0.16	-0.16	-0.83	-1.13	0.37	0.37	-1.56	-0.21	1.21	1.21	-0.1	0.94	1.12	1.12	0.83

Note: Antenna information is provided by the applicant.

2 MEASUREMENT SYSTEM

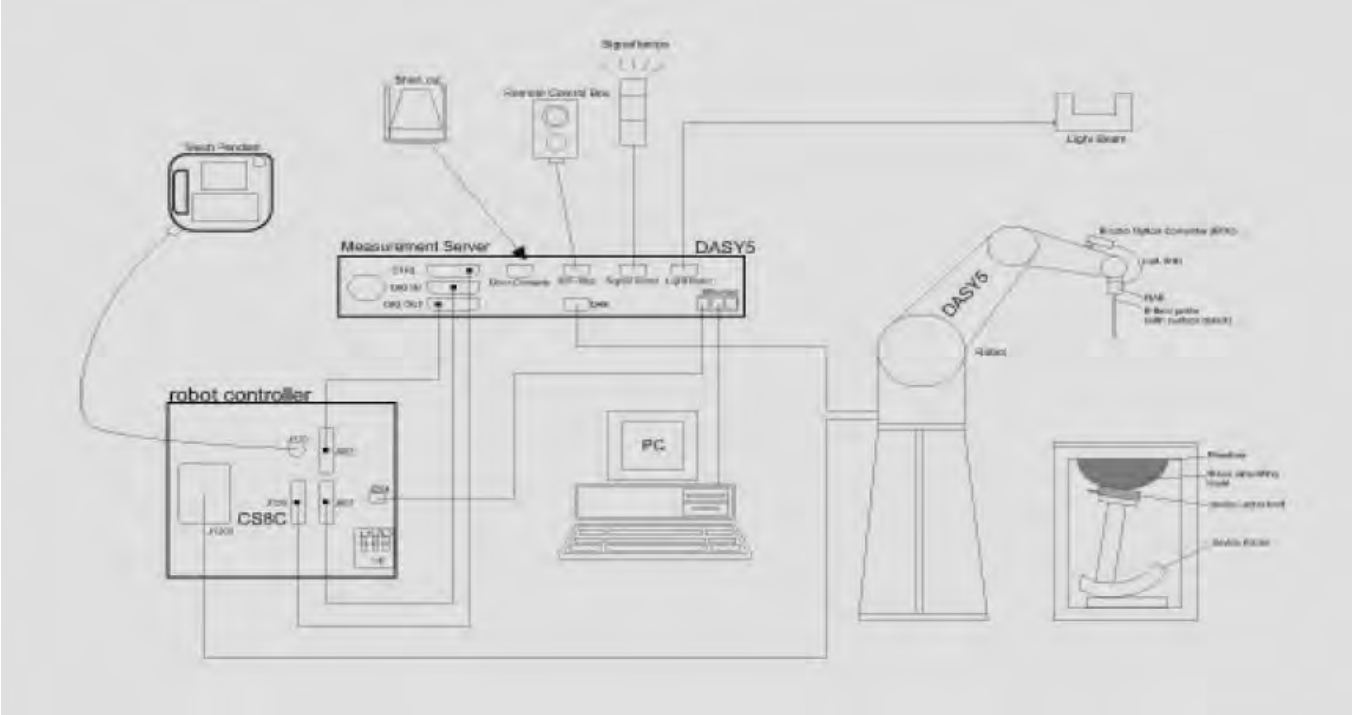
2.1 Test Facility

Laboratory	Test Site Address	Test Site Name	FCC Designation number	IC CAB identifier
SGS Taiwan Ltd. Central RF Lab. (TAF code 3702)	**1F, No. 8, Alley 15, Lane 120, Sec. 1, NeiHu Road, Neihu District, Taipei City, 11493, Taiwan.**	SAR 2	TW0029	TW3702
		SAR 6		
	No. 2, Keji 1st Rd., Guishan Township, Taoyuan County, 33383, Taiwan	SAR 1	TW0028	
		SAR 4		
	No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan	SAR 3	TW0027	
		SAR 7		
Note: Test site name is remarked on the equipment list in each section of this report as an indication where measurements occurred in specific test site and address.				

2.2 SAR System

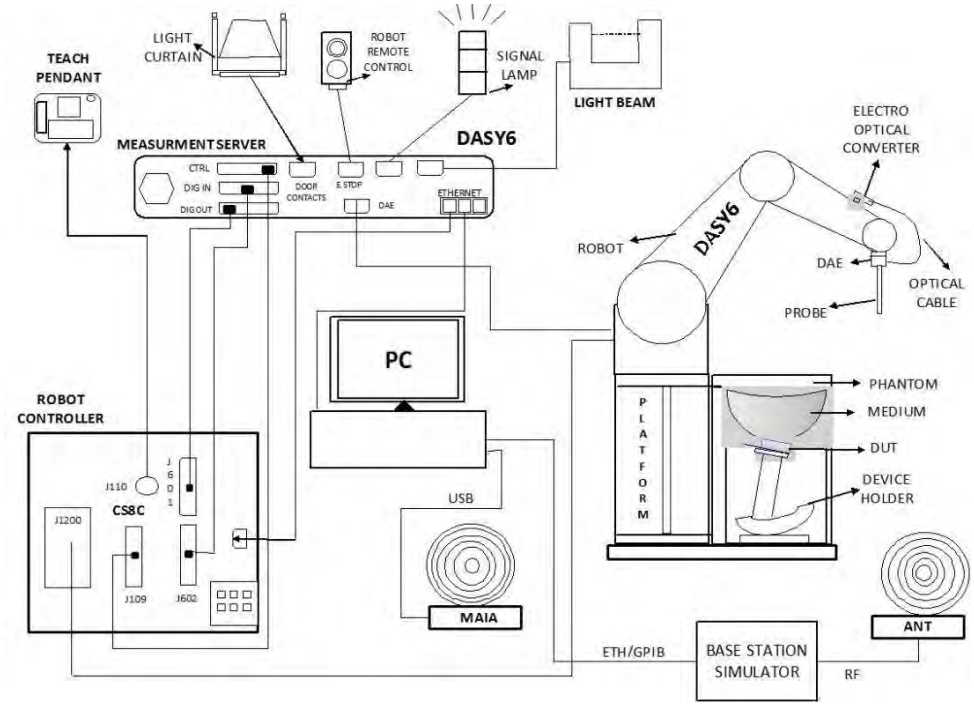
Block Diagram (DASY5)

A block diagram of the SAR measurement System is given in below. This SAR measurement system uses a computer-controlled 3-D stepper motor system (SPEAG DASY 5 professional system). The model EX3DV4 field probe is used to determine the internal electric fields. The SAR can be obtained from the equation SAR= σ ($|Ei|^2$)/ ρ where σ and ρ are the conductivity and mass density of the tissue-simulant.



Block Diagram (DASY6)

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



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running Windows 10 and the DASY6 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

EX3DV4 E-Field Probe

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Calibration	Basic Broad Band Calibration in air Conversion Factors (CF) for HSL 2450/5250/5600/5750/6500/7000 MHz Additional CF for other liquids and frequencies upon request	
Frequency	10 MHz to > 6 GHz	
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)	
Dynamic Range	10 µW/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 µW/g)	
Dimensions	Tip diameter: 2.5 mm	
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.	

PHANTOM (ELI)

Model	ELI	
Construction	The ELI phantom is used for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI is fully compatible with the IEC 62209-2 standard and all known tissue simulating 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 ± 0.2 mm	
Filling Volume	Approx. 30 liters	
Dimensions	Major axis: 600 mm Minor axis: 400 mm	

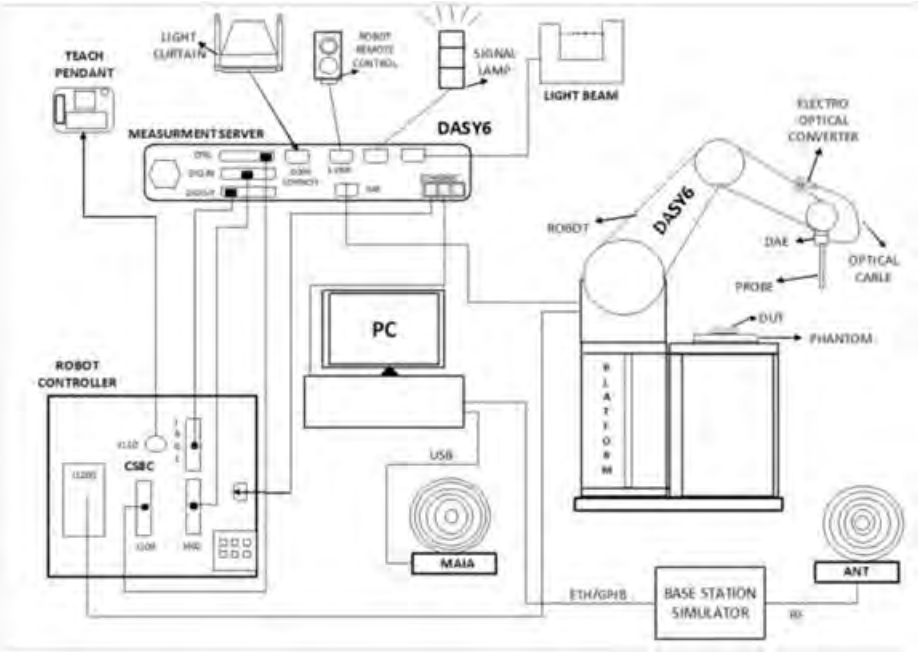
DEVICE HOLDER

Construction	The device holder (Supporter) for Notebook is made by POM (polyoxymethylene resin) , which is non-metal and non-conductive. The height can be adjusted to fit varies kind of notebooks.	 Device Holder

2.3 PD system

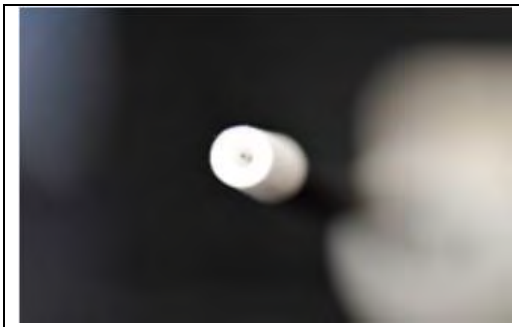
Block Diagram (DASY6)

Power density measurements for mmWave frequencies were performed using SPEAG DASY6 with cDASY6 5G module. The DASY6 included a high precision robotics system (Staubli), robot controller, desktop computer, near-field probe, probe alignment sensor, and the 5G phantom cover.

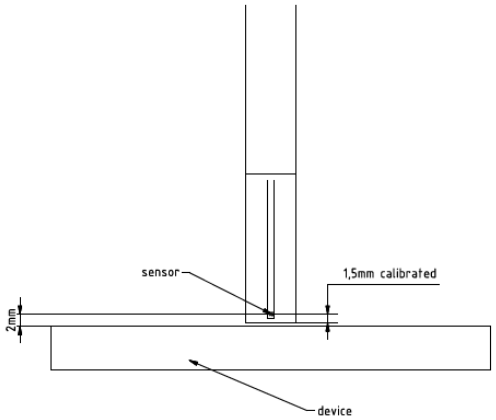


EUmmWVx probe

The EUmmWVx probe is based on the pseudo-vector probe design, which not only measures the field magnitude but also derives its polarization ellipse. The design entails two small 0.8mm dipole sensors mechanically protected by high-density foam, printed on both sides of a 0.9mm wide and 0.12mm thick glass substrate. The body of the probe is specifically constructed to minimize distortion by the scattered fields. The probe consist of two sensors with different angles (1 and 2) arranged in the same plane in the probe axis. Three or more measurements of the two sensors are taken for different probe rotational angles to derive the amplitude and polarization information. The probe design allows measurements at distances as small as 2mm from the sensors to the surface of the device under test (DUT). The typical sensor to probe tip distance is 1.5 mm. The exact distance is calibrated.

	Two dipoles optimally arranged to obtain pseudo-vector information.Minimum 3 measurements/ point, 120º rotated around probe axis. Sensors (0.8mm length) printed on glass substrate protected by high density foam.Low perturbation of the measured field. Requires positioner which can do accurate probe rotation.

Frequency Range	750 MHz – 110 GHz
Dynamic Range	< 20 V/m – 10,000 V/m with PRE-10 (min < 50 V/m - 3000 V/m)
Position Precision	< 0.2 mm (DASY6)
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: encapsulation 8 mm (internal sensor < 1mm) Distance from probe tip to dipole centers: < 2 mm. Sensor displacement to probe's calibration point: < 0.3 mm
Applications	E-field measurements of 5G devices and other mm-wave transmitters operating above 10GHz in < 2 mm distance from device (free-space).Power density, H-field and far-field analysis using total field reconstruction (cDASY6 5G module required)
Compatibility	cDASY6 + 5G-Module SW1.0 and higher



mmWave Phantom

The mmWave Phantom approximates free-space conditions, allowing for the evaluation of the antenna side of the device and the front (screen) side or any opposite-radiating side of wireless devices operating above 10 GHz without distorting the RF field. It consists of a 40mm thick Rohacell plate used as a test bed, which has a loss tangent (tan δ) $\leq$ 0.05 and a relative permittivity (ɛr) $\leq$ 1.2. High-performance RF absorbers are placed below the foam.

3 SAR SYSTEM VERIFICATION

3.1 Tissue Simulating Liquid

For the measurement of the field distribution inside the SAM phantom with DASY, the phantom must be filled with homogeneous tissue simulating liquid. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15cm.

3.2 Tissue Simulant Liquid measurement

The dielectric properties for this Head-simulant fluid were measured by using the SPEAG Dielectric Assessment Kit (DAKS-3.5)
All dielectric parameters of tissue simulates were measured within 24 hours of SAR measurements. The measured conductivity and permittivity are all within ± 5% of the target values.

3.3 Measurement results of Tissue Simulant Liquid

Report No. :EN/2021/C0030

Tissue Type	Measurement Date	Measured Frequency (MHz)	Target Dielectric Constant, εr	Target Conductivity, σ (S/m)	Measured Dielectric Constant, εr	Measured Conductivity, σ (S/m)	% dev εr	% dev σ
Head	Dec, 29. 2021	2402	39.285	1.757	38.664	1.768	-1.58%	0.63%
		2412	39.268	1.766	38.631	1.777	-1.62%	0.61%
		2437	39.223	1.788	38.567	1.799	-1.67%	0.62%
		2441	39.216	1.792	38.562	1.802	-1.67%	0.56%
		2450	39.200	1.800	38.544	1.811	-1.67%	0.61%
		2462	39.185	1.813	38.516	1.823	-1.71%	0.55%
		2480	39.147	1.827	38.487	1.841	-1.69%	0.77%
	Dec, 30. 2021	5190	35.997	4.645	37.228	4.643	3.42%	-0.04%
		5200	35.986	4.655	37.200	4.655	3.37%	0.00%
		5230	35.951	4.686	37.109	4.693	3.22%	0.15%
	Dec, 31. 2021	5260	35.917	4.717	37.073	4.729	3.22%	0.27%
		5280	35.894	4.737	37.064	4.767	3.26%	0.63%
		5300	35.871	4.758	37.022	4.792	3.21%	0.73%
		5320	35.849	4.778	36.987	4.818	3.18%	0.84%
	Jan, 01. 2022	5500	35.643	4.963	36.733	5.026	3.06%	1.28%
		5600	35.529	5.065	36.589	5.154	2.98%	1.76%
		5700	35.414	5.168	36.288	5.267	2.47%	1.93%
		5720	35.391	5.188	36.219	5.293	2.34%	2.02%
	Jan, 02. 2022	5745	35.363	5.214	36.176	5.321	2.30%	2.06%
		5785	35.317	5.255	35.987	5.368	1.90%	2.16%
		5800	35.300	5.270	35.923	5.389	1.76%	2.26%
		5825	35.271	5.296	35.895	5.426	1.77%	2.46%
	Jan, 03. 2022	6025	35.038	5.504	34.647	5.423	-1.11%	-1.48%
		6185	34.851	5.692	34.451	5.613	-1.15%	-1.39%
		6345	34.664	5.880	34.275	5.796	-1.12%	-1.43%
		6500	34.483	6.063	34.093	5.974	-1.13%	-1.46%
		6505	34.478	6.068	34.085	5.982	-1.14%	-1.42%
		6665	34.291	6.256	33.907	6.165	-1.12%	-1.46%
		6825	34.104	6.444	33.713	6.349	-1.15%	-1.48%
		6985	33.918	6.632	33.524	6.531	-1.16%	-1.53%
		7000	33.900	6.650	33.502	6.547	-1.17%	-1.55%

Report No.: TESA2305000314EN

Measured Frequency (MHz)	Target Dielectric Constant, εr	Target Conductivity, σ (S/m)	Measured Dielectric Constant, εr	Measured Conductivity, σ (S/m)	% dev εr	% dev σ	Limit	Measurement Date
5750	35.350	5.220	34.846	5.270	-1.43%	0.96%	± 5%	May. 26, 2023
5815	35.285	5.286	34.656	5.377	-1.78%	1.73%	± 5%	May. 26, 2023

3.4 The composition of the tissue simulating liquid:

Simulating Liquids for 600 MHz -10 GHz, Manufactured by SPEAG:

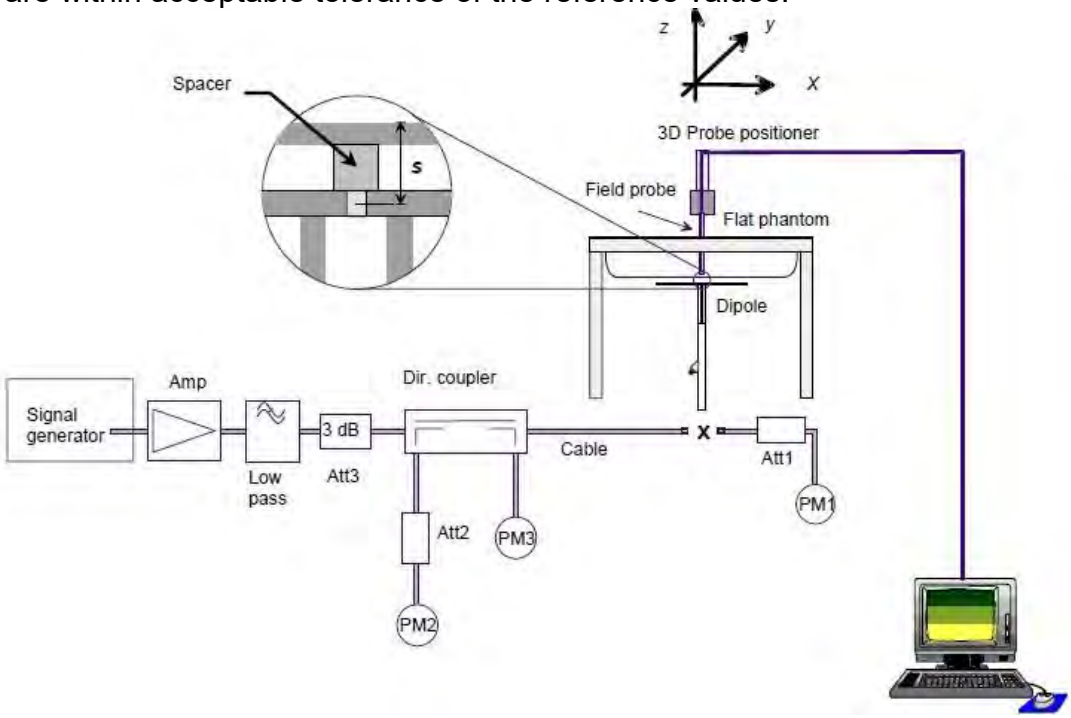
Broad-band head tissue simulating liquids	SPEAG Product	Frequency range (MHz)	Main Ingredients
	HBBL600-10000V6	600 - 10000	Water, Oil

3.5 System check

The microwave circuit arrangement for system check is sketched in below. The daily system accuracy verification occurs within the flat section of the SAM phantom and ELI phantom. A SAR measurement was performed to see if the measured SAR was within +/- 10% from the target SAR values.

The tests were conducted on the same days as the measurement of the DUT. The obtained results from the system accuracy verification are displayed with SAR values normalized to 1W forward power delivered to the dipole.

During the tests, the liquid depth from the center of the flat phantom to the liquid top surface was 15 cm above in all the cases. It is seen that the system is operating within its specification, as the results are within acceptable tolerance of the reference values.



The block diagram of system check

3.6 System check results

Report No. :EN/2021/C0030

Validation Kit	S/N	Frequency (MHz)		1W Target SAR-1g (mW/g)	pin=250mW Measured SAR-1g (mW/g)	Measured SAR-1g normalized to 1W (mW/g)	Deviation (%)	Measured Date
D2450V2	727	2450	Head	53.9	13.20	52.8	-2.04%	Dec. 29, 2021

Validation Kit	S/N	Frequency (MHz)		1W Target SAR-1g (mW/g)	Pin=100mW Measured SAR-1g (mW/g)	Measured SAR-1g normalized to 1W (mW/g)	Deviation (%)	Measured Date
D5GHzV2	1023	5200	Head	77.9	7.90	79	1.41%	Dec. 30, 2021
		5300	Head	80.4	7.82	78.2	-2.74%	Dec. 31, 2021
		5600	Head	83.9	8.77	87.7	4.53%	Jan. 01, 2022
		5800	Head	80.9	8.08	80.8	-0.12%	Jan. 02, 2022
D6.5GHzV2	1006	6500	Head	291	27.80	278	-4.47%	Jan. 03, 2022
D7GHzV2	1007	7000	Head	275	28.00	280	1.82%	Jan. 03, 2022

Report No.: TESA2305000314EN

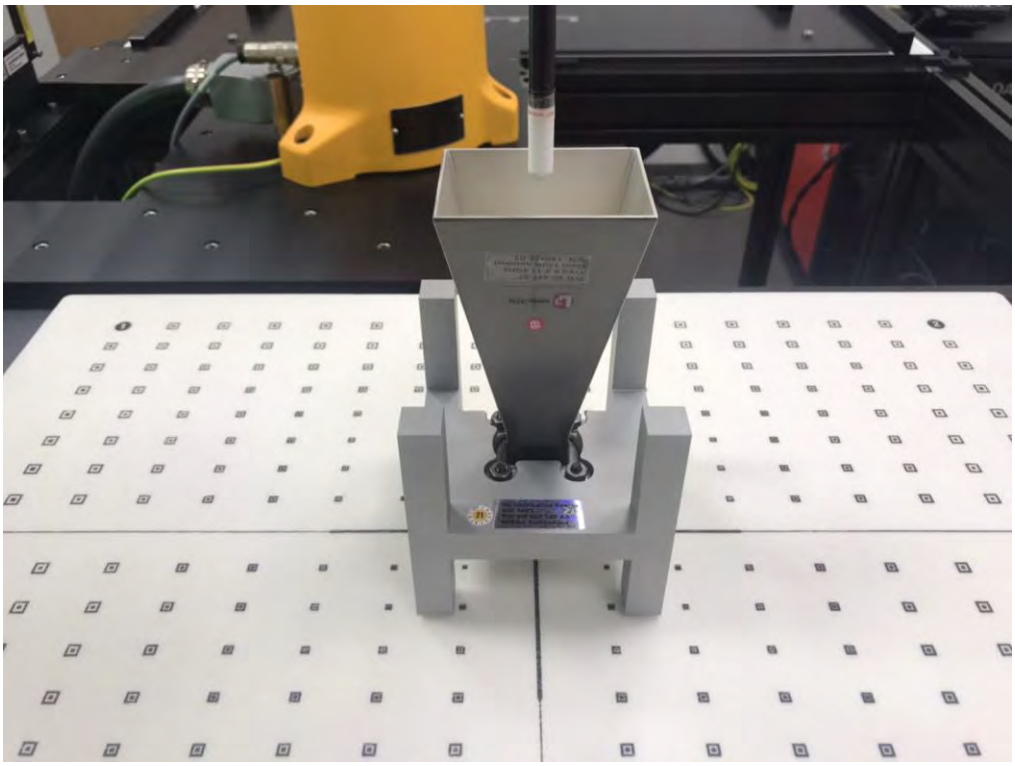
Validation Kit	S/N	Frequency (MHz)	1W Target 1g-SAR (W/kg)	pin=100mW Measured 1g-SAR (W/kg)	Normalized to 1W 1g-SAR (W/kg)	Deviation (%)	Limit	Measurement Date
D5GHzV2	1349	5750	81.4	8.02	80.2	-1.47	± 10%	May.26,2023

4 PD SYSTEM VERIFICATION

4.1 System check

The system was verified to be within ±0.66 dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG's mmWave verification sources. The same spatial resolution and measurement region used in the source calibration was applied during the system check.

The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provided by the manufacturer, per November 2017 TCBC Workshop Notes.



System Verification Setup Photo

4.2 System check result

The system was verified to be within ±0.66 dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG's mmWave verification sources. The same spatial resolution and measurement region used in the source calibration was applied during the system check. The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provided by the manufacturer, per November 2017 TCBC Workshop Notes.

Frequency (GHz)	PD Verification Source	Probe S/N	DAE S/N	Distance (mm)	Prad (mW)	Measured 4cm^2 (W/m^2)	Target 4cm^2 (W/m^2)	Deviation (dB)	Date
10G	10G	9579	1665	10	74	43.8	41.2	0.27	Jan. 05, 2022

5 TEST CONFIGURATIONS

5.1 Test Environment

Ambient Temperature: 22±2° C
Tissue Simulating Liquid: 22±2° C

5.2 Test Note

- **General:** Measurements are performed respectively on the lowest, middle and highest channels of the operating band(s).
- **General:** The EUT is set to maximum power level during all tests, and at the beginning of each test the battery is fully charged.
- **General:** During the SAR testing, the DASY system checks power drift by comparing the e-field strength of one specific location measured at the beginning with that measured at the end of the SAR testing.
- **General:** According to KDB447498D01v06, testing of other required channels is not required when the reported 1-g SAR for the highest output channel is ≤ 0.8 W/kg, when the transmission band is ≤ 100 MHz.
- **General:** According to KDB865664D01v01r04, SAR measurement variability must be assessed for each frequency band. When the original highest measured SAR is ≥ 0.8 W/kg, repeated that measurement once. Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
- **WLAN 2.4GHz:** 802.11b DSSS SAR Test Requirements: SAR is measured for 2.4 GHz 802.11b DSSS mode using the highest measured maximum output power channel, when the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration. When the reported SAR is > 0.8 W/kg, SAR is required for that exposure configuration using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.
- **WLAN 2.4GHz:** 802.11g/n OFDM SAR Test Exclusion Requirements: SAR is not required for 802.11g/n since the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.
- **WLAN 5GHz:** Initial Test Configuration: An initial test configuration is determined for OFDM transmission modes according to the channel bandwidth, modulation and data rate combination(s) with the highest maximum output power specified for production units in each standalone and aggregated frequency band. SAR is measured using the highest measured maximum output power channel. When the reported SAR of the initial test configuration is > 0.8 W/kg, SAR measurement is required for the subsequent next highest measured output power channel(s) in the initial test configuration until the reported SAR is ≤ 1.2 W/kg or all required channels are tested. Since the highest reported SAR for the initial test configuration is adjusted by the ratio of the subsequent test configuration to initial test configuration

specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for subsequent test configuration.

- **WLAN 5GHz:** Based on FCC guidance, general principles of KDB248227D01 can be applied to 802.11ax to determine initial test configuration with 802.11ax being considered as the highest 802.11 mode for the appropriate frequency band.
- **WLAN 6GHz:** Per October 2020 & April 2021 TCB Workshop Interim procedures and FCC guidance, start instead with a minimum of 5 test channels across the full band, then adapt and apply conducted power and SAR test reduction procedures of KDB Pub. 248227 v02r02. WIFI 6E SAR is measured by using 6-7GHz parameters per IEC/IEEE62209- 1528:2020 and report also estimated absorbed PD (for reference purposes only, not specifically for compliance). For the highest SAR test configurations also measure incident PD (total) using mmW near-field probe and total-field/power-density reconstruction method.
- **WLAN 6GHz:** Per equipment manufacturer guidance, power density was measured at d=2mm with the grid step (0.0625λ) for determining compliance at d=2mm.
- **WLAN 6GHz:** According to October 2020 TCB Workshop Interim procedures, power density results were scaled according to IEC 62479:2010 for the portion of the measurement uncertainty > 30%. Total expanded uncertainty of 2.67 dB (85%) was used to determine the psPD measurement scaling factor.
- **WLAN 6GHz:** Per FCC guidance, for simultaneous transmission evaluation, using SAR sum and SPLSR for simultaneous transmit exclusion analyses and evaluations.

5.3 Test position

Tablet mode SAR test position (0mm)

For full-size tablet, according to KDB 616217 D04, SAR evaluation is required for back surface and edges of the devices. The back surface and edges of the tablet are tested with the tablet touching the phantom. Exposures from antennas through the front surface of the display section of a tablet are generally limited to the user's hands. Exposures to hands for typical consumer transmitters used in tablets are not expected to exceed the extremity SAR limit; therefore, SAR evaluation for the front surface of tablet display screens are generally not necessary. When voice mode is supported on a tablet and it is limited to speaker mode or headset operations only, additional SAR testing for this type of voice use is not required.

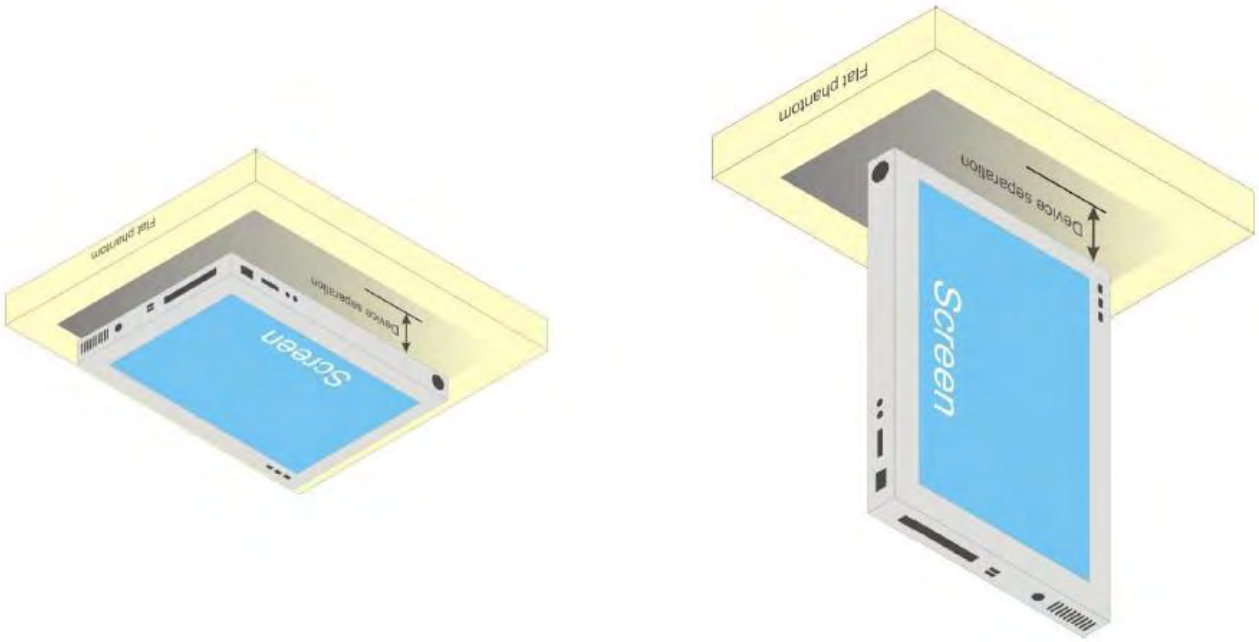


Illustration for Tablet Setup

5.4 Power verification of device mode

The device is a convertible laptop computer with predefined single fixed power to each device modes.
For the operating modes validation, the measured conducted output power is monitored qualitatively to identify the triggering characteristics and recorded quantitatively.

DUT operating mode	Lid Angle description	WLAN TX state
Lid-close	0° ≤ Lid angle < 35°	No TX transmission
Notebook	35° ≤ Lid angle < 130°	Full Power Level
Tablet	130° ≤ Lid angle ≤ 360°	Reduced Power Level

The measured output power versus lid angle is tabulated in the following table based on the guidance from 2019-11 TCB workshop, and the triggering verification complies with the device mode / power level declared by the manufacturer.

Device mode verification by power measurement

Report No. :EN/2021/C0030-01

Antenna	Operation mode	Lid angle	802.11b	802.11n(40M) 5.2G	802.11a 5.3G	802.11a 5.6G	802.11a 5.8G	802.11ax(160M) 6.2G	802.11ax(160M) 6.5G	802.11ax(160M) 6.7G	802.11ax(160M) 7.0G
Tx1	Lid close	0°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		10°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		20°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		30°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Laptop	40°	20.40	14.98	18.93	18.92	18.90	8.92	8.91	8.97	8.93
		35°	20.42	14.94	18.90	18.97	18.96	8.93	8.93	8.96	8.90
	Lid close	30°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		31°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		32°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		33°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		34°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Laptop	35°	20.45	14.95	18.97	18.99	18.97	8.95	8.94	8.91	8.92
		36°	20.43	14.95	18.97	18.95	18.94	8.99	8.92	9.00	8.96
		37°	20.42	14.94	18.94	18.91	18.98	8.95	8.96	9.00	8.98
		38°	20.43	14.94	19.00	18.94	18.98	8.97	8.92	8.95	8.95
		39°	20.40	14.94	18.97	18.93	18.98	8.93	8.93	8.98	8.94
		40°	20.42	14.95	18.92	18.92	18.93	8.90	8.93	8.97	8.96
		50°	20.47	14.98	18.93	19.00	18.94	8.97	8.92	8.91	9.00
		60°	20.47	14.96	18.95	18.91	18.90	9.00	8.92	9.00	8.90
		70°	20.41	14.94	18.99	19.00	18.95	8.93	8.93	8.97	8.93
		80°	20.45	14.91	18.93	18.98	18.92	8.90	8.96	8.95	8.92
		90°	20.40	14.90	18.95	18.99	18.96	8.92	8.94	8.99	8.95
		100°	20.42	15.00	18.93	18.99	18.93	8.98	8.92	8.90	9.00
		110°	20.41	14.98	18.92	18.97	18.97	8.97	8.98	8.97	8.96
		120°	20.40	14.90	18.97	18.99	18.98	8.97	8.99	8.95	8.91
	Tablet	130°	19.93	14.92	17.90	17.92	17.90	8.93	8.94	8.98	8.97
	Laptop	125°	20.50	14.97	18.94	18.90	19.00	9.00	8.98	8.98	8.91
		126°	20.48	14.98	18.95	18.95	19.00	8.91	8.93	8.98	8.97
		127°	20.42	14.93	18.90	18.92	18.93	8.93	8.98	8.90	8.95
		128°	20.40	14.97	19.00	18.91	18.94	8.93	8.96	8.94	8.93
		129°	20.44	14.95	18.94	18.94	18.92	9.00	8.99	8.91	8.98
	Tablet	130°	20.00	14.97	17.95	17.94	17.97	8.94	8.96	8.95	8.95
		131°	20.00	14.94	17.95	17.99	18.00	8.93	8.94	8.94	8.91
		132°	20.00	14.99	17.91	17.99	17.98	8.98	8.99	8.99	8.93
		133°	19.93	14.97	17.95	17.93	18.00	8.91	9.00	8.91	8.91
		134°	19.99	14.93	17.93	17.94	17.91	8.93	8.98	8.98	8.97
		135°	19.97	15.00	17.95	17.92	17.92	8.97	8.97	9.00	8.96
		145°	19.94	14.99	17.94	18.00	17.94	8.92	8.91	9.00	8.93
		155°	19.99	14.97	17.94	17.96	17.95	8.96	8.96	8.95	8.99
		165°	19.95	14.99	17.94	17.96	17.95	9.00	8.99	8.97	8.90
		175°	19.95	14.91	17.90	17.97	17.95	8.97	8.93	8.92	8.99
		185°	19.94	14.94	17.95	17.93	17.93	9.00	8.90	8.92	8.96
		195°	19.90	14.98	17.97	17.95	17.99	8.90	8.99	8.92	8.98
		205°	19.95	14.93	18.00	17.90	17.96	8.99	8.97	8.98	8.95
		215°	19.95	14.91	17.92	17.98	17.91	8.94	8.91	8.90	8.91
		225°	19.98	14.94	17.97	17.97	17.98	8.94	8.90	8.92	8.99
		235°	19.94	14.97	17.98	17.99	17.92	8.93	8.92	8.96	8.97
		245°	19.99	14.98	17.97	17.99	17.93	8.92	8.92	8.96	8.92
		255°	19.93	14.99	17.91	17.90	17.93	8.96	8.93	8.98	8.95
		265°	19.99	14.96	17.92	17.96	17.98	8.99	8.95	8.98	8.98
		275°	19.96	14.96	17.90	17.90	17.99	8.96	8.95	8.93	8.90
		285°	19.90	14.96	17.96	17.91	17.91	9.00	8.91	8.97	8.96
		295°	20.00	14.91	17.96	17.95	17.92	8.92	8.95	8.99	8.92
		305°	19.90	14.97	18.00	17.91	17.93	8.95	9.00	8.99	9.00
		315°	19.91	14.92	17.93	17.94	17.91	8.95	8.95	8.92	8.91
		325°	19.90	14.99	18.00	17.97	17.91	8.92	8.91	8.99	8.94
		335°	19.94	14.93	17.91	17.91	17.99	8.99	8.92	8.93	8.91
		345°	19.99	14.98	17.97	17.94	17.95	8.90	9.00	8.99	8.92
		355°	19.94	14.96	17.97	17.98	17.99	8.90	8.97	8.92	8.90
		360°	19.92	14.94	17.99	17.94	17.92	9.00	8.92	8.96	8.95
	Tablet	350°	19.91	14.93	17.93	17.90	17.91	8.91	8.98	8.97	9.00
		340°	19.96	14.99	17.98	17.98	17.93	8.92	8.93	8.95	9.00
		330°	19.98	14.97	17.94	17.96	17.91	8.96	8.92	8.96	8.91
		320°	19.96	14.99	17.94	17.92	17.90	8.98	8.90	8.97	8.97
		310°	19.94	14.97	17.94	17.98	17.96	8.95	8.99	8.94	8.91
		300°	19.91	14.99	17.92	17.95	17.90	8.91	8.96	8.99	8.97
		290°	19.91	15.00	17.92	17.92	17.98	8.95	8.91	8.90	8.97
		280°	19.90	14.97	17.94	17.94	17.91	8.91	8.93	8.92	8.99
		270°	19.99	14.90	17.90	17.99	17.96	8.97	8.90	8.98	8.95
		260°	19.97	14.90	17.90	17.98	17.91	8.99	8.98	8.93	8.99
		250°	19.95	15.00	17.96	17.95	17.90	8.97	8.94	8.92	8.96
		240°	19.95	14.96	17.94	17.99	17.98	8.97	8.95	8.93	8.94
		230°	19.96	14.90	17.98	17.98	17.93	9.00	8.95	8.96	8.91
		220°	19.96	14.99	17.92	17.98	17.98	9.00	8.93	8.95	8.99
		210°	19.98	14.98	17.97	17.96	17.97	8.90	8.93	8.98	8.99
		200°	20.00	14.99	17.96	17.92	17.94	8.91	8.91	8.95	9.00
		190°	19.98	14.94	17.98	17.99	17.97	8.90	8.99	8.91	8.91
		180°	19.96	14.94	17.98	17.95	18.00	8.96	8.90	8.99	8.90
		170°	19.92	14.95	17.96	17.95	17.92	8.93	8.97	8.91	8.93
		160°	19.98	14.97	17.98	17.92	17.92	8.98	8.97	8.97	8.95
		150°	19.97	14.90	17.94	17.92	17.97	8.96	8.97	9.00	8.91
		140°	19.98	14.98	17.93	17.92	17.90	9.00	9.00	8.92	8.96
		130°	19.95	14.97	17.94	17.99	17.94	8.90	8.98	8.98	8.90
	Laptop	120°	20.43	14.95	19.00	18.98	18.99	8.99	8.90	9.00	8.91
		125°	20.40	14.90	19.00	18.95	18.96	8.97	8.97	8.98	8.96
	Tablet	130°	19.91	14.91	17.97	17.99	17.91	8.92	8.93	8.92	8.91
	Laptop	129°	20.40	14.91	18.94	18.90	18.94	8.90	8.99	8.99	8.97
		128°	20.41	14.91	18.94	18.96	18.94	8.90	8.92	8.93	8.98
		127°	20.49	14.93	18.91	18.94	18.95	8.99	8.98	9.00	8.92
		126°	20.45	15.00	18.92	18.92	18.96	8.92	8.93	8.95	8.90
		125°	20.49	14.91	18.91	18.99	18.93	9.00	8.90	9.00	8.94
		115°	20.40	14.98	19.00	18.90	18.96	8.95	8.97	8.93	8.97
		105°	20.44	14.98	18.95	18.97	19.00	8.98	8.91	8.94	8.96
		95°	20.47	14.99	18.94	18.95	18.91	8.91	8.93	8.92	8.98
		85°	20.42	14.90	18.95	18.98	18.91	8.99	8.97	8.97	8.98
		75°	20.42	14.95	18.99	18.90	18.94	8.97	8.94	8.94	8.97
		65°	20.49	14.98	19.00	18.90	18.96	8.98	8.94	8.95	8.90
		55°	20.43	14.90	18.91	18.93	18.95	8.90	8.96	8.95	8.99
		45°	20.40	15.00	18.93	18.94	18.93	8.93	8.91	8.92	8.92
		35°	20.49	14.97	18.90	18.94	18.93	8.99	8.95	8.95	8.90
	Lid close	25°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		30°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Laptop	35°	20.44	14.96	18.99	18.96	18.96	8.91	8.90	8.91	8.96
	Lid close	34°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		33°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		32°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		31°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		30°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		20°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		10°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		0°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Antenna	Operation mode	Lid angle	802.11b	802.11ac(80M) 5.2G	802.11ac(80M) 5.3G	802.11ac(80M) 5.6G	802.11ac(80M) 5.8G	802.11ax(160M) 6.2G	802.11ax(160M) 6.5G	802.11ax(160M) 6.7G	802.11ax(160M) 7.0G
Tx2	Lid close	0°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		10°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		20°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		30°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Laptop	40°	20.49	14.96	18.99	19.00	18.97	8.95	8.91	8.98	8.95
		35°	20.47	15.00	18.92	19.00	18.96	8.90	8.97	8.91	8.99
	Lid close	30°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		31°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		32°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		33°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		34°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Laptop	35°	20.45	14.99	18.94	18.94	18.91	9.00	9.00	8.94	8.93
		36°	20.43	14.95	18.94	18.93	19.00	8.90	8.92	8.94	8.98
		37°	20.42	14.98	18.92	18.91	18.98	8.91	8.97	8.91	8.93
		38°	20.41	14.96	18.93	18.99	18.93	8.96	8.95	8.90	8.96
		39°	20.41	14.90	18.94	19.00	18.99	8.96	8.98	8.98	8.96
		40°	20.47	14.93	19.00	18.98	19.00	8.97	8.94	8.99	8.90
		50°	20.40	14.97	18.90	18.98	18.93	8.96	8.91	8.98	8.96
		60°	20.43	14.91	18.92	18.98	18.99	9.00	8.94	8.95	8.90
		70°	20.49	14.95	18.94	18.94	19.00	9.00	8.96	8.98	8.99
		80°	20.41	14.93	18.95	18.93	18.97	9.00	8.98	8.97	8.95
		90°	20.45	14.97	18.90	18.90	18.94	8.93	8.97	8.96	8.97
		100°	20.46	15.00	18.98	18.98	18.99	8.95	8.93	8.95	8.95
		110°	20.40	14.99	18.99	18.91	18.96	8.92	8.93	8.94	8.92
		120°	20.49	14.92	18.91	18.94	18.95	8.93	8.95	9.00	8.99
	Tablet	130°	19.96	14.95	17.90	17.93	17.91	8.90	8.95	8.94	8.95
	Laptop	125°	20.40	14.91	18.93	18.91	18.90	8.99	8.97	8.92	9.00
		126°	20.44	14.92	18.95	19.00	18.93	8.91	8.98	8.98	8.99
		127°	20.49	14.97	18.97	18.96	18.91	8.94	8.95	8.90	8.97
		128°	20.46	14.92	18.97	18.90	18.90	8.99	8.97	8.95	8.91
		129°	20.42	15.00	18.93	18.97	18.98	8.99	8.91	8.90	8.97
	Tablet	130°	19.99	14.91	17.95	17.92	17.98	9.00	8.98	8.90	8.95
		131°	19.98	14.99	17.90	17.98	17.91	8.93	8.98	8.98	8.97
		132°	19.91	14.96	17.99	17.95	17.97	9.00	8.97	8.91	8.99
		133°	19.90	14.92	17.98	17.96	17.99	8.91	8.90	8.95	8.94
		134°	19.95	14.94	17.92	17.93	17.91	8.98	8.98	8.99	8.91
		135°	20.00	14.91	17.93	17.99	17.96	8.94	8.95	9.00	8.93
		145°	19.95	14.95	18.00	17.94	17.93	8.95	8.97	8.99	8.99
		155°	19.90	14.97	17.91	17.96	17.96	8.96	8.92	8.98	8.99
		165°	19.99	14.92	17.91	17.98	17.96	8.90	9.00	9.00	8.98
		175°	19.91	14.90	17.91	17.95	17.95	8.95	8.96	8.98	8.98
		185°	19.91	14.97	17.95	17.92	17.95	8.94	8.97	8.91	8.90
		195°	19.90	14.99	17.92	17.94	17.92	8.93	8.97	8.94	8.93
		205°	20.00	14.97	17.96	17.95	17.93	8.92	8.91	8.95	8.99
		215°	19.97	14.96	17.93	18.00	18.00	8.93	8.95	8.94	8.98
		225°	20.00	14.90	17.93	17.94	18.00	8.95	8.93	8.94	8.97
		235°	20.00	15.00	17.93	18.00	17.92	8.91	8.99	8.99	8.93
		245°	19.96	14.90	17.95	17.98	17.98	8.91	8.98	8.93	8.90
		255°	19.96	14.97	17.97	17.94	17.92	8.98	8.96	8.99	8.94
		265°	19.97	14.95	17.93	17.96	17.91	8.98	8.92	8.94	8.90
		275°	20.00	14.93	17.98	17.93	17.93	8.96	9.00	8.94	8.91
		285°	19.98	14.98	18.00	17.96	17.91	8.99	8.96	8.92	8.97
		295°	19.94	14.96	17.97	17.98	17.96	8.94	8.91	8.92	8.96
		305°	19.94	14.96	17.94	17.95	18.00	8.99	8.91	8.95	8.92
		315°	19.93	14.93	17.92	17.97	17.91	8.90	8.94	8.98	9.00
		325°	19.92	14.94	17.98	17.95	17.91	9.00	8.92	8.99	8.96
		335°	19.97	14.95	17.95	17.93	17.93	8.95	8.92	8.95	8.90
		345°	19.95	14.97	17.95	17.95	18.00	8.99	8.98	8.95	8.96
		355°	19.92	14.91	18.00	17.91	17.90	8.94	8.97	9.00	9.00
		360°	19.90	14.96	18.00	17.95	18.00	8.94	8.92	8.94	8.95
	Tablet	350°	19.99	14.99	17.90	17.95	17.97	8.92	8.97	8.92	8.92
		340°	19.90	14.94	18.00	17.97	17.97	8.98	8.96	8.94	8.91
		330°	19.91	14.97	17.92	18.00	17.93	8.93	8.91	8.98	8.91
		320°	19.91	14.95	17.90	17.97	18.00	8.99	8.93	8.98	8.90
		310°	20.00	14.93	17.93	17.92	17.99	8.99	8.90	8.97	8.96
		300°	19.98	14.91	17.92	17.98	17.94	8.93	8.99	8.90	8.98
		290°	19.93	14.90	17.93	17.95	17.96	8.98	8.91	8.98	8.95
		280°	19.91	15.00	17.92	17.95	17.91	8.91	8.93	8.99	8.93
		270°	19.95	14.93	17.93	17.92	18.00	8.90	8.93	8.99	9.00
		260°	19.90	15.00	17.97	17.96	17.98	8.98	8.96	8.96	8.98
		250°	19.91	14.95	17.91	17.92	17.90	8.90	8.99	8.99	8.95
		240°	19.99	14.91	17.96	17.97	17.96	8.96	8.92	8.97	8.93
		230°	19.95	14.98	17.91	17.92	17.96	8.97	8.92	9.00	8.99
		220°	20.00	14.90	17.98	18.00	17.91	8.90	8.98	8.91	9.00
		210°	19.98	14.93	17.91	17.94	17.92	9.00	8.96	8.91	8.92
		200°	19.94	14.94	17.94	17.91	17.96	8.90	8.98	8.98	8.94
		190°	19.95	14.90	17.94	17.94	17.95	8.91	8.91	9.00	8.92
		180°	19.94	14.94	18.00	17.90	17.91	8.95	8.93	9.00	8.93
		170°	20.00	14.93	17.92	17.94	17.94	8.96	8.98	8.90	8.95
		160°	19.96	14.99	18.00	17.98	17.93	8.98	8.93	8.98	8.92
		150°	19.90	14.93	17.96	17.94	17.90	8.98	8.91	8.93	9.00
		140°	19.91	14.99	17.90	17.91	17.94	8.97	8.98	8.94	8.95
		130°	20.00	14.93	18.00	17.90	17.95	9.00	8.94	8.90	8.92
	Laptop	120°	20.48	14.99	18.92	18.96	19.00	8.94	8.97	9.00	8.96
		125°	20.44	14.90	18.94	18.93	18.90	8.95	8.90	8.95	8.98
	Tablet	130°	19.91	14.92	17.92	17.91	17.94	8.98	8.98	8.98	8.91
	Laptop	129°	20.40	14.97	18.96	18.99	18.96	8.98	8.90	8.98	8.99
		128°	20.50	14.93	18.92	18.97	18.94	9.00	8.94	8.91	8.95
		127°	20.47	14.97	18.96	19.00	18.94	8.91	9.00	8.99	8.93
		126°	20.43	15.00	19.00	18.91	18.92	8.95	8.97	8.93	8.91
		125°	20.40	14.90	18.93	18.96	18.99	8.95	8.94	8.90	9.00
		115°	20.44	14.97	18.93	18.92	18.97	8.94	8.94	8.95	8.96
		105°	20.49	14.91	18.90	19.00	18.99	8.95	8.96	8.91	8.90
		95°	20.44	14.90	18.95	18.98	18.90	8.95	8.91	8.94	8.94
		85°	20.45	14.90	18.99	18.97	18.92	8.90	9.00	8.97	8.98
		75°	20.43	14.97	18.95	18.96	18.90	8.98	8.93	8.98	8.94
		65°	20.46	14.92	18.90	18.98	18.93	8.91	8.92	8.91	8.90
		55°	20.40	14.93	18.98	18.97	19.00	8.91	8.99	8.95	8.93
		45°	20.50	14.97	19.00	18.94	18.92	8.94	8.92	9.00	8.99
		35°	20.44	14.99	18.91	18.98	18.98	9.00	8.98	8.95	8.91
	Lid close	25°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		30°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Laptop	35°	20.48	14.96	18.98	18.97	18.99	8.96	8.94	8.92	8.90
	Lid close	34°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		33°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		32°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		31°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		30°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		20°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		10°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		0°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Report No.: TESA2305000314EN

Antenna	Operation mode	Lid angle	802.11ac(160M) 5.9G
Tx1	Lid close	0°	n/a
		10°	n/a
		20°	n/a
		30°	n/a
	Laptop	40°	17.96
		35°	17.83
	Lid close	30°	n/a
		31°	n/a
		32°	n/a
		33°	n/a
		34°	n/a
	Laptop	35°	17.92
		36°	18.00
		37°	17.80
		38°	17.97
		39°	18.00
		40°	17.99
		50°	18.00
		60°	17.84
		70°	17.93
		80°	17.92
		90°	17.92
		100°	17.90
		110°	17.81
		120°	17.94
	Tablet	130°	17.90
	Laptop	125°	17.81
		126°	17.90
		127°	17.82
		128°	17.83
		129°	17.96
	Tablet	130°	17.95
		131°	17.86
		132°	17.94
		133°	17.93
		134°	18.00
		135°	17.81
		145°	17.92
		155°	18.00
		165°	17.82
		175°	17.98
		185°	17.96
		195°	17.86
		205°	17.92
		215°	17.81
		225°	17.92
		235°	17.81
		245°	17.87
		255°	17.93
		265°	18.00
		275°	17.80
		285°	17.86
		295°	17.85
		305°	17.99
		315°	17.92
		325°	17.81
		335°	17.92
		345°	17.99
		355°	17.85
		360°	17.85
	Tablet	350°	17.80
		340°	17.82
		330°	17.92
		320°	17.98
		310°	17.86
		300°	17.97
		290°	17.95
		280°	17.93
		270°	17.89
		260°	17.80
		250°	17.81
		240°	17.90
		230°	17.80
		220°	17.92
		210°	17.80
		200°	18.00
		190°	17.96
		180°	17.95
		170°	17.83
		160°	17.91
		150°	17.85
		140°	17.95
		130°	17.94
	Laptop	120°	17.98
		125°	17.92
	Tablet	130°	17.80
	Laptop	129°	17.87
		128°	17.95
		127°	17.84
		126°	17.87
		125°	17.95
		115°	17.91
		105°	17.81
		95°	17.97
		85°	17.88
		75°	17.80
		65°	17.92
		55°	17.93
		45°	17.86
		35°	17.80
	Lid close	25°	n/a
		30°	n/a
	Laptop	35°	17.98
	Lid close	34°	n/a
		33°	n/a
		32°	n/a
		31°	n/a
		30°	n/a
		20°	n/a
		10°	n/a
		0°	n/a

Antenna	Operation mode	Lid angle	802.11ac(160M) 5.9G
Tx2	Lid close	0°	n/a
		10°	n/a
		20°	n/a
		30°	n/a
	Laptop	40°	17.81
		35°	17.80
	Lid close	30°	n/a
		31°	n/a
		32°	n/a
		33°	n/a
		34°	n/a
	Laptop	35°	17.81
		36°	17.97
		37°	17.85
		38°	17.89
		39°	17.93
		40°	17.89
		50°	17.87
		60°	17.82
		70°	17.94
		80°	17.86
		90°	17.95
		100°	17.97
		110°	17.86
		120°	17.94
	Tablet	130°	17.85
	Laptop	125°	17.99
		126°	17.91
		127°	17.89
		128°	17.96
		129°	18.00
	Tablet	130°	17.84
		131°	17.94
		132°	17.90
		133°	17.99
		134°	18.00
		135°	17.88
		145°	17.82
		155°	17.97
		165°	17.95
		175°	17.98
		185°	17.85
		195°	17.99
		205°	17.80
		215°	17.85
		225°	17.88
		235°	17.97
		245°	17.98
		255°	17.84
		265°	17.89
		275°	17.81
		285°	17.86
		295°	17.81
		305°	17.81
		315°	17.80
		325°	17.87
		335°	17.87
		345°	17.94
		355°	17.90
		360°	17.89
	Tablet	350°	17.96
		340°	17.81
		330°	17.88
		320°	17.95
		310°	17.92
		300°	17.93
		290°	17.97
		280°	17.86
		270°	17.95
		260°	17.92
		250°	17.81
		240°	17.97
		230°	17.94
		220°	17.91
		210°	17.98
		200°	17.88
		190°	17.91
		180°	17.96
		170°	17.88
		160°	17.95
		150°	17.83
		140°	17.98
		130°	17.82
	Laptop	120°	17.86
		125°	17.86
	Tablet	130°	18.00
	Laptop	129°	17.84
		128°	17.86
		127°	17.86
		126°	17.83
		125°	17.82
		115°	17.99
		105°	17.96
		95°	17.95
		85°	17.83
		75°	17.97
		65°	17.87
		55°	17.87
		45°	17.83
		35°	17.83
	Lid close	25°	n/a
		30°	n/a
	Laptop	35°	17.81
	Lid close	34°	n/a
		33°	n/a
		32°	n/a
		31°	n/a
		30°	n/a
		20°	n/a
		10°	n/a
		0°	n/a

5.5 Test limit

§ 2.1093(d)(1)

Applications for equipment authorization of portable RF sources subject to routine environmental evaluation must contain a statement confirming compliance with the limits specified in § 1.1310 as part of their application. Technical information showing the basis for this statement must be submitted to the Commission upon request. The SAR limits specified in § 1.1310(a) through (c) of this chapter shall be used for evaluation of portable devices transmitting in the frequency range from 100 kHz to 6 GHz. Portable devices that transmit at frequencies above 6 GHz shall be evaluated in terms of the MPE limits specified in Table 1 to § 1.1310(e)(1). A minimum separation distance applicable to the operating configurations and exposure conditions of the device shall be used for the evaluation. In general, maximum time-averaged power levels must be used for evaluation. All unlicensed personal communications service (PCS) devices and unlicensed NII devices shall be subject to the limits for general population/uncontrolled exposure.

Radiofrequency radiation exposure limits.

§ 1.1310(a)

Specific absorption rate (SAR) shall be used to evaluate the environmental impact of human exposure to radiofrequency (RF) radiation as specified in § 1.1307(b) within the frequency range of 100 kHz to 6 GHz (inclusive).

§ 1.1310(b)

The SAR limits for occupational/controlled exposure are 0.4 W/kg, as averaged over the whole body, and a peak spatial-average SAR of 8 W/kg, averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the parts of the human body treated as extremities, such as hands, wrists, feet, ankles, and pinnae, where the peak spatial-average SAR limit for occupational/controlled exposure is 20 W/kg, averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). Exposure may be averaged over a time period not to exceed 6 minutes to determine compliance with occupational/controlled SAR limits.

§ 1.1310(c)

The SAR limits for general population/uncontrolled exposure are 0.08 W/kg, as averaged over the whole body, and a peak spatial-average SAR of 1.6 W/kg, averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the parts of the human body treated as extremities, such as hands, wrists, feet, ankles, and pinnae, where the peak spatial-average SAR limit is 4 W/kg, averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). Exposure may be averaged over a time period not to exceed 30 minutes to determine compliance with general population/uncontrolled SAR limits.

Note to paragraphs (a) through (c):

SAR is a measure of the rate of energy absorption due to exposure to RF electromagnetic energy. These SAR limits to be used for evaluation are based generally on criteria published by the American National Standards Institute (ANSI) for localized SAR in Section 4.2 of “IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz,” ANSI/IEEE Std C95.1-1992, copyright 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017. These criteria for SAR evaluation are similar to those

recommended by the National Council on Radiation Protection and Measurements (NCRP) in "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," NCRP Report No. 86, Section 17.4.5, copyright 1986 by NCRP, Bethesda, Maryland 20814. Limits for whole body SAR and peak spatial-average SAR are based on recommendations made in both of these documents. The MPE limits in Table 1 are based generally on criteria published by the NCRP in "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," NCRP Report No. 86, Sections 17.4.1, 17.4.1.1, 17.4.2 and 17.4.3, copyright 1986 by NCRP, Bethesda, Maryland 20814. In the frequency range from 100 MHz to 1500 MHz, these MPE exposure limits for field strength and power density are also generally based on criteria recommended by the ANSI in Section 4.1 of "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," ANSI/IEEE Std C95.1-1992, copyright 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017.

Portable devices that transmit at frequencies above 6 GHz shall be evaluated in terms of the MPE limits specified in Table 1 to § 1.1310(e)(1).
According to ANSI/IEEE C95.1-1992, the criteria listed in the following Table shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.
Peak Spatially Averaged Power Density was evaluated over a circular area of 4cm2 per interim FCC Guidance for near-field power density evaluations per October 2018 TCB Workshop notes

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(i) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*(100)	≤6
3.0-30	1842/f	4.89/f	*($900/f^2$)	<6
30-300	61.4	0.163	1.0	<6
300-1,500			f/300	<6
1,500-100,000			5	<6
(ii) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/f	2.19/f	*($180/f^2$)	<30
30-300	27.5	0.073	0.2	<30
300-1,500			f/1500	<30
1,500-100,000			1.0	<30

f = frequency in MHz. * = Plane-wave equivalent power density.
Table 1 to § 1.1310(e)(1) - Limits for Maximum Permissible Exposure (MPE)

6 MAXIMUM OUTPUT POWER

6.1 WLAN

Tablet mode

Tx 1						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
2.45GHz	802.11b	1	2412	1Mbps	19.50	19.32
		6	2437		20.00	19.99
		11	2462		19.50	19.46
	802.11g	1	2412	6Mbps	18.00	17.83
		6	2437		20.00	19.76
		11	2462		18.00	17.74
	802.11n20-HT0	1	2412	MCS0	17.50	17.27
		6	2437		19.50	19.24
		11	2462		13.50	13.34
	802.11ac20-VHT0	1	2412	MCS0	17.50	17.37
		6	2437		19.50	19.34
		11	2462		13.50	13.27
	802.11ax20-HE0	1	2412	MCS0	17.50	17.28
		6	2437		19.50	19.30
		11	2462		13.50	13.31
	802.11n40-HT0	3	2422	MCS0	15.50	15.32
		6	2437		16.00	15.77
		9	2452		15.00	14.75
	802.11ac40-VHT0	3	2422	MCS0	15.50	15.29
		6	2437		16.00	15.75
		9	2452		15.00	14.78
	802.11ax40-HE0	3	2422	MCS0	15.50	15.32
		6	2437		16.00	15.85
		9	2452		15.00	14.79

Tx 1						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.15-5.25 GHz	802.11a	36	5180	6Mbps	14.50	14.39
		40	5200		14.50	14.22
		44	5220		14.50	14.25
		48	5240		14.50	14.38
	802.11n20-HT0	36	5180	MCS0	14.50	14.32
		40	5200		14.50	14.18
		44	5220		14.50	14.21
		48	5240		14.50	14.30
	802.11ac20-VHT0	36	5180	MCS0	14.50	14.23
		40	5200		14.50	14.25
		44	5220		14.50	14.33
		48	5240		14.50	14.30
	802.11ax20-HE0	36	5180	MCS0	14.50	14.16
		40	5200		14.50	14.15
		44	5220		14.50	14.19
		48	5240		14.50	14.26
	802.11n40-HT0	38	5190	MCS0	15.00	14.78
		46	5230		15.00	14.98
	802.11ac40-VHT0	38	5190	MCS0	15.00	14.74
		46	5230		15.00	14.96
	802.11ax40-HE0	38	5190	MCS0	15.00	14.78
		46	5230		15.00	14.84
	802.11ac80-VHT0	42	5210	MCS0	13.00	12.86
	802.11ax80-HE0	42	5210	MCS0	13.00	12.73
	802.11ac160-VHT0	50	5250	MCS0	13.00	12.69
	802.11ax160-HE0	50	5250	MCS0	13.00	12.77

Tx 1						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.25-5.35 GHz	802.11a	52	5260	6Mbps	16.00	15.91
		56	5280		18.00	17.98
		60	5300		18.00	17.86
		64	5320		16.00	15.74
	802.11n20-HT0	52	5260	MCS0	16.00	15.87
		56	5280		17.50	17.37
		60	5300		17.50	17.33
		64	5320		16.00	15.89
	802.11ac20-VHT0	52	5260	MCS0	16.00	15.74
		56	5280		17.50	17.29
		60	5300		17.50	17.33
		64	5320		16.00	15.75
	802.11ax20-HE0	52	5260	MCS0	16.00	15.91
		56	5280		17.50	17.20
		60	5300		17.50	17.38
		64	5320		16.00	15.81
	802.11n40-HT0	54	5270	MCS0	17.00	16.78
		62	5310		15.50	15.34
	802.11ac40-VHT0	54	5270	MCS0	17.00	16.78
		62	5310		15.50	15.37
	802.11ax40-HE0	54	5270	MCS0	17.00	16.71
		62	5310		15.50	15.41
	802.11ac80-VHT0	58	5290	MCS0	14.00	13.90
	802.11ax80-HE0	58	5290	MCS0	14.00	13.85

Tx 1						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.6GHz	802.11a	100	5500	6Mbps	16.00	15.94
		120	5600		18.00	17.92
		140	5700		16.00	15.86
		144	5720		18.00	17.96
	802.11n20-HT0	100	5500	MCS0	16.00	15.80
		120	5600		17.50	17.22
		140	5700		16.00	15.76
		144	5720		17.50	17.17
	802.11ac20-VHT0	100	5500	MCS0	16.00	15.74
		120	5600		17.50	17.21
		140	5700		16.00	15.87
		144	5720		17.50	17.30
	802.11ax20-HE0	100	5500	MCS0	16.00	15.90
		120	5600		17.50	17.28
		140	5700		16.00	15.77
		144	5720		17.50	17.39
	802.11n40-HT0	102	5510	MCS0	15.50	15.34
		118	5590		17.00	16.73
		134	5670		15.50	15.23
		142	5710		17.00	16.69
	802.11ac40-VHT0	102	5510	MCS0	15.50	15.30
		118	5590		17.00	16.77
		134	5670		15.50	15.35
		142	5710		17.00	16.77
	802.11ax40-HE0	102	5510	MCS0	15.50	15.34
		118	5590		17.00	16.78
		134	5670		15.50	15.26
		142	5710		17.00	16.76
	802.11ac80-VHT0	106	5530	MCS0	15.00	14.73
		122	5610		15.00	14.79
		138	5690		16.50	16.28
	802.11ax80-HE0	106	5530	MCS0	15.00	14.85
		122	5610		15.00	14.89
		138	5690		16.50	16.28
	802.11ac160-VHT0	114	5570	MCS0	14.00	13.71
	802.11ax160-HE0	114	5570	MCS0	14.00	13.92

Tx 1						
Mode	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.8GHz	802.11a	149	5745	6Mbps	18.00	17.96
		157	5785		18.00	17.72
		165	5825		18.00	17.92
	802.11n20-HT0	149	5745	MCS0	17.50	17.37
		157	5785		17.50	17.17
		165	5825		17.50	17.35
	802.11ac20-VHT0	149	5745	MCS0	17.50	17.28
		157	5785		17.50	17.37
		165	5825		17.50	17.31
	802.11ax20-HE0	149	5745	MCS0	17.50	17.24
		157	5785		17.50	17.34
		165	5825		17.50	17.34
	802.11n40-HT0	151	5755	MCS0	17.00	16.89
		159	5795		17.00	16.86
	802.11ac40-VHT0	151	5755	MCS0	17.00	16.79
		159	5795		17.00	16.76
	802.11ax40-HE0	151	5755	MCS0	17.00	16.81
		159	5795		17.00	16.72
	802.11ac80-VHT0	155	5775	MCS0	16.50	16.27
	802.11ax80-HE0	155	5775	MCS0	16.50	16.38

Tx 1						
Mode	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.9GHz	802.11a	169	5845	6Mbps	18.00	17.51
		173	5865		18.00	17.46
		177	5885		18.00	17.47
	802.11n20-HT0	169	5845	MCS0	18.00	17.45
		173	5865		18.00	17.38
		177	5885		18.00	17.25
	802.11ac20-VHT0	169	5845	MCS0	18.00	17.44
		173	5865		18.00	17.39
		177	5885		18.00	17.42
	802.11ax20-HE0	169	5845	MCS0	18.00	17.41
		173	5865		18.00	17.53
		177	5885		18.00	17.44
	802.11n40-HT0	167	5835	MCS0	18.00	17.40
		175	5875		18.00	17.42
	802.11ac40-VHT0	167	5835	MCS0	18.00	17.41
		175	5875		18.00	17.45
	802.11ax40-HE0	167	5835	MCS0	18.00	17.50
		175	5875		18.00	17.45
	802.11ac80-VHT0	171	5855	MCS0	18.00	17.47
	802.11ax80-HE0	171	5855	MCS0	18.00	17.45
	802.11ac160-VHT0	163	5815	MCS0	18.00	17.55
	802.11ax160-HE0	163	5815	MCS0	18.00	17.48

Tx 2						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
2.45GHz	802.11b	1	2412	1Mbps	19.50	19.36
		6	2437		20.00	19.98
		11	2462		19.50	19.48
	802.11g	1	2412	6Mbps	18.00	17.69
		6	2437		20.00	19.75
		11	2462		18.00	17.89
	802.11n20-HT0	1	2412	MCS0	17.50	17.18
		6	2437		19.50	19.32
		11	2462		13.50	13.18
	802.11ac20-VHT0	1	2412	MCS0	17.50	17.34
		6	2437		19.50	19.29
		11	2462		13.50	13.31
	802.11ax20-HE0	1	2412	MCS0	17.50	17.31
		6	2437		19.50	19.24
		11	2462		13.50	13.38
	802.11n40-HT0	3	2422	MCS0	15.50	15.21
		6	2437		16.00	15.76
		9	2452		15.00	14.81
	802.11ac40-VHT0	3	2422	MCS0	15.50	15.22
		6	2437		16.00	15.90
		9	2452		15.00	14.79
	802.11ax40-HE0	3	2422	MCS0	15.50	15.25
		6	2437		16.00	15.87
		9	2452		15.00	14.74

Tx 2						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.15-5.25 GHz	802.11a	36	5180	6Mbps	14.50	14.28
		40	5200		14.50	14.29
		44	5220		14.50	14.26
		48	5240		14.50	14.35
	802.11n20-HT0	36	5180	MCS0	14.50	14.30
		40	5200		14.50	14.24
		44	5220		14.50	14.24
		48	5240		14.50	14.37
	802.11ac20-VHT0	36	5180	MCS0	14.50	14.19
		40	5200		14.50	14.33
		44	5220		14.50	14.33
		48	5240		14.50	14.33
	802.11ax20-HE0	36	5180	MCS0	14.50	14.21
		40	5200		14.50	14.25
		44	5220		14.50	14.29
		48	5240		14.50	14.23
	802.11n40-HT0	38	5190	MCS0	15.00	14.96
		46	5230		15.00	14.98
	802.11ac40-VHT0	38	5190	MCS0	15.00	14.71
		46	5230		15.00	14.76
	802.11ax40-HE0	38	5190	MCS0	15.00	14.77
		46	5230		15.00	14.85
	802.11ac80-VHT0	42	5210	MCS0	13.00	12.70
	802.11ax80-HE0	42	5210	MCS0	13.00	12.81
	802.11ac160-VHT0	50	5250	MCS0	13.00	12.71
	802.11ax160-HE0	50	5250	MCS0	13.00	12.80

Tx 2						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.25-5.35 GHz	802.11a	52	5260	6Mbps	16.00	15.78
		56	5280		18.00	17.94
		60	5300		18.00	17.99
		64	5320		16.00	15.85
	802.11n20-HT0	52	5260	MCS0	16.00	15.90
		56	5280		17.50	17.30
		60	5300		17.50	17.29
		64	5320		16.00	15.82
	802.11ac20-VHT0	52	5260	MCS0	16.00	15.80
		56	5280		17.50	17.33
		60	5300		17.50	17.30
		64	5320		16.00	15.77
	802.11ax20-HE0	52	5260	MCS0	16.00	15.84
		56	5280		17.50	17.20
		60	5300		17.50	17.30
		64	5320		16.00	15.81
	802.11n40-HT0	54	5270	MCS0	17.00	16.79
		62	5310		15.50	15.40
	802.11ac40-VHT0	54	5270	MCS0	17.00	16.86
		62	5310		15.50	15.36
	802.11ax40-HE0	54	5270	MCS0	17.00	16.80
		62	5310		15.50	15.27
	802.11ac80-VHT0	58	5290	MCS0	14.00	13.76
	802.11ax80-HE0	58	5290	MCS0	14.00	13.78

Tx 2						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.6GHz	802.11a	100	5500	6Mbps	16.00	15.97
		120	5600		18.00	17.88
		140	5700		16.00	15.95
		144	5720		18.00	17.98
	802.11n20-HT0	100	5500	MCS0	16.00	15.82
		120	5600		17.50	17.26
		140	5700		16.00	15.72
		144	5720		17.50	17.19
	802.11ac20-VHT0	100	5500	MCS0	16.00	15.79
		120	5600		17.50	17.35
		140	5700		16.00	15.82
		144	5720		17.50	17.33
	802.11ax20-HE0	100	5500	MCS0	16.00	15.89
		120	5600		17.50	17.26
		140	5700		16.00	15.80
		144	5720		17.50	17.25
	802.11n40-HT0	102	5510	MCS0	15.50	15.23
		118	5590		17.00	16.77
		134	5670		15.50	15.21
		142	5710		17.00	16.73
	802.11ac40-VHT0	102	5510	MCS0	15.50	15.24
		118	5590		17.00	16.72
		134	5670		15.50	15.18
		142	5710		17.00	16.77
	802.11ax40-HE0	102	5510	MCS0	15.50	15.31
		118	5590		17.00	16.77
		134	5670		15.50	15.30
		142	5710		17.00	16.76
	802.11ac80-VHT0	106	5530	MCS0	15.00	14.77
		122	5610		15.00	14.90
		138	5690		16.50	16.32
	802.11ax80-HE0	106	5530	MCS0	15.00	14.78
		122	5610		15.00	14.77
		138	5690		16.50	16.29
	802.11ac160-VHT0	114	5570	MCS0	14.00	13.81
	802.11ax160-HE0	114	5570	MCS0	14.00	13.72

Tx 2						
Mode	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.8GHz	802.11a	149	5745	6Mbps	18.00	17.82
		157	5785		18.00	17.96
		165	5825		18.00	17.99
	802.11n20-HT0	149	5745	MCS0	17.50	17.42
		157	5785		17.50	17.33
		165	5825		17.50	17.34
	802.11ac20-VHT0	149	5745	MCS0	17.50	17.38
		157	5785		17.50	17.34
		165	5825		17.50	17.39
	802.11ax20-HE0	149	5745	MCS0	17.50	17.17
		157	5785		17.50	17.33
		165	5825		17.50	17.30
	802.11n40-HT0	151	5755	MCS0	17.00	16.66
		159	5795		17.00	16.76
	802.11ac40-VHT0	151	5755	MCS0	17.00	16.78
		159	5795		17.00	16.73
	802.11ax40-HE0	151	5755	MCS0	17.00	16.79
		159	5795		17.00	16.69
	802.11ac80-VHT0	155	5775	MCS0	16.50	16.38
	802.11ax80-HE0	155	5775	MCS0	16.50	16.36

Tx 2						
Mode	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.9GHz	802.11a	169	5845	6Mbps	18.00	17.85
		173	5865		18.00	17.80
		177	5885		18.00	17.85
	802.11n20-HT0	169	5845	MCS0	18.00	17.88
		173	5865		18.00	17.87
		177	5885		18.00	17.81
	802.11ac20-VHT0	169	5845	MCS0	18.00	17.93
		173	5865		18.00	17.87
		177	5885		18.00	17.88
	802.11ax20-HE0	169	5845	MCS0	18.00	17.85
		173	5865		18.00	17.91
		177	5885		18.00	17.83
	802.11n40-HT0	167	5835	MCS0	18.00	17.84
		175	5875		18.00	17.96
	802.11ac40-VHT0	167	5835	MCS0	18.00	17.94
		175	5875		18.00	17.89
	802.11ax40-HE0	167	5835	MCS0	18.00	17.90
		175	5875		18.00	17.88
	802.11ac80-VHT0	171	5855	MCS0	18.00	17.91
	802.11ax80-HE0	171	5855	MCS0	18.00	17.89
	802.11ac160-VHT0	163	5815	MCS0	18.00	17.98
	802.11ax160-HE0	163	5815	MCS0	18.00	17.93

Notebook mode

Tx 1						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
2.45GHz	802.11b	1	2412	1Mbps	19.50	19.42
		6	2437		20.50	20.45
		11	2462		19.50	19.46
	802.11g	1	2412	6Mbps	18.00	17.95
		6	2437		20.50	20.38
		11	2462		18.00	17.96
	802.11n20-HT0	1	2412	MCS0	17.50	17.37
		6	2437		19.50	19.45
		11	2462		13.50	13.44
	802.11ac20-VHT0	1	2412	MCS0	17.50	17.45
		6	2437		19.50	19.46
		11	2462		13.50	13.33
	802.11ax20-HE0	1	2412	MCS0	17.50	17.33
		6	2437		19.50	19.43
		11	2462		13.50	13.41
	802.11n40-HT0	3	2422	MCS0	15.50	15.42
		6	2437		16.00	15.85
		9	2452		15.00	14.89
	802.11ac40-VHT0	3	2422	MCS0	15.50	15.39
		6	2437		16.00	15.89
		9	2452		15.00	14.83
	802.11ax40-HE0	3	2422	MCS0	15.50	15.34
		6	2437		16.00	15.93
		9	2452		15.00	14.86

Tx 1						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.15-5.25 GHz	802.11a	36	5180	6Mbps	14.50	14.44
		40	5200		14.50	14.32
		44	5220		14.50	14.42
		48	5240		14.50	14.48
	802.11n20-HT0	36	5180	MCS0	14.50	14.34
		40	5200		14.50	14.43
		44	5220		14.50	14.42
		48	5240		14.50	14.32
	802.11ac20-VHT0	36	5180	MCS0	14.50	14.47
		40	5200		14.50	14.45
		44	5220		14.50	14.35
		48	5240		14.50	14.42
	802.11ax20-HE0	36	5180	MCS0	14.50	14.43
		40	5200		14.50	14.38
		44	5220		14.50	14.39
		48	5240		14.50	14.45
	802.11n40-HT0	38	5190	MCS0	15.00	14.96
		46	5230		15.00	14.92
	802.11ac40-VHT0	38	5190	MCS0	15.00	14.87
		46	5230		15.00	14.94
	802.11ax40-HE0	38	5190	MCS0	15.00	14.92
		46	5230		15.00	14.93
	802.11ac80-VHT0	42	5210	MCS0	13.00	12.89
	802.11ax80-HE0	42	5210	MCS0	13.00	12.95
	802.11ac160-VHT0	50	5250	MCS0	13.00	12.88
	802.11ax160-HE0	50	5250	MCS0	13.00	12.84

Tx 1						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.25-5.35 GHz	802.11a	52	5260	6Mbps	16.00	15.92
		56	5280		19.00	18.96
		60	5300		19.00	18.92
		64	5320		16.00	15.86
	802.11n20-HT0	52	5260	MCS0	16.00	15.82
		56	5280		17.50	17.38
		60	5300		17.50	17.44
		64	5320		16.00	15.82
	802.11ac20-VHT0	52	5260	MCS0	16.00	15.95
		56	5280		17.50	17.37
		60	5300		17.50	17.35
		64	5320		16.00	15.94
	802.11ax20-HE0	52	5260	MCS0	16.00	15.83
		56	5280		17.50	17.38
		60	5300		17.50	17.37
		64	5320		16.00	15.86
	802.11n40-HT0	54	5270	MCS0	17.00	16.93
		62	5310		15.50	15.38
	802.11ac40-VHT0	54	5270	MCS0	17.00	16.84
		62	5310		15.50	15.33
	802.11ax40-HE0	54	5270	MCS0	17.00	16.83
		62	5310		15.50	15.37
	802.11ac80-VHT0	58	5290	MCS0	14.00	13.87
	802.11ax80-HE0	58	5290	MCS0	14.00	13.95

Tx 1						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.6GHz	802.11a	100	5500	6Mbps	16.00	15.89
		120	5600		18.50	18.38
		140	5700		16.00	15.92
		144	5720		19.00	18.98
	802.11n20-HT0	100	5500	MCS0	16.00	15.91
		120	5600		17.50	17.42
		140	5700		16.00	15.82
		144	5720		17.50	17.42
	802.11ac20-VHT0	100	5500	MCS0	16.00	15.84
		120	5600		17.50	17.42
		140	5700		16.00	15.86
		144	5720		17.50	17.34
	802.11ax20-HE0	100	5500	MCS0	16.00	15.94
		120	5600		17.50	17.39
		140	5700		16.00	15.93
		144	5720		17.50	17.39
	802.11n40-HT0	102	5510	MCS0	15.50	15.39
		118	5590		17.00	16.87
		134	5670		15.50	15.36
		142	5710		17.00	16.83
	802.11ac40-VHT0	102	5510	MCS0	15.50	15.41
		118	5590		17.00	16.89
		134	5670		15.50	15.46
		142	5710		17.00	16.91
	802.11ax40-HE0	102	5510	MCS0	15.50	15.34
		118	5590		17.00	16.88
		134	5670		15.50	15.44
		142	5710		17.00	16.86
	802.11ac80-VHT0	106	5530	MCS0	15.00	14.87
		122	5610		15.00	14.86
		138	5690		16.50	16.34
	802.11ax80-HE0	106	5530	MCS0	15.00	14.86
		122	5610		15.00	14.92
		138	5690		16.50	16.38
	802.11ac160-VHT0	114	5570	MCS0	14.00	13.86
	802.11ax160-HE0	114	5570	MCS0	14.00	13.91

Tx 1						
Mode	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.8GHz	802.11a	149	5745	6Mbps	19.00	18.93
		157	5785		19.00	18.84
		165	5825		19.00	18.98
	802.11n20-HT0	149	5745	MCS0	17.50	17.44
		157	5785		17.50	17.38
		165	5825		17.50	17.46
	802.11ac20-VHT0	149	5745	MCS0	17.50	17.44
		157	5785		17.50	17.45
		165	5825		17.50	17.43
	802.11ax20-HE0	149	5745	MCS0	17.50	17.35
		157	5785		17.50	17.33
		165	5825		17.50	17.40
	802.11n40-HT0	151	5755	MCS0	17.00	16.87
		159	5795		17.00	16.85
	802.11ac40-VHT0	151	5755	MCS0	17.00	16.88
		159	5795		17.00	16.86
	802.11ax40-HE0	151	5755	MCS0	17.00	16.91
		159	5795		17.00	16.86
	802.11ac80-VHT0	155	5775	MCS0	16.50	16.37
	802.11ax80-HE0	155	5775	MCS0	16.50	16.42

Tx 1						
Mode	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.9GHz	802.11a	169	5845	6Mbps	18.00	17.51
		173	5865		18.00	17.46
		177	5885		18.00	17.47
	802.11n20-HT0	169	5845	MCS0	18.00	17.45
		173	5865		18.00	17.38
		177	5885		18.00	17.25
	802.11ac20-VHT0	169	5845	MCS0	18.00	17.44
		173	5865		18.00	17.39
		177	5885		18.00	17.42
	802.11ax20-HE0	169	5845	MCS0	18.00	17.41
		173	5865		18.00	17.53
		177	5885		18.00	17.44
	802.11n40-HT0	167	5835	MCS0	18.00	17.40
		175	5875		18.00	17.42
	802.11ac40-VHT0	167	5835	MCS0	18.00	17.41
		175	5875		18.00	17.45
	802.11ax40-HE0	167	5835	MCS0	18.00	17.50
		175	5875		18.00	17.45
	802.11ac80-VHT0	171	5855	MCS0	18.00	17.47
	802.11ax80-HE0	171	5855	MCS0	18.00	17.45
	802.11ac160-VHT0	163	5815	MCS0	18.00	17.55
	802.11ax160-HE0	163	5815	MCS0	18.00	17.48

Tx 2						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
2.45GHz	802.11b	1	2412	1Mbps	19.50	19.45
		6	2437		20.50	20.48
		11	2462		19.50	19.42
	802.11g	1	2412	6Mbps	18.00	17.86
		6	2437		20.50	20.32
		11	2462		18.00	17.89
	802.11n20-HT0	1	2412	MCS0	17.50	17.32
		6	2437		19.50	19.35
		11	2462		13.50	13.33
	802.11ac20-VHT0	1	2412	MCS0	17.50	17.43
		6	2437		19.50	19.44
		11	2462		13.50	13.43
	802.11ax20-HE0	1	2412	MCS0	17.50	17.39
		6	2437		19.50	19.34
		11	2462		13.50	13.43
	802.11n40-HT0	3	2422	MCS0	15.50	15.36
		6	2437		16.00	15.94
		9	2452		15.00	14.90
	802.11ac40-VHT0	3	2422	MCS0	15.50	15.32
		6	2437		16.00	15.96
		9	2452		15.00	14.87
	802.11ax40-HE0	3	2422	MCS0	15.50	15.32
		6	2437		16.00	15.91
		9	2452		15.00	14.91

Tx 2						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.15-5.25 GHz	802.11a	36	5180	6Mbps	14.50	14.45
		40	5200		14.50	14.39
		44	5220		14.50	14.45
		48	5240		14.50	14.46
	802.11n20-HT0	36	5180	MCS0	14.50	14.37
		40	5200		14.50	14.38
		44	5220		14.50	14.32
		48	5240		14.50	14.36
	802.11ac20-VHT0	36	5180	MCS0	14.50	14.40
		40	5200		14.50	14.45
		44	5220		14.50	14.45
		48	5240		14.50	14.44
	802.11ax20-HE0	36	5180	MCS0	14.50	14.35
		40	5200		14.50	14.38
		44	5220		14.50	14.34
		48	5240		14.50	14.39
	802.11n40-HT0	38	5190	MCS0	15.00	14.96
		46	5230		15.00	14.92
	802.11ac40-VHT0	38	5190	MCS0	15.00	14.88
		46	5230		15.00	14.94
	802.11ax40-HE0	38	5190	MCS0	15.00	14.87
		46	5230		15.00	14.85
	802.11ac80-VHT0	42	5210	MCS0	13.00	12.94
	802.11ax80-HE0	42	5210	MCS0	13.00	12.92
	802.11ac160-VHT0	50	5250	MCS0	13.00	12.91
	802.11ax160-HE0	50	5250	MCS0	13.00	12.85

Tx 2						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.25-5.35 GHz	802.11a	52	5260	6Mbps	16.00	15.90
		56	5280		19.00	18.93
		60	5300		19.00	18.99
		64	5320		16.00	15.89
	802.11n20-HT0	52	5260	MCS0	16.00	15.84
		56	5280		17.50	17.33
		60	5300		17.50	17.46
		64	5320		16.00	15.87
	802.11ac20-VHT0	52	5260	MCS0	16.00	15.82
		56	5280		17.50	17.34
		60	5300		17.50	17.36
		64	5320		16.00	15.83
	802.11ax20-HE0	52	5260	MCS0	16.00	15.86
		56	5280		17.50	17.40
		60	5300		17.50	17.45
		64	5320		16.00	15.91
	802.11n40-HT0	54	5270	MCS0	17.00	16.86
		62	5310		15.50	15.45
	802.11ac40-VHT0	54	5270	MCS0	17.00	16.93
		62	5310		15.50	15.42
	802.11ax40-HE0	54	5270	MCS0	17.00	16.91
		62	5310		15.50	15.41
	802.11ac80-VHT0	58	5290	MCS0	14.00	13.90
	802.11ax80-HE0	58	5290	MCS0	14.00	13.88

Tx 2						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.6GHz	802.11a	100	5500	6Mbps	16.00	15.98
		120	5600		18.50	18.43
		140	5700		16.00	15.93
		144	5720		19.00	18.96
	802.11n20-HT0	100	5500	MCS0	16.00	15.84
		120	5600		17.50	17.44
		140	5700		16.00	15.93
		144	5720		17.50	17.32
	802.11ac20-VHT0	100	5500	MCS0	16.00	15.86
		120	5600		17.50	17.40
		140	5700		16.00	15.92
		144	5720		17.50	17.36
	802.11ax20-HE0	100	5500	MCS0	16.00	15.92
		120	5600		17.50	17.43
		140	5700		16.00	15.83
		144	5720		17.50	17.34
	802.11n40-HT0	102	5510	MCS0	15.50	15.46
		118	5590		17.00	16.90
		134	5670		15.50	15.46
		142	5710		17.00	16.86
	802.11ac40-VHT0	102	5510	MCS0	15.50	15.45
		118	5590		17.00	16.84
		134	5670		15.50	15.34
		142	5710		17.00	16.95
	802.11ax40-HE0	102	5510	MCS0	15.50	15.38
		118	5590		17.00	16.86
		134	5670		15.50	15.37
		142	5710		17.00	16.86
	802.11ac80-VHT0	106	5530	MCS0	15.00	14.91
		122	5610		15.00	14.84
		138	5690		16.50	16.32
	802.11ax80-HE0	106	5530	MCS0	15.00	14.96
		122	5610		15.00	14.85
		138	5690		16.50	16.33
	802.11ac160-VHT0	114	5570	MCS0	14.00	13.87
	802.11ax160-HE0	114	5570	MCS0	14.00	13.93

Tx 2						
Mode	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.8GHz	802.11a	149	5745	6Mbps	19.00	18.92
		157	5785		19.00	18.97
		165	5825		19.00	18.94
	802.11n20-HT0	149	5745	MCS0	17.50	17.44
		157	5785		17.50	17.36
		165	5825		17.50	17.33
	802.11ac20-VHT0	149	5745	MCS0	17.50	17.41
		157	5785		17.50	17.41
		165	5825		17.50	17.32
	802.11ax20-HE0	149	5745	MCS0	17.50	17.33
		157	5785		17.50	17.33
		165	5825		17.50	17.37
	802.11n40-HT0	151	5755	MCS0	17.00	16.88
		159	5795		17.00	16.95
	802.11ac40-VHT0	151	5755	MCS0	17.00	16.85
		159	5795		17.00	16.85
	802.11ax40-HE0	151	5755	MCS0	17.00	16.84
		159	5795		17.00	16.93
	802.11ac80-VHT0	155	5775	MCS0	16.50	16.38
	802.11ax80-HE0	155	5775	MCS0	16.50	16.44

Tx 2						
Mode	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.9GHz	802.11a	169	5845	6Mbps	18.00	17.85
		173	5865		18.00	17.80
		177	5885		18.00	17.85
	802.11n20-HT0	169	5845	MCS0	18.00	17.88
		173	5865		18.00	17.87
		177	5885		18.00	17.81
	802.11ac20-VHT0	169	5845	MCS0	18.00	17.93
		173	5865		18.00	17.87
		177	5885		18.00	17.88
	802.11ax20-HE0	169	5845	MCS0	18.00	17.85
		173	5865		18.00	17.91
		177	5885		18.00	17.83
	802.11n40-HT0	167	5835	MCS0	18.00	17.84
		175	5875		18.00	17.96
	802.11ac40-VHT0	167	5835	MCS0	18.00	17.94
		175	5875		18.00	17.89
	802.11ax40-HE0	167	5835	MCS0	18.00	17.90
		175	5875		18.00	17.88
	802.11ac80-VHT0	171	5855	MCS0	18.00	17.91
	802.11ax80-HE0	171	5855	MCS0	18.00	17.89
	802.11ac160-VHT0	163	5815	MCS0	18.00	17.98
	802.11ax160-HE0	163	5815	MCS0	18.00	17.93

6.2 WIFI 6E

Tablet mode

Tx 1						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
U-NII-5 6.2GHz	802.11a	1	5955	6Mbps	1.50	1.25
		45	6175		1.50	1.34
		93	6415		1.50	1.45
	802.11ax20-HE0	1	5955	MCS0	2.50	2.38
		45	6175		2.50	2.35
		93	6415		2.50	2.23
	802.11ax40-HE0	3	5985	MCS0	5.50	5.31
		43	6165		5.50	5.31
		91	6405		5.50	5.30
	802.11ax80-HE0	7	5985	MCS0	8.50	8.28
		39	6145		8.50	8.31
		87	6385		8.50	8.33
	802.11ax160-HE0	15	6025	MCS0	9.00	8.80
		47	6185		9.00	8.72
		79	6345		9.00	8.75
U-NII-6 6.5GHz	802.11a	97	6435	6Mbps	1.50	1.30
		105	6475		1.50	1.24
		113	6515		1.50	1.30
	802.11ax20-HE0	97	6435	MCS0	2.50	2.25
		105	6475		2.50	2.31
		113	6515		2.50	2.33
	802.11ax40-HE0	99	6445	MCS0	5.50	5.25
		107	6485		5.50	5.33
	802.11ax80-HE0	103	6465	MCS0	8.50	8.37
		119	6545		8.50	8.32
	802.11ax160-HE0	111	6505	MCS0	9.00	8.94
U-NII-7 6.7GHz	802.11a	117	6535	6Mbps	1.50	1.31
		149	6695		1.50	1.36
		181	6855		1.50	1.38
	802.11ax20-HE0	117	6535	MCS0	2.50	2.39
		149	6695		2.50	2.33
		181	6855		2.50	2.35
	802.11ax40-HE0	115	6525	MCS0	5.50	5.32
		147	6685		5.50	5.39
		179	6845		5.50	5.22
	802.11ax80-HE0	135	6625	MCS0	8.50	8.36
		151	6705		8.50	8.38
		167	6785		8.50	8.31
	802.11ax160-HE0	143	6665	MCS0	9.00	8.86
		175	6825		9.00	8.90
U-NII-8 7.0GHz	802.11a	185	6875	6Mbps	1.50	1.36
		209	6995		1.50	1.31
		233	7115		1.50	1.39
	802.11ax20-HE0	185	6875	MCS0	2.50	2.34
		209	6995		2.50	2.36
		233	7115		2.50	2.30
	802.11ax40-HE0	187	6885	MCS0	5.50	5.26
		227	7085		5.50	5.42
	802.11ax80-HE0	183	6865	MCS0	8.50	8.33
		199	6945		8.50	8.32
		215	7025		8.50	8.21
	802.11ax160-HE0	207	6985	MCS0	9.00	8.84

Tx 2						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
U-NII-5 6.2GHz	802.11a	1	5955	6Mbps	1.50	1.34
		45	6175		1.50	1.36
		93	6415		1.50	1.39
	802.11ax20-HE0	1	5955	MCS0	2.50	2.35
		45	6175		2.50	2.39
		93	6415		2.50	2.42
	802.11ax40-HE0	3	5985	MCS0	5.50	5.35
		43	6165		5.50	5.36
		91	6405		5.50	5.24
	802.11ax80-HE0	7	5985	MCS0	8.50	8.37
		39	6145		8.50	8.39
		87	6385		8.50	8.34
	802.11ax160-HE0	15	6025	MCS0	9.00	8.97
		47	6185		9.00	8.99
		79	6345		9.00	8.58
U-NII-6 6.5GHz	802.11a	97	6435	6Mbps	1.50	1.36
		105	6475		1.50	1.26
		113	6515		1.50	1.32
	802.11ax20-HE0	97	6435	MCS0	2.50	2.38
		105	6475		2.50	2.29
		113	6515		2.50	2.44
	802.11ax40-HE0	99	6445	MCS0	5.50	5.33
		107	6485		5.50	5.40
	802.11ax80-HE0	103	6465	MCS0	8.50	8.31
		119	6545		8.50	8.34
	802.11ax160-HE0	111	6505	MCS0	9.00	8.75
U-NII-7 6.7GHz	802.11a	117	6535	6Mbps	1.50	1.32
		149	6695		1.50	1.29
		181	6855		1.50	1.32
	802.11ax20-HE0	117	6535	MCS0	2.50	2.33
		149	6695		2.50	2.31
		181	6855		2.50	2.39
	802.11ax40-HE0	115	6525	MCS0	5.50	5.34
		147	6685		5.50	5.36
		179	6845		5.50	5.25
	802.11ax80-HE0	135	6625	MCS0	8.50	8.32
		151	6705		8.50	8.31
		167	6785		8.50	8.22
	802.11ax160-HE0	143	6665	MCS0	9.00	8.77
		175	6825		9.00	8.51
U-NII-8 7.0GHz	802.11a	185	6875	6Mbps	1.50	1.39
		209	6995		1.50	1.33
		233	7115		1.50	1.22
	802.11ax20-HE0	185	6875	MCS0	2.50	2.30
		209	6995		2.50	2.31
		233	7115		2.50	2.36
	802.11ax40-HE0	187	6885	MCS0	5.50	5.40
		227	7085		5.50	5.42
	802.11ax80-HE0	183	6865	MCS0	8.50	8.34
		199	6945		8.50	8.43
		215	7025		8.50	8.26
	802.11ax160-HE0	207	6985	MCS0	9.00	8.68

Notebook mode

Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
U-NII-5 6.2GHz	802.11a	1	5955	6Mbps	1.50	1.32
		45	6175		1.50	1.44
		93	6415		1.50	1.35
	802.11ax20-HE0	1	5955	MCS0	2.50	2.32
		45	6175		2.50	2.42
		93	6415		2.50	2.45
	802.11ax40-HE0	3	5985	MCS0	5.50	5.35
		43	6165		5.50	5.36
		91	6405		5.50	5.43
	802.11ax80-HE0	7	5985	MCS0	8.50	8.35
		39	6145		8.50	8.37
		87	6385		8.50	8.43
	802.11ax160-HE0	15	6025	MCS0	9.00	8.83
		47	6185		9.00	8.96
		79	6345		9.00	8.93
U-NII-6 6.5GHz	802.11a	97	6435	6Mbps	1.50	1.36
		105	6475		1.50	1.42
		113	6515		1.50	1.39
	802.11ax20-HE0	97	6435	MCS0	2.50	2.34
		105	6475		2.50	2.34
		113	6515		2.50	2.35
	802.11ax40-HE0	99	6445	MCS0	5.50	5.36
		107	6485		5.50	5.38
	802.11ax80-HE0	103	6465	MCS0	8.50	8.43
		119	6545		8.50	8.36
	802.11ax160-HE0	111	6505	MCS0	9.00	8.93
U-NII-7 6.7GHz	802.11a	117	6535	6Mbps	1.50	1.46
		149	6695		1.50	1.34
		181	6855		1.50	1.41
	802.11ax20-HE0	117	6535	MCS0	2.50	2.42
		149	6695		2.50	2.38
		181	6855		2.50	2.34
	802.11ax40-HE0	115	6525	MCS0	5.50	5.36
		147	6685		5.50	5.35
		179	6845		5.50	5.32
	802.11ax80-HE0	135	6625	MCS0	8.50	8.43
		151	6705		8.50	8.45
		167	6785		8.50	8.33
	802.11ax160-HE0	143	6665	MCS0	9.00	8.95
		175	6825		9.00	8.92
U-NII-8 7.0GHz	802.11a	185	6875	6Mbps	1.50	1.39
		209	6995		1.50	1.44
		233	7115		1.50	1.33
	802.11ax20-HE0	185	6875	MCS0	2.50	2.35
		209	6995		2.50	2.45
		233	7115		2.50	2.33
	802.11ax40-HE0	187	6885	MCS0	5.50	5.37
		227	7085		5.50	5.45
	802.11ax80-HE0	183	6865	MCS0	8.50	8.45
		199	6945		8.50	8.37
		215	7025		8.50	8.39
	802.11ax160-HE0	207	6985	MCS0	9.00	8.96

Tx 2						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
U-NII-5 6.2GHz	802.11a	1	5955	6Mbps	1.50	1.40
		45	6175		1.50	1.45
		93	6415		1.50	1.35
	802.11ax20-HE0	1	5955	MCS0	2.50	2.40
		45	6175		2.50	2.44
		93	6415		2.50	2.42
	802.11ax40-HE0	3	5985	MCS0	5.50	5.36
		43	6165		5.50	5.44
		91	6405		5.50	5.42
	802.11ax80-HE0	7	5985	MCS0	8.50	8.41
		39	6145		8.50	8.37
		87	6385		8.50	8.34
	802.11ax160-HE0	15	6025	MCS0	9.00	8.88
		47	6185		9.00	8.87
		79	6345		9.00	8.95
U-NII-6 6.5GHz	802.11a	97	6435	6Mbps	1.50	1.32
		105	6475		1.50	1.45
		113	6515		1.50	1.39
	802.11ax20-HE0	97	6435	MCS0	2.50	2.38
		105	6475		2.50	2.45
		113	6515		2.50	2.40
	802.11ax40-HE0	99	6445	MCS0	5.50	5.40
		107	6485		5.50	5.41
	802.11ax80-HE0	103	6465	MCS0	8.50	8.33
		119	6545		8.50	8.35
	802.11ax160-HE0	111	6505	MCS0	9.00	8.96
U-NII-7 6.7GHz	802.11a	117	6535	6Mbps	1.50	1.39
		149	6695		1.50	1.45
		181	6855		1.50	1.39
	802.11ax20-HE0	117	6535	MCS0	2.50	2.42
		149	6695		2.50	2.38
		181	6855		2.50	2.37
	802.11ax40-HE0	115	6525	MCS0	5.50	5.41
		147	6685		5.50	5.33
		179	6845		5.50	5.40
	802.11ax80-HE0	135	6625	MCS0	8.50	8.41
		151	6705		8.50	8.32
		167	6785		8.50	8.46
	802.11ax160-HE0	143	6665	MCS0	9.00	8.92
		175	6825		9.00	8.97
U-NII-8 7.0GHz	802.11a	185	6875	6Mbps	1.50	1.40
		209	6995		1.50	1.36
		233	7115		1.50	1.33
	802.11ax20-HE0	185	6875	MCS0	2.50	2.37
		209	6995		2.50	2.37
		233	7115		2.50	2.43
	802.11ax40-HE0	187	6885	MCS0	5.50	5.43
		227	7085		5.50	5.39
	802.11ax80-HE0	183	6865	MCS0	8.50	8.37
		199	6945		8.50	8.40
		215	7025		8.50	8.32
	802.11ax160-HE0	207	6985	MCS0	9.00	8.98

6.3 Bluetooth

Mode	Channel	Frequency (MHz)	1Mbps		2Mbps		3Mbps	
			Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
BR/EDR	CH 00	2402	14.00	13.93	10.00	9.95	10.00	9.93
	CH 39	2441		13.21		9.09		9.03
	CH 78	2480		12.65		8.86		8.85

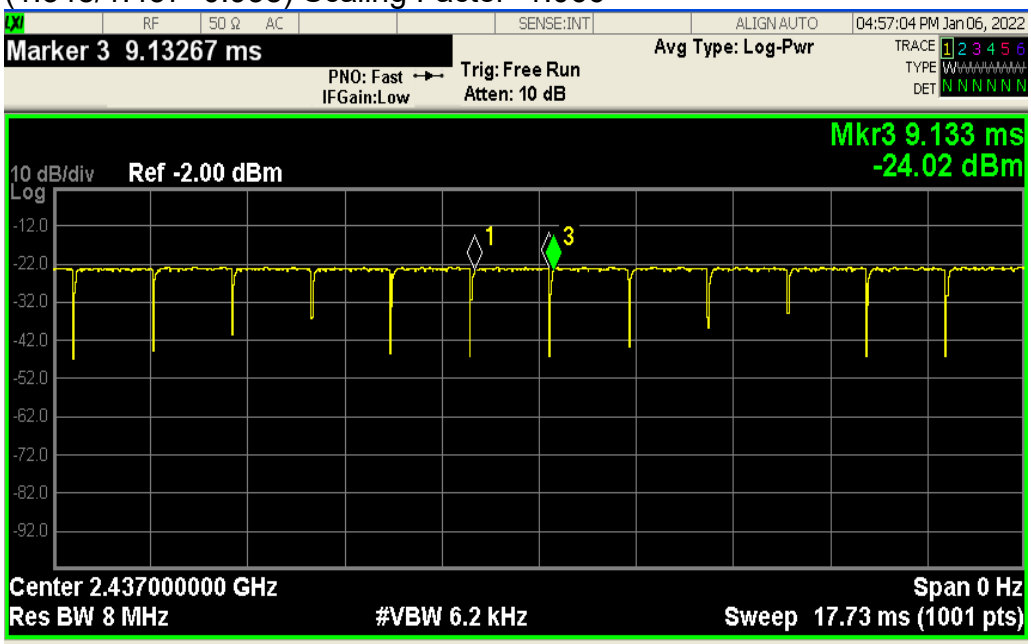
6.4 BLE

Mode	Channel	Frequency (MHz)	GFSK	
			Max. Rated Avg.Power + Max. Tolerance (dBm)	Average Output Power (dBm)
BLE_1M	CH 00	2402	5	3.24
	CH 19	2440		3.65
	CH 39	2480		3.73

Mode	Channel	Frequency (MHz)	GFSK	
			Max. Rated Avg.Power + Max. Tolerance (dBm)	Average Output Power (dBm)
BLE_2M	CH 00	2402	5	3.13
	CH 19	2440		3.48
	CH 39	2480		3.56

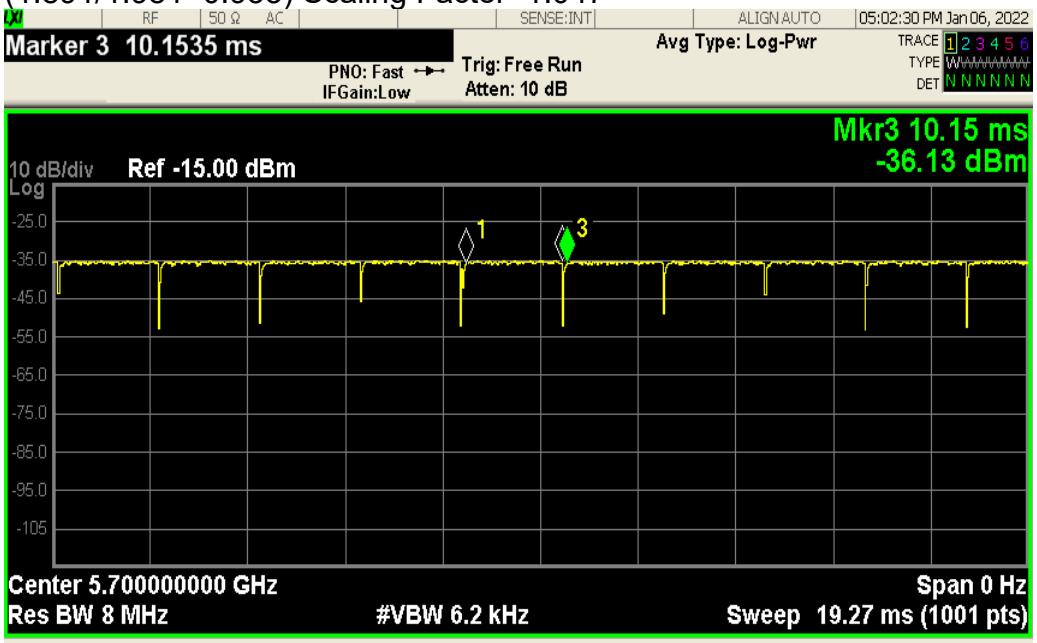
7 DUTY CYCLE

2.4G b duty
(1.348/1.437=0.938) Scaling Factor=1.066



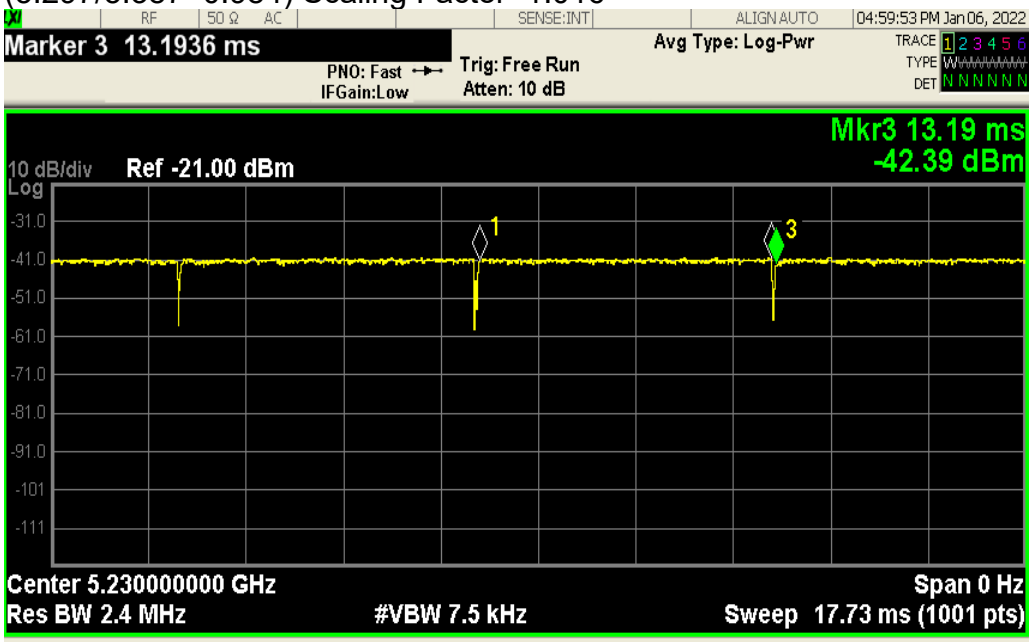
MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	7.696 ms	-23.96 dBm			
2	N	1	t	9.044 ms	-23.34 dBm			
3	N	1	t	9.133 ms	-24.02 dBm			
4								
5								

5G a duty
(1.891/1.981=0.955) Scaling Factor=1.047



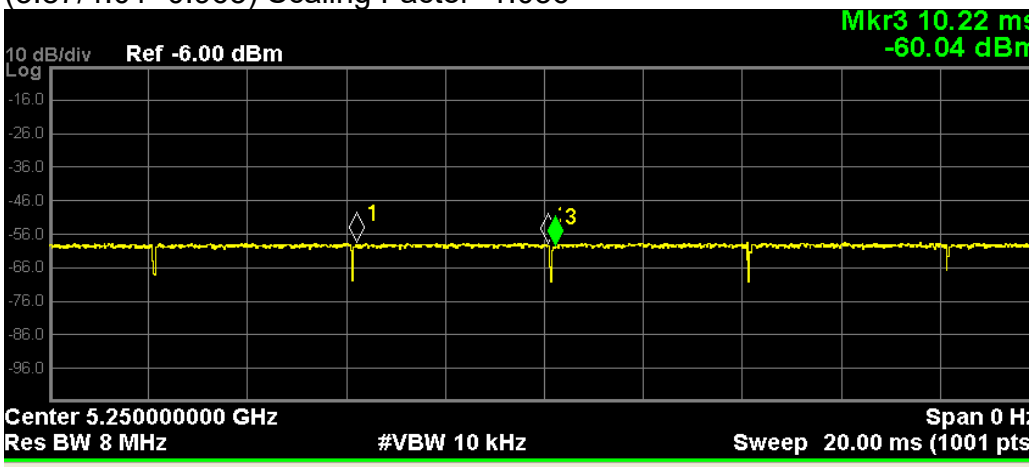
MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	8.169 ms	-36.31 dBm			
2	N	1	t	10.06 ms	-35.76 dBm			
3	N	1	t	10.15 ms	-36.13 dBm			
4								
5								

5G n40 duty
(5.297/5.387=0.984) Scaling Factor=1.016



MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	7.803 ms	-41.56 dBm			
2	N	1	t	13.10 ms	-40.87 dBm			
3	N	1	t	13.19 ms	-42.39 dBm			
4								
5								

5G ac(160M) duty
(3.87/4.01=0.965) Scaling Factor=1.036

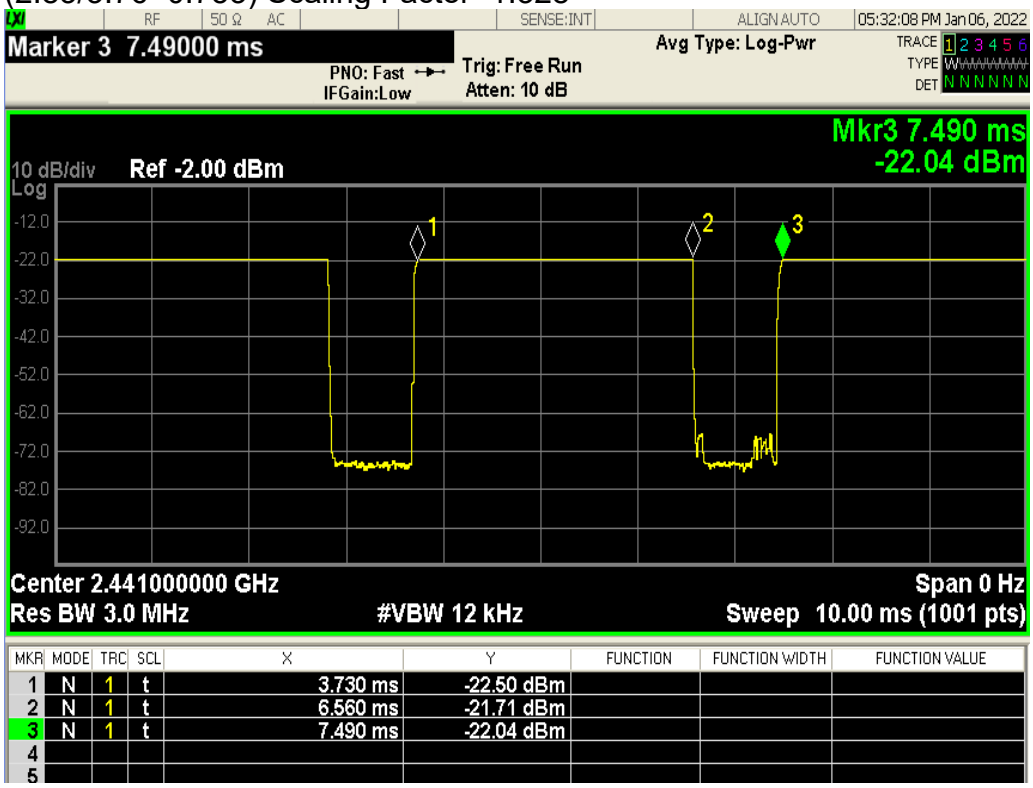


MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	6.210 ms	-59.10 dBm			
2	N	1	t	10.08 ms	-59.44 dBm			
3	N	1	t	10.22 ms	-60.04 dBm			
4								
5								
6								
7								
8								
9								
10								
11								
12								

6E ax160 duty
(2.135/2.235=0.955) Scaling Factor=1.047

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	8.285 ms	-54.88 dBm			
2	N	1	t	10.42 ms	-54.44 dBm			
3	N	1	t	10.52 ms	-54.95 dBm			
4								
5								

BT duty
(2.83/3.76=0.753) Scaling Factor=1.328



MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	3.730 ms	-22.50 dBm			
2	N	1	t	6.560 ms	-21.71 dBm			
3	N	1	t	7.490 ms	-22.04 dBm			
4								
5								

8 SUMMARY OF RESULTS

8.1 Decision rules

Reported measurement data comply with Test Methodology in section 1.1.
Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

8.2 Summary of SAR Results

Report No. :EN/2021/C0030

Tablet mode

Vendor 1

Tx1

Mode	Position	Distance (mm)	CH	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Duty cycle scaling	Power scaling	Averaged SAR over 1g (W/kg)		ID
									Measured	Reported	
WLAN 802.11b	Back Surface	0	6	2437	20.00	19.99	1.066	100.23%	0.136	0.145	-
	Top Edge	0	1	2412	19.50	19.32	1.066	104.23%	0.624	0.693	001
	Top Edge	0	6	2437	20.00	19.99	1.066	100.23%	0.462	0.494	-
	Top Edge	0	11	2462	19.50	19.46	1.066	100.93%	0.322	0.346	-
	Left Edge	0	6	2437	20.00	19.99	1.066	100.23%	0.023	0.025	-
	Right Edge	0	6	2437	20.00	19.99	1.066	100.23%	0.275	0.294	-
Bluetooth (GFSK)	Back Surface	0	0	2402	14.00	13.93	1.328	101.62%	0.043	0.058	-
	Top Edge	0	0	2402	14.00	13.93	1.328	101.62%	0.172	0.232	002
	Left Edge	0	0	2402	14.00	13.93	1.328	101.62%	0.095	0.128	-
	Right Edge	0	0	2402	14.00	13.93	1.328	101.62%	0.143	0.193	-
WLAN 802.11n (40M) 5.2G	Back Surface	0	46	5230	15.00	14.98	1.016	100.46%	0.056	0.057	-
	Top Edge	0	46	5230	15.00	14.98	1.016	100.46%	0.578	0.590	003
	Left Edge	0	46	5230	15.00	14.98	1.016	100.46%	0.079	0.081	-
	Right Edge	0	46	5230	15.00	14.98	1.016	100.46%	0.146	0.149	-
WLAN 802.11a 5.3G	Back Surface	0	56	5280	18.00	17.98	1.047	100.46%	0.089	0.094	-
	Top Edge	0	52	5260	16.00	15.91	1.047	102.09%	0.690	0.738	-
	Top Edge	0	56	5280	18.00	17.98	1.047	100.46%	0.723	0.760	-
	Top Edge	0	60	5300	18.00	17.86	1.047	103.28%	0.834	0.902	004
	Top Edge	0	64	5320	16.00	15.74	1.047	106.17%	0.771	0.857	-
	Left Edge	0	56	5280	18.00	17.98	1.047	100.46%	0.043	0.045	-
	Right Edge	0	56	5280	18.00	17.98	1.047	100.46%	0.242	0.255	-
Repeat	Top Edge	0	60	5300	18.00	17.86	1.047	103.28%	0.824	0.891	-
WLAN 802.11a 5.6G	Back Surface	0	144	5720	18.00	17.96	1.047	100.93%	0.106	0.112	-
	Top Edge	0	144	5720	18.00	17.96	1.047	100.93%	0.650	0.687	005
	Left Edge	0	144	5720	18.00	17.96	1.047	100.93%	0.067	0.071	-
	Right Edge	0	144	5720	18.00	17.96	1.047	100.93%	0.131	0.138	-
WLAN 802.11a 5.8G	Back Surface	0	149	5745	18.00	17.96	1.047	100.93%	0.086	0.091	-
	Top Edge	0	149	5745	18.00	17.96	1.047	100.93%	0.571	0.603	006
	Left Edge	0	149	5745	18.00	17.96	1.047	100.93%	0.068	0.072	-
	Right Edge	0	149	5745	18.00	17.96	1.047	100.93%	0.132	0.139	-

*** - repeated at the highest SAR measurement according to the KDB 865664 D01**

Tx2

Mode	Position	Distance (mm)	CH	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Duty cycle scaling	Power scaling	Averaged SAR over 1g (W/kg)		ID
									Measured	Reported	
WLAN 802.11b	Back Surface	0	6	2437	20.00	19.98	1.066	100.46%	0.071	0.076	-
	Top Edge	0	1	2412	19.50	19.36	1.066	103.28%	0.454	0.500	-
	Top Edge	0	6	2437	20.00	19.98	1.066	100.46%	0.389	0.417	-
	Top Edge	0	11	2462	19.50	19.48	1.066	100.46%	0.489	0.524	007
	Left Edge	0	6	2437	20.00	19.98	1.066	100.46%	0.119	0.127	-
	Right Edge	0	6	2437	20.00	19.98	1.066	100.46%	0.275	0.295	-
WLAN 802.11n (40M) 5.2G	Back Surface	0	46	5230	15.00	14.98	1.016	100.46%	0.081	0.083	-
	Top Edge	0	46	5230	15.00	14.98	1.016	100.46%	0.371	0.379	008
	Left Edge	0	46	5230	15.00	14.98	1.016	100.46%	0.188	0.192	-
	Right Edge	0	46	5230	15.00	14.98	1.016	100.46%	0.055	0.056	-
WLAN 802.11a 5.3G	Back Surface	0	60	5300	18.00	17.99	1.047	100.23%	0.164	0.172	-
	Top Edge	0	60	5300	18.00	17.99	1.047	100.23%	0.690	0.724	009
	Left Edge	0	60	5300	18.00	17.99	1.047	100.23%	0.377	0.396	-
	Right Edge	0	60	5300	18.00	17.99	1.047	100.23%	0.053	0.056	-
WLAN 802.11a 5.6G	Back Surface	0	144	5720	18.00	17.98	1.047	100.46%	0.224	0.236	-
	Top Edge	0	100	5500	16.00	15.97	1.047	100.69%	0.632	0.666	-
	Top Edge	0	120	5600	18.00	17.88	1.047	102.80%	0.810	0.872	-
	Top Edge	0	144	5720	18.00	17.98	1.047	100.46%	0.959	1.009	010
	Left Edge	0	144	5720	18.00	17.98	1.047	100.46%	0.305	0.321	-
	Right Edge	0	144	5720	18.00	17.98	1.047	100.46%	0.060	0.063	-
Repeat	Top Edge	0	144	5720	18.00	17.98	1.047	100.46%	0.931	0.979	-
WLAN 802.11a 5.8G	Back Surface	0	165	5825	18.00	17.99	1.047	100.23%	0.209	0.219	-
	Top Edge	0	149	5745	18.00	17.82	1.047	104.23%	0.945	1.031	-
	Top Edge	0	157	5785	18.00	17.96	1.047	100.93%	0.999	1.056	-
	Top Edge	0	165	5825	18.00	17.99	1.047	100.23%	1.020	1.070	011
	Left Edge	0	165	5825	18.00	17.99	1.047	100.23%	0.387	0.406	-
	Right Edge	0	165	5825	18.00	17.99	1.047	100.23%	0.037	0.039	-
Repeat	Top Edge	0	165	5825	18.00	17.99	1.047	100.23%	0.999	1.048	-

*** - repeated at the highest SAR measurement according to the KDB 865664 D01**

Vendor 2

Tx1

Mode	Position	Distance (mm)	CH	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Duty cycle scaling	Power scaling	Averaged SAR over 1g (W/kg)		ID
									Measured	Reported	
WLAN 802.11b	Back Surface	0	6	2437	20.00	19.99	1.066	100.23%	0.120	0.128	-
	Top Edge	0	1	2412	19.50	19.32	1.066	104.23%	0.161	0.179	-
	Top Edge	0	6	2437	20.00	19.99	1.066	100.23%	0.275	0.294	-
	Top Edge	0	11	2462	19.50	19.46	1.066	100.93%	0.453	0.487	012
	Left Edge	0	6	2437	20.00	19.99	1.066	100.23%	0.021	0.022	-
	Right Edge	0	6	2437	20.00	19.99	1.066	100.23%	0.286	0.306	-
Bluetooth (GFSK)	Back Surface	0	0	2402	14.00	13.93	1.328	101.62%	0.032	0.043	-
	Top Edge	0	0	2402	14.00	13.93	1.328	101.62%	0.236	0.319	013
	Left Edge	0	0	2402	14.00	13.93	1.328	101.62%	0.046	0.062	-
	Right Edge	0	0	2402	14.00	13.93	1.328	101.62%	0.132	0.178	-
WLAN 802.11n (40M) 5.2G	Back Surface	0	46	5230	15.00	14.98	1.016	100.46%	0.032	0.032	-
	Top Edge	0	46	5230	15.00	14.98	1.016	100.46%	0.346	0.353	014
	Left Edge	0	46	5230	15.00	14.98	1.016	100.46%	0.001	0.001	-
	Right Edge	0	46	5230	15.00	14.98	1.016	100.46%	0.172	0.176	-
WLAN 802.11a 5.3G	Back Surface	0	56	5280	18.00	17.98	1.047	100.46%	0.033	0.035	-
	Top Edge	0	52	5260	16.00	15.91	1.047	102.09%	0.480	0.513	-
	Top Edge	0	56	5280	18.00	17.98	1.047	100.46%	0.701	0.737	015
	Top Edge	0	60	5300	18.00	17.86	1.047	103.28%	0.588	0.636	-
	Top Edge	0	64	5320	16.00	15.74	1.047	106.17%	0.333	0.370	-
	Left Edge	0	56	5280	18.00	17.98	1.047	100.46%	0.002	0.002	-
	Right Edge	0	56	5280	18.00	17.98	1.047	100.46%	0.253	0.266	-
WLAN 802.11a 5.6G	Back Surface	0	144	5720	18.00	17.96	1.047	100.93%	0.050	0.052	-
	Top Edge	0	144	5720	18.00	17.96	1.047	100.93%	0.391	0.413	016
	Left Edge	0	144	5720	18.00	17.96	1.047	100.93%	0.003	0.003	-
	Right Edge	0	144	5720	18.00	17.96	1.047	100.93%	0.135	0.143	-
WLAN 802.11a 5.8G	Back Surface	0	149	5745	18.00	17.96	1.047	100.93%	0.004	0.004	-
	Top Edge	0	149	5745	18.00	17.96	1.047	100.93%	0.513	0.542	017
	Left Edge	0	149	5745	18.00	17.96	1.047	100.93%	0.001	0.001	-
	Right Edge	0	149	5745	18.00	17.96	1.047	100.93%	0.076	0.080	-

Tx2

Mode	Position	Distance (mm)	CH	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Duty cycle scaling	Power scaling	Averaged SAR over 1g (W/kg)		ID
									Measured	Reported	
WLAN 802.11b	Back Surface	0	6	2437	20.00	19.98	1.066	100.46%	0.044	0.047	-
	Top Edge	0	1	2412	19.50	19.36	1.066	103.28%	0.107	0.118	-
	Top Edge	0	6	2437	20.00	19.98	1.066	100.46%	0.183	0.196	-
	Top Edge	0	11	2462	19.50	19.48	1.066	100.46%	0.239	0.256	018
	Left Edge	0	6	2437	20.00	19.98	1.066	100.46%	0.108	0.116	-
	Right Edge	0	6	2437	20.00	19.98	1.066	100.46%	0.001	0.001	-
WLAN 802.11n (40M) 5.2G	Back Surface	0	46	5230	15.00	14.98	1.016	100.46%	0.106	0.108	-
	Top Edge	0	46	5230	15.00	14.98	1.016	100.46%	0.195	0.199	019
	Left Edge	0	46	5230	15.00	14.98	1.016	100.46%	0.175	0.179	-
	Right Edge	0	46	5230	15.00	14.98	1.016	100.46%	0.006	0.006	-
WLAN 802.11a 5.3G	Back Surface	0	60	5300	18.00	17.99	1.047	100.23%	0.114	0.120	-
	Top Edge	0	60	5300	18.00	17.99	1.047	100.23%	0.455	0.477	020
	Left Edge	0	60	5300	18.00	17.99	1.047	100.23%	0.329	0.345	-
	Right Edge	0	60	5300	18.00	17.99	1.047	100.23%	0.002	0.002	-
WLAN 802.11a 5.6G	Back Surface	0	144	5720	18.00	17.98	1.047	100.46%	0.216	0.227	-
	Top Edge	0	144	5720	18.00	17.98	1.047	100.46%	0.587	0.617	021
	Left Edge	0	144	5720	18.00	17.98	1.047	100.46%	0.296	0.311	-
	Right Edge	0	144	5720	18.00	17.98	1.047	100.46%	0.003	0.003	-
WLAN 802.11a 5.8G	Back Surface	0	165	5825	18.00	17.99	1.047	100.23%	0.255	0.268	-
	Top Edge	0	149	5745	18.00	17.82	1.047	104.23%	0.567	0.619	-
	Top Edge	0	157	5785	18.00	17.96	1.047	100.93%	0.590	0.623	-
	Top Edge	0	165	5825	18.00	17.99	1.047	100.23%	0.644	0.676	022
	Left Edge	0	165	5825	18.00	17.99	1.047	100.23%	0.311	0.326	-
	Right Edge	0	165	5825	18.00	17.99	1.047	100.23%	0.002	0.002	-

WIFI 6E

Tablet mode

Vendor 1

Tx1

Mode	Position	Distance (mm)	CH	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Duty cycle scaling	Power scaling	Averaged SAR over 1g (W/kg)		Estimated APD mW/cm^2 (4cm^2)	ID
									Measured	Reported		
U-NII-5 6.2GHz 802.11ax (160M)	Back Surface	0	15	6025	9.00	8.80	1.047	104.71%	0.017	0.019	0.0134	-
	Top Edge	0	15	6025	9.00	8.80	1.047	104.71%	0.119	0.130	0.0913	023
	Top Edge	0	79	6345	9.00	8.75	1.047	105.93%	0.097	0.108	0.0743	-
	Left Edge	0	15	6025	9.00	8.80	1.047	104.71%	0.006	0.007	0.00457	-
	Right Edge	0	15	6025	9.00	8.80	1.047	104.71%	0.038	0.042	0.0326	-
U-NII-6 6.5GHz 802.11ax (160M)	Back Surface	0	111	6505	9.00	8.94	1.047	101.39%	0.014	0.015	0.0118	-
	Top Edge	0	111	6505	9.00	8.94	1.047	101.39%	0.117	0.124	0.0926	024
	Left Edge	0	111	6505	9.00	8.94	1.047	101.39%	0.005	0.006	0.00389	-
	Right Edge	0	111	6505	9.00	8.94	1.047	101.39%	0.036	0.039	0.0297	-
U-NII-7 6.7GHz 802.11ax (160M)	Back Surface	0	175	6825	9.00	8.90	1.047	102.33%	0.027	0.029	0.00435	-
	Top Edge	0	175	6825	9.00	8.90	1.047	102.33%	0.067	0.072	0.0586	025
	Left Edge	0	175	6825	9.00	8.90	1.047	102.33%	0.004	0.005	0.00318	-
	Right Edge	0	175	6825	9.00	8.90	1.047	102.33%	0.023	0.025	0.0207	-
U-NII-8 7.0GHz 802.11ax (160M)	Back Surface	0	207	6985	9.00	8.84	1.066	103.75%	0.028	0.031	0.00236	-
	Top Edge	0	207	6985	9.00	8.84	1.066	103.75%	0.038	0.042	0.0302	026
	Left Edge	0	207	6985	9.00	8.84	1.066	103.75%	0.001	0.001	0.000784	-
	Right Edge	0	207	6985	9.00	8.84	1.066	103.75%	0.010	0.012	0.0783	-

Tx2

Mode	Position	Distance (mm)	CH	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Duty cycle scaling	Power scaling	Averaged SAR over 1g (W/kg)		Estimated APD mW/cm^2 (4cm^2)	ID
									Measured	Reported		
U-NII-5 6.2GHz 802.11ax (160M)	Back Surface	0	47	6185	9.00	8.99	1.047	100.23%	0.018	0.019	0.0147	-
	Top Edge	0	15	6025	9.00	8.97	1.047	100.69%	0.119	0.125	0.0974	027
	Top Edge	0	47	6185	9.00	8.99	1.047	100.23%	0.105	0.110	0.0863	
	Left Edge	0	47	6185	9.00	8.99	1.047	100.23%	0.033	0.035	0.0267	-
	Right Edge	0	47	6185	9.00	8.99	1.047	100.23%	0.012	0.013	0.00946	-
U-NII-6 6.5GHz 802.11ax (160M)	Back Surface	0	111	6505	9.00	8.75	1.047	105.93%	0.049	0.054	0.00743	-
	Top Edge	0	111	6505	9.00	8.75	1.047	105.93%	0.094	0.104	0.0768	028
	Left Edge	0	111	6505	9.00	8.75	1.047	105.93%	0.021	0.024	0.0174	-
	Right Edge	0	111	6505	9.00	8.75	1.047	105.93%	0.005	0.005	0.00321	-
U-NII-7 6.7GHz 802.11ax (160M)	Back Surface	0	143	6665	9.00	8.77	1.047	105.44%	0.046	0.051	0.00635	-
	Top Edge	0	143	6665	9.00	8.77	1.047	105.44%	0.083	0.092	0.0671	029
	Left Edge	0	143	6665	9.00	8.77	1.047	105.44%	0.025	0.027	0.0207	-
	Right Edge	0	143	6665	9.00	8.77	1.047	105.44%	0.003	0.003	0.00248	-
U-NII-8 7.0GHz 802.11ax (160M)	Back Surface	0	207	6985	9.00	8.68	1.066	107.65%	0.055	0.063	0.00668	-
	Top Edge	0	207	6985	9.00	8.68	1.066	107.65%	0.094	0.108	0.0794	030
	Left Edge	0	207	6985	9.00	8.68	1.066	107.65%	0.028	0.032	0.0253	-
	Right Edge	0	207	6985	9.00	8.68	1.066	107.65%	0.004	0.004	0.00337	-

Vendor 2

Tx1

Mode	Position	Distance (mm)	CH	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Duty cycle scaling	Power scaling	Averaged SAR over 1g (W/kg)		Estimated APD mW/cm^2 (4cm^2)	ID
									Measured	Reported		
U-NII-5 6.2GHz 802.11ax (160M)	Back Surface	0	15	6025	9.00	8.80	1.047	104.71%	0.021	0.023	0.0167	-
	Top Edge	0	15	6025	9.00	8.80	1.047	104.71%	0.076	0.083	0.0601	031
	Top Edge	0	79	6345	9.00	8.75	1.047	105.93%	0.069	0.077	0.0488	-
	Left Edge	0	15	6025	9.00	8.80	1.047	104.71%	0.006	0.007	0.00486	-
	Right Edge	0	15	6025	9.00	8.80	1.047	104.71%	0.037	0.041	0.0335	-
U-NII-6 6.5GHz 802.11ax (160M)	Back Surface	0	111	6505	9.00	8.94	1.047	101.39%	0.028	0.029	0.0241	-
	Top Edge	0	111	6505	9.00	8.94	1.047	101.39%	0.102	0.108	0.0763	032
	Left Edge	0	111	6505	9.00	8.94	1.047	101.39%	0.011	0.011	0.00876	-
	Right Edge	0	111	6505	9.00	8.94	1.047	101.39%	0.035	0.037	0.0286	-
U-NII-7 6.7GHz 802.11ax (160M)	Back Surface	0	175	6825	9.00	8.90	1.047	102.33%	0.023	0.024	0.0161	-
	Top Edge	0	175	6825	9.00	8.90	1.047	102.33%	0.083	0.089	0.065	033
	Left Edge	0	175	6825	9.00	8.90	1.047	102.33%	0.008	0.008	0.00632	-
	Right Edge	0	175	6825	9.00	8.90	1.047	102.33%	0.042	0.045	0.0337	-
U-NII-8 7.0GHz 802.11ax (160M)	Back Surface	0	207	6985	9.00	8.84	1.066	103.75%	0.018	0.020	0.0164	-
	Top Edge	0	207	6985	9.00	8.84	1.066	103.75%	0.057	0.063	0.0422	034
	Left Edge	0	207	6985	9.00	8.84	1.066	103.75%	0.004	0.005	0.00316	-
	Right Edge	0	207	6985	9.00	8.84	1.066	103.75%	0.024	0.026	0.0195	-

Tx2

Mode	Position	Distance (mm)	CH	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Duty cycle scaling	Power scaling	Averaged SAR over 1g (W/kg)		Estimated APD mW/cm^2 (4cm^2)	ID
									Measured	Reported		
U-NII-5 6.2GHz 802.11ax (160M)	Back Surface	0	47	6185	9.00	8.99	1.047	100.23%	0.018	0.019	0.0144	-
	Top Edge	0	15	6025	9.00	8.97	1.047	100.69%	0.095	0.100	0.0557	035
	Top Edge	0	47	6185	9.00	8.99	1.047	100.23%	0.066	0.069	0.039	-
	Left Edge	0	47	6185	9.00	8.99	1.047	100.23%	0.023	0.024	0.0181	-
	Right Edge	0	47	6185	9.00	8.99	1.047	100.23%	0.009	0.009	0.00718	-
U-NII-6 6.5GHz 802.11ax (160M)	Back Surface	0	111	6505	9.00	8.75	1.047	105.93%	0.016	0.017	0.0129	-
	Top Edge	0	111	6505	9.00	8.75	1.047	105.93%	0.062	0.069	0.0346	036
	Left Edge	0	111	6505	9.00	8.75	1.047	105.93%	0.021	0.023	0.0168	-
	Right Edge	0	111	6505	9.00	8.75	1.047	105.93%	0.006	0.006	0.00457	-
U-NII-7 6.7GHz 802.11ax (160M)	Back Surface	0	143	6665	9.00	8.77	1.047	105.44%	0.026	0.028	0.0204	-
	Top Edge	0	143	6665	9.00	8.77	1.047	105.44%	0.102	0.113	0.0595	037
	Left Edge	0	143	6665	9.00	8.77	1.047	105.44%	0.037	0.041	0.0298	-
	Right Edge	0	143	6665	9.00	8.77	1.047	105.44%	0.011	0.012	0.0876	-
U-NII-8 7.0GHz 802.11ax (160M)	Back Surface	0	207	6985	9.00	8.68	1.066	107.65%	0.015	0.017	0.0116	-
	Top Edge	0	207	6985	9.00	8.68	1.066	107.65%	0.085	0.098	0.0626	038
	Left Edge	0	207	6985	9.00	8.68	1.066	107.65%	0.024	0.028	0.0195	-
	Right Edge	0	207	6985	9.00	8.68	1.066	107.65%	0.008	0.009	0.00597	-

Report No. : TESA2305000314EN

Tablet mode

Vendor 1

Tx 1

Band	Position	Distance (mm)	Channel	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Duty cycle scaling	Power scaling	Averaged SAR over 1g (W/kg)		ID
									Measured	Reported	
WLAN 802.11ac(160M) 5.9G	Back Surface	0	163	5815	18.00	17.55	1.04	110.92%	0.141	0.162	-
WLAN 802.11ac(160M) 5.9G	Top Edge	0	163	5815	18.00	17.55	1.04	110.92%	0.778	0.894	059
WLAN 802.11ac(160M) 5.9G	Left Edge	0	163	5815	18.00	17.55	1.04	110.92%	0.063	0.072	-
WLAN 802.11ac(160M) 5.9G	Right Edge	0	163	5815	18.00	17.55	1.04	110.92%	0.171	0.196	-
WLAN 802.11ac(160M) 5.9G*	Top Edge	0	163	5815	18.00	17.55	1.04	110.92%	0.763	0.877	-
Tx 2											
Band	Position	Distance (mm)	Channel	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Duty cycle scaling	Power scaling	Averaged SAR over 1g (W/kg)		ID
									Measured	Reported	
WLAN 802.11ac(160M) 5.9G	Back Surface	0	163	5815	18.00	17.98	1.04	100.46%	0.273	0.284	-
WLAN 802.11ac(160M) 5.9G	Top Edge	0	163	5815	18.00	17.98	1.04	100.46%	1.010	1.051	060
WLAN 802.11ac(160M) 5.9G	Left Edge	0	163	5815	18.00	17.98	1.04	100.46%	0.424	0.441	-
WLAN 802.11ac(160M) 5.9G	Right Edge	0	163	5815	18.00	17.98	1.04	100.46%	0.048	0.050	-
WLAN 802.11ac(160M) 5.9G*	Top Edge	0	163	5815	18.00	17.98	1.04	100.46%	0.983	1.023	-

*** - repeated at the highest SAR measurement according to the KDB 865664 D01**

Vendor 2

Tx 1

Band	Position	Distance (mm)	Channel	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Duty cycle scaling	Power scaling	Averaged SAR over 1g (W/kg)		ID
									Measured	Reported	
WLAN 802.11ac(160M) 5.9G	Back Surface	0	163	5815	18.00	17.55	1.04	110.92%	0.034	0.039	-
WLAN 802.11ac(160M) 5.9G	Top Edge	0	163	5815	18.00	17.55	1.04	110.92%	0.602	0.692	061
WLAN 802.11ac(160M) 5.9G	Left Edge	0	163	5815	18.00	17.55	1.04	110.92%	0.009	0.010	-
WLAN 802.11ac(160M) 5.9G	Right Edge	0	163	5815	18.00	17.55	1.04	110.92%	0.099	0.114	-
Tx 2											
Band	Position	Distance (mm)	Channel	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Duty cycle scaling	Power scaling	Averaged SAR over 1g (W/kg)		ID
									Measured	Reported	
WLAN 802.11ac(160M) 5.9G	Back Surface	0	163	5815	18.00	17.98	1.04	100.46%	0.269	0.280	-
WLAN 802.11ac(160M) 5.9G	Top Edge	0	163	5815	18.00	17.98	1.04	100.46%	0.719	0.748	062
WLAN 802.11ac(160M) 5.9G	Left Edge	0	163	5815	18.00	17.98	1.04	100.46%	0.332	0.346	-
WLAN 802.11ac(160M) 5.9G	Right Edge	0	163	5815	18.00	17.98	1.04	100.46%	0.012	0.012	-

Note:

Reported SAR = measured SAR * Power scaling * Duty cycle scaling
Reported APD = measured APD * Power scaling * Duty cycle scaling

8.3 Summary of PD Results

Tablet mode

Vendor 1

Tx1

Mode	Position	Distance (mm)	CH	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Tune-up Scaling	Duty cycle scaling	Measurement uncertainty	PD result(4cm^2)				ID
										Measured Total psPD (mW/cm^2)	Reported Total psPD (mW/cm^2)	Measured Normal psPD (mW/cm^2)	Reported Normal psPD (mW/cm^2)	
WLAN 6E 802.11ax(160M) U-NII-5	Top Edge	2	15	6025	9.00	8.80	104.71%	1.047	1.55	0.055	0.093	0.052	0.089	039
WLAN 6E 802.11ax(160M) U-NII-5	Top Edge	2	79	6345	9.00	8.75	105.93%	1.047	1.55	0.035	0.060	0.029	0.050	040
WLAN 6E 802.11ax(160M) U-NII-6	Top Edge	2	111	6505	9.00	8.94	101.39%	1.047	1.55	0.016	0.027	0.012	0.019	041
WLAN 6E 802.11ax(160M) U-NII-7	Top Edge	2	175	6825	9.00	8.90	102.33%	1.047	1.55	0.016	0.026	0.015	0.025	042
WLAN 6E 802.11ax(160M) U-NII-8	Top Edge	2	207	6985	9.00	8.84	103.75%	1.047	1.55	0.016	0.027	0.015	0.025	043

Tx2

Mode	Position	Distance (mm)	CH	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Tune-up Scaling	Duty cycle scaling	Measurement uncertainty	PD result(4cm^2)				ID
										Measured Total psPD (mW/cm^2)	Reported Total psPD (mW/cm^2)	Measured Normal psPD (mW/cm^2)	Reported Normal psPD (mW/cm^2)	
WLAN 6E 802.11ax(160M) U-NII-5	Top Edge	2	15	6025	9.00	8.97	100.69%	1.047	1.55	0.067	0.109	0.061	0.100	044
WLAN 6E 802.11ax(160M) U-NII-5	Top Edge	2	47	6185	9.00	8.99	100.23%	1.047	1.55	0.052	0.084	0.049	0.079	045
WLAN 6E 802.11ax(160M) U-NII-6	Top Edge	2	111	6505	9.00	8.75	105.93%	1.047	1.55	0.028	0.048	0.027	0.046	046
WLAN 6E 802.11ax(160M) U-NII-7	Top Edge	2	143	6665	9.00	8.77	105.44%	1.047	1.55	0.019	0.032	0.018	0.030	047
WLAN 6E 802.11ax(160M) U-NII-8	Top Edge	2	207	6985	9.00	8.68	107.65%	1.047	1.55	0.032	0.056	0.027	0.047	048

Vendor 2

Tx1

Mode	Position	Distance (mm)	CH	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Tune-up Scaling	Duty cycle scaling	Measurement uncertainty	PD result(4cm^2)				ID
										Measured Total psPD (mW/cm^2)	Reported Total psPD (mW/cm^2)	Measured Normal psPD (mW/cm^2)	Reported Normal psPD (mW/cm^2)	
WLAN 6E 802.11ax(160M) U-NII-5	Top Edge	2	15	6025	9.00	8.80	104.71%	1.047	1.55	0.019	0.032	0.013	0.023	049
WLAN 6E 802.11ax(160M) U-NII-5	Top Edge	2	79	6345	9.00	8.75	105.93%	1.047	1.55	0.010	0.017	0.006	0.010	050
WLAN 6E 802.11ax(160M) U-NII-6	Top Edge	2	111	6505	9.00	8.94	101.39%	1.047	1.55	0.015	0.025	0.011	0.019	051
WLAN 6E 802.11ax(160M) U-NII-7	Top Edge	2	175	6825	9.00	8.90	102.33%	1.047	1.55	0.032	0.053	0.030	0.049	052
WLAN 6E 802.11ax(160M) U-NII-8	Top Edge	2	207	6985	9.00	8.84	103.75%	1.047	1.55	0.012	0.020	0.011	0.019	053

Tx2

Mode	Position	Distance (mm)	CH	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Tune-up Scaling	Duty cycle scaling	Measurement uncertainty	PD result(4cm^2)				ID
										Measured Total psPD (mW/cm^2)	Reported Total psPD (mW/cm^2)	Measured Normal psPD (mW/cm^2)	Reported Normal psPD (mW/cm^2)	
WLAN 6E 802.11ax(160M) U-NII-5	Top Edge	2	15	6025	9.00	8.97	100.69%	1.047	1.55	0.036	0.059	0.032	0.052	054
WLAN 6E 802.11ax(160M) U-NII-5	Top Edge	2	47	6185	9.00	8.99	100.23%	1.047	1.55	0.011	0.018	0.009	0.014	055
WLAN 6E 802.11ax(160M) U-NII-6	Top Edge	2	111	6505	9.00	8.75	105.93%	1.047	1.55	0.023	0.039	0.019	0.033	056
WLAN 6E 802.11ax(160M) U-NII-7	Top Edge	2	143	6665	9.00	8.77	105.44%	1.047	1.55	0.035	0.061	0.026	0.045	057
WLAN 6E 802.11ax(160M) U-NII-8	Top Edge	2	207	6985	9.00	8.68	107.65%	1.047	1.55	0.020	0.035	0.018	0.032	058

Note:
Reported PD = measured PD * Power scaling * Duty cycle scaling * Uncertainty scaling

8.4 Reporting statements of conformity

The conformity statement in this report is based solely on the test results, measurement uncertainty is excluded.

8.5 Conclusion

The device is compliant because all the standalone results are less than their corresponding criteria.

9 SIMULTANEOUS TRANSMISSION ANALYSIS

9.1 Simultaneous Transmission Scenarios:

Simultaneous Transmit Configurations	Body
WLAN 2.4GHz Tx1 + WLAN 2.4GHz Tx2	Yes
WLAN 2.4GHz Tx1 + WLAN 6E Tx2	Yes
WLAN 2.4GHz Tx2 + WLAN 6E Tx1	Yes
WLAN 2.4GHz Tx1 + WLAN 5GHz Tx2	Yes
WLAN 2.4GHz Tx2 + WLAN 5GHz Tx1	Yes
WLAN 2.4GHz Tx1 + WLAN 2.4GHz Tx2 + WLAN 5GHz Tx1 + WLAN 5GHz Tx2	Yes
WLAN 2.4GHz Tx1 + WLAN 2.4GHz Tx2 + WLAN 6E Tx1 + WLAN 6E Tx2	Yes
WLAN 5GHz Tx1 + WLAN 5GHz Tx2	Yes
WLAN 5GHz Tx2 + BT	Yes
WLAN 5GHz Tx1 + WLAN 5GHz Tx2 + BT	Yes
WLAN 6E Tx1 + WLAN 6E Tx2	Yes
WLAN 6E Tx2 + BT	Yes
WLAN 6E Tx1 + WLAN 6E Tx2 + BT	Yes

Note:
1. Bluetooth and WLAN Tx1 share the same antenna path, and BT can transmit with WLAN Tx2 simultaneously.
2. For 2.4/5/6GHz WLAN Tx1 and Tx2 antennas, the maximum output power of each antenna during simultaneous transmission is the same with (or less than) that used in standalone transmission, and we used the sum of 1-g SAR provision in KDB447498D01 to exclude the simultaneous transmitted SAR measurement.

9.2 Estimated SAR calculation

According to KDB447498 D01v06 – When standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:

$$\text{Estimated SAR} = \frac{\text{Max. tune up power (mW)}}{\text{Min. test separation distance(mm)}} \times \frac{\sqrt{\text{f(GHz)}}}{7.5}$$

If the minimum test separation distance is < 5mm, a distance of 5mm is used for estimated SAR calculation. When the test separation distance is >50mm, the 0.4W/kg is used for SAR-1g.

9.3 SPLSR evaluation and analysis

Per KDB447498D01, when the sum of SAR is larger than the limit, SAR test exclusion is determined by the SAR sum to peak location separation ratio(SPLSR).

The simultaneous transmitting antennas in each operating mode and exposure condition combination must be considered one pair at a time to determine the SAR to peak location separation ratio to qualify for test exclusion.

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

SAR1 and SAR2 are the highest reported or estimated SAR for each antenna in the pair, and Ri is the separation distance between the peak SAR locations for the antenna pair in mm.

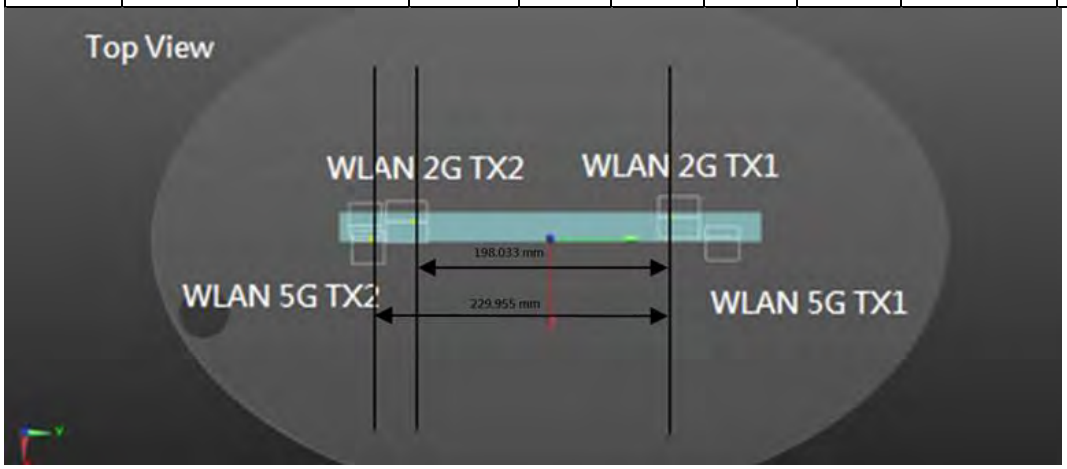
When standalone test exclusion applies, SAR is estimated; the peak location is assumed to be at the feed-point or geometric center of the antenna.

Simultaneous Transmission Combination

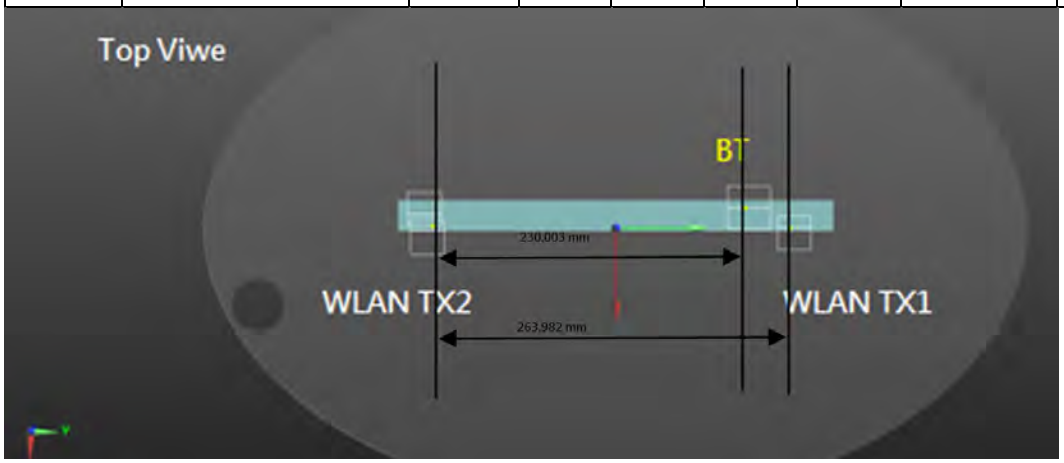
Vendor 1

Exposure Position		FCC Reported SAR							Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6	Scenario 7	Scenario 8	Scenario 9	Scenario 10	Scenario 11	Scenario 12	Scenario 13
		2	3	4	5	6	8	9	2+3	2+9	3+8	2+5	3+4	2+3+4+5	2+3+8+9	4+5	5+6	4+5+6	6+9	8+9	6+8+9
		2.4GHz WLAN Tx 1	2.4GHz WLAN Tx 2	5GHz WLAN Tx 1	5GHz WLAN Tx 2	Bluetooth Tx 1	6GHz WLAN Ant 1	6GHz WLAN Ant 2	Summed	Summed	Summed	Summed	Summed	Summed	Summed	Summed	Summed	Summed	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
Back Surface	0	0.145	0.076	0.162	0.284	0.058	0.031	0.063	0.221	0.208	0.107	0.429	0.238	0.667	0.315	0.446	0.342	0.504	0.121	0.094	0.152
Top Edge	0	0.693	0.524	0.902	1.070	0.232	0.130	0.125	1.217	0.818	0.654	1.763	1.426	3.189	1.472	1.972	1.302	2.204	0.357	0.255	0.487
Right Edge	0	0.294	0.295	0.255	0.063	0.193	0.042	0.013	0.589	0.307	0.337	0.357	0.550	0.907	0.644	0.318	0.256	0.511	0.206	0.055	0.248
Left Edge	0	0.025	0.127	0.081	0.441	0.128	0.007	0.035	0.152	0.060	0.134	0.466	0.208	0.674	0.194	0.522	0.569	0.650	0.163	0.042	0.170

Scenario 4&6									
Position	Conditions	SAR Value (W/kg)	Coordinates (mm)			ΣSAR (W/kg)	Peak Location Separation Distance (mm)	SPLSR	Simultaneous Transmission SAR Test
			x	y	z				
Top Edge	WLAN 2.4G Tx1	0.693	-13.00	96.00	-4.58	-	-	-	-
	WLAN 5G Tx2	1.070	-10.80	-136.00	-4.83	1.763	232.01	0.010	SPLSR ≤ 0.04, Not required
Top Edge	WLAN 2.4G Tx1+WLAN 5G Tx1	1.595	-13.00	96.00	-4.58	-	-	-	-
	WLAN 2.4G Tx2+WLAN 5G Tx2	1.594	-9.40	-102.00	-5.13	3.189	198.03	0.029	SPLSR ≤ 0.04, Not required



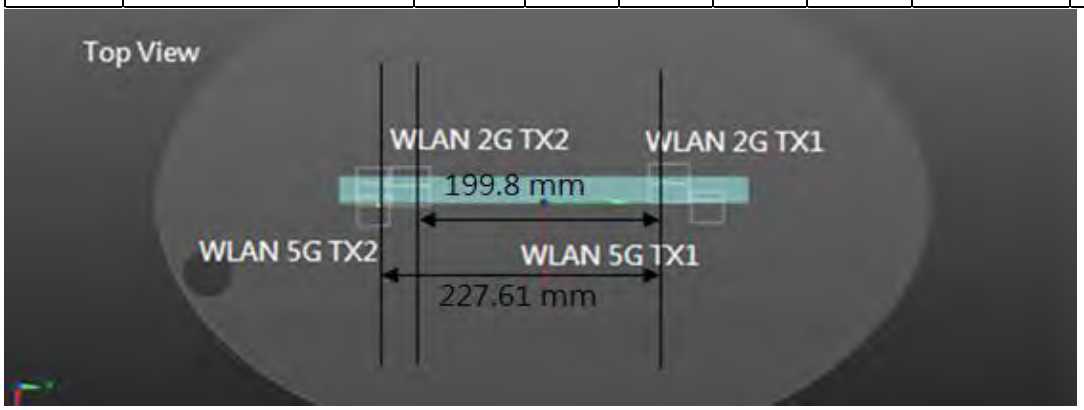
Scenario 8 &10									
Position	Conditions	SAR Value (W/kg)	Coordinates (mm)			ΣSAR (W/kg)	Peak Location Separation Distance (mm)	SPLSR	Simultaneous Transmission SAR Test
			x	y	z				
Top Edge	WLAN 5G Tx2	1.070	-10.80	-136.00	-4.83	-	-	-	-
	WLAN 5G Tx1	0.902	-1.00	127.80	-4.33	1.972	263.98	0.010	SPLSR ≤ 0.04, Not required
	WLAN 5G Tx1+BT	1.134	-11.80	94.00	-5.53	2.204	230.00	0.014	SPLSR ≤ 0.04, Not required



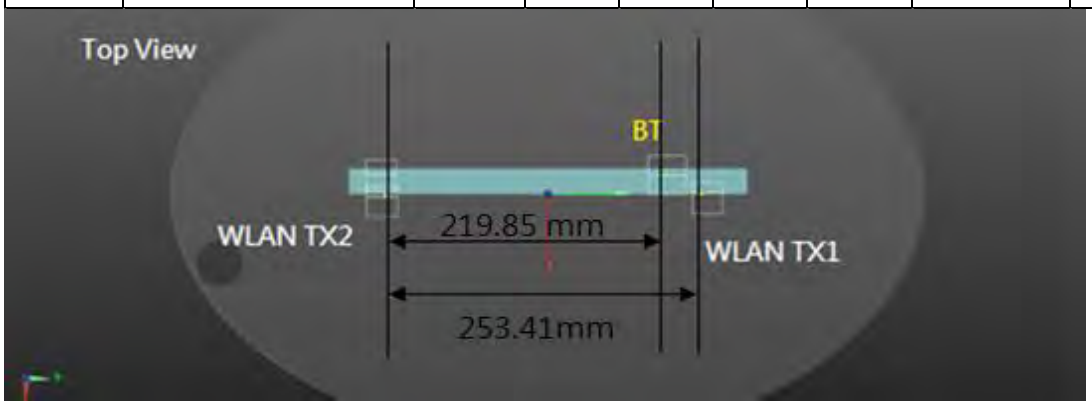
Vendor 2

Exposure Position		FCC Reported SAR							Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6	Scenario 7	Scenario 8	Scenario 9	Scenario 10	Scenario 11	Scenario 12	Scenario 13
		2	3	4	5	6	8	9	2+3	2+9	3+8	2+5	3+4	2+3+4+5	2+3+8+9	4+5	5+6	4+5+6	6+9	8+9	6+8+9
		2.4GHz WLAN Tx 1	2.4GHz WLAN Tx 2	5GHz WLAN Tx 1	5GHz WLAN Tx 2	Bluetooth Tx 1	6GHz WLAN Ant 1	6GHz WLAN Ant 2	Summed	Summed	Summed	Summed	Summed	Summed	Summed	Summed	Summed	Summed	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
Back Surface	0	0.128	0.047	0.052	0.280	0.043	0.029	0.028	0.175	0.156	0.076	0.408	0.099	0.507	0.232	0.332	0.323	0.375	0.071	0.057	0.100
Top Edge	0	0.487	0.256	0.737	0.748	0.319	0.108	0.113	0.743	0.600	0.364	1.235	0.993	2.228	0.964	1.485	1.067	1.804	0.432	0.221	0.540
Right Edge	0	0.306	0.001	0.266	0.012	0.178	0.045	0.012	0.307	0.318	0.046	0.318	0.267	0.585	0.364	0.278	0.190	0.456	0.190	0.057	0.235
Left Edge	0	0.022	0.116	0.010	0.346	0.062	0.011	0.041	0.138	0.063	0.127	0.368	0.126	0.494	0.190	0.356	0.408	0.418	0.103	0.052	0.114

Scenario 6									
Position	Conditions	SAR Value (W/kg)	Coordinates (mm)			ΣSAR (W/kg)	Peak Location Separation Distance (mm)	SPLSR	Simultaneous Transmission SAR Test
			x	y	z				
Top Edge	WLAN 2.4G Tx1+WLAN 5G Tx1	1.224	-11.80	97.00	-4.95	-	-	-	-
	WLAN 2.4G Tx2+WLAN 5G Tx2	1.004	-11.60	-102.80	-5.14	2.228	199.80	0.017	SPLSR ≤ 0.04, Not required



Scenario 10									
Position	Conditions	SAR Value (W/kg)	Coordinates (cm)			ΣSAR (W/kg)	Peak Location Separation Distance (mm)	SPLSR	Simultaneous Transmission SAR Test
			x	y	z				
Top Edge	WLAN 5G Tx2	0.748	1.20	-128.80	-5.12	-	-	-	-
	WLAN 5G Tx1	0.737	-1.00	124.60	-4.34	1.485	253.41	0.007	SPLSR ≤ 0.04, Not required
	WLAN 5G Tx1+BT	1.056	-12.80	90.60	-4.20	1.804	219.85	0.011	SPLSR ≤ 0.04, Not required



9.4 Conclusion

The simultaneous transmission is compliant because both SAR sum and/or SPLSR are less than their corresponding criteria.

10 INSTRUMENTS LIST

Manufacturer	Device	Type	Serial number	Date of last calibration	Date of next calibration
SPEAG	Dosimetric E-Field Probe	EX3DV4	3770	Apr.28,2021	Apr.27,2022
			7466	Jan.29,2021	Jan.28,2022
		EUmmWV4	9579	Oct.06,2021	Oct.05,2022
SPEAG	System Validation Dipole	D2450V2	727	Apr.14,2021	Apr.13,2022
		D5GHzV2	1023	Jan.26.2021	Jan.25.2022
		D6.5GHzV2	1006	Aug.26,2021	Aug.25,2022
		D7GHzV2	1007	Aug.26,2021	Aug.25,2022
		5G-Veri10	1021	Jan.18,2021	Jan.17,2022
SPEAG	Data acquisition Electronics	DAE4	856	Apr.23,2021	Apr.22,2022
			1665	Mar.01,2021	Feb.28,2022
SPEAG	Software	DASY 52 V52.10.4	N/A	Calibration not required	Calibration not required
SPEAG	Phantom	ELI	N/A	Calibration not required	Calibration not required
		mmWave			
SPEAG	Dielectric Assessment Kit	DAKS-3.5	1053	Feb.17,2021	Feb.16,2022
Agilent	Dual-directional coupler	772D	MY46151242	Aug.16.2021	Aug.15.2022
		778D	MY48220468	Aug.16.2021	Aug.15.2022
Agilent	Signal Generator	N5181A	MY50141235	May.30,2021	May.29,2022
Agilent	Power Meter	E4417A	MY51410006	Mar.23,2021	Mar.22,2022
Agilent	Power Sensor	E9301H	MY51470001	Mar.23,2021	Mar.22,2022
			MY51470002	Mar.23,2021	Mar.22,2022
TECPEL	Digital thermometer	DTM-303A	TP130074	Apr.26,2021	Apr.25,2022
R&S	Power Sensor	NRP18S	101974	Oct.12.2021	Oct.11.2022
Note: Instruments List of the test report EN/2021/C0030.					

Equipment List					
Manufacturer	**Device**	**Type**	**Serial number**	**Date of last calibration**	**Date of next calibration**
SPEAG	Data acquisition Electronics	DAE4	1260	Sep/22/2022	Sep/21/2023
SPEAG	Dosimetric E-Field Probe	EX3DV4	7509	Apr/26/2023	Apr/25/2024
SPEAG	System Validation Dipole	D5GHzV2	1349	Mar/20/2023	Mar/19/2024
SPEAG	Dielectric Assessment Kit	DAKS-3.5	1053	Feb/27/2023	Feb/26/2024
R&S	MXG Analog Signal Generator	SMB100A03	182012	Jun/13/2022	Jun/12/2023
Agilent	Dual-directional coupler	772D	MY46151258	Oct/03/2022	Oct/02/2023
Agilent	Dual-directional coupler	778D	MY46151242	Aug/30/2022	Aug/29/2023
EMCI	Amplifier	EMC 2830P	980156	Calibration not required	Calibration not required
R&S	Power Meter	NRX	105651	Nov/25/2022	Nov/24/2023
R&S	Power Sensor	NRP6A	104246	Nov/22/2022	Nov/21/2023
R&S	Power Sensor	NRP6A	104247	Nov/22/2022	Nov/21/2023
SPEAG	Software	DASY 52 V52.10.4.1527	N/A	Calibration not required	Calibration not required
SPEAG	Phantom	ELI	N/A	Calibration not required	Calibration not required
TECPEL	Digital thermometer	DTM-303A	TP130074	Apr/28/2023	Apr/27/2024

Note:
Instruments List of the test report TESA2305000314EN.

11 UNCERTAINTY BUDGET

Measurement Uncertainty evaluation template for DUT SAR test (3-6G)

A	c	D	e		f	g	h=c * f / e	i=c * g / e	k
Source of Uncertainty	Tolerance/ Uncertaint	Probabili ty	Div	Div Value	ci (1g)	ci (10g)	Standard uncertainty	Standard uncertainty	vi, or Veff
Measurement system									
Probe calibration	6.55%	N	1	1	1	1	6.55%	6.55%	∞
Isotropy , Axial	3.50%	R	√3	1.732	1	1	2.02%	2.02%	∞
Isotropy, Hemispherical	9.60%	R	√3	1.732	1	1	5.54%	5.54%	∞
Modulation Response	2.40%	R	√3	1.732	1	1	1.40%	1.40%	∞
Boundary Effect	1.00%	R	√3	1.732	1	1	0.58%	0.58%	∞
Linearity	4.70%	R	√3	1.732	1	1	2.71%	2.71%	∞
Detection Limits	1.00%	R	√3	1.732	1	1	0.58%	0.58%	∞
Readout Electronics	0.30%	N	1	1	1	1	0.30%	0.30%	∞
Response time	0.80%	R	√3	1.732	1	1	0.46%	0.46%	∞
Integration Time	2.60%	R	√3	1.732	1	1	1.50%	1.50%	∞
Measurement drift (class A evaluation)	1.75%	R	√3	1.732	1	1	1.01%	1.01%	∞
RF ambient condition - noise	3.00%	R	√3	1.732	1	1	1.73%	1.73%	∞
RF ambient conditions - reflections	3.00%	R	√3	1.732	1	1	1.73%	1.73%	∞
Probe positioner Mechanical restrictions	0.40%	R	√3	1.732	1	1	0.23%	0.23%	∞
Probe Positioning with respect to phantom	2.90%	R	√3	1.732	1	1	1.67%	1.67%	∞
Post-processing	1.00%	R	√3	1.732	1	1	0.58%	0.58%	∞
Max SAR Eval	1.00%	R	√3	1.732	1	1	0.58%	0.58%	∞
Test Sample related									
Test sample positioning	2.90%	N	1	1	1	1	2.90%	2.90%	M-1
Device Holder Uncertainty	3.60%	N	1	1	1	1	3.60%	3.60%	M-1
Drift of output power	5.00%	R	√3	1.732	1	1	2.89%	2.89%	∞
Phantom and Setup									
Phantom Uncertainty	4.00%	R	√3	1.732	1	1	2.31%	2.31%	∞
Liquid permittivity (mea.)	3.42%	N	1	1	0.64	0.43	2.19%	1.47%	M
Liquid Conductivity (mea.)	2.02%	N	1	1	0.6	0.49	1.21%	0.99%	M
Combined standard uncertainty		RSS					11.98%	11.84%	
Expant uncertainty (95% confidence							23.96%	23.68%	

Measurement Uncertainty evaluation template for DUT SAR test (0.3-3G)

A	c	D	e		f	g	h=c * f / e	i=c * g / e	k
Source of Uncertainty	Tolerance/ Uncertaint	Probabili ty	Div	Div Value	ci (1g)	ci (10g)	Standard uncertainty	Standard uncertainty	vi, or Veff
Measurement system									
Probe calibration	6.00%	N	1	1	1	1	6.00%	6.00%	∞
Isotropy , Axial	3.50%	R	√3	1.732	1	1	2.02%	2.02%	∞
Isotropy, Hemispherical	9.60%	R	√3	1.732	1	1	5.54%	5.54%	∞
Modulation Response	2.40%	R	√3	1.732	1	1	1.40%	1.40%	∞
Boundary Effect	1.00%	R	√3	1.732	1	1	0.58%	0.58%	∞
Linearity	4.70%	R	√3	1.732	1	1	2.71%	2.71%	∞
Detection Limits	1.00%	R	√3	1.732	1	1	0.58%	0.58%	∞
Readout Electronics	0.30%	N	1	1	1	1	0.30%	0.30%	∞
Response time	0.80%	R	√3	1.732	1	1	0.46%	0.46%	∞
Integration Time	2.60%	R	√3	1.732	1	1	1.50%	1.50%	∞
Measurement drift (class A evaluation)	1.75%	R	√3	1.732	1	1	1.01%	1.01%	∞
RF ambient condition - noise	3.00%	R	√3	1.732	1	1	1.73%	1.73%	∞
RF ambient conditions - reflections	3.00%	R	√3	1.732	1	1	1.73%	1.73%	∞
Probe positioner Mechanical restrictions	0.40%	R	√3	1.732	1	1	0.23%	0.23%	∞
Probe Positioning with respect to phantom	2.90%	R	√3	1.732	1	1	1.67%	1.67%	∞
Post-processing	1.00%	R	√3	1.732	1	1	0.58%	0.58%	∞
Max SAR Eval	1.00%	R	√3	1.732	1	1	0.58%	0.58%	∞
Test Sample related									
Test sample positioning	2.90%	N	1	1	1	1	2.90%	2.90%	M-1
Device Holder Uncertainty	3.60%	N	1	1	1	1	3.60%	3.60%	M-1
Drift of output power	5.00%	R	√3	1.732	1	1	2.89%	2.89%	∞
Phantom and Setup									
Phantom Uncertainty	4.00%	R	√3	1.732	1	1	2.31%	2.31%	∞
Liquid permittivity (mea.)	1.71%	N	1	1	0.64	0.43	1.09%	0.74%	M
Liquid Conductivity (mea.)	0.77%	N	1	1	0.6	0.49	0.46%	0.38%	M
Combined standard uncertainty		RSS					11.48%	11.44%	
Expant uncertainty (95% confidence							22.96%	22.88%	

DASY6 Uncertainty Budget
According to IEC/IEEE 62209-1528
(Frequency band: 6GHz - 10GHz range)

a	b	c	d		e	e	f=b * e / d	f=b * e / d
Source of Uncertainty	Uncertainty Value (±%)	Probability Distributioin	Div.	Div. Value	(ci) 1g	(ci) 10g	Std. uncertainty (1g) (±%)	Std. uncertainty (10g) (±%)
Measurement system errors								
Probe calibration	18.6	N	2	2	1	1	9.3	9.3
Probe Calibration Drift	1.7	R	√3	1.732	1	1	1.0	1.0
Probe Linearity	4.7	R	√3	1.732	1	1	2.7	2.7
Broadband Signal	2.8	R	√3	1.732	1	1	1.6	1.6
Probe Isotropy	7.6	R	√3	1.732	1	1	4.4	4.4
Data Acquisition	0.3	N	1	1	1	1	0.3	0.3
RF Ambient	1.8	N	1	1	1	1	1.8	1.8
Probe positioning	0.2	N	1	1	0.67	0.67	0.1	0.1
Data Processing	3.5	N	1	1	1	1	3.5	3.5
Phantom and device errors								
Conductivity (meas.)DAK	2.5	N	1	1	0.78	0.71	2.0	1.8
Conductivity (temp.)BB	2.4	R	√3	1.732	0.78	0.71	1.1	1.0
Phantom Permittivity	14.0	R	√3	1.732	0.5	0.5	4.0	4.0
Distance DUT - TSL	2.0	N	1	1	2	2	4.0	4.0
Device Positioning (±0.5mm)	1.0	N	1	1	1	1	1.0	1.0
Device Holder	3.6	N	1	1	1	1	3.6	3.6
DUT Modulationm	2.4	R	√3	1.732	1	1	1.4	1.4
Time-average SAR	0.0	R	√3	1.732	1	1	0.0	0.0
DUT drift	2.5	N	1	1	1	1	2.5	2.5
Val Antenna Unc.	0.0	N	1	1	1	1	0.0	0.0
Unc. Input Power	0.0	N	1	1	1	1	0.0	0.0
Correction to the SAR results								
Deviation to Target	1.90	N	1	1	1	0.84	1.9	1.6
SAR scaling		R	√3	1.732	1	1	0.0	0.0
Combined Std. uncertainty							14.0	13.9
Expanded Std. uncertainty (95% confidence interval), K=2							28.0	27.8

cDASY6 Module mmWave Uncertainty Budget for PD Evaluation Distances to the Antennas ≧λ/ 5 In Compliance with IEC/IEEE 63195

a	b	c	d		e	f=b * e / d	g
Source of Uncertainty	Uncertainty Value (+-dB)	Probability Distributioin	Div.	Div. Value	ci	Std. uncertainty (+-dB)	(vi) Veff
Uncertainty terms dependent on the measurement system							
Probe calibration	0.49	N	1	1	1	0.49	∞
Probe correction	0.00	R	√3	1.732	1	0.00	∞
Frequency response (BW≦1GHz)	0.20	R	√3	1.732	1	0.12	∞
Sensor cross coupling	0.00	R	√3	1.732	1	0.00	∞
Isotropy	0.50	R	√3	1.732	1	0.29	∞
Linearity	0.20	R	√3	1.732	1	0.12	∞
Probe scattering	0.00	R	√3	1.732	1	0.00	∞
Probe positioning offset	0.30	R	√3	1.732	1	0.17	∞
Probe positioning repeatability	0.04	R	√3	1.732	1	0.02	∞
Sensor mechanical offset	0.00	R	√3	1.732	1	0.00	∞
Probe spatial resolution	0.00	R	√3	1.732	1	0.00	∞
Field impedance dependance	0.00	R	√3	1.732	1	0.00	∞
Amplitude and phase drift	0.00	R	√3	1.732	1	0.00	∞
Amplitude and phase noise	0.04	R	√3	1.732	1	0.02	∞
Measurement area truncation	0.00	R	√3	1.732	1	0.00	∞
Data acquisition	0.03	N	1	1	1	0.03	∞
Sampling	0.00	R	√3	1	1	0.00	∞
Field reconstruction	2.00	R	√3	1.732	1	1.15	∞
Forward transformation	0.00	R	√3	1.732	1	0.00	∞
Power density scaling	-	R	√3	1.732	1	-	∞
Spatial averaging	0.10	R	√3	1.732	1	0.06	∞
System detection limit	0.04	R	√3	1.732	1	0.02	∞
Uncertainty terms dependent on the DUT and environmental factors							
Probe coupling with DUT	0.00	R	√3	1.732	1	0.00	∞
Modulation response	0.40	R	√3	1.732	1	0.23	∞
Integration time	0.00	R	√3	1.732	1	0.00	∞
Response time	0.00	R	√3	1.732	1	0.00	∞
Device holder influence	0.10	R	√3	1.732	1	0.06	∞
DUT alignment	0.00	R	√3	1.732	1	0.00	∞
RF ambient conditions	0.04	R	√3	1.732	1	0.02	∞
Ambient reflections	0.04	R	√3	1.732	1	0.02	∞
Immunity / secondary reception	0.00	R	√3	1.732	1	0.00	∞
Drift of the DUT	-	R	√3	1.732	1	-	∞
Combined Std. uncertainty						1.33	
Expanded Std. uncertainty (95% confidence interval), K=2						2.67	

12 SAR MEASUREMENT RESULTS

Date: 2021/12/29

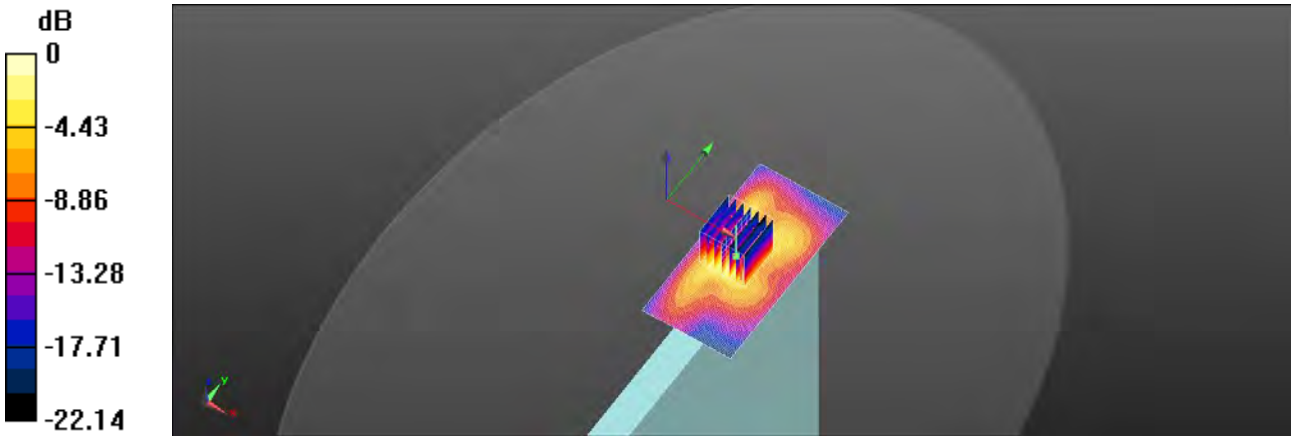
ID:001
Report No. :EN/2021/C0030
WLAN 802.11b, Body, Top Edge, CH 1, 0mm, Tx1
Communication System: WLAN 2.45G; Frequency: 2412 MHz; Duty cycle= 1:1.066
Medium parameters used: f = 2412 MHz; σ = 1.777 S/m; ε_r = 38.631; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.1°C; Liquid temperature: 21.7℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(7.67, 7.67, 7.67) @ 2412 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (51x101x1): Interpolated grid: dx=12 mm, dy=12 mm
Maximum value of SAR (interpolated) = 0.970 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.991 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 1.55 W/kg
SAR(1 g) = 0.624 W/kg; SAR(10 g) = 0.257 W/kg
Smallest distance from peaks to all points 3 dB below = 6 mm
Ratio of SAR at M2 to SAR at M1 = 49%
Maximum value of SAR (measured) = 0.970 W/kg



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

Date: 2021/12/29

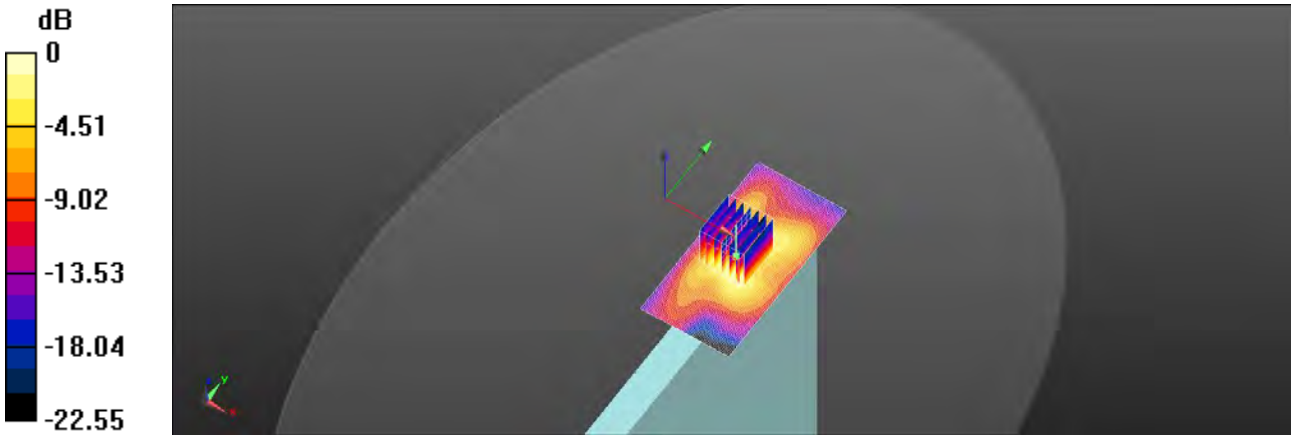
ID:002
Report No. :EN/2021/C0030
Bluetooth(GFSK), Body, Top Edge, CH 0, 0mm, Tx1
Communication System: Bluetooth; Frequency: 2402 MHz; Duty cycle= 1:1.328
Medium parameters used: f = 2402 MHz; σ = 1.768 S/m; ε_r = 38.664; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.1°C; Liquid temperature: 21.7℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(7.67, 7.67, 7.67) @ 2402 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (51x101x1): Interpolated grid: dx=12 mm, dy=12 mm
Maximum value of SAR (interpolated) = 0.262 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.122 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.421 W/kg
SAR(1 g) = 0.172 W/kg; SAR(10 g) = 0.073 W/kg
Smallest distance from peaks to all points 3 dB below = 7 mm
Ratio of SAR at M2 to SAR at M1 = 48.7%
Maximum value of SAR (measured) = 0.268 W/kg



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

Date: 2021/12/30

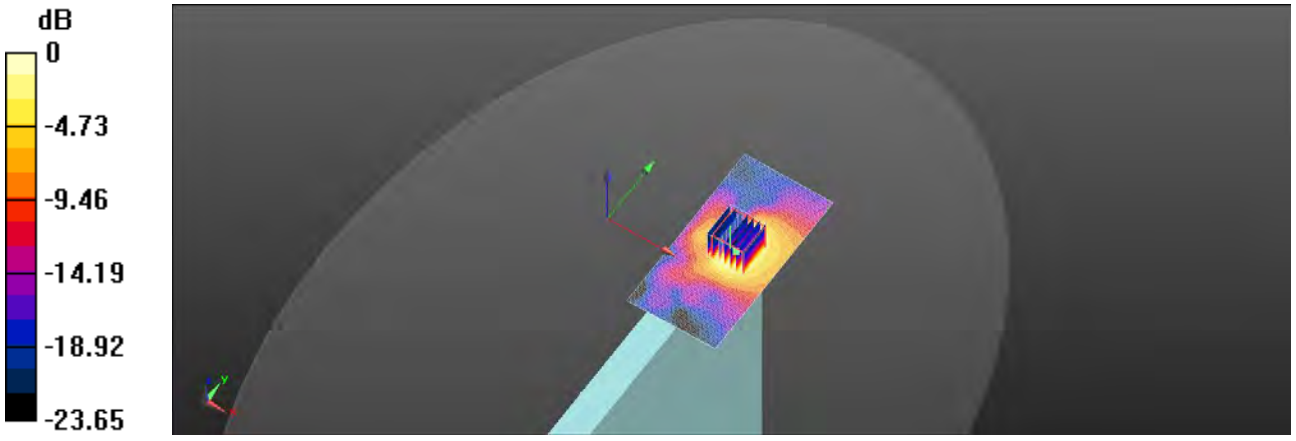
ID:003
Report No. :EN/2021/C0030
WLAN 802.11n(40M) 5.2G, Body, Top Edge, CH 46, 0mm, Tx1
Communication System: WLAN 5G; Frequency: 5230 MHz; Duty cycle= 1:1.016
Medium parameters used: f = 5230 MHz; σ = 4.693 S/m; ε_r = 37.109; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 21.8°C; Liquid temperature: 21.4℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(5.61, 5.61, 5.61) @ 5230 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 1.17 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.111 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 2.12 W/kg
SAR(1 g) = 0.578 W/kg; SAR(10 g) = 0.209 W/kg
Smallest distance from peaks to all points 3 dB below = 5.6 mm
Ratio of SAR at M2 to SAR at M1 = 58.1%
Maximum value of SAR (measured) = 1.09 W/kg



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

Date: 2021/12/31

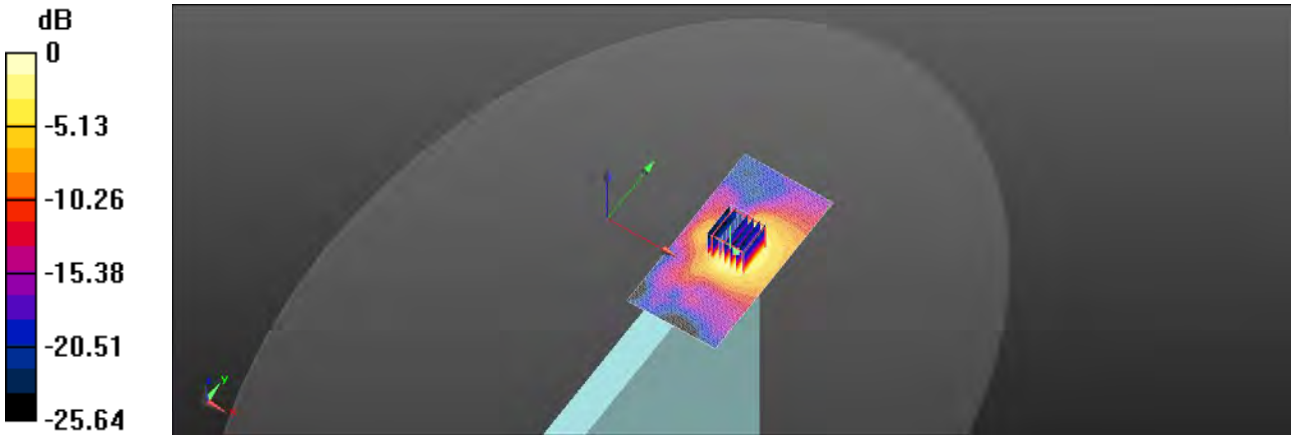
ID:004
Report No. :EN/2021/C0030
WLAN 802.11a 5.3G, Body, Top Edge, CH 60, 0mm, Tx1
Communication System: WLAN 5G; Frequency: 5300 MHz; Duty cycle= 1:1.047
Medium parameters used: f = 5300 MHz; σ = 4.792 S/m; ε_r = 37.022; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 21.9°C; Liquid temperature: 22.3℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(5.61, 5.61, 5.61) @ 5300 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 1.75 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.014 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 3.16 W/kg
SAR(1 g) = 0.834 W/kg; SAR(10 g) = 0.296 W/kg
Smallest distance from peaks to all points 3 dB below = 5.6 mm
Ratio of SAR at M2 to SAR at M1 = 57%
Maximum value of SAR (measured) = 1.62 W/kg



0 dB = 1.62 W/kg = 2.10 dBW/kg

Date: 2022/1/1

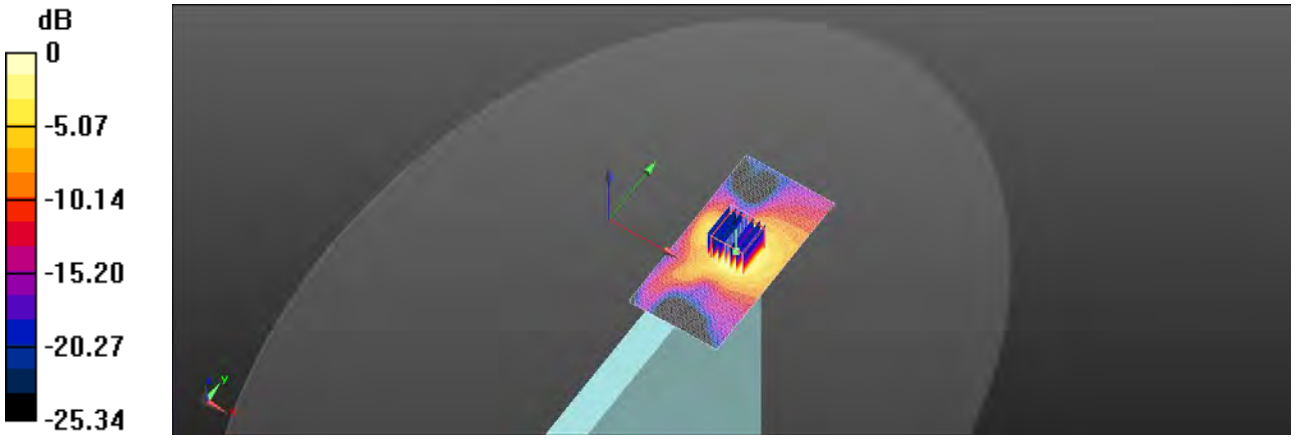
ID:005
Report No. :EN/2021/C0030
WLAN 802.11a 5.6G, Body, Top Edge, CH 144, 0mm, Tx1
Communication System: WLAN 5G; Frequency: 5720 MHz; Duty cycle= 1:1.047
Medium parameters used: f = 5720 MHz; σ = 5.293 S/m; ε_r = 36.219; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.2°C; Liquid temperature: 21.8℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(4.95, 4.95, 4.95) @ 5720 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 1.35 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.552 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 2.85 W/kg
SAR(1 g) = 0.650 W/kg; SAR(10 g) = 0.210 W/kg
Smallest distance from peaks to all points 3 dB below = 4.2 mm
Ratio of SAR at M2 to SAR at M1 = 55%
Maximum value of SAR (measured) = 1.24 W/kg



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

Date: 2022/1/2

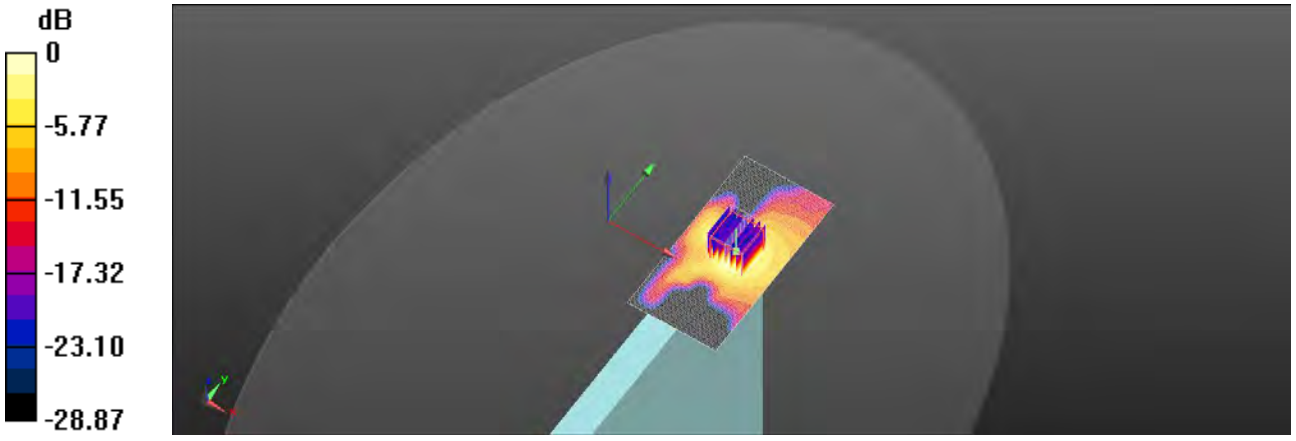
ID:006
Report No. :EN/2021/C0030
WLAN 802.11a 5.8G, Body, Top Edge, CH 149, 0mm, Tx1
Communication System: WLAN 5G; Frequency: 5745 MHz; Duty cycle= 1:1.047
Medium parameters used: f = 5745 MHz; σ = 5.321 S/m; ε_r = 36.176; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 21.7°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(4.95, 4.95, 4.95) @ 5745 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 1.18 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.423 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 2.54 W/kg
SAR(1 g) = 0.571 W/kg; SAR(10 g) = 0.188 W/kg
Smallest distance from peaks to all points 3 dB below = 4.3 mm
Ratio of SAR at M2 to SAR at M1 = 54.3%
Maximum value of SAR (measured) = 1.09 W/kg



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

Date: 2021/12/29

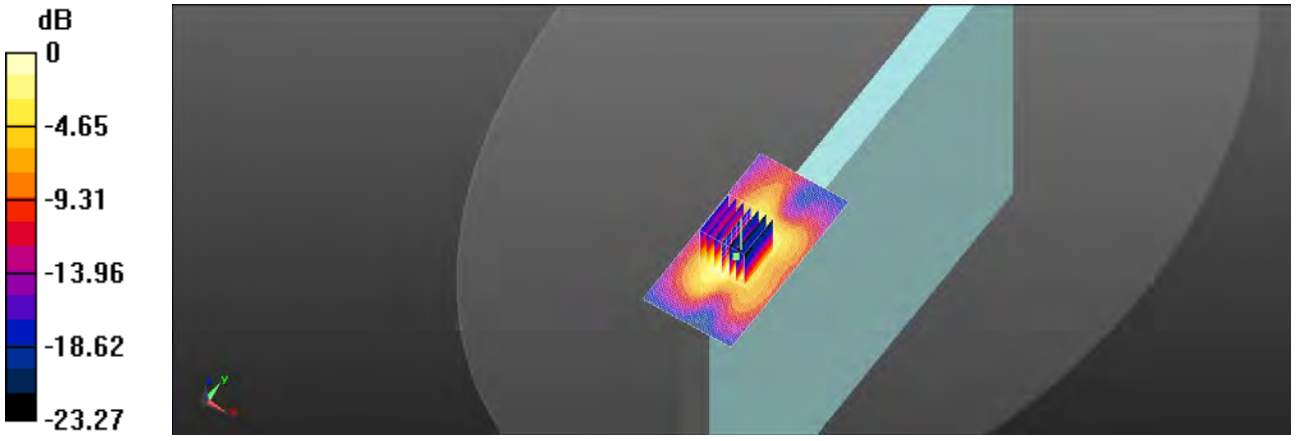
ID:007
Report No. :EN/2021/C0030
WLAN 802.11b, Body, Top Edge, CH 11, 0mm, Tx2
Communication System: WLAN 2.45G; Frequency: 2462 MHz; Duty cycle= 1:1.066
Medium parameters used: f = 2462 MHz; σ = 1.823 S/m; ε_r = 38.516; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.1°C; Liquid temperature: 21.7℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(7.67, 7.67, 7.67) @ 2462 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (51x101x1): Interpolated grid: dx=12 mm, dy=12 mm
Maximum value of SAR (interpolated) = 0.711 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.635 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 1.15 W/kg
SAR(1 g) = 0.489 W/kg; SAR(10 g) = 0.208 W/kg
Smallest distance from peaks to all points 3 dB below = 6 mm
Ratio of SAR at M2 to SAR at M1 = 51.4%
Maximum value of SAR (measured) = 0.750 W/kg



0 dB = 0.750 W/kg = -1.25 dBW/kg

Date: 2021/12/30

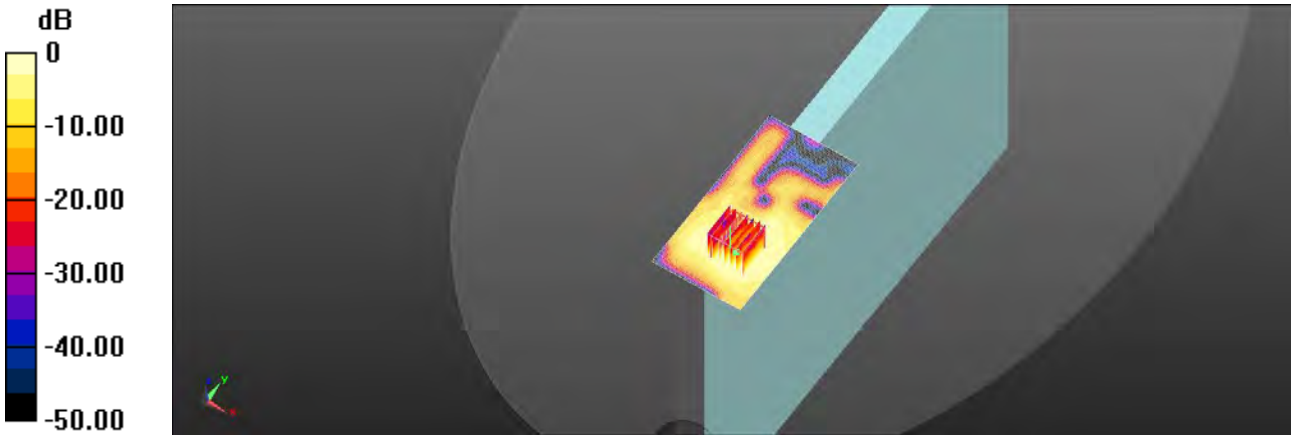
ID:008
Report No. :EN/2021/C0030
WLAN 802.11n(40M) 5.2G, Body, Top Edge, CH 46, 0mm, Tx2
Communication System: WLAN 5G; Frequency: 5230 MHz; Duty cycle= 1:1.016
Medium parameters used: f = 5230 MHz; σ = 4.693 S/m; ε_r = 37.109; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 21.8°C; Liquid temperature: 21.4℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(5.61, 5.61, 5.61) @ 5230 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 0.576 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.433 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 1.44 W/kg
SAR(1 g) = 0.371 W/kg; SAR(10 g) = 0.122 W/kg
Smallest distance from peaks to all points 3 dB below = 4.8 mm
Ratio of SAR at M2 to SAR at M1 = 55.2%
Maximum value of SAR (measured) = 0.696 W/kg



0 dB = 0.696 W/kg = -1.57 dBW/kg

Date: 2021/12/31

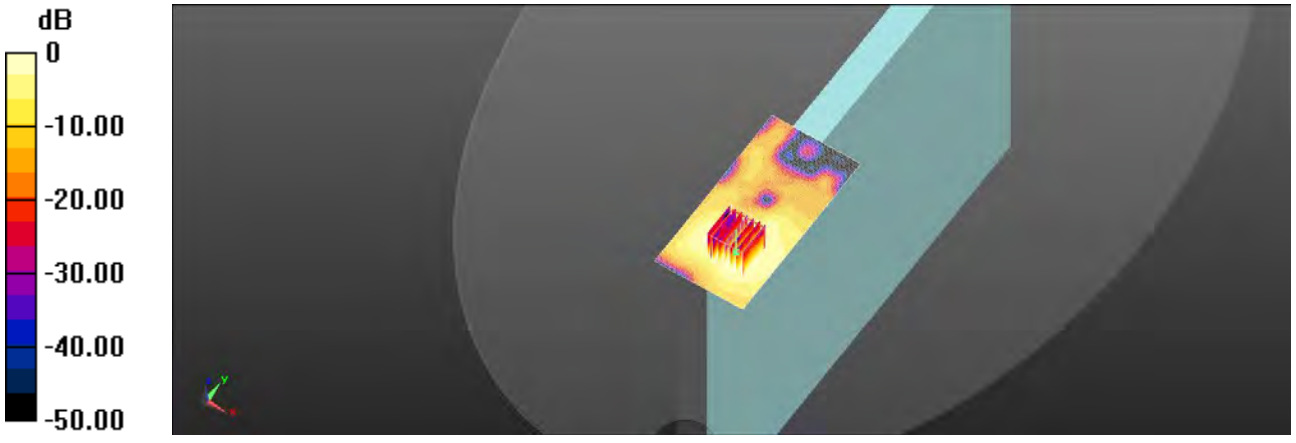
ID:009
Report No. :EN/2021/C0030
WLAN 802.11a 5.3G, Body, Top Edge, CH 60, 0mm, Tx2
Communication System: WLAN 5G; Frequency: 5300 MHz; Duty cycle= 1:1.047
Medium parameters used: f = 5300 MHz; σ = 4.792 S/m; ε_r = 37.022; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 21.9°C; Liquid temperature: 22.3℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(5.61, 5.61, 5.61) @ 5300 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 1.10 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.154 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 2.77 W/kg
SAR(1 g) = 0.690 W/kg; SAR(10 g) = 0.227 W/kg
Smallest distance from peaks to all points 3 dB below = 4.2 mm
Ratio of SAR at M2 to SAR at M1 = 58.5%
Maximum value of SAR (measured) = 1.32 W/kg



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

Date: 2022/1/1

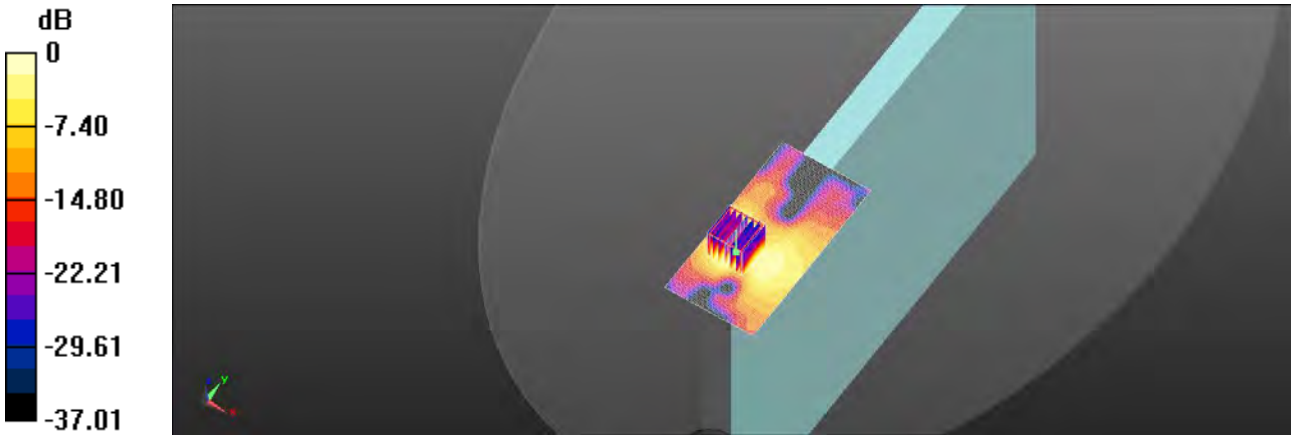
ID:010
Report No. :EN/2021/C0030
WLAN 802.11a 5.6G, Body, Top Edge, CH 144, 0mm, Tx2
Communication System: WLAN 5G; Frequency: 5720 MHz; Duty cycle= 1:1.047
Medium parameters used: f = 5720 MHz; σ = 5.293 S/m; ε_r = 36.219; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.2°C; Liquid temperature: 21.8℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(4.95, 4.95, 4.95) @ 5720 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 1.96 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.445 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 4.73 W/kg
SAR(1 g) = 0.959 W/kg; SAR(10 g) = 0.269 W/kg
Smallest distance from peaks to all points 3 dB below = 5.1 mm
Ratio of SAR at M2 to SAR at M1 = 54%
Maximum value of SAR (measured) = 2.01 W/kg



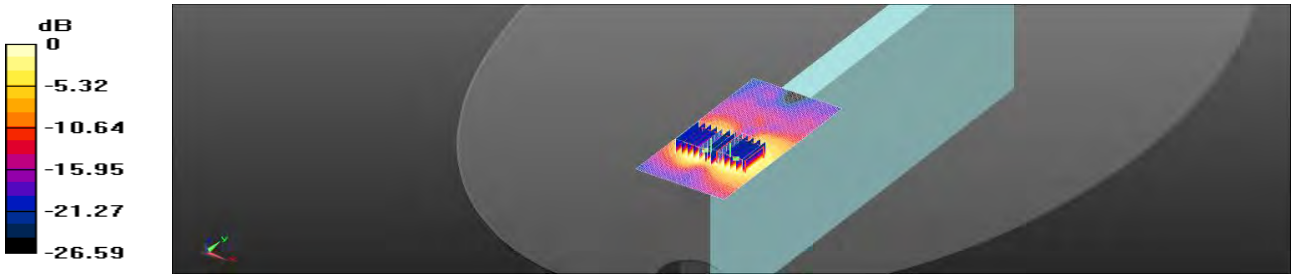
0 dB = 2.01 W/kg = 3.03 dBW/kg

Date: 2022/1/2

ID:011
Report No. :EN/2021/C0030
WLAN 802.11a 5.8G, Body, Top Edge, CH 165, 0mm, Tx2
Communication System: WLAN 5G; Frequency: 5825 MHz; Duty cycle= 1:1.047
Medium parameters used: f = 5825 MHz; σ = 5.426 S/m; ε_r = 35.895; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 21.7°C; Liquid temperature: 22.0°C
DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(4.95, 4.95, 4.95) @ 5825 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 1.61 W/kg
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.442 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 4.29 W/kg
SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.312 W/kg
Smallest distance from peaks to all points 3 dB below = 4.7 mm
Ratio of SAR at M2 to SAR at M1 = 51.6%
Maximum value of SAR (measured) = 1.81 W/kg
Zoom Scan (7x7x12)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.442 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 2.63 W/kg
SAR(1 g) = 0.722 W/kg; SAR(10 g) = 0.263 W/kg
Smallest distance from peaks to all points 3 dB below = 5.4 mm
Ratio of SAR at M2 to SAR at M1 = 53.4%
Maximum value of SAR (measured) = 1.25 W/kg



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

Date: 2021/12/29

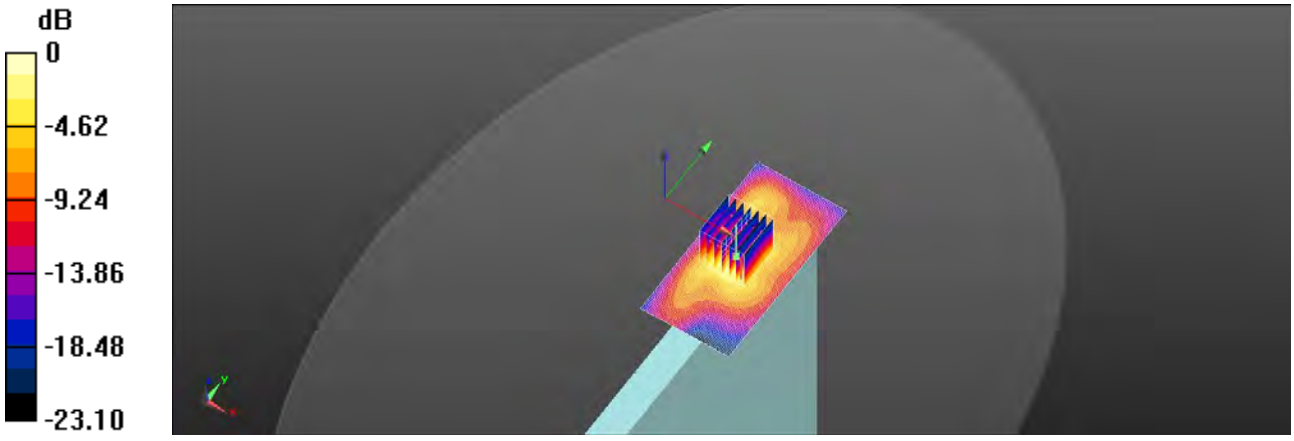
ID:012
Report No. :EN/2021/C0030
WLAN 802.11b, Body, Top Edge, CH 11, 0mm, Tx1
Communication System: WLAN 2.45G; Frequency: 2462 MHz; Duty cycle= 1:1.066
Medium parameters used: f = 2462 MHz; σ = 1.823 S/m; ε_r = 38.516; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.1°C; Liquid temperature: 21.7℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(7.67, 7.67, 7.67) @ 2462 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (51x101x1): Interpolated grid: dx=12 mm, dy=12 mm
Maximum value of SAR (interpolated) = 0.694 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.954 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 1.12 W/kg
SAR(1 g) = 0.453 W/kg; SAR(10 g) = 0.189 W/kg
Smallest distance from peaks to all points 3 dB below = 7 mm
Ratio of SAR at M2 to SAR at M1 = 48.8%
Maximum value of SAR (measured) = 0.701 W/kg



0 dB = 0.701 W/kg = -1.54 dBW/kg

Date: 2021/12/29

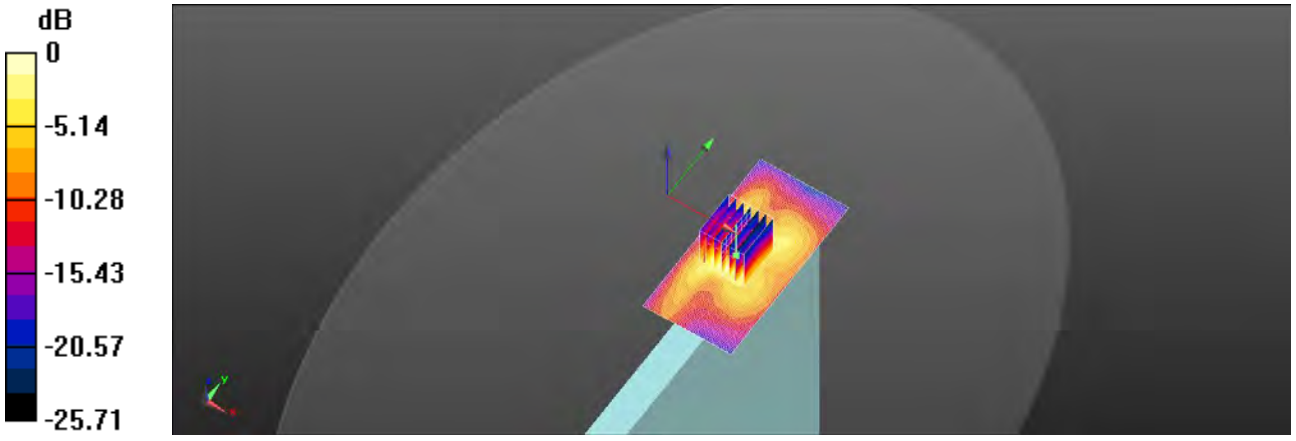
ID:013
Report No. :EN/2021/C0030
Bluetooth(GFSK), Body, Top Edge, CH 0, 0mm, Tx1
Communication System: Bluetooth; Frequency: 2402 MHz; Duty cycle= 1:1.328
Medium parameters used: f = 2402 MHz; σ = 1.768 S/m; ε_r = 38.664; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.1°C; Liquid temperature: 21.7℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(7.67, 7.67, 7.67) @ 2402 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (51x101x1): Interpolated grid: dx=12 mm, dy=12 mm
Maximum value of SAR (interpolated) = 0.349 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.444 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 0.575 W/kg
SAR(1 g) = 0.236 W/kg; SAR(10 g) = 0.099 W/kg
Smallest distance from peaks to all points 3 dB below = 7 mm
Ratio of SAR at M2 to SAR at M1 = 46.9%
Maximum value of SAR (measured) = 0.370 W/kg



0 dB = 0.370 W/kg = -4.32 dBW/kg

Date: 2021/12/30

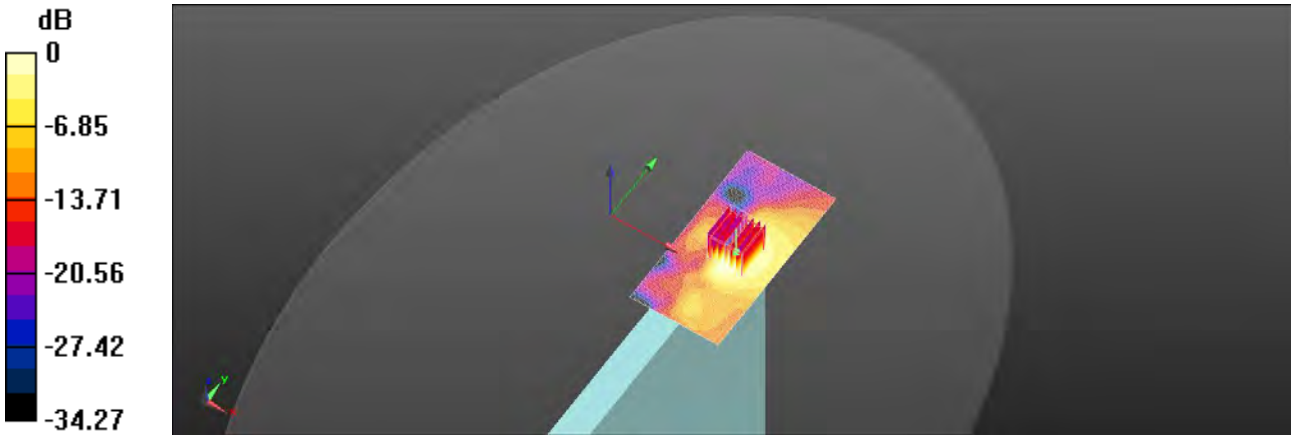
ID:014
Report No. :EN/2021/C0030
WLAN 802.11n(40M) 5.2G, Body, Top Edge, CH 46, 0mm, Tx1
Communication System: WLAN 5G; Frequency: 5230 MHz; Duty cycle= 1:1.016
Medium parameters used: f = 5230 MHz; σ = 4.693 S/m; ε_r = 37.109; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 21.8°C; Liquid temperature: 21.4℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(5.61, 5.61, 5.61) @ 5230 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 0.829 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.656 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 1.21 W/kg
SAR(1 g) = 0.346 W/kg; SAR(10 g) = 0.129 W/kg
Smallest distance from peaks to all points 3 dB below = 5.6 mm
Ratio of SAR at M2 to SAR at M1 = 58.8%
Maximum value of SAR (measured) = 0.614 W/kg



0 dB = 0.614 W/kg = -2.12 dBW/kg

Date: 2021/12/31

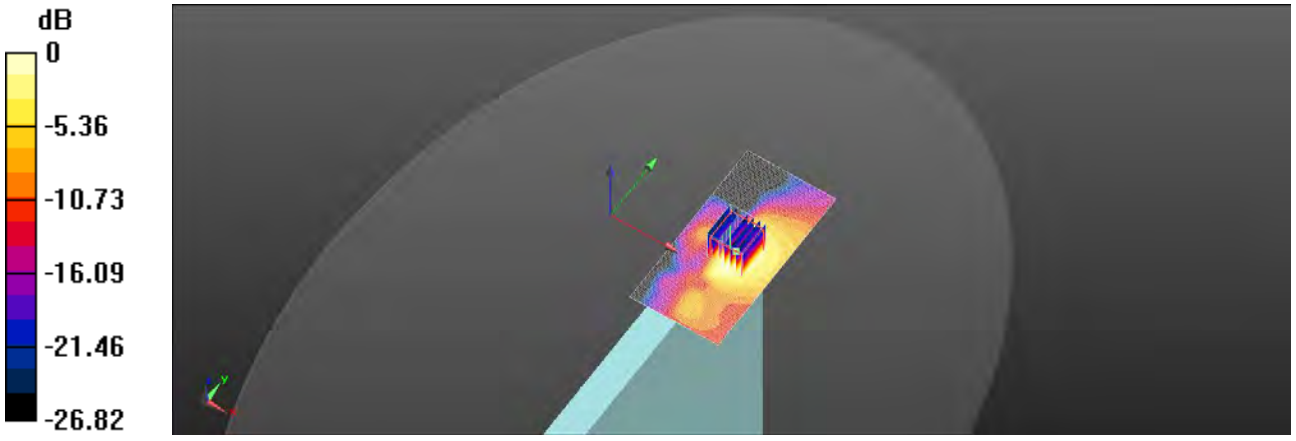
ID:015
Report No. :EN/2021/C0030
WLAN 802.11a 5.3G, Body, Top Edge, CH 56, 0mm, Tx1
Communication System: WLAN 5G; Frequency: 5280 MHz; Duty cycle= 1:1.047
Medium parameters used: f = 5280 MHz; σ = 4.767 S/m; ε_r = 37.064; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 21.9°C; Liquid temperature: 22.3℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(5.61, 5.61, 5.61) @ 5280 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 1.64 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.221 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 2.48 W/kg
SAR(1 g) = 0.701 W/kg; SAR(10 g) = 0.260 W/kg
Smallest distance from peaks to all points 3 dB below = 5.7 mm
Ratio of SAR at M2 to SAR at M1 = 57.8%
Maximum value of SAR (measured) = 1.27 W/kg



0 dB = 1.27 W/kg = 1.04 dBW/kg

Date: 2022/1/1

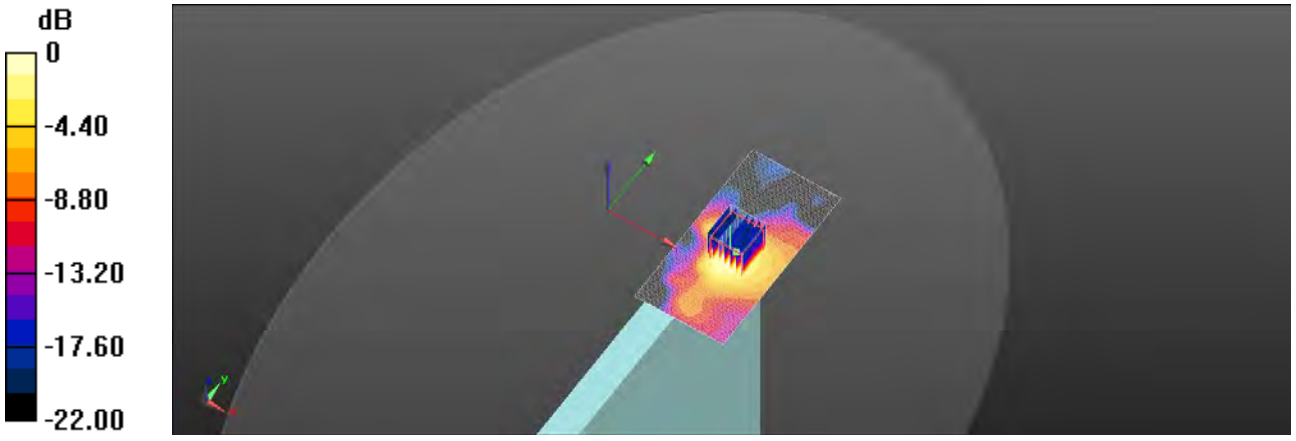
ID:016
Report No. :EN/2021/C0030
WLAN 802.11a 5.6G, Body, Top Edge, CH 144, 0mm, Tx1
Communication System: WLAN 5G; Frequency: 5720 MHz; Duty cycle= 1:1.047
Medium parameters used: f = 5720 MHz; σ = 5.293 S/m; ε_r = 36.219; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.2°C; Liquid temperature: 21.8℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(4.95, 4.95, 4.95) @ 5720 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 0.690 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.176 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 1.62 W/kg
SAR(1 g) = 0.391 W/kg; SAR(10 g) = 0.146 W/kg
Smallest distance from peaks to all points 3 dB below = 4.8 mm
Ratio of SAR at M2 to SAR at M1 = 54.9%
Maximum value of SAR (measured) = 0.752 W/kg



0 dB = 0.752 W/kg = -1.24 dBW/kg

Date: 2022/1/2

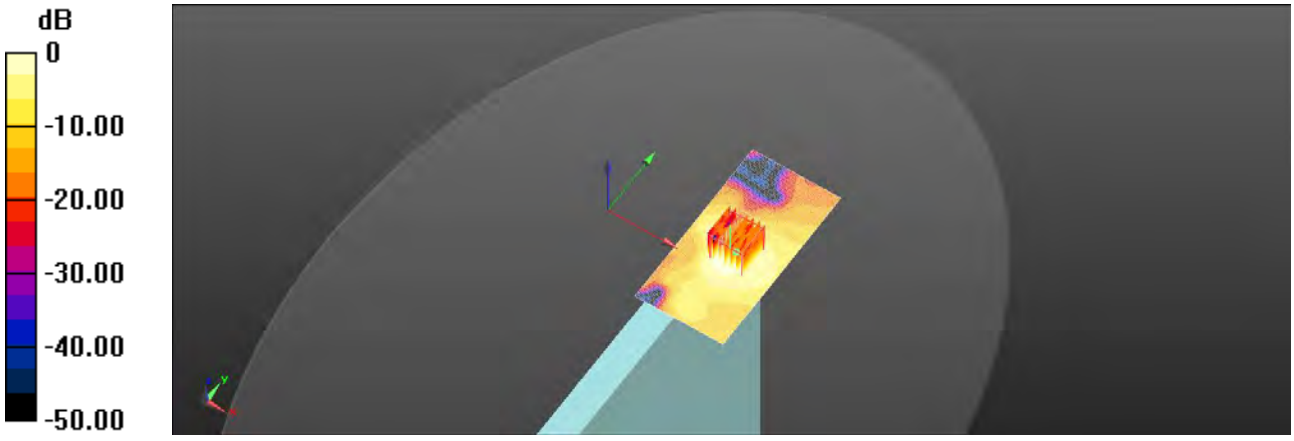
ID:017
Report No. :EN/2021/C0030
WLAN 802.11a 5.8G, Body, Top Edge, CH 149, 0mm, Tx1
Communication System: WLAN 5G; Frequency: 5745 MHz; Duty cycle= 1:1.047
Medium parameters used: f = 5745 MHz; σ = 5.321 S/m; ε_r = 36.176; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 21.7°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(4.95, 4.95, 4.95) @ 5745 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 0.916 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.332 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 2.11 W/kg
SAR(1 g) = 0.513 W/kg; SAR(10 g) = 0.187 W/kg
Smallest distance from peaks to all points 3 dB below = 4.9 mm
Ratio of SAR at M2 to SAR at M1 = 54.9%
Maximum value of SAR (measured) = 0.982 W/kg



0 dB = 0.982 W/kg = -0.08 dBW/kg

Date: 2021/12/29

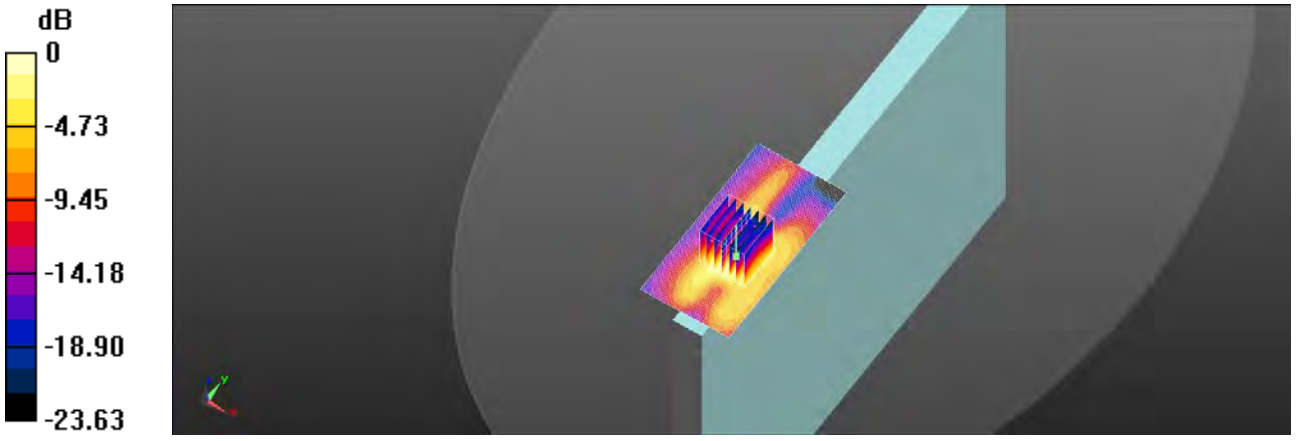
ID:018
Report No. :EN/2021/C0030
WLAN 802.11b, Body, Top Edge, CH 11, 0mm, Tx2
Communication System: WLAN 2.45G; Frequency: 2462 MHz; Duty cycle= 1:1.066
Medium parameters used: f = 2462 MHz; σ = 1.823 S/m; ε_r = 38.516; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.1°C; Liquid temperature: 21.7℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(7.67, 7.67, 7.67) @ 2462 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (51x101x1): Interpolated grid: dx=12 mm, dy=12 mm
Maximum value of SAR (interpolated) = 0.350 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.312 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 0.597 W/kg
SAR(1 g) = 0.239 W/kg; SAR(10 g) = 0.102 W/kg
Smallest distance from peaks to all points 3 dB below = 8 mm
Ratio of SAR at M2 to SAR at M1 = 43.1%
Maximum value of SAR (measured) = 0.385 W/kg



0 dB = 0.385 W/kg = -4.15 dBW/kg

Date: 2021/12/30

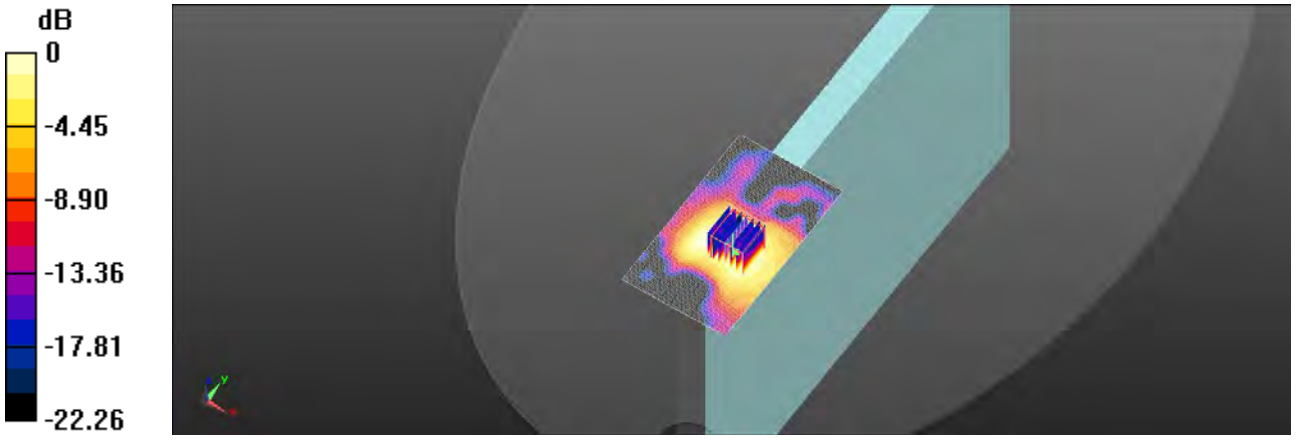
ID:019
Report No. :EN/2021/C0030
WLAN 802.11n(40M) 5.2G, Body, Top Edge, CH 46, 0mm, Tx2
Communication System: WLAN 5G; Frequency: 5230 MHz; Duty cycle= 1:1.016
Medium parameters used: f = 5230 MHz; σ = 4.693 S/m; ε_r = 37.109; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 21.8°C; Liquid temperature: 21.4℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(5.61, 5.61, 5.61) @ 5230 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 0.309 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.221 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.635 W/kg
SAR(1 g) = 0.195 W/kg; SAR(10 g) = 0.069 W/kg
Smallest distance from peaks to all points 3 dB below = 6.4 mm
Ratio of SAR at M2 to SAR at M1 = 59.3%
Maximum value of SAR (measured) = 0.344 W/kg



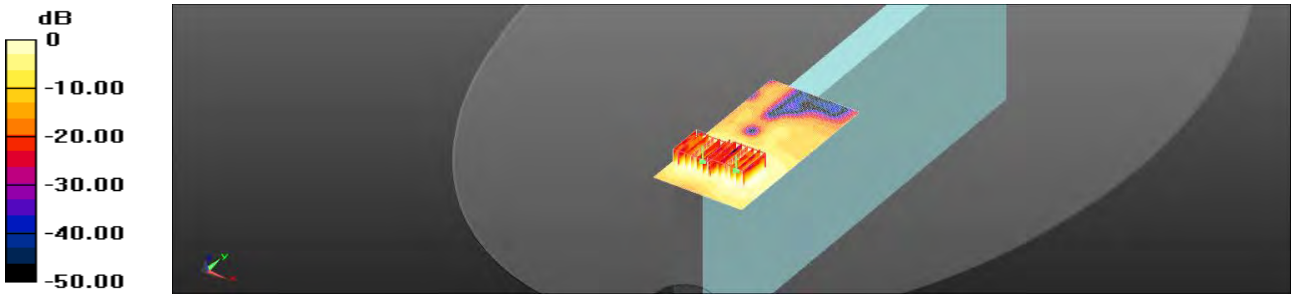
0 dB = 0.344 W/kg = -4.63 dBW/kg

Date: 2021/12/31

ID:020
Report No. :EN/2021/C0030
WLAN 802.11a 5.3G, Body, Top Edge, CH 60, 0mm, Tx2
Communication System: WLAN 5G; Frequency: 5300 MHz; Duty cycle= 1:1.047
Medium parameters used: f = 5300 MHz; σ = 4.792 S/m; ε_r = 37.022; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 21.9°C; Liquid temperature: 22.3℃
DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(5.61, 5.61, 5.61) @ 5300 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 0.678 W/kg
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.457 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 1.90 W/kg
SAR(1 g) = 0.455 W/kg; SAR(10 g) = 0.133 W/kg
Smallest distance from peaks to all points 3 dB below = 4.1 mm
Ratio of SAR at M2 to SAR at M1 = 58.2%
Maximum value of SAR (measured) = 0.890 W/kg
Zoom Scan (7x7x12)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.457 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 1.31 W/kg
SAR(1 g) = 0.379 W/kg; SAR(10 g) = 0.142 W/kg
Smallest distance from peaks to all points 3 dB below = 5.4 mm
Ratio of SAR at M2 to SAR at M1 = 58.7%
Maximum value of SAR (measured) = 0.670 W/kg



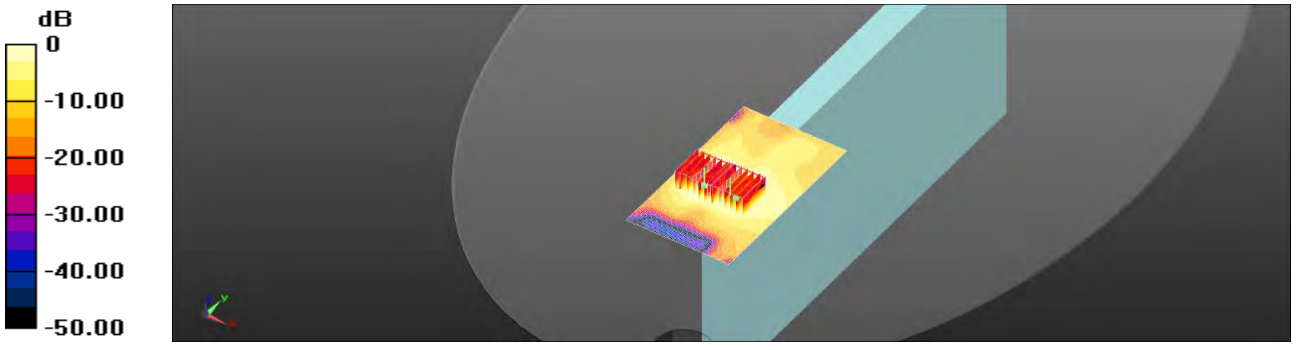
0 dB = 0.670 W/kg = -1.74 dBW/kg

Date: 2022/1/1

ID:021
Report No. :EN/2021/C0030
WLAN 802.11a 5.6G, Body, Top Edge, CH 144, 0mm, Tx2
Communication System: WLAN 5G; Frequency: 5720 MHz; Duty cycle= 1:1.047
Medium parameters used: f = 5720 MHz; σ = 5.293 S/m; ε_r = 36.219; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.2°C; Liquid temperature: 21.8℃
DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(4.95, 4.95, 4.95) @ 5720 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 1.19 W/kg
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.223 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 2.86 W/kg
SAR(1 g) = 0.575 W/kg; SAR(10 g) = 0.172 W/kg
Smallest distance from peaks to all points 3 dB below = 4.8 mm
Ratio of SAR at M2 to SAR at M1 = 53.8%
Maximum value of SAR (measured) = 1.20 W/kg
Zoom Scan (7x7x12)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.223 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 2.34 W/kg
SAR(1 g) = 0.587 W/kg; SAR(10 g) = 0.210 W/kg
Smallest distance from peaks to all points 3 dB below = 5.8 mm
Ratio of SAR at M2 to SAR at M1 = 54.7%
Maximum value of SAR (measured) = 1.13 W/kg



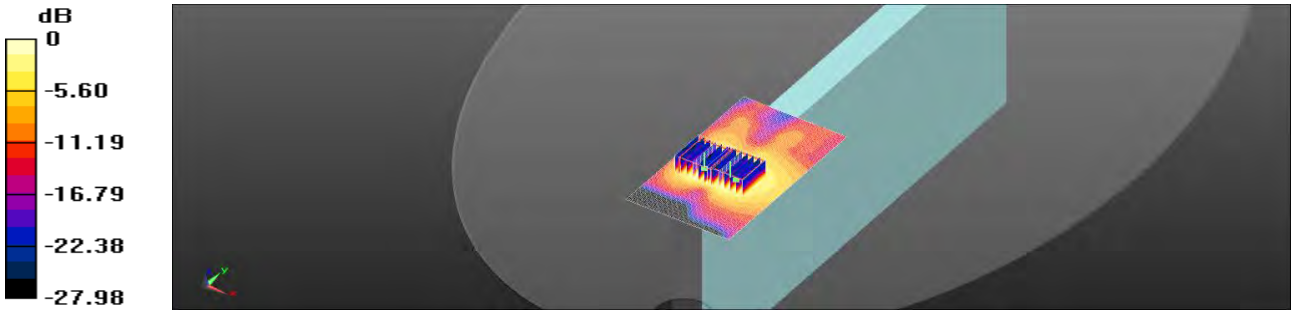
0 dB = 1.13 W/kg = 0.53 dBW/kg

Date: 2022/1/2

ID:022
Report No. :EN/2021/C0030
WLAN 802.11a 5.8G, Body, Top Edge, CH 165, 0mm, Tx2
Communication System: WLAN 5G; Frequency: 5825 MHz; Duty cycle= 1:1.047
Medium parameters used: f = 5825 MHz; σ = 5.426 S/m; ε_r = 35.895; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 21.7°C; Liquid temperature: 22.0°C
DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(4.95, 4.95, 4.95) @ 5825 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 1.33 W/kg
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.976 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 3.20 W/kg
SAR(1 g) = 0.644 W/kg; SAR(10 g) = 0.189 W/kg
Smallest distance from peaks to all points 3 dB below = 4.8 mm
Ratio of SAR at M2 to SAR at M1 = 53%
Maximum value of SAR (measured) = 1.36 W/kg
Zoom Scan (7x7x12)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.976 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 2.54 W/kg
SAR(1 g) = 0.631 W/kg; SAR(10 g) = 0.224 W/kg
Smallest distance from peaks to all points 3 dB below = 6.4 mm
Ratio of SAR at M2 to SAR at M1 = 54.4%
Maximum value of SAR (measured) = 1.24 W/kg



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

ID:023
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-5, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 15 (6025.0 MHz)_Tx1
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	U-NII-5	WLAN, 10743-AAC	6025.0, 15	5.7	5.423	34.647

Hardware Setup

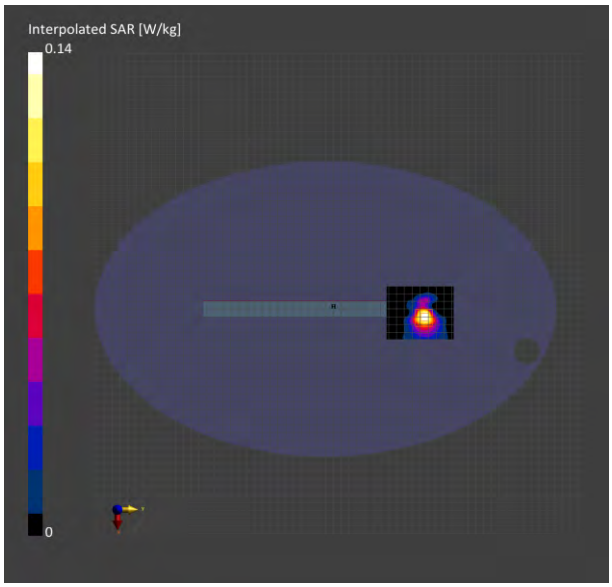
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI	HBBL-600-10000	EX3DV4 - SN7466, 2021-01-29	DAE4 Sn1665, 2021-03-01

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	68.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2022-01-03, 07:04	2022-01-03, 07:17
psSAR1g [W/Kg]	0.106	0.119
psSAR10g [W/Kg]	0.038	0.040
Power Drift [dB]	0.05	-0.12
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		59.4
Dist 3dB Peak [mm]		5.4



ID:024
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-6, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 111 (6505.0 MHz)_Tx1
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	U-NII-6	WLAN, 10743-AAC	6505.0, 111	5.7	5.982	34.085

Hardware Setup

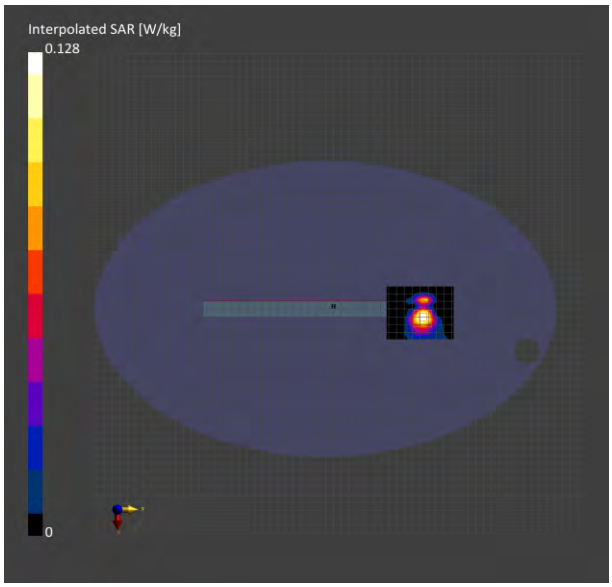
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI	HBBL-600-10000	EX3DV4 - SN7466, 2021-01-29	DAE4 Sn1665, 2021-03-01

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	68.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2022-01-03, 08:14	2022-01-03, 08:26
psSAR1g [W/Kg]	0.102	0.117
psSAR10g [W/Kg]	0.037	0.041
Power Drift [dB]	0.14	-0.08
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.7
Dist 3dB Peak [mm]		6.1



ID:025
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-7, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 175 (6825.0 MHz)_Tx1
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	U-NII-7	WLAN, 10743-AAC	6825.0, 175	5.7	6.349	33.713

Hardware Setup

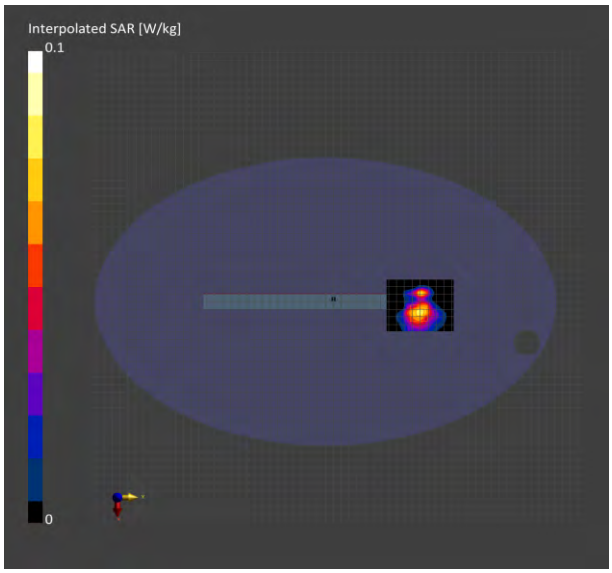
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI	HBBL-600-10000	EX3DV4 - SN7466, 2021-01-29	DAE4 Sn1665, 2021-03-01

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	68.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2022-01-03, 08:48	2022-01-03, 08:59
psSAR1g [W/Kg]	0.066	0.067
psSAR10g [W/Kg]	0.026	0.026
Power Drift [dB]	-0.11	-0.09
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		54.1
Dist 3dB Peak [mm]		4.8



ID:026
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-8, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 207 (6985.0 MHz)_Tx1
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	U-NII-8	WLAN, 10743-AAC	6985.0, 207	5.85	6.531	33.524

Hardware Setup

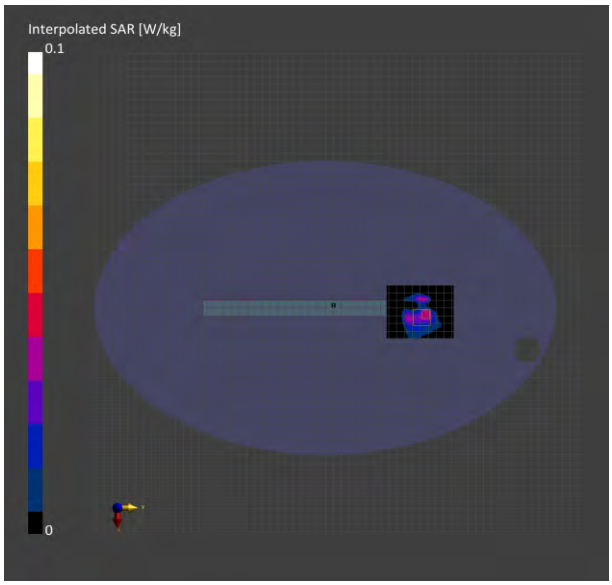
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI	HBBL-600-10000	EX3DV4 - SN7466, 2021-01-29	DAE4 Sn1665, 2021-03-01

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	68.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2022-01-03, 09:24	2022-01-03, 09:37
psSAR1g [W/Kg]	0.035	0.038
psSAR10g [W/Kg]	0.012	0.014
Power Drift [dB]	0.13	-0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.2
Dist 3dB Peak [mm]		3.8



ID:027
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-5, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 15 (6025.0 MHz)_Tx2
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	U-NII-5	WLAN, 10743-AAC	6025.0, 15	5.7	5.423	34.647

Hardware Setup

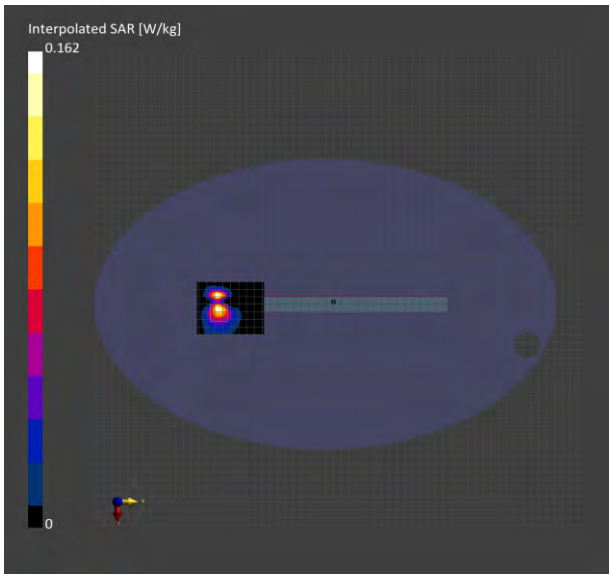
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI	HBBL-600-10000	EX3DV4 - SN7466, 2021-01-29	DAE4 Sn1665, 2021-03-01

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	68.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2022-01-03, 10:00	2022-01-03, 10:13
psSAR1g [W/Kg]	0.110	0.119
psSAR10g [W/Kg]	0.035	0.031
Power Drift [dB]	-0.07	-0.14
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.3
Dist 3dB Peak [mm]		5.2



ID:028
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-6, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 111 (6505.0 MHz)_Tx2
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	U-NII-6	WLAN, 10743-AAC	6505.0, 111	5.7	5.982	34.085

Hardware Setup

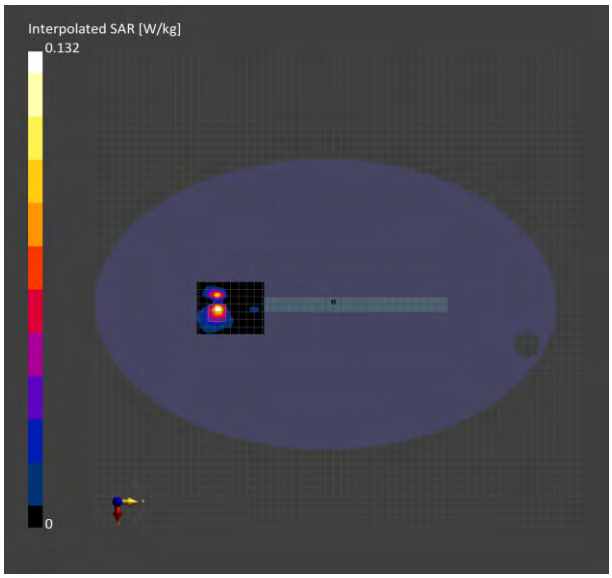
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI	HBBL-600-10000	EX3DV4 - SN7466, 2021-01-29	DAE4 Sn1665, 2021-03-01

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	68.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2022-01-03, 11:12	2022-01-03, 11:25
psSAR1g [W/Kg]	0.089	0.094
psSAR10g [W/Kg]	0.026	0.029
Power Drift [dB]	-0.17	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.0
Dist 3dB Peak [mm]		4.6



ID:029
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-7, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 143 (6665.0 MHz)_Tx2
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	U-NII-7	WLAN, 10743-AAC	6665.0, 143	5.7	6.165	33.907

Hardware Setup

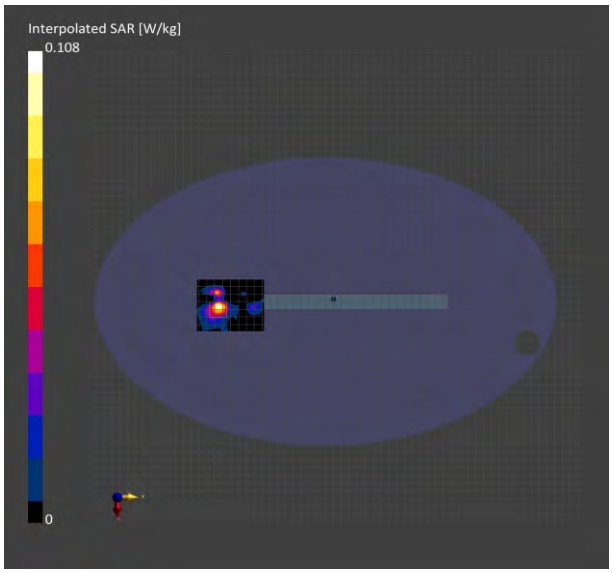
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI	HBBL-600-10000	EX3DV4 - SN7466, 2021-01-29	DAE4 Sn1665, 2021-03-01

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	68.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2022-01-03, 11:49	2022-01-03, 12:01
psSAR1g [W/Kg]	0.078	0.083
psSAR10g [W/Kg]	0.023	0.025
Power Drift [dB]	-0.04	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		58.0
Dist 3dB Peak [mm]		4.9



ID:030
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-8, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 207 (6985.0 MHz)_Tx2
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	U-NII-8	WLAN, 10743-AAC	6985.0, 207	5.85	6.531	33.524

Hardware Setup

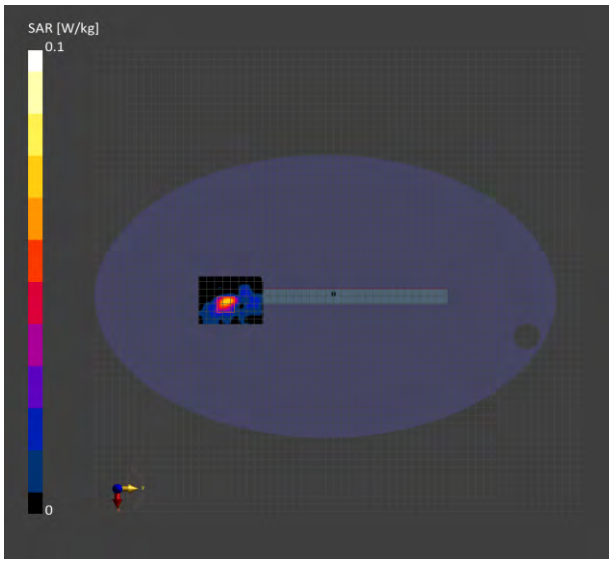
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI	HBBL-600-10000	EX3DV4 - SN7466, 2021-01-29	DAE4 Sn1665, 2021-03-01

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	68.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2022-01-03, 12:24	2022-01-03, 12:37
psSAR1g [W/Kg]	0.091	0.094
psSAR10g [W/Kg]	0.027	0.030
Power Drift [dB]	0.17	-0.07
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.7
Dist 3dB Peak [mm]		5.6



ID:031
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-5, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 15 (6025.0 MHz)_Tx1
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	U-NII-5	WLAN, 10743-AAC	6025.0, 15	5.7	5.423	34.647

Hardware Setup

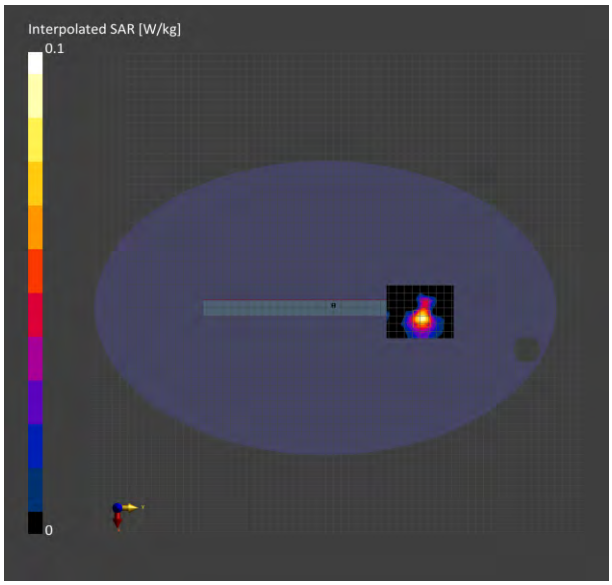
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI	HBBL-600-10000	EX3DV4 - SN7466, 2021-01-29	DAE4 Sn1665, 2021-03-01

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	68.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2022-01-03, 13:01	2022-01-03, 13:14
psSAR1g [W/Kg]	0.067	0.076
psSAR10g [W/Kg]	0.024	0.027
Power Drift [dB]	0.15	-0.12
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		64.5
Dist 3dB Peak [mm]		5.4



ID:032
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-6, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 111 (6505.0 MHz) _Tx1
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	U-NII-6	WLAN, 10743-AAC	6505.0, 111	5.7	5.982	34.085

Hardware Setup

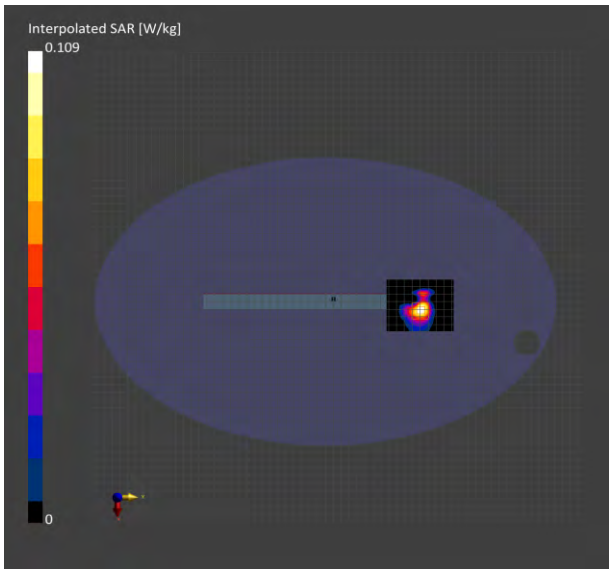
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI	HBBL-600-10000	EX3DV4 - SN7466, 2021-01-29	DAE4 Sn1665, 2021-03-01

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	68.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2022-01-03, 14:11	2022-01-03, 14:24
psSAR1g [W/Kg]	0.085	0.102
psSAR10g [W/Kg]	0.029	0.034
Power Drift [dB]	-0.17	-0.07
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.6
Dist 3dB Peak [mm]		4.3



ID:033
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-7, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 175 (6825.0 MHz) _Tx1
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	U-NII-7	WLAN, 10743-AAC	6825.0, 175	5.7	6.349	33.713

Hardware Setup

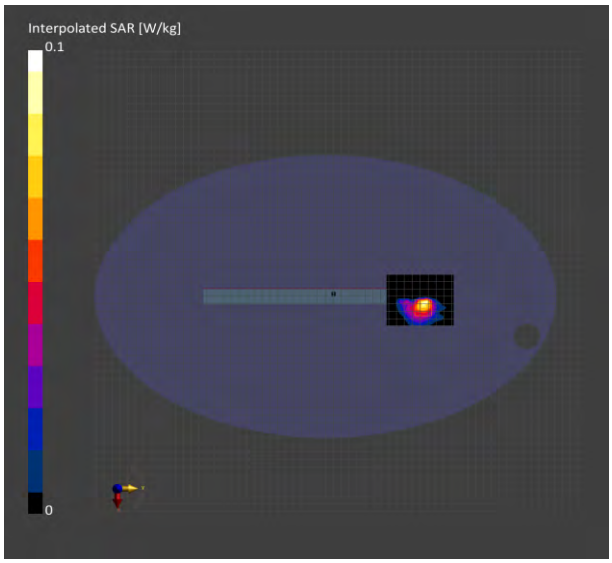
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI	HBBL-600-10000	EX3DV4 - SN7466, 2021-01-29	DAE4 Sn1665, 2021-03-01

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	68.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2022-01-03, 14:46	2022-01-03, 14:58
psSAR1g [W/Kg]	0.072	0.083
psSAR10g [W/Kg]	0.025	0.029
Power Drift [dB]	0.07	-0.17
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		52.7
Dist 3dB Peak [mm]		4.1



ID:034
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-8, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 207 (6985.0 MHz) _Tx1
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	U-NII-8	WLAN, 10743-AAC	6985.0, 207	5.85	6.531	33.524

Hardware Setup

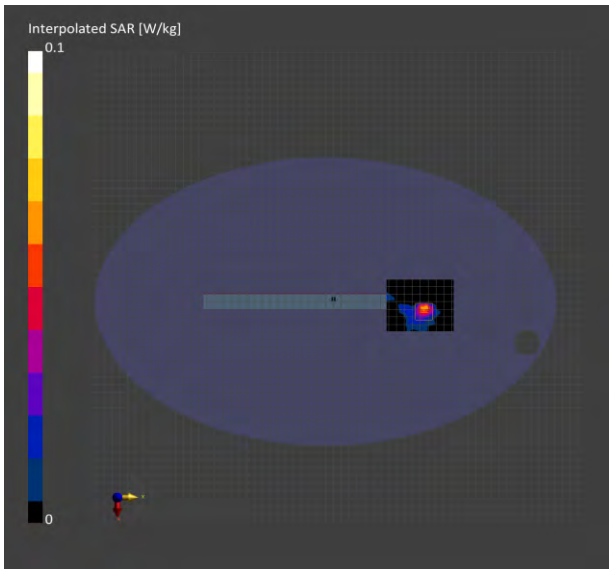
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI	HBBL-600-10000	EX3DV4 - SN7466, 2021-01-29	DAE4 Sn1665, 2021-03-01

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	68.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2022-01-03, 15:22	2022-01-03, 15:35
psSAR1g [W/Kg]	0.053	0.057
psSAR10g [W/Kg]	0.016	0.018
Power Drift [dB]	0.13	-0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.1
Dist 3dB Peak [mm]		4.1



ID:035
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-5, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 15 (6025.0 MHz)_Tx2
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	U-NII-5	WLAN, 10743-AAC	6025.0, 15	5.7	5.423	34.647

Hardware Setup

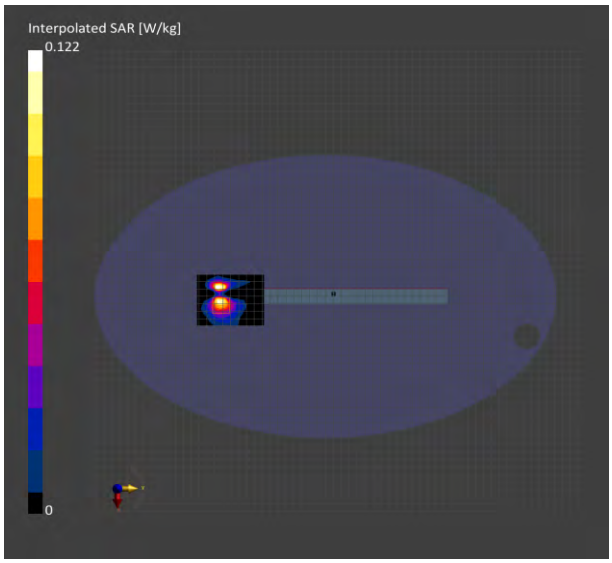
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI	HBBL-600-10000	EX3DV4 - SN7466, 2021-01-29	DAE4 Sn1665, 2021-03-01

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	68.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2022-01-03, 15:57	2022-01-03, 16:10
psSAR1g [W/Kg]	0.082	0.095
psSAR10g [W/Kg]	0.027	0.024
Power Drift [dB]	0.05	-0.12
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.9
Dist 3dB Peak [mm]		6.1



ID:036
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-6, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 111 (6505.0 MHz) _Tx2
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	U-NII-6	WLAN, 10743-AAC	6505.0, 111	5.7	5.982	34.085

Hardware Setup

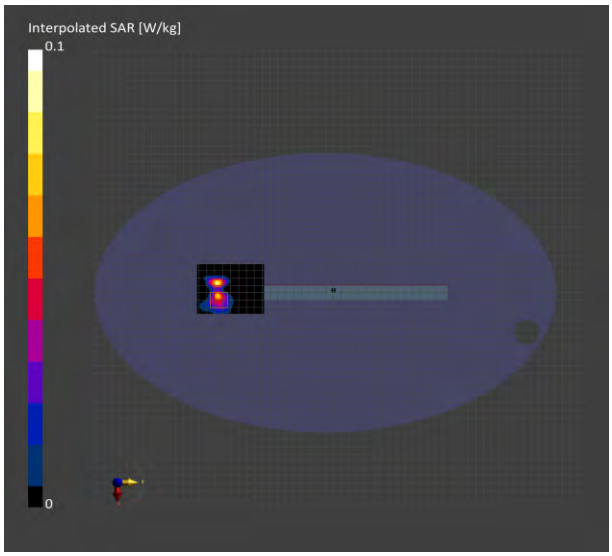
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI	HBBL-600-10000	EX3DV4 - SN7466, 2021-01-29	DAE4 Sn1665, 2021-03-01

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	68.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2022-01-03, 17:08	2022-01-03, 17:21
psSAR1g [W/Kg]	0.054	0.062
psSAR10g [W/Kg]	0.016	0.014
Power Drift [dB]	-0.05	-0.13
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		47.5
Dist 3dB Peak [mm]		5.2



ID:037
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-7, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 143 (6665.0 MHz) _Tx2
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	U-NII-7	WLAN, 10743-AAC	6665.0, 143	5.7	6.165	33.907

Hardware Setup

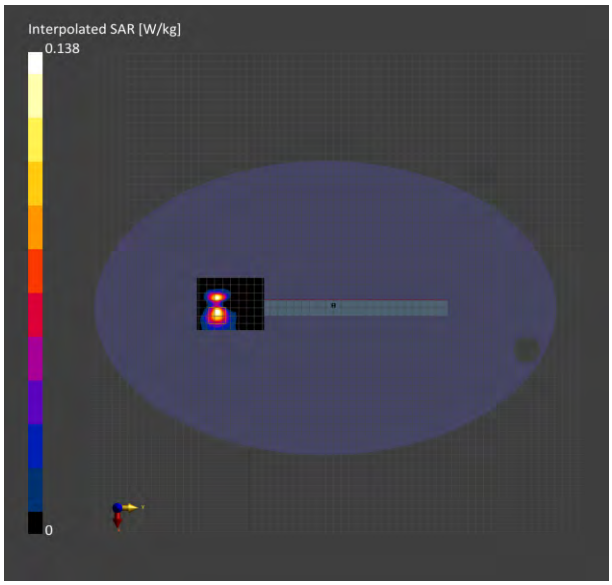
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI	HBBL-600-10000	EX3DV4 - SN7466, 2021-01-29	DAE4 Sn1665, 2021-03-01

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	68.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.0 x 3.0 x 1.2
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.2
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2022-01-03, 17:43	2022-01-03, 17:56
psSAR1g [W/Kg]	0.101	0.102
psSAR10g [W/Kg]	0.032	0.025
Power Drift [dB]	0.09	0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		57.1
Dist 3dB Peak [mm]		4.8



ID:038
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-8, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 207 (6985.0 MHz) _Tx2
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	U-NII-8	WLAN, 10743-AAC	6985.0, 207	5.85	6.531	33.524

Hardware Setup

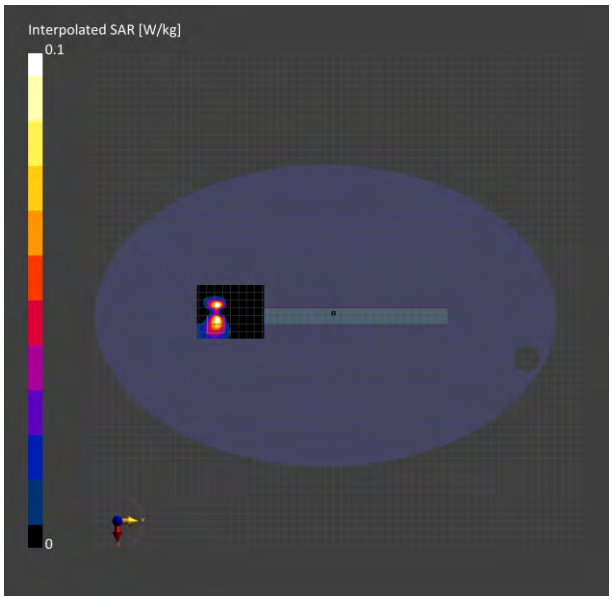
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI	HBBL-600-10000	EX3DV4 - SN7466, 2021-01-29	DAE4 Sn1665, 2021-03-01

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	68.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2022-01-03, 18:20	2022-01-03, 18:33
psSAR1g [W/Kg]	0.075	0.085
psSAR10g [W/Kg]	0.023	0.027
Power Drift [dB]	0.15	-0.07
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		52.9
Dist 3dB Peak [mm]		4.1



Date: 2023/5/26

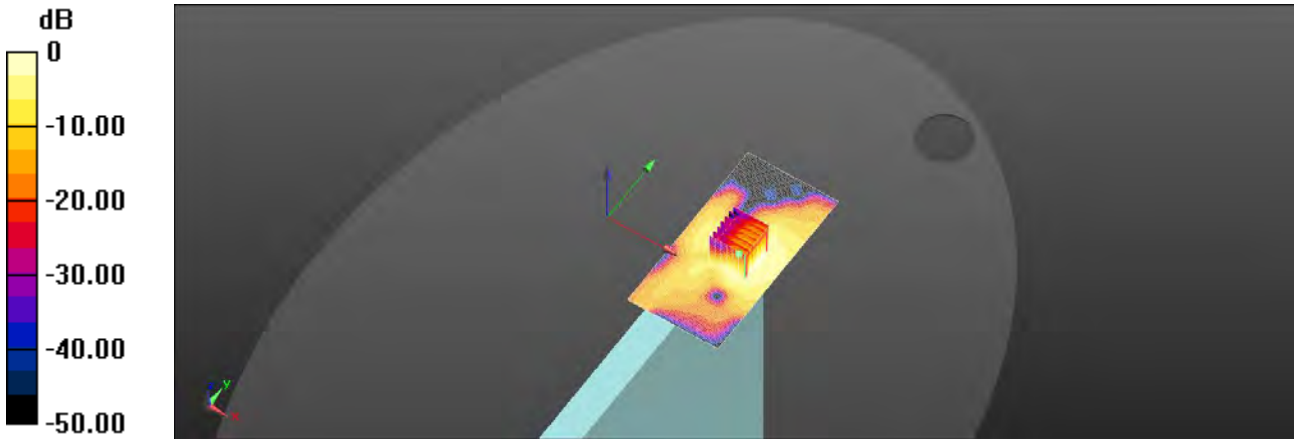
ID: 059
Report No. :TESA2305000314EN
WLAN 802.11ac(160M) 5.9G_Body_Top Edge_CH 163_0mm_Tx1
Communication System: WLAN 5G; Frequency: 5815 MHz; Duty cycle= 1:1.036
Medium parameters used: f = 5815 MHz; σ = 5.377 S/m; ε_r = 34.656; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.3°C; Liquid temperature: 22.1℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(5.12, 5.16, 5.51) @ 5815 MHz; Calibrated: 2023/4/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1260; Calibrated: 2022/9/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 1.23 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.796 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 2.19 W/kg
SAR(1 g) = 0.778 W/kg; SAR(10 g) = 0.278 W/kg
Smallest distance from peaks to all points 3 dB below = 6.4 mm
Ratio of SAR at M2 to SAR at M1 = 68.5%
Maximum value of SAR (measured) = 1.28 W/kg



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

Date: 2023/5/26

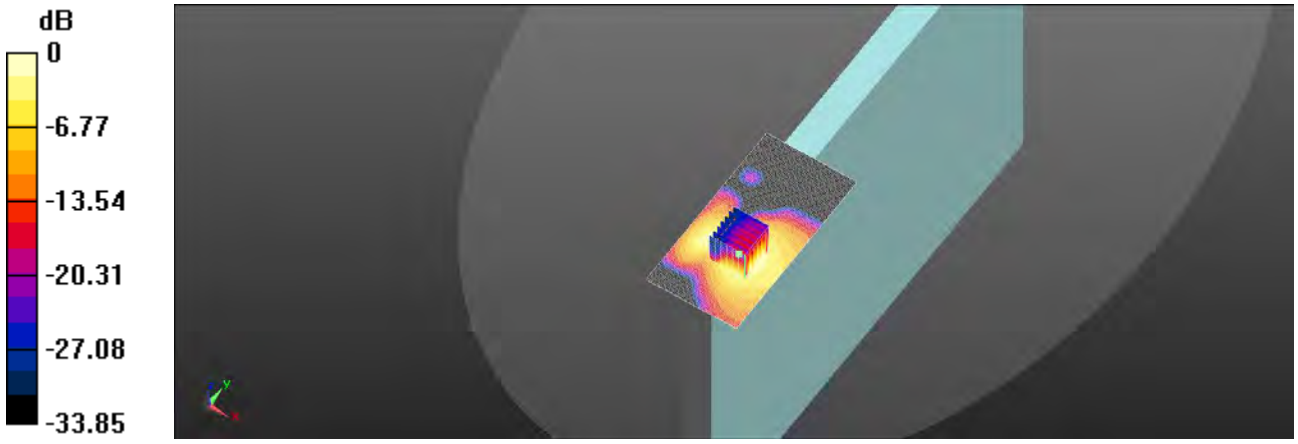
ID: 060
Report No. :TESA2305000314EN
WLAN 802.11ac(160M) 5.9G_Body_Top Edge_CH 163_0mm_Tx2
Communication System: WLAN 5G; Frequency: 5815 MHz; Duty cycle= 1:1.036
Medium parameters used: f = 5815 MHz; σ = 5.377 S/m; ε_r = 34.656; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.3°C; Liquid temperature: 22.1℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(5.12, 5.16, 5.51) @ 5815 MHz; Calibrated: 2023/4/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1260; Calibrated: 2022/9/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 1.52 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.762 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 2.83 W/kg
SAR(1 g) = 1.01 W/kg; SAR(10 g) = 0.358 W/kg
Smallest distance from peaks to all points 3 dB below = 6.1 mm
Ratio of SAR at M2 to SAR at M1 = 67.5%
Maximum value of SAR (measured) = 1.67 W/kg



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

Date: 2023/5/26

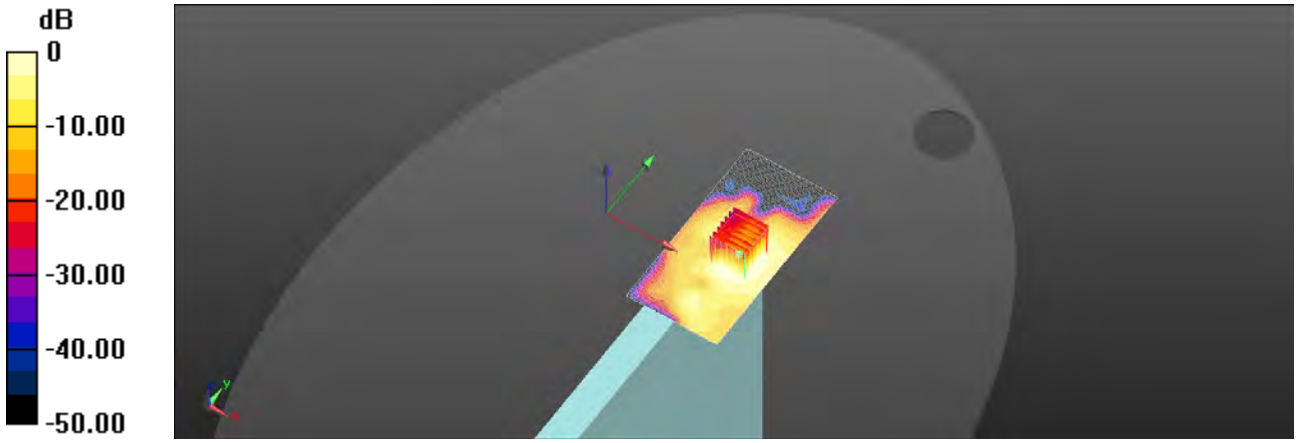
ID: 061
Report No. :TESA2305000314EN
WLAN 802.11ac(160M) 5.9G_Body_Top Edge_CH 163_0mm_Tx1
Communication System: WLAN 5G; Frequency: 5815 MHz; Duty cycle= 1:1.036
Medium parameters used: f = 5815 MHz; σ = 5.377 S/m; ε_r = 34.656; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.3°C; Liquid temperature: 22.1℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(5.12, 5.16, 5.51) @ 5815 MHz; Calibrated: 2023/4/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1260; Calibrated: 2022/9/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 0.971 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.698 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.73 W/kg
SAR(1 g) = 0.602 W/kg; SAR(10 g) = 0.214 W/kg
Smallest distance from peaks to all points 3 dB below = 4.7 mm
Ratio of SAR at M2 to SAR at M1 = 67.1%
Maximum value of SAR (measured) = 1.02 W/kg



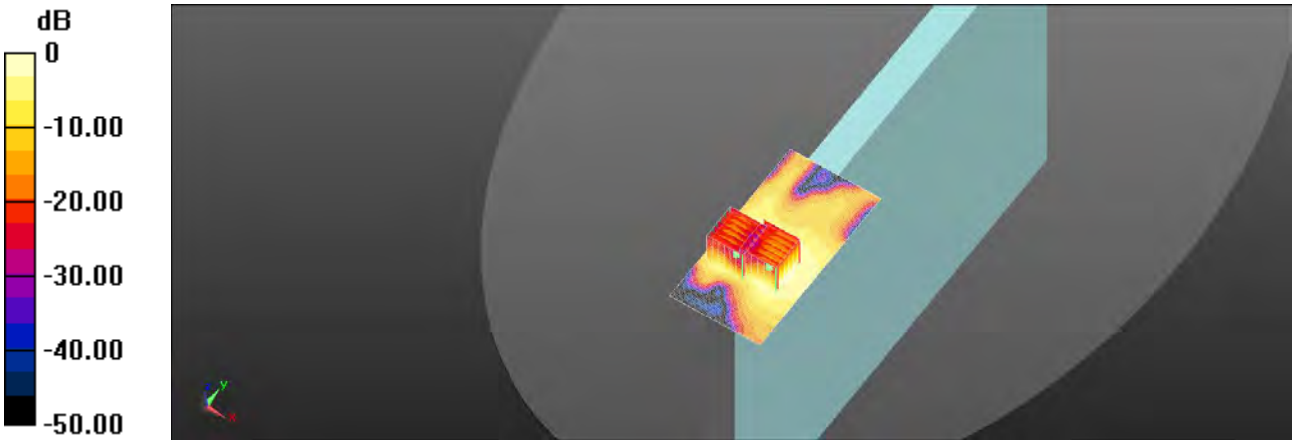
0 dB = 1.02 W/kg = 0.09 dBW/kg

Date: 2023/5/26

ID: 062
Report No. :TESA2305000314EN
WLAN 802.11ac(160M) 5.9G_Body_Top Edge_CH 163_0mm_Tx2
Communication System: WLAN 5G; Frequency: 5815 MHz; Duty cycle= 1:1.036
Medium parameters used: f = 5815 MHz; σ = 5.377 S/m; ε_r = 34.656; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.3°C; Liquid temperature: 22.1℃
DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(5.12, 5.16, 5.51) @ 5815 MHz; Calibrated: 2023/4/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1260; Calibrated: 2022/9/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 1.10 W/kg
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.969 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 2.07 W/kg
SAR(1 g) = 0.719 W/kg; SAR(10 g) = 0.265 W/kg
Smallest distance from peaks to all points 3 dB below = 4.1 mm
Ratio of SAR at M2 to SAR at M1 = 66.9%
Maximum value of SAR (measured) = 1.22 W/kg
Zoom Scan (7x7x12)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.969 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 2.45 W/kg
SAR(1 g) = 0.709 W/kg; SAR(10 g) = 0.203 W/kg
Smallest distance from peaks to all points 3 dB below = 4.1 mm
Ratio of SAR at M2 to SAR at M1 = 67.4%
Maximum value of SAR (measured) = 1.30 W/kg



0 dB = 1.30 W/kg = 1.14 dBW/kg

13 PD MEASUREMENT RESULTS

ID:039
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-5, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 15 (6025.0 MHz)_Tx1
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE TOP, 2.00	U-NII-5	WLAN, 10743-AAC	6025.0, 15	1.0

Hardware Setup

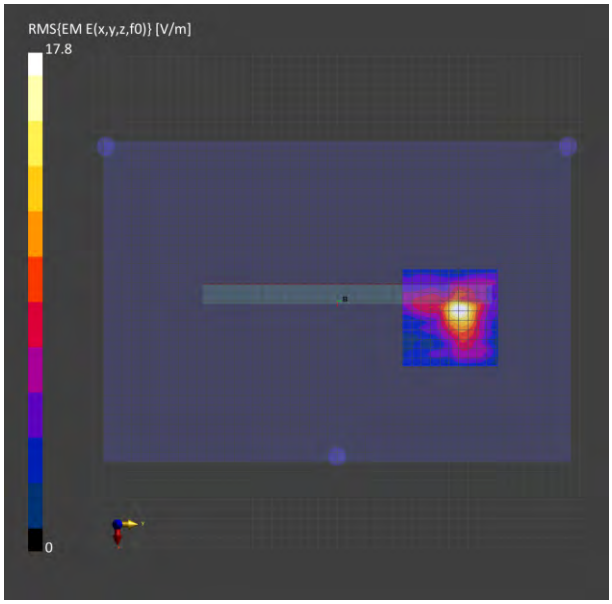
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-05, 08:31
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	0.522
psPDtot+ [W/m²]	0.545
psPDmod+ [W/m²]	0.577
E_{max} [V/m]	17.8
Power Drift [dB]	0.14



ID:040
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-5, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 79 (6345.0 MHz) _Tx1
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE TOP, 2.00	U-NII-5	WLAN, 10743-AAC	6345.0, 79	1.0

Hardware Setup

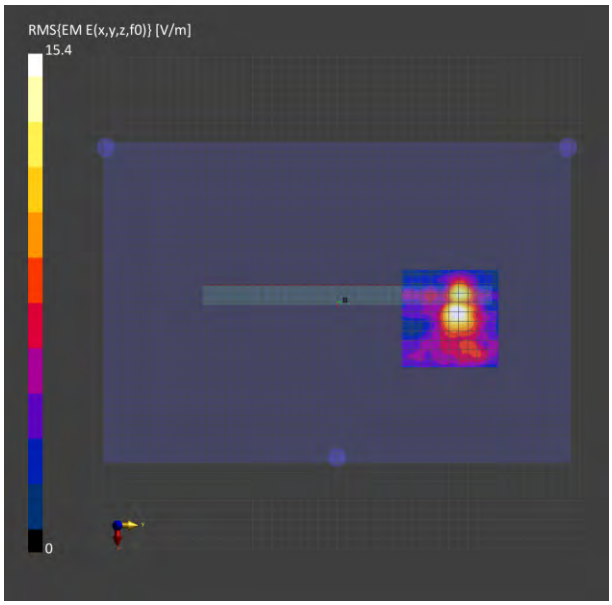
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-05, 10:33
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	0.291
psPDtot+ [W/m²]	0.347
psPDmod+ [W/m²]	0.375
E_{max} [V/m]	15.4
Power Drift [dB]	-0.08



ID:041
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-6, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 111 (6505.0 MHz) _Tx1
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE TOP, 2.00	U-NII-6	WLAN, 10743-AAC	6505.0, 111	1.0

Hardware Setup

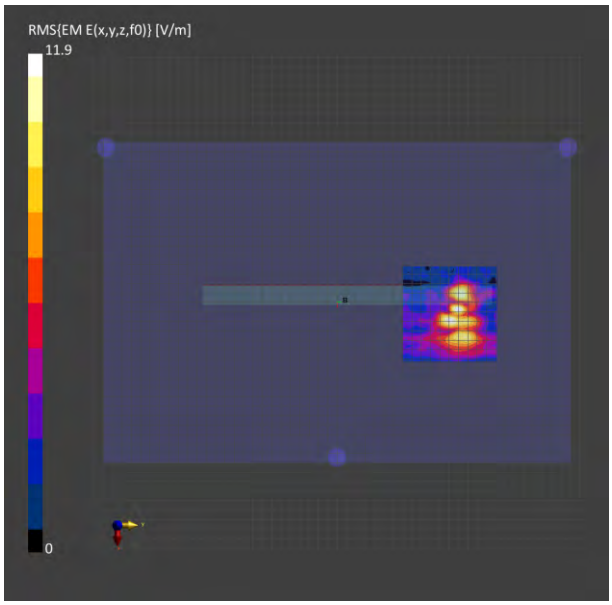
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-05, 12:38
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	0.115
psPDtot+ [W/m²]	0.163
psPDmod+ [W/m²]	0.193
E_{max} [V/m]	11.9
Power Drift [dB]	-0.07



ID:042
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-7, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 175 (6825.0 MHz) _Tx1
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE TOP, 2.00	U-NII-7	WLAN, 10743-AAC	6825.0, 175	1.0

Hardware Setup

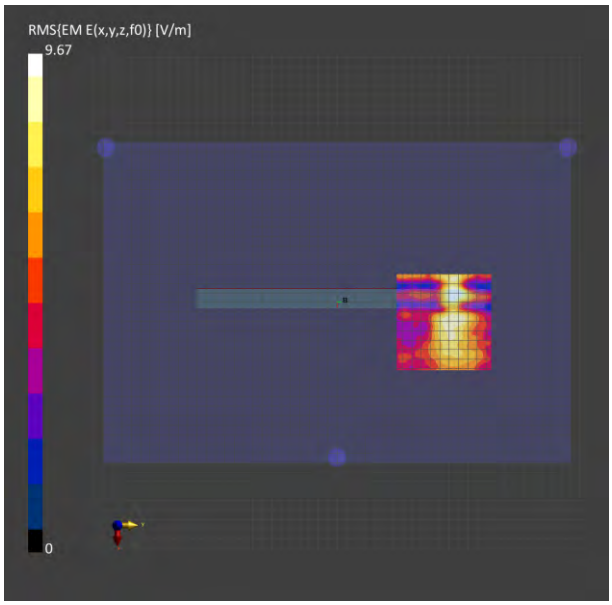
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-05, 14:49
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	0.151
psPDtot+ [W/m²]	0.155
psPDmod+ [W/m²]	0.160
E_{max} [V/m]	9.67
Power Drift [dB]	0.18



ID:043
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-8, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 207 (6985.0 MHz) _Tx1
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE TOP, 2.00	U-NII-8	WLAN, 10743-AAC	6985.0, 207	1.0

Hardware Setup

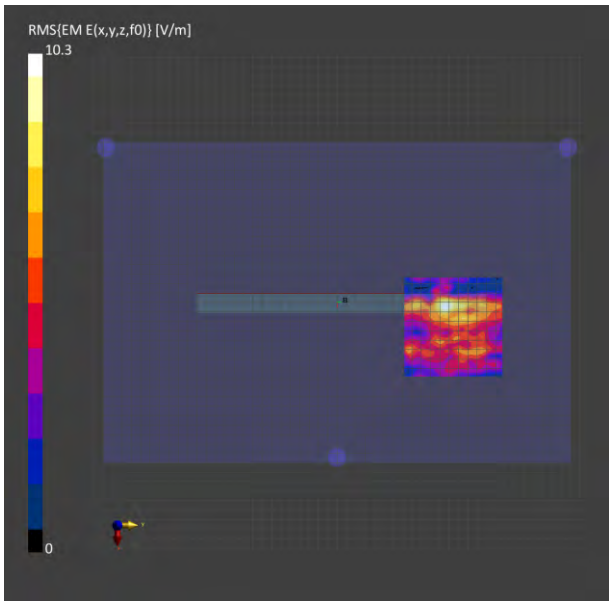
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-05, 17:00
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	0.148
psPDtot+ [W/m²]	0.163
psPDmod+ [W/m²]	0.172
E_{max} [V/m]	10.3
Power Drift [dB]	-0.18



ID:044
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-5, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 15 (6025.0 MHz) _Tx2
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE TOP, 2.00	U-NII-5	WLAN, 10743-AAC	6025.0, 15	1.0

Hardware Setup

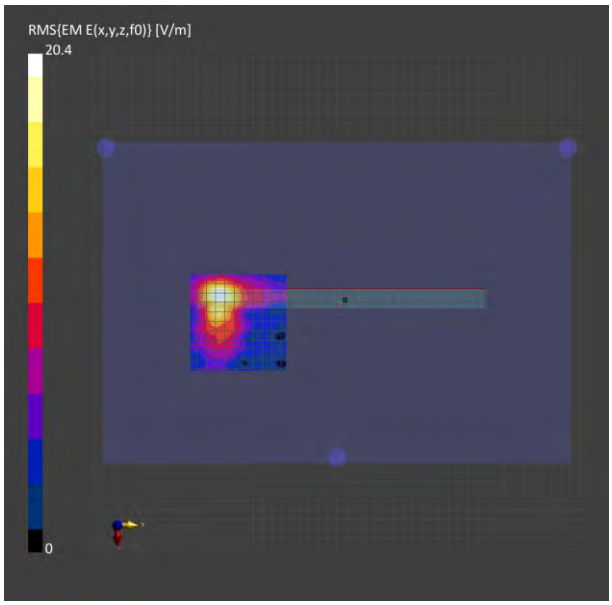
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-05, 21:11
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	0.613
psPDtot+ [W/m²]	0.666
psPDmod+ [W/m²]	0.721
E_{max} [V/m]	20.4
Power Drift [dB]	0.18



ID:045
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-5, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 47 (6185.0 MHz) _Tx2
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE TOP, 2.00	U-NII-5	WLAN, 10743-AAC	6185.0, 47	1.0

Hardware Setup

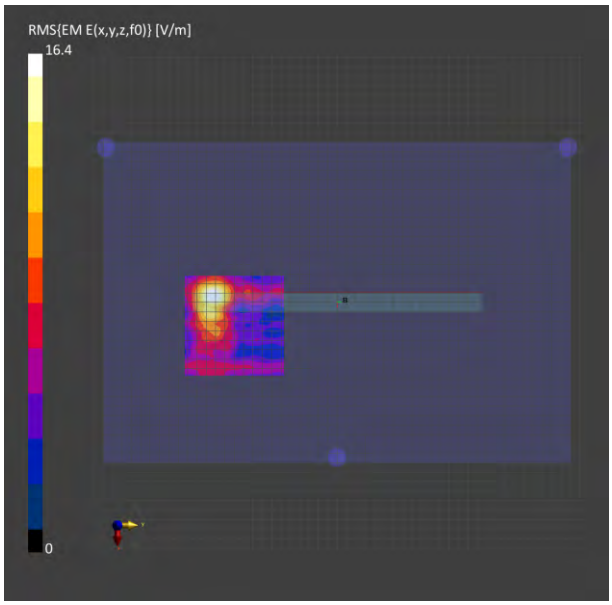
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-05, 23:22
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	0.487
psPDtot+ [W/m²]	0.517
psPDmod+ [W/m²]	0.553
E_{max} [V/m]	16.4
Power Drift [dB]	0.17



ID:046
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-6, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 111 (6505.0 MHz) _Tx2
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE TOP, 2.00	U-NII-6	WLAN, 10743-AAC	6505.0, 111	1.0

Hardware Setup

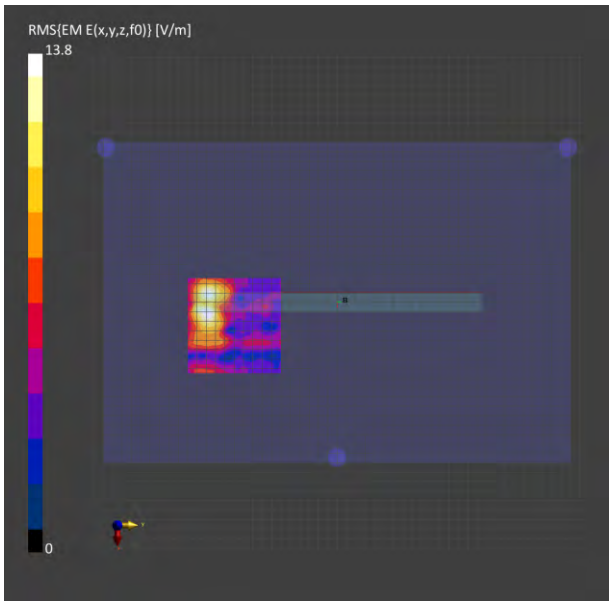
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-06, 02:08
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	0.270
psPDtot+ [W/m²]	0.282
psPDmod+ [W/m²]	0.340
E_{max} [V/m]	13.7
Power Drift [dB]	0.07



ID:047
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-7, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 143 (6665.0 MHz) _Tx2
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE TOP, 2.00	U-NII-7	WLAN, 10743-AAC	6665.0, 143	1.0

Hardware Setup

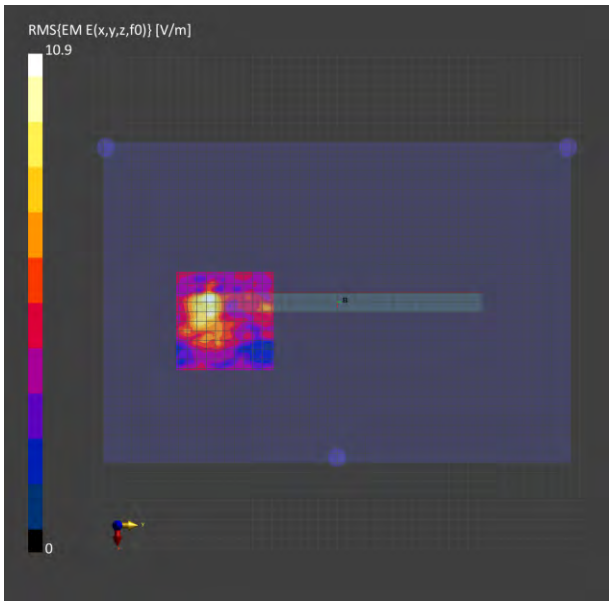
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-06, 04:34
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	0.177
psPDtot+ [W/m²]	0.188
psPDmod+ [W/m²]	0.207
E_{max} [V/m]	10.9
Power Drift [dB]	0.08



ID:048
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-8, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 207 (6985.0 MHz)
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE TOP, 2.00	U-NII-8	WLAN, 10743-AAC	6985.0, 207	1.0

Hardware Setup

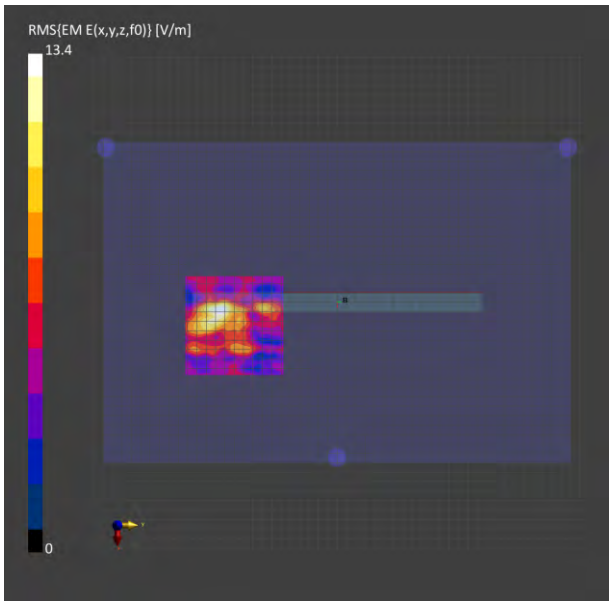
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-06, 06:43
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	0.269
psPDtot+ [W/m²]	0.318
psPDmod+ [W/m²]	0.327
E_{max} [V/m]	13.4
Power Drift [dB]	0.14



ID:049
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-5, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 15 (6025.0 MHz)_Tx1
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE TOP, 2.00	U-NII-5	WLAN, 10743-AAC	6025.0, 15	1.0

Hardware Setup

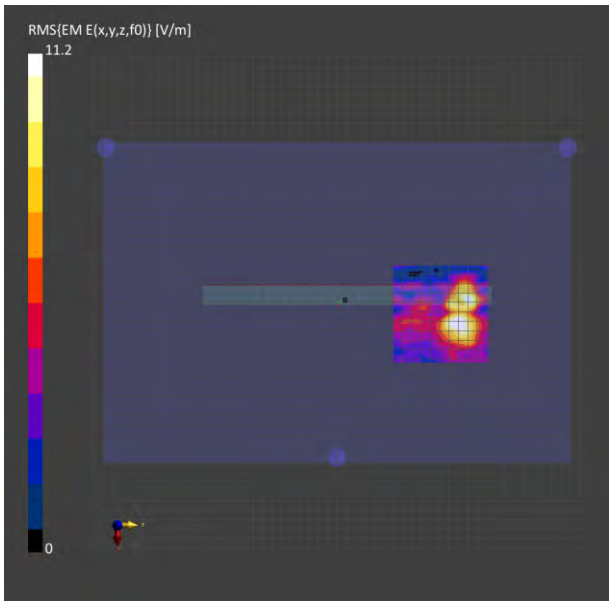
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-06, 09:29
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	0.133
psPDtot+ [W/m²]	0.186
psPDmod+ [W/m²]	0.196
E_{max} [V/m]	11.2
Power Drift [dB]	0.09



ID:050
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-5, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 79 (6345.0 MHz) _Tx1
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE TOP, 2.00	U-NII-5	WLAN, 10743-AAC	6345.0, 79	1.0

Hardware Setup

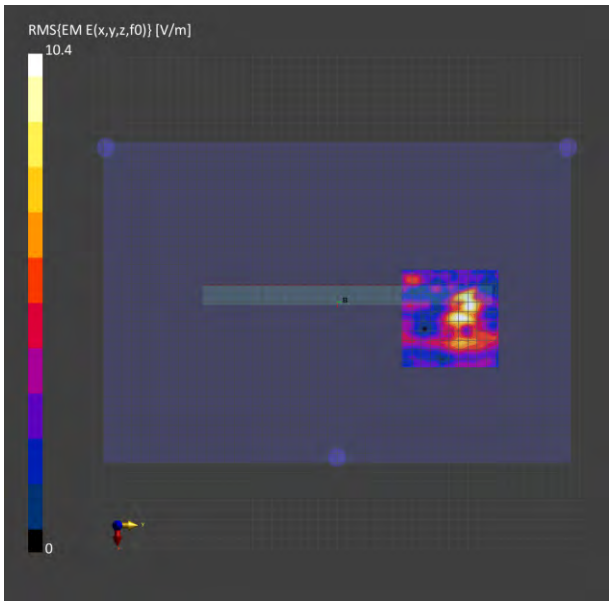
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-06, 12:36
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	0.058
psPDtot+ [W/m²]	0.097
psPDmod+ [W/m²]	0.152
E_{max} [V/m]	10.4
Power Drift [dB]	-0.11



ID:051
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-6, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 111 (6505.0 MHz) _Tx1
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE TOP, 2.00	U-NII-6	WLAN, 10743-AAC	6505.0, 111	1.0

Hardware Setup

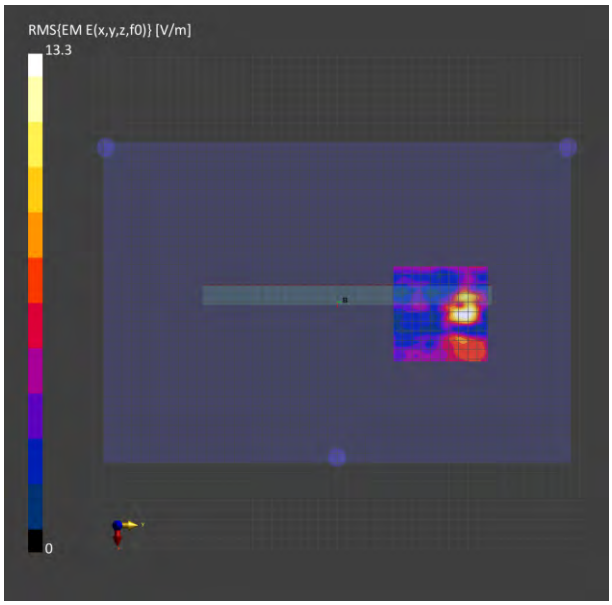
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-06, 14:39
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	0.113
psPDtot+ [W/m²]	0.152
psPDmod+ [W/m²]	0.208
E_{max} [V/m]	13.3
Power Drift [dB]	0.09



ID:052
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-7, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 175 (6825.0 MHz) _Tx1
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE TOP, 2.00	U-NII-7	WLAN, 10743-AAC	6825.0, 175	1.0

Hardware Setup

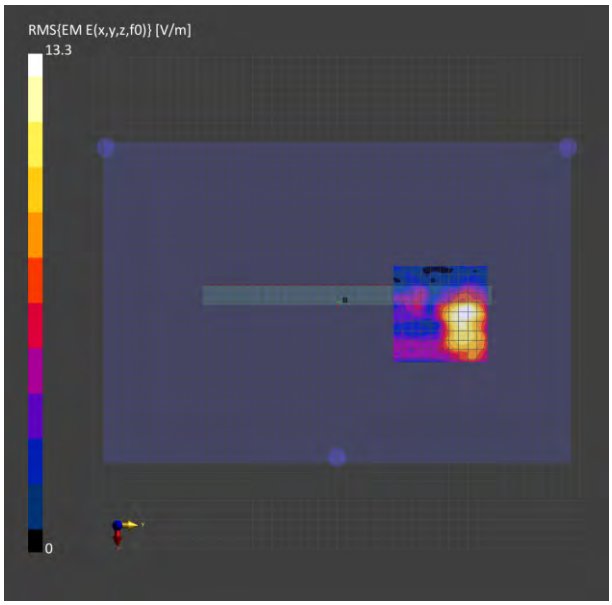
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-06, 16:54
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	0.296
psPDtot+ [W/m²]	0.320
psPDmod+ [W/m²]	0.347
E_{max} [V/m]	13.3
Power Drift [dB]	0.17



ID:053
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-8, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 207 (6985.0 MHz) _Tx1
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE TOP, 2.00	U-NII-8	WLAN, 10743-AAC	6985.0, 207	1.0

Hardware Setup

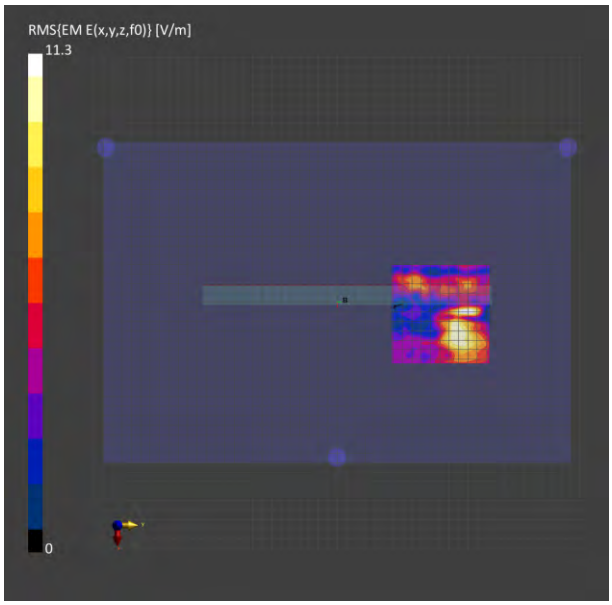
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-06, 19:01
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	0.112
psPDtot+ [W/m²]	0.120
psPDmod+ [W/m²]	0.171
E_{max} [V/m]	11.3
Power Drift [dB]	0.04



ID:054
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-5, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 15 (6025.0 MHz) _Tx2
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE TOP, 2.00	U-NII-5	WLAN, 10743-AAC	6025.0, 15	1.0

Hardware Setup

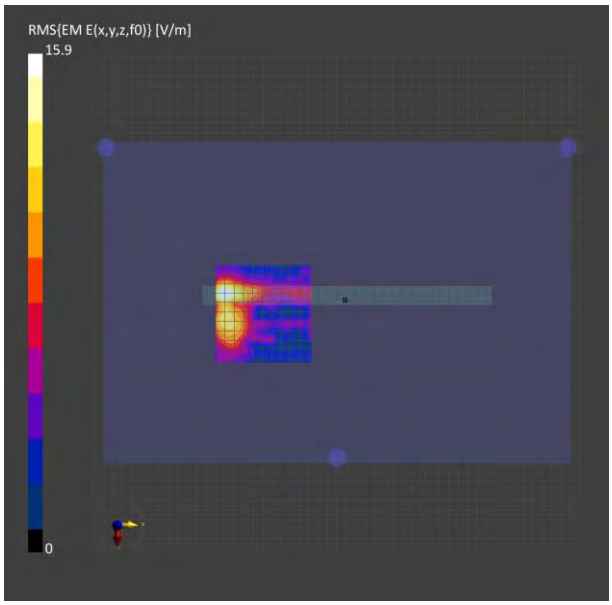
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-06, 21:59
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	0.317
psPDtot+ [W/m²]	0.362
psPDmod+ [W/m²]	0.386
E_{max} [V/m]	15.9
Power Drift [dB]	-0.02



ID:055
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-5, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 47 (6185.0 MHz) _Tx2
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE TOP, 2.00	U-NII-5	WLAN, 10743-AAC	6185.0, 47	1.0

Hardware Setup

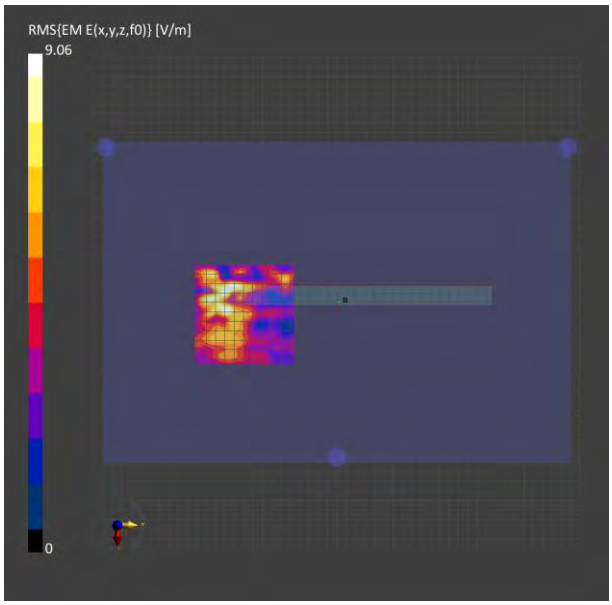
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-07, 01:03
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	0.085
psPDtot+ [W/m²]	0.108
psPDmod+ [W/m²]	0.149
E_{max} [V/m]	9.06
Power Drift [dB]	-0.15



ID:056
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-6, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 111 (6505.0 MHz) _Tx2
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE TOP, 2.00	U-NII-6	WLAN, 10743-AAC	6505.0, 111	1.0

Hardware Setup

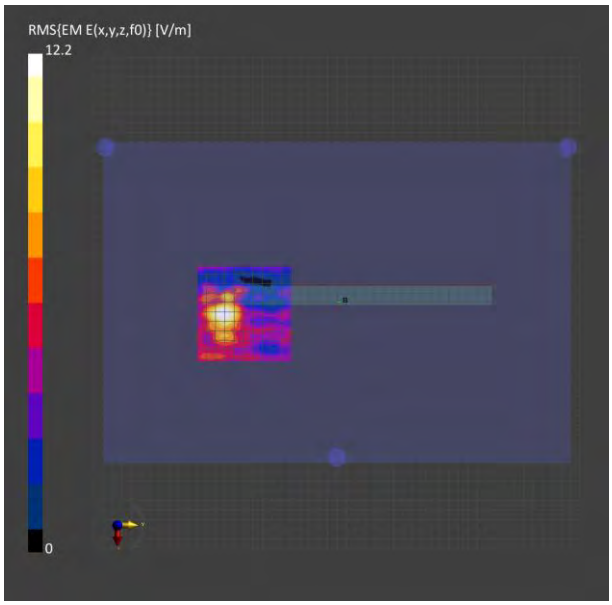
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-07, 04:05
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	0.190
psPDtot+ [W/m²]	0.225
psPDmod+ [W/m²]	0.238
E_{max} [V/m]	12.2
Power Drift [dB]	0.18



ID:057
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-7, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 143 (6665.0 MHz) _Tx2
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE TOP, 2.00	U-NII-7	WLAN, 10743-AAC	6665.0, 143	1.0

Hardware Setup

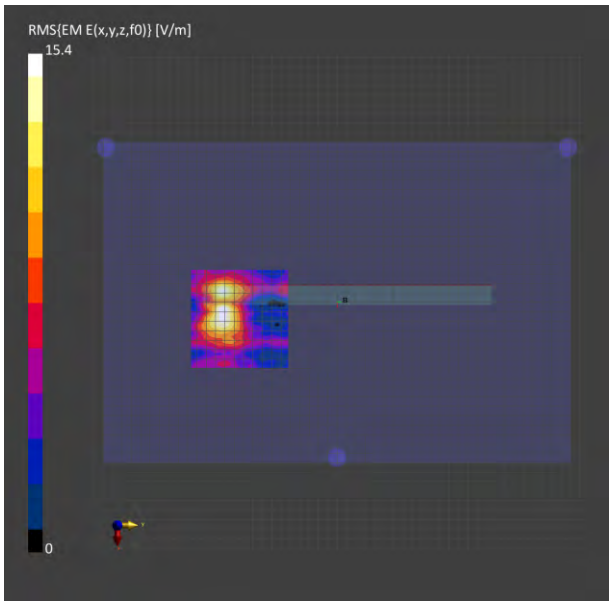
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-07, 07:18
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	0.261
psPDtot+ [W/m²]	0.354
psPDmod+ [W/m²]	0.370
E_{max} [V/m]	15.4
Power Drift [dB]	0.05



ID:058
Report No. :EN/2021/C0030
Measurement Report for Pixie, EDGE TOP, U-NII-8, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 207 (6985.0 MHz) _Tx2
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Pixie,	227.0 x 309.0 x 21.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE TOP, 2.00	U-NII-8	WLAN, 10743-AAC	6985.0, 207	1.0

Hardware Setup

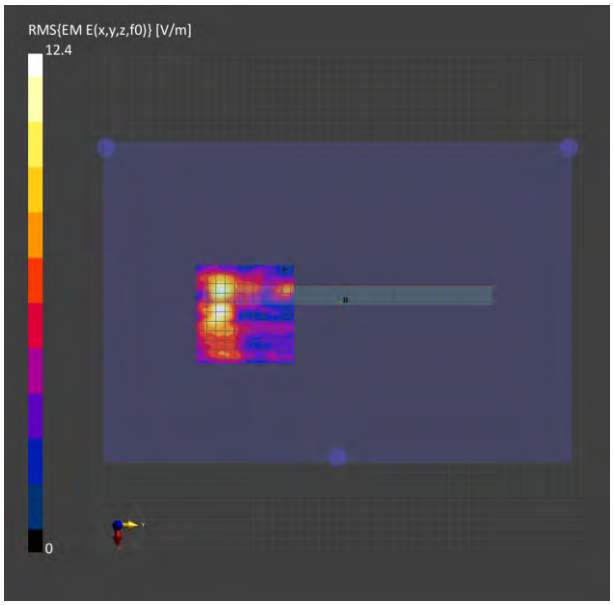
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-07, 10:47
Avg. Area [cm^2]	4.00
psPDn+ [W/m^2]	0.182
psPDtot+ [W/m^2]	0.203
psPDmod+ [W/m^2]	0.230
E_{max} [V/m]	12.4
Power Drift [dB]	0.12



14 SAR SYSTEM CHECK RESULTS

Date: 2021/12/29

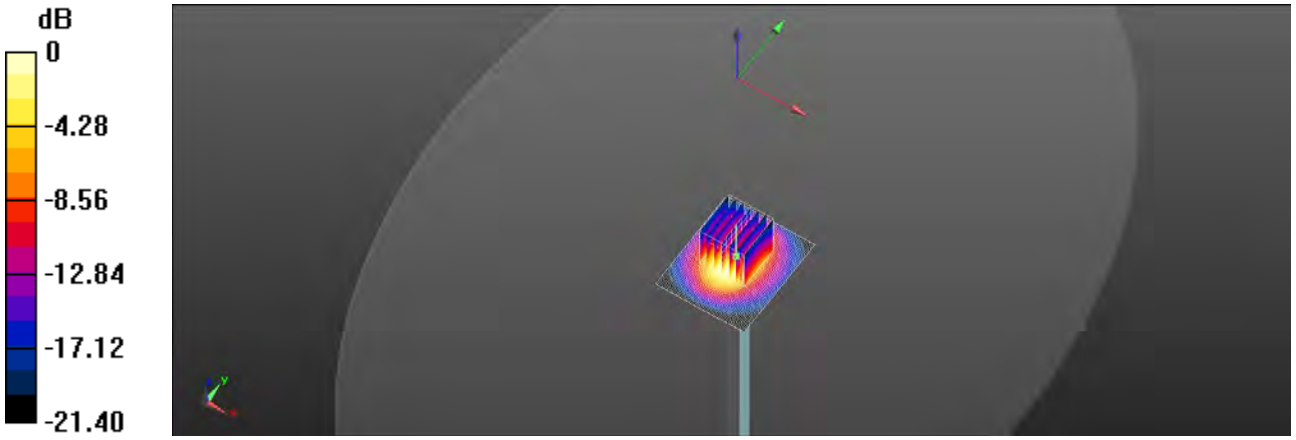
Report No. :EN/2021/C0030
Dipole 2450 MHz, SN:727
Communication System: CW; Frequency: 2450 MHz; Duty cycle= 1:1
Medium parameters used: f = 2450 MHz; σ = 1.811 S/m; ε_r = 38.544; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.1°C; Liquid temperature: 21.7℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(7.67, 7.67, 7.67) @ 2450 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (51x61x1): Interpolated grid: dx=12 mm, dy=12 mm
Maximum value of SAR (interpolated) = 19.2 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 97.11 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 27.2 W/kg
SAR(1 g) = 13.2 W/kg; SAR(10 g) = 6.19 W/kg
Smallest distance from peaks to all points 3 dB below = 10 mm
Ratio of SAR at M2 to SAR at M1 = 49.6%
Maximum value of SAR (measured) = 17.3 W/kg



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

Date: 2021/12/30

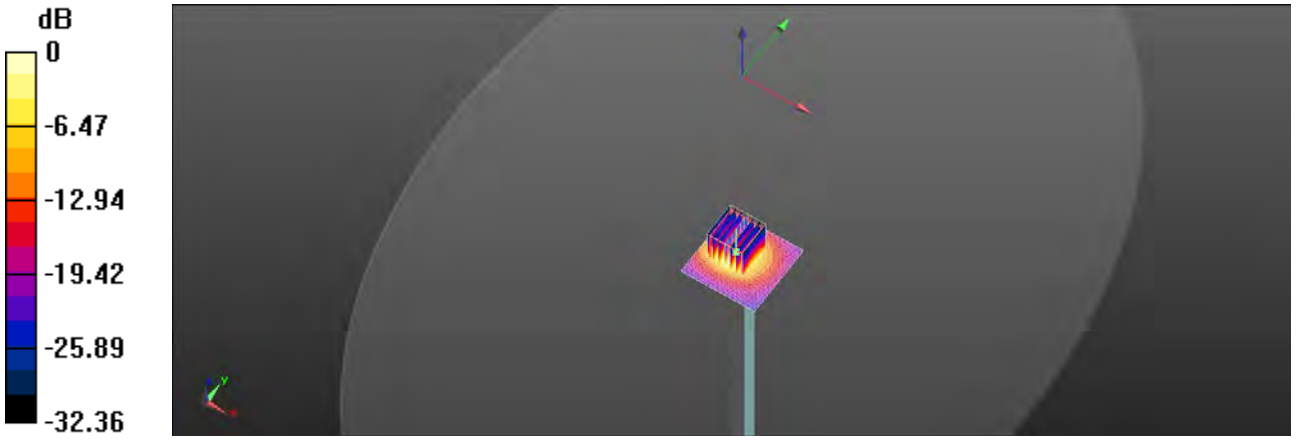
Report No. :EN/2021/C0030
Dipole 5200 MHz, SN:1023
Communication System: CW; Frequency: 5200 MHz; Duty cycle= 1:1
Medium parameters used: f = 5200 MHz; σ = 4.655 S/m; ε_r = 37.2; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 21.8°C; Liquid temperature: 21.4℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(5.61, 5.61, 5.61) @ 5200 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (51x51x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 16.8 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 48.55 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 30.2 W/kg
SAR(1 g) = 7.9 W/kg; SAR(10 g) = 2.33 W/kg
Smallest distance from peaks to all points 3 dB below = 7.6 mm
Ratio of SAR at M2 to SAR at M1 = 56.7%
Maximum value of SAR (measured) = 15.9 W/kg



0 dB = 15.9 W/kg = 12.01 dBW/kg

Date: 2021/12/31

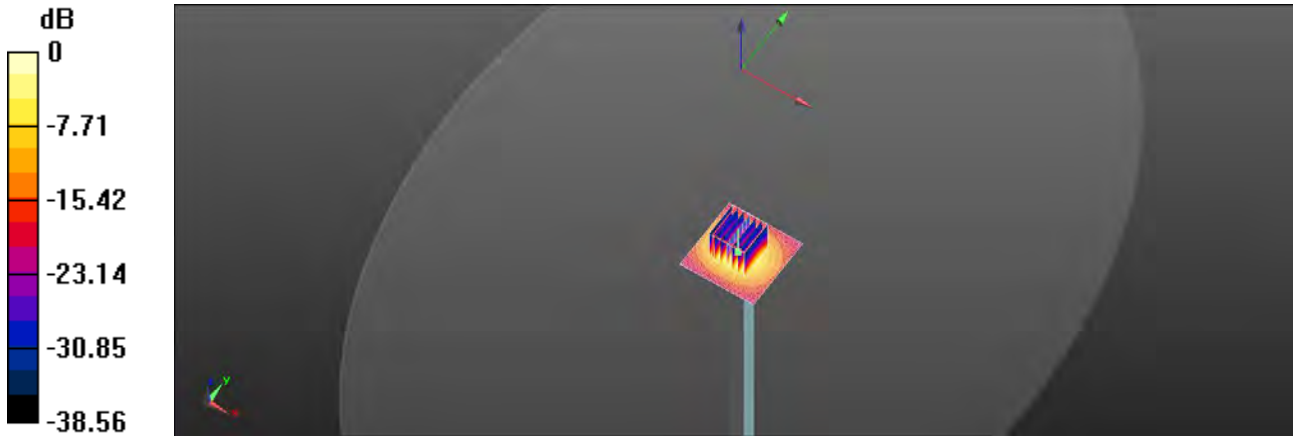
Report No. :EN/2021/C0030
Dipole 5300 MHz, SN:1023
Communication System: CW; Frequency: 5300 MHz; Duty cycle= 1:1
Medium parameters used: f = 5300 MHz; σ = 4.792 S/m; ε_r = 37.022; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 21.9°C; Liquid temperature: 22.3℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(5.61, 5.61, 5.61) @ 5300 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (51x51x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 17.3 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 62.38 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 37.3 W/kg
SAR(1 g) = 7.82 W/kg; SAR(10 g) = 2.2 W/kg
Smallest distance from peaks to all points 3 dB below = 7.4 mm
Ratio of SAR at M2 to SAR at M1 = 48.8%
Maximum value of SAR (measured) = 16.8 W/kg



0 dB = 16.8 W/kg = 12.25 dBW/kg

Date: 2022/1/1

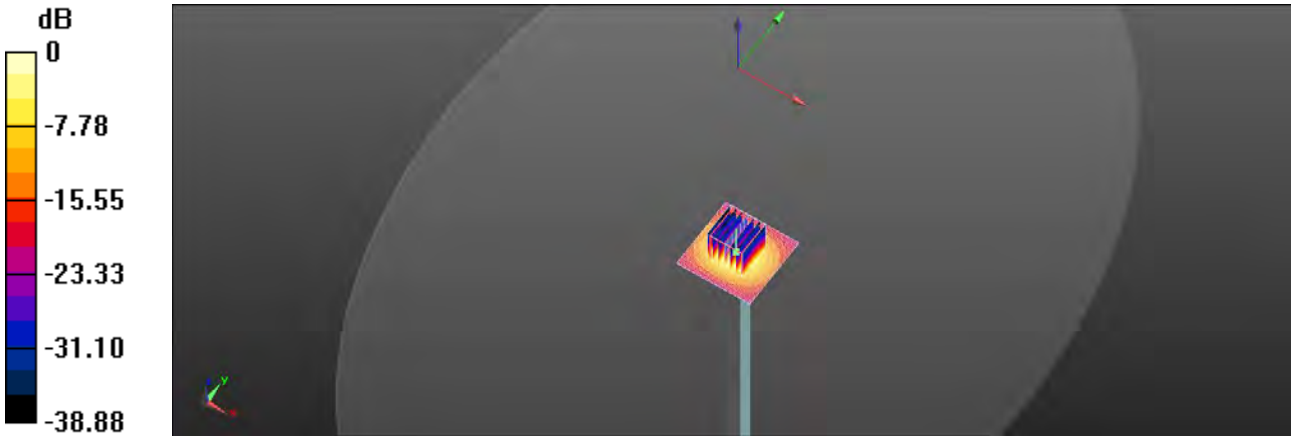
Report No. :EN/2021/C0030
Dipole 5600 MHz, SN:1023
Communication System: CW; Frequency: 5600 MHz; Duty cycle= 1:1
Medium parameters used: f = 5600 MHz; σ = 5.154 S/m; ε_r = 36.589; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.2°C; Liquid temperature: 21.8℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(4.9, 4.9, 4.9) @ 5600 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (51x51x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 20.2 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 65.37 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 45.0 W/kg
SAR(1 g) = 8.77 W/kg; SAR(10 g) = 2.46 W/kg
Smallest distance from peaks to all points 3 dB below = 7.5 mm
Ratio of SAR at M2 to SAR at M1 = 46.3%
Maximum value of SAR (measured) = 19.0 W/kg



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

Date: 2022/1/2

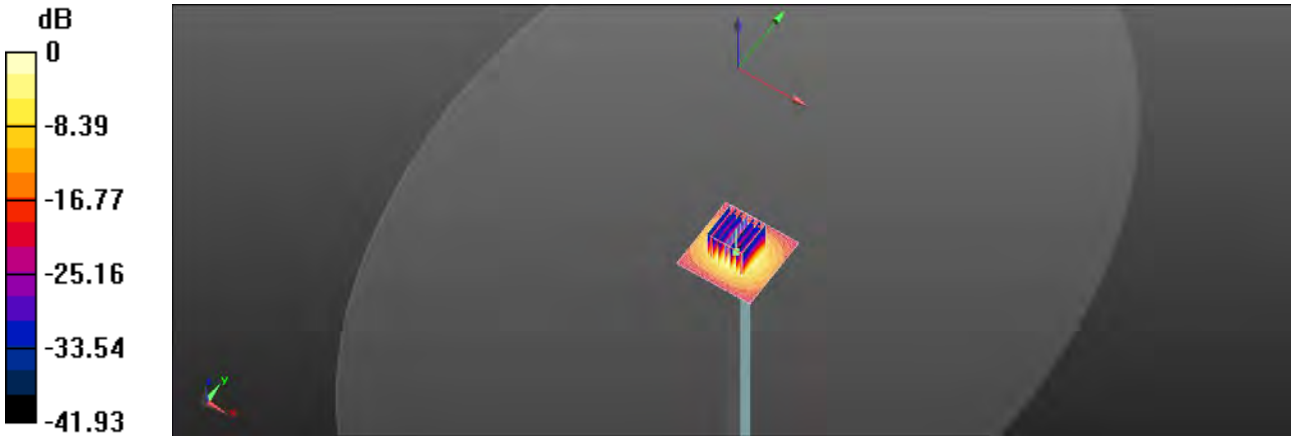
Report No. :EN/2021/C0030
Dipole 5800 MHz, SN:1023
Communication System: CW; Frequency: 5800 MHz; Duty cycle= 1:1
Medium parameters used: f = 5800 MHz; σ = 5.389 S/m; ε_r = 35.923; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 21.7°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3770; ConvF(4.95, 4.95, 4.95) @ 5800 MHz; Calibrated: 2021/4/28
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2021/4/23
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (51x51x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 17.5 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 62.37 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 38.3 W/kg
SAR(1 g) = 8.08 W/kg; SAR(10 g) = 2.34 W/kg
Smallest distance from peaks to all points 3 dB below = 7.6 mm
Ratio of SAR at M2 to SAR at M1 = 47.6%
Maximum value of SAR (measured) = 16.8 W/kg



0 dB = 16.8 W/kg = 12.25 dBW/kg

Report No. :EN/2021/C0030
Measurement Report for Device, FRONT, Validation band, CW, Channel 6500 (6500.0 MHz)
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Dipole,	6.0 x 16.0 x 300.0	SN:1006	Dipole

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	FRONT, 5.00	Validation band	CW, 0--	6500.0, 6500	5.7	5.974	34.093

Hardware Setup

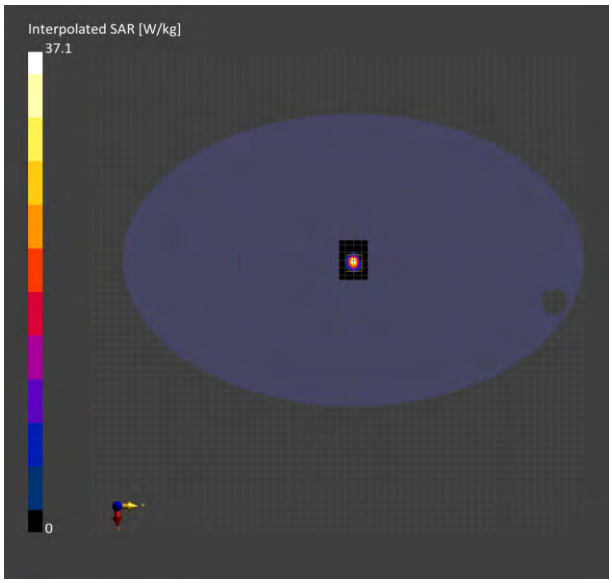
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI	HBBL-600-10000	EX3DV4 - SN7466, 2021-01-29	DAE4 Sn1665, 2021-03-01

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	51.0 x 36.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 6.0	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2022-01-03, 06:00	2022-01-03, 06:10
psSAR1g [W/Kg]	22.8	27.8
psSAR10g [W/Kg]	4.82	5.28
Power Drift [dB]	0.02	-0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		54.1
Dist 3dB Peak [mm]		4.9



Report No. :EN/2021/C0030
Measurement Report for Device, FRONT, Validation band, CW, Channel 7000 (7000.0 MHz)
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Dipole,	6.0 x 14.0 x 297.0	SN:1006	Dipole,

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	FRONT, 5.00	Validation band	CW, 0--	7000.0, 7000	5.85	6.547	33.502

Hardware Setup

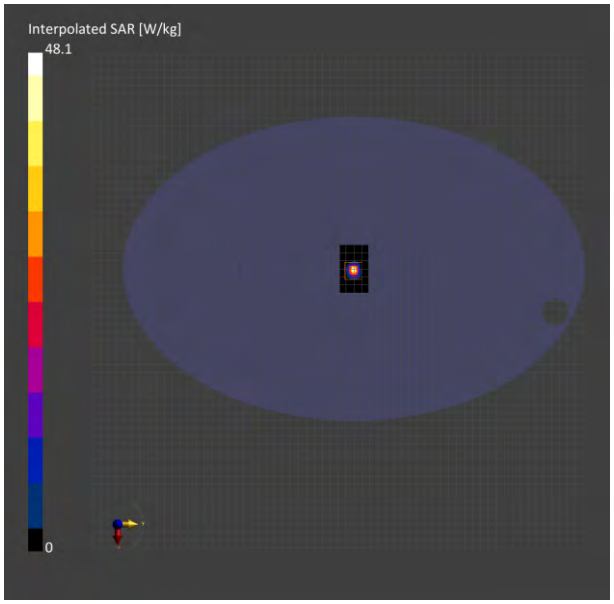
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI	HBBL-600-10000	EX3DV4 - SN7466, 2021-01-29	DAE4 Sn1665, 2021-03-01

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 36.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	7.5 x 6.0	3.0 x 3.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2022-01-03, 06:29	2022-01-03, 06:39
psSAR1g [W/Kg]	26.5	28.0
psSAR10g [W/Kg]	4.81	4.75
Power Drift [dB]	-0.11	0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		49.5
Dist 3dB Peak [mm]		4.8



Date: 2023/5/26

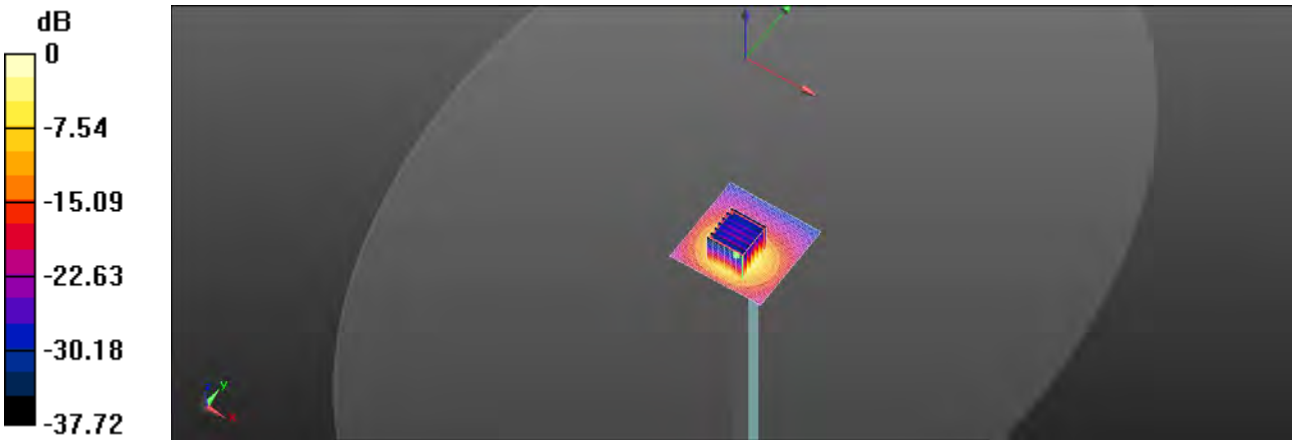
Report No. :TESA2305000314EN
Dipole 5750 MHz_SN:1349
Communication System: CW; Frequency: 5750 MHz; Duty cycle= 1:1
Medium parameters used: f = 5750 MHz; σ = 5.27 S/m; ε_r = 34.846; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.3°C; Liquid temperature: 22.1℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(5.12, 5.16, 5.51) @ 5750 MHz; Calibrated: 2023/4/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1260; Calibrated: 2022/9/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x61x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 16.9 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 39.71 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 34.8 W/kg
SAR(1 g) = 8.02 W/kg; SAR(10 g) = 2.26 W/kg
Smallest distance from peaks to all points 3 dB below = 7.4 mm
Ratio of SAR at M2 to SAR at M1 = 52.9%
Maximum value of SAR (measured) = 17.0 W/kg



0 dB = 17.0 W/kg = 12.30 dBW/kg

15 PD SYSTEM CHECK RESULTS

Report No. :EN/2021/C0030
Measurement Report for 10G Source,, FRONT, Validation band, CW, Channel 10000 (10000.0 MHz)
Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
5G Verification Source 10 GHz.	100.0 x 100.0 x 172.0	SN:1021	Dipole

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 10.00	Validation band	CW, 0--	10000.0, 10000	1.0

Hardware Setup

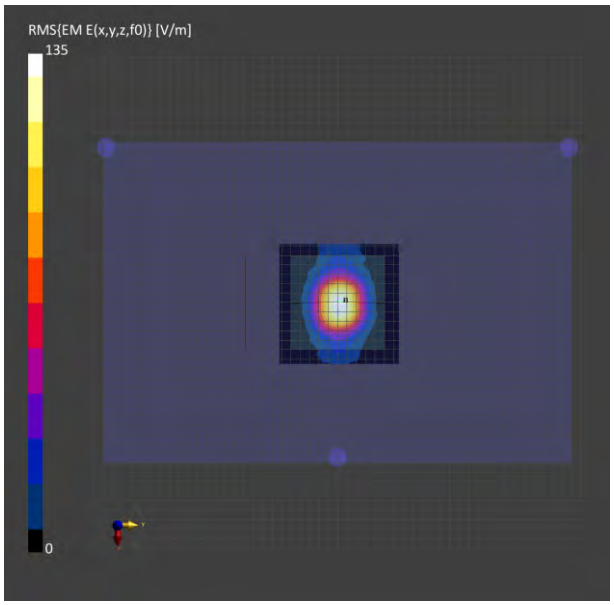
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9579_F1-55GHz, 2021-10-06	DAE4 Sn1665, 2021-03-01

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	120.0 x 120.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	10.0
MAIA	N/A

Measurement Results

Scan Type	5G Scan
Date	2022-01-05, 05:05
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	41.0
psPDtot+ [W/m²]	41.2
psPDmod+ [W/m²]	41.3
E_{max} [V/m]	131
Power Drift [dB]	0.02



16 APPENDIXES

Refer to separated files for the following appendixes.

16.1 SAR_Appendix A Photographs

16.2 SAR_Appendix B DAE & Probe Cal. Certificate

16.3 SAR_Appendix C Phantom Description & Dipole Cal. Certificate

- End of report -