

FCC SAR Test Report

Report No.: RWAY202300045-SAA

Applicant: Shenzhen Youmi Intelligent Technology Co., Ltd.

Address: 406-407 Jinqi Zhigu Building, 4/F, 1 Tangling Road, Nanshan District, Shenzhen City, China

Product Name: Smart phone

Product Model: PG2309GBA

Trade Mark: UMIDIGI

FCC ID: 2ATZ4-G65GA

Standards: FCC CFR Title 47 CFR Part 2(2.1093)

Test Date: 2024/01/30-2024/02/04

Test Result: PASS

Report Date: 2024/02/21

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Revision History

Version No.	Issued Date	Description
00	2024/02/21	Original

SAR TEST RESULTS SUMMARY

Operation Frequency Band	Highest Reported SAR(W/kg)		Limit (W/kg)
	Head SAR (Gap 0mm)	Body SAR (Gap 10mm)	
GSM 850	0.13	0.25	1.6
PCS 1900	0.74	0.64	
WCDMA Band 2	0.58	0.23	
WCDMA Band 5	0.17	0.19	
LTE Band 2	0.48	0.16	
LTE Band 5	0.05	0.13	
LTE Band 12	0.02	0.05	
LTE Band 13	0.04	0.07	
LTE Band 41	0.17	0.79	
5G NR n41	0.42	0.18	
5G NR n66	0.79	0.17	
WLAN 2.4G	0.3	0.06	
WLAN 5.2G	0.36	0.2	
WLAN 5.8G	0.28	0.14	
Max. Simultaneous Transmission SAR(W/kg)			
Items	Head SAR (Gap 0mm)	Body SAR (Gap 10mm)	Limit (W/kg)
Sum SAR	1.16	0.79	1.6
SPLSR	NA	NA	0.04

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1 General Information

1.1 Client Information

Applicant:	Shenzhen Youmi Intelligent Technology Co., Ltd.
Address:	406-407 Jinqi Zhigu Building, 4/F, 1 Tangling Road, Nanshan District, Shenzhen City, China
Manufacturer:	Shenzhen Youmi Intelligent Technology Co., Ltd.
Address:	406-407 Jinqi Zhigu Building, 4/F, 1 Tangling Road, Nanshan District, Shenzhen City, China

1.2 Product Description of EUT

Sample Serial Number	2DU0-1(assigned by WATC)
Sample Received Date	2023-11-10
Sample Status	Good Condition
Device Type	Portable
Exposure Category	Population / Uncontrolled
Antenna Type(s)	Internal Antenna
Body-Worn Accessories	None
Proximity Sensor	None
Carrier Aggregation	None
Operation modes	GSM Voice, GPRS/EDGE Data, WCDMA(R99 (Voice+Data), HSUPA/HSDPA/HSPA+), FDD-LTE, TDD-LTE, 5G NR,WLAN, Bluetooth, NFC
Frequency Range	GSM 850: 824-849MHz(TX); 869-894MHz(RX) PCS 1900: 1850-1910MHz(TX); 1930-1990MHz(RX) WCDMA Band 2: 1850-1910MHz(TX); 1930-1990MHz(RX) WCDMA Band 5: 824-849MHz(TX); 869-894MHz(RX) LTE Band 2: 1850-1910MHz(TX); 1930-1990MHz(RX) LTE Band 5: 824-849MHz(TX); 869-894MHz(RX) LTE Band 12: 699-716MHz(TX); 729-746MHz(RX) LTE Band 13: 777-787MHz(TX); 746-756MHz(RX) LTE Band 41: 2496-2690MHz(TX/RX) 5G NR n41: 2496-2690MHz(TX/RX) 5G NR n66:1710-1780MHz(TX); 2110-2180MHz(RX) WLAN 2.4G:2412MHz-2462MHz/2422MHz-2452MHz WLAN 5.2G: 5150MHz-5250MHz WLAN 5.8G: 5745MHz-5850MHz Bluetooth: 2402MHz-2480MHz NFC: 13.56MHz
Power Supply	DC 3.87 V from Rechargeable Battery
Dimensions (L*W*H)	165mm (L) *76mm (W) *10mm (H)
Normal Operation	Head and Body Worn

1.3 Laboratory Location

World Alliance Testing and Certification (Shenzhen) Co., Ltd

No. 1002, East Block, Laobing Building, Xingye Road 3012, Xixiang street, Bao'an District, Shenzhen, Guangdong, People's Republic of China

Tel: +86-755-29691511, Email: qa@watc.com.cn

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 463912, the FCC Designation No. : CN5040.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0160.

1.4 Test Methodology

FCC 47 CFR § 2.1093

IEEE 1528:2013

IEC 62209-1

IEC 62209-2

KDB 447498 D01 General RF Exposure Guidance v06

KDB 648474 D04 Handset SAR v01r03

KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04

KDB 865664 D02 RF Exposure Reporting v01r02

KDB 941225 D01 3G SAR Procedures v03r01

KDB 941225 D05 SAR for LTE Devices v02r05

KDB 941225 D06 Hotspot Mode v02r01

KDB 248227 D01 802.11 Wi-Fi SAR v02r02

1.5 SAR Limit

FCC Limit

EXPOSURE LIMITS	SAR (W/kg)	
	(General Population / Uncontrolled Exposure Environment)	(Occupational / Controlled Exposure Environment)
Spatial Average (averaged over the whole body)	0.08	0.4
Spatial Peak (averaged over any 1 g of tissue)	1.60	8.0
Spatial Peak (hands/wrists/feet/ankles averaged over 10 g)	4.0	20.0

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

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

General Population/Uncontrolled environments Spatial Peak limit 1.6W/kg for 1g SAR applied to the EUT.

2 SAR Measurement System & Test Equipment

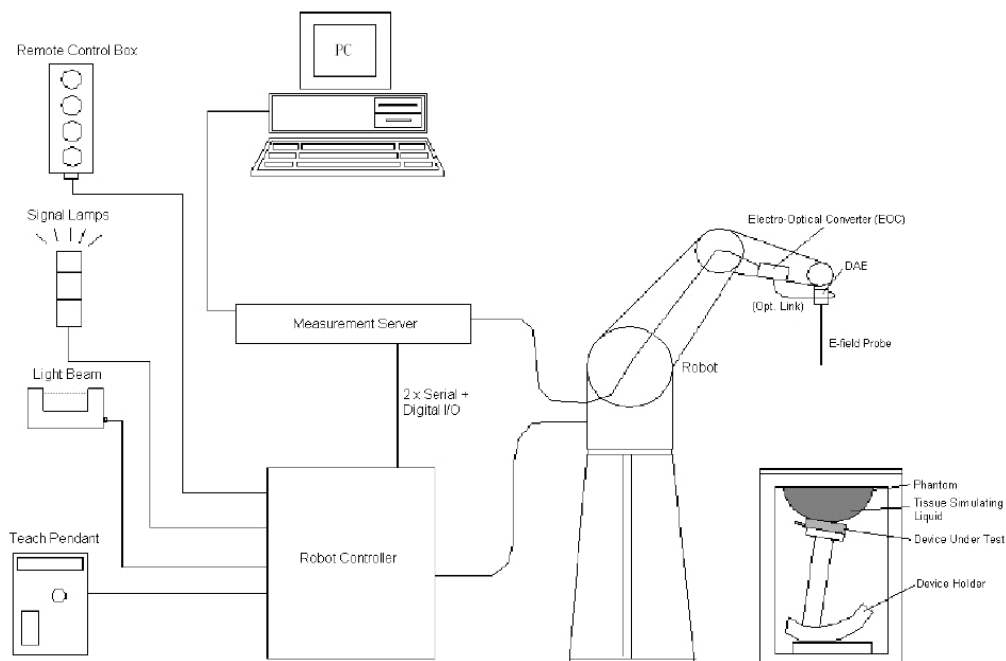
2.1 SAR Measurement System

These measurements were performed with the automated near-field scanning system DASY5 from Schmid & Partner Engineering AG (SPEAG) which is the Fifth generation of the system shown in the figure hereinafter:



DASY5 System Description

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



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal application, 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 Win7 professional operating system and the DASY52 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.

DASY5 Measurement Server

The DASY5 measurement server is based on a PC/104 CPU board with a 400MHz Intel ULV Celeron, 128MB chip-disk and 128MB RAM. The necessary circuits for communication with the DAE4 (or DAE3) electronics box, as well as the 16 bit AD-converter system for optical detection and digital I/O interface are contained on the DASY5 I/O board, which is directly connected to the PC/104 bus of the CPU board.



The measurement server performs all real-time data evaluation of field measurements and surface detection, controls robot movements and handles safety operation. The PC operating system cannot interfere with these time critical processes. All connections are supervised by a watchdog, and disconnection of any of the cables to the measurement server will automatically disarm the robot and disable all program-controlled robot movements. Furthermore, the measurement server is equipped with an expansion port which is reserved for future applications. Please note that this expansion port does not have a standardized point out, and therefore only devices provided by SPEAG can be connected. Devices from any other supplier could seriously damage the measurement server.

Data Acquisition Electronics

The data acquisition electronics (DAE4) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information, as well as an optical uplink for commands and the clock.

The mechanical probe mounting device includes two different sensor systems for frontal and sideways probe contacts. They are used for mechanical surface detection and probe collision detection.

The input impedance of both the DAE4 as well as of the DAE3 box is 200MΩ; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.

EX3DV4 E-Field Probes

Frequency	4 MHz - 10 GHz Linearity: ± 0.2 dB (30 MHz to 10 GHz)
Directivity	± 0.1 dB in TSL (rotation around probe axis) ± 0.3 dB in TSL (rotation normal to probe axis)
Dynamic Range	10 μ W/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μ W/g)
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields); the only probe that enables compliance testing for frequencies up to 6 GHz with precision of better 30%.
Compatibility	DASY3, DASY4, DASY52, DASY6, DASY8 SAR, EASY6, EASY4/MRI

SAM Twin Phantom

The SAM twin phantom is a fiberglass shell phantom with 2mm shell thickness (except the ear region, where shell thickness increases to 6 mm). The phantom has three measurement areas:

- _ Left Head
- _ Right Head
- _ Flat phantom

The phantom table for the DASY systems based on the robots have the size of 100 x 50 x 85 cm (L x W x H).

For easy dislocation these tables have fork lift cut outs at the bottom.

The bottom plate contains three pairs of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. Only one device holder is necessary if two phantoms are used (e.g., for different liquids)

A white cover is provided to cover the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. Free space scans of devices on top of this phantom cover are possible.

Three reference marks are provided on the phantom counter. These reference marks are used to teach the absolute phantom position relative to the robot.



Robots

The DASY5 system uses the high precision industrial robot. The robot offers the same features important for our application:

- High precision (repeatability 0.02mm)
- High reliability (industrial design)
- Low maintenance costs (virtually maintenance free due to direct drive gears; no belt drives)
- Jerk-free straight movements (brushless synchrony motors; no stepper motors)
- Low ELF interference (motor control fields shielded via the closed metallic construction shields)

The above mentioned robots are controlled by the Staubli CS8c robot controllers. All information regarding the use and maintenance of the robot arm and the robot controller is contained on the CDs delivered along with the robot. Paper manuals are available upon request direct from Staubli.

2.2 SAR Scan Procedures

Step 1: Power Reference Measurement

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. The minimum distance of probe sensors to surface is 1.4 mm. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

Step 2: Area Scans

Area scans are defined prior to the measurement process being executed with a user defined variable spacing between each measurement point (integral) allowing low uncertainty measurements to be conducted. Scans defined for FCC applications utilize a 15mm² step integral, with 1.5mm interpolation used to locate the peak SAR area used for zoom scan assessments.

Where the system identifies multiple SAR peaks (which are within 25% of peak value) the system will provide the user with the option of assessing each peak location individually for zoom scan averaging.

Area Scan Parameters extracted from KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 mm ± 1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2)$ mm ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: Δx_{Area} , Δy_{Area}	≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

Step 3: Zoom Scan (Cube Scan Averaging)

The averaging zoom scan volume utilized in the DASY5 software is in the shape of a cube and the side dimension of a 1 g or 10 g mass is dependent on the density of the liquid representing the simulated tissue. A density of 1000 kg/m³ is used to represent the head and body tissue density and not the phantom liquid density, in order to be consistent with the definition of the liquid dielectric properties, i.e. the side length of the 1g cube is 5mm, with the side length of the 10g cube is 21.5mm.

When the cube intersects with the surface of the phantom, it is oriented so that 3 vertices touch the surface of the shell or the center of a face is tangent to the surface. The face of the cube closest to the surface is modified in order to conform to the tangent surface.

The zoom scan integer steps can be user defined so as to reduce uncertainty, but normal practice for typical test applications (including FCC) utilize a physical step of 7 x 7 x 7 (5mmx5mmx5mm) providing a volume of 30 mm in the X & Y & Z axis.

Zoom Scan Parameters extracted from KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

			$\leq 3 \text{ GHz}$	$> 3 \text{ GHz}$
Maximum zoom scan spatial resolution: $\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$			$\leq 2 \text{ GHz}: \leq 8 \text{ mm}$ $2 - 3 \text{ GHz}: \leq 5 \text{ mm}^*$	$3 - 4 \text{ GHz}: \leq 5 \text{ mm}^*$ $4 - 6 \text{ GHz}: \leq 4 \text{ mm}^*$
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{\text{Zoom}}(n)$		$\leq 5 \text{ mm}$	$3 - 4 \text{ GHz}: \leq 4 \text{ mm}$ $4 - 5 \text{ GHz}: \leq 3 \text{ mm}$ $5 - 6 \text{ GHz}: \leq 2 \text{ mm}$
	graded grid	$\Delta z_{\text{Zoom}}(1)$: between 1 st two points closest to phantom surface	$\leq 4 \text{ mm}$	$3 - 4 \text{ GHz}: \leq 3 \text{ mm}$ $4 - 5 \text{ GHz}: \leq 2.5 \text{ mm}$ $5 - 6 \text{ GHz}: \leq 2 \text{ mm}$
		$\Delta z_{\text{Zoom}}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1) \text{ mm}$	
Minimum zoom scan volume	x, y, z		$\geq 30 \text{ mm}$	$3 - 4 \text{ GHz}: \geq 28 \text{ mm}$ $4 - 5 \text{ GHz}: \geq 25 \text{ mm}$ $5 - 6 \text{ GHz}: \geq 22 \text{ mm}$
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see IEEE Std 1528-2013 for details.				
* When zoom scan is required and the <i>reported</i> SAR from the <i>area scan based 1-g SAR estimation</i> procedures of KDB Publication 447498 is $\leq 1.4 \text{ W/kg}$, $\leq 8 \text{ mm}$, $\leq 7 \text{ mm}$ and $\leq 5 \text{ mm}$ zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.				

Step 4: Power Drift Measurement

The Power Drift Measurement measures the field at the same location as the most recent power reference measurement within the same procedure, and with the same settings. The Power Drift Measurement gives the field difference in dB from the reading conducted within the last Power Reference Measurement. This allows a user to monitor the power drift of the device under test within a batch process. The measurement procedure is the same as Step 1.

2.3 Test Equipment

Description	Model	SN	Calibration Date	Calibration Due Date
DASY5 Test Software	DASY52.8	N/A	NCR	NCR
DASY5 Measurement Server	DASY5 5.0.28	1123	NCR	NCR
Data Acquisition Electronics	DAE4	1354	2023/11/17	2024/11/16
E-Field Probe	EX3DV4	3801	2023/6/23	2024/6/22
Mounting Device	MD4HHTV5	BJPCTC0152	NCR	NCR
Twin SAM	Twin SAM V5.0	1470	NCR	NCR
Dipole, 750 MHz	D750V3	1109	2021/5/17	2024/5/16
Dipole, 1750 MHz	D1750V2	1166	2021/5/17	2024/5/16
Dipole, 1900 MHz	D1900V2	5d229	2021/5/20	2024/5/19
Dipole, 2450 MHz	D2450V2	1014	2021/5/19	2024/5/18
Dipole, 2600 MHz	D2600V2	1153	2021/5/19	2024/5/18
Dipole, 5GHz	D5GHzV2	1280	2021/5/17	2024/5/16
Simulated Tissue Liquid Head(500-9500 MHz)	HBBL600-1000 0V6	230728-1	Each Time	/
Network Analyzer	8753D	3410A08288	2023/12/18	2024/12/17
Dielectric assessment kit	85070B	US33020324	NCR	NCR
Vector Signal Generator	SMBV100A	256300	2023/9/12	2024/9/11
USB Power Sensor	MA24418A	12620	2023/7/12	2024/7/11
SPECTRUM ANALYZER	FSV40	101419	2023/9/12	2024/9/11
Amplifier	ZHL-5W-202S+	416402571	NCR	NCR
Amplifier	ZVE-8G+	558621401	NCR	NCR
Directional Coupler	441498	523Z	NCR	NCR
10dB attenuator	10dB	10-1	NCR	NCR
10dB attenuator	DC-6GHz	10-2	NCR	NCR
Thermometer	0~50℃	N/A	2023/11/16	2024/11/15
Wideband Radio Communication Tester	CMW500	116218	2023/9/12	2024/9/11
Radio Communication Analyzer	MT8821C	6262150039	2024/1/19	2025/1/18
Radio Communication Test Station	MT8000A	6262166770	2024/1/19	2025/1/18

Note: All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or International standards.

3 SAR Measurements Verification

3.1 Tissue Verification

The temperature of the tissue-equivalent medium used during measurement must also be within 18°C to 25°C and within $\pm 2^\circ\text{C}$ of the temperature when the tissue parameters are characterized.

The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements. The parameters should be re-measured after each 3 – 4 days of use; or earlier if the dielectric parameters can become out of tolerance; for example, when the parameters are marginal at the beginning of the measurement series.

Tissue dielectric parameters were measured at the low, middle and high frequency of each operating frequency range of the test device.

The head tissue dielectric parameters recommended by the IEC 62209-1

Table A.3 – Dielectric properties of the head tissue-equivalent liquid

Frequency MHz	Relative permittivity ϵ_r	Conductivity (σ) S/m
300	45,3	0,87
450	43,5	0,87
750	41,9	0,89
835	41,5	0,90
900	41,5	0,97
1 450	40,5	1,20
1 500	40,4	1,23
1 640	40,2	1,31
1 750	40,1	1,37
1 800	40,0	1,40
1 900	40,0	1,40
2 000	40,0	1,40
2 100	39,8	1,49
2 300	39,5	1,67
2 450	39,2	1,80
2 600	39,0	1,96
3 000	38,5	2,40
3 500	37,9	2,91
4 000	37,4	3,43
4 500	36,8	3,94
5 000	36,2	4,45
5 200	36,0	4,66
5 400	35,8	4,86
5 600	35,5	5,07
5 800	35,3	5,27
6 000	35,1	5,48

NOTE For convenience, permittivity and conductivity values at those frequencies which are not part of the original data provided by Drossos et al. [33] or the extension to 5 800 MHz are provided (i.e. the values shown *in italics*). These values were linearly interpolated between the values in this table that are immediately above and below these values, except the values at 6 000 MHz that were linearly extrapolated from the values at 3 000 MHz and 5 800 MHz.

Dielectric Property Measurements Results:

Date	Band (MHz)	Tissue Type	Frequency (MHz)	Conductivity, σ (S/m)			Relative Permittivity, ϵ_r			Tolerance (%)
				Meas.	Target	Delta(%)	Meas.	Target	Delta(%)	
2024/01/27	750	Head	704	0.852	0.89	-4.27	42.664	42.15	1.22	±5
			707.5	0.859	0.89	-3.48	42.496	42.13	0.87	±5
			711	0.865	0.89	-2.81	42.228	42.11	0.28	±5
			750	0.871	0.89	-2.13	42.034	41.9	0.32	±5
			782	0.892	0.89	0.22	41.729	41.75	-0.05	±5
2024/01/27	750	Head	750	0.864	0.89	-2.92	42.265	41.9	0.87	±5
			824.2	0.903	0.9	0.33	41.911	41.55	0.87	±5
			826.4	0.908	0.9	0.89	41.892	41.54	0.85	±5
			829	0.913	0.9	1.44	41.886	41.53	0.86	±5
			836.5	0.921	0.9	2.33	41.467	41.50	-0.08	±5
			836.6	0.924	0.9	2.67	41.416	41.50	-0.2	±5
			844	0.931	0.91	2.31	41.106	41.50	-0.95	±5
			846.6	0.935	0.91	2.75	41.002	41.50	-1.2	±5
			848.8	0.938	0.91	3.08	40.908	41.50	-1.43	±5
2024/01/28	1900	Head	1850.2	1.382	1.40	-1.29	40.273	40.00	0.68	±5
			1852.4	1.386	1.40	-1	40.254	40.00	0.63	±5
			1860	1.398	1.40	-0.14	40.023	40.00	0.06	±5
			1880	1.405	1.40	0.36	39.928	40.00	-0.18	±5
			1900	1.411	1.40	0.79	39.636	40.00	-0.91	±5
			1907.6	1.418	1.40	1.29	39.479	40.00	-1.3	±5
			1909.8	1.426	1.40	1.86	39.376	40.00	-1.56	±5
2024/01/28	1750	Head	1730	1.312	1.36	-3.53	40.747	40.12	1.56	±5
			1745	1.322	1.37	-3.5	40.477	40.1	0.94	±5
			1750	1.351	1.37	-1.39	40.319	40.1	0.55	±5
			1760	1.364	1.38	-1.16	40.161	40.08	0.2	±5
2024/01/28	2450	Head	2412	1.739	1.77	-1.75	39.901	39.28	1.58	±5
			2437	1.747	1.79	-2.4	39.883	39.23	1.66	±5
			2450	1.752	1.80	-2.67	39.674	39.20	1.21	±5
			2462	1.798	1.81	-0.66	39.519	39.18	0.87	±5
2024/01/29	2600	Head	2510	1.833	1.86	-1.45	39.452	39.12	0.85	±5

			2535	1.901	1.89	0.58	39.169	39.09	0.2	±5
			2545	1.917	1.90	0.89	38.901	39.07	-0.43	±5
			2560	1.918	1.92	-0.1	38.88	39.05	-0.44	±5
			2593	1.935	1.95	-0.77	38.847	39.01	-0.42	±5
			2600	1.998	1.96	1.94	38.723	39.00	-0.71	±5
			2625	2.008	1.99	0.9	38.626	38.97	-0.88	±5
			2645	2.012	2.01	0.1	38.547	38.94	-1.01	±5
2024/01/28	5250	Head	5180	4.596	4.64	-0.95	36.281	36.02	0.72	±5
			5200	4.645	4.66	-0.32	36.016	36.00	0.04	±5
			5230	4.725	4.69	0.75	35.996	35.97	0.07	±5
			5240	4.764	4.70	1.36	35.987	35.96	0.08	±5
			5250	4.782	4.71	1.53	35.802	35.95	-0.41	±5
2024/01/29	5750	Head	5745	5.182	5.22	-0.73	35.465	35.36	0.3	±5
			5785	5.206	5.26	-1.03	35.225	35.32	-0.27	±5
			5800	5.308	5.27	0.72	34.951	35.3	-0.99	±5
			5825	5.383	5.30	1.57	34.832	35.28	-1.27	±5

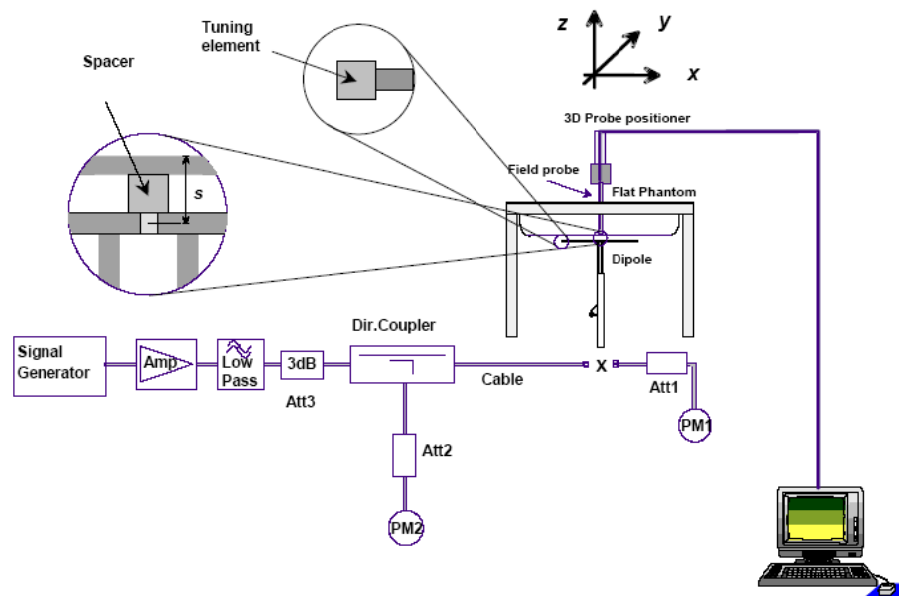
3.2 System Accuracy Verification

Prior to the assessment, the system validation kit was used to test whether the system was operating within its specifications of $\pm 10\%$. The validation results are tabulated below. And also the corresponding SAR plot is attached as well in the SAR plots files.

The spacing distances in the **System Verification Setup Block Diagram** is given by the following:

- $s = 15 \text{ mm} \pm 0,2 \text{ mm}$ for $300 \text{ MHz} \leq f \leq 1\,000 \text{ MHz}$;
- $s = 10 \text{ mm} \pm 0,2 \text{ mm}$ for $1\,000 \text{ MHz} < f \leq 3\,000 \text{ MHz}$;
- $s = 10 \text{ mm} \pm 0,2 \text{ mm}$ for $3\,000 \text{ MHz} < f \leq 6\,000 \text{ MHz}$.

System Verification Setup Block Diagram



3.3 SAR System Validation Results

Date	Frequency Band	Liquid Type	Input Power (mW)	Measured 1g SAR (W/kg)	Normalized to 1W (W/kg)	Target Value (W/kg)	Delta (%)	Tolerance (%)
2024/01/30	750MHz	Head	100	0.867	8.67	8.39	3.34	± 10
2024/01/31	750MHz	Head	100	0.853	8.53	8.39	1.67	± 10
2024/02/02	1750MHz	Head	100	3.63	36.3	36.8	-1.36	± 10
2024/02/01	1900MHz	Head	100	3.95	39.5	39.9	-1.0	± 10
2024/02/02	2450MHz	Head	100	5.13	51.3	51.8	-0.97	± 10
2024/02/03	2600MHz	Head	100	5.72	57.2	54.8	4.38	± 10
2024/02/04	5250MHz	Head	100	8.06	80.6	79.2	1.77	± 10
2024/02/04	5800MHz	Head	100	7.98	79.8	80.6	-0.99	± 10

3.4 SAR System Validation Data

System Performance 750 MHz

DUT: D750V3; Type: 750 MHz; Serial: 1109

Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.885 \text{ S/m}$; $\epsilon_r = 42.652$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(9.49, 9.49, 9.49) @ 750 MHz; Calibrated: 2023/6/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (7x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 1.25 W/kg

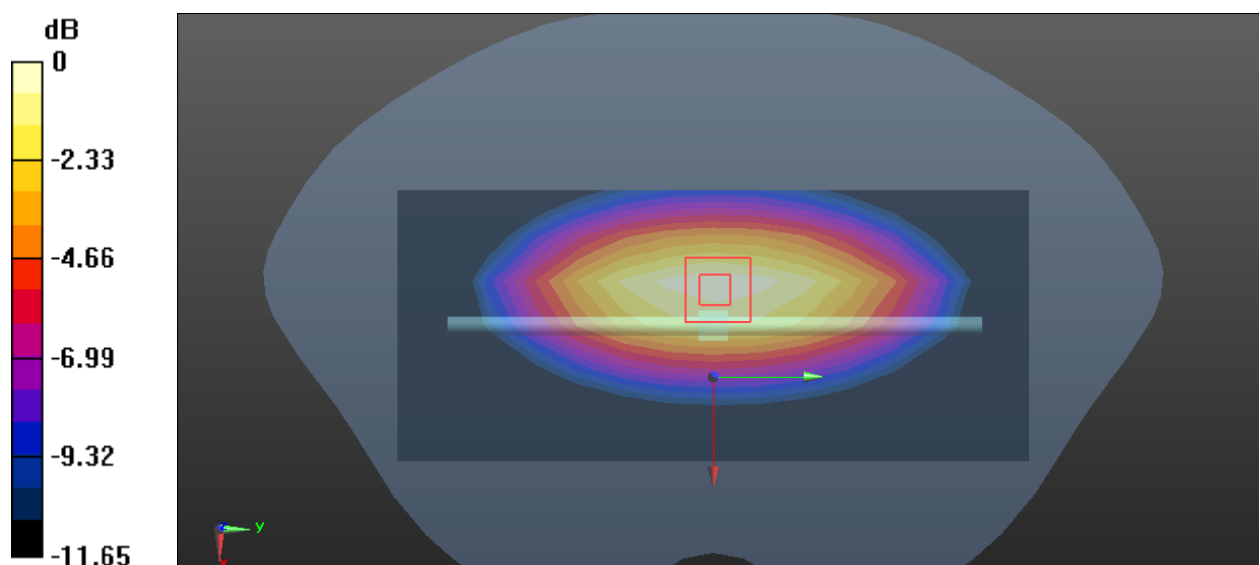
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 37.67 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.57 W/kg

SAR(1 g) = 0.867 W/kg; SAR(10 g) = 0.558 W/kg

Maximum value of SAR (measured) = 1.22 W/kg



0 dB = 1.22 W/kg = 0.86dBW/kg

System Performance 750 MHz was performed on 2023/12/03

DUT: D750V3; Type: 750 MHz; Serial: 1109

Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.864 \text{ S/m}$; $\epsilon_r = 42.647$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(9.49, 9.49, 9.49) @ 750 MHz; Calibrated: 2023/6/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 1.35 W/kg

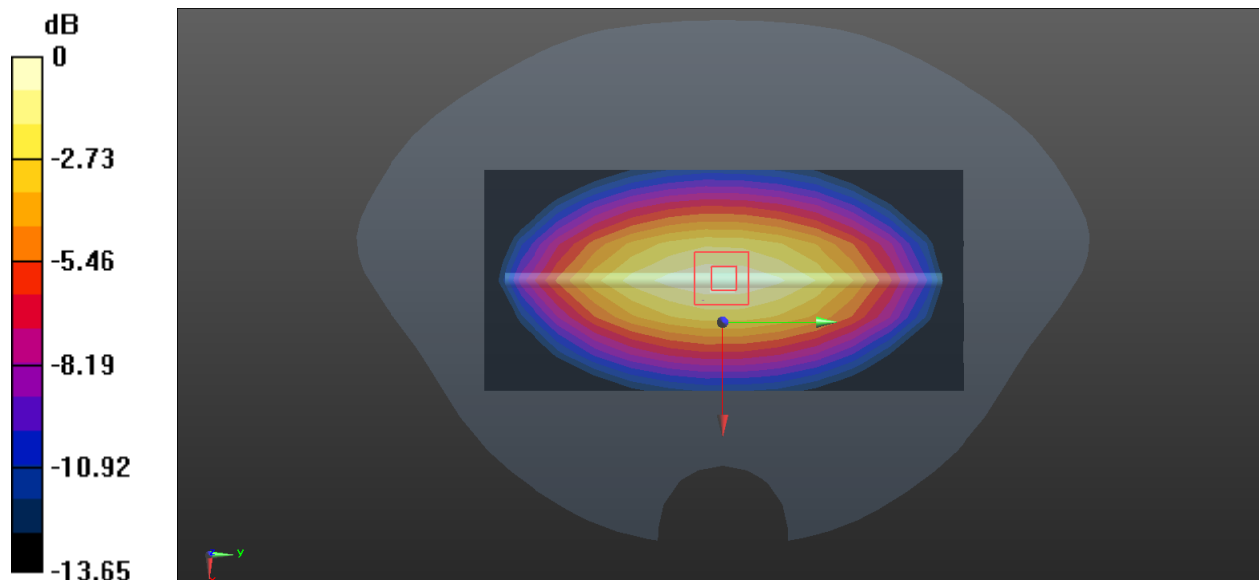
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 24.56 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.38 W/kg

SAR(1 g) = 0.853 W/kg; SAR(10 g) = 0.557 W/kg

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



0 dB = 1.12 W/kg = 0.49 dBW/kg

System Performance 1750MHz

DUT: D1750V2; Type: 1750 MHz; Serial: 1166

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

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.345$ S/m; $\epsilon_r = 40.544$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(8.22, 8.22, 8.22) @ 1750 MHz; Calibrated: 2023/6/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (6x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 5.52 W/kg

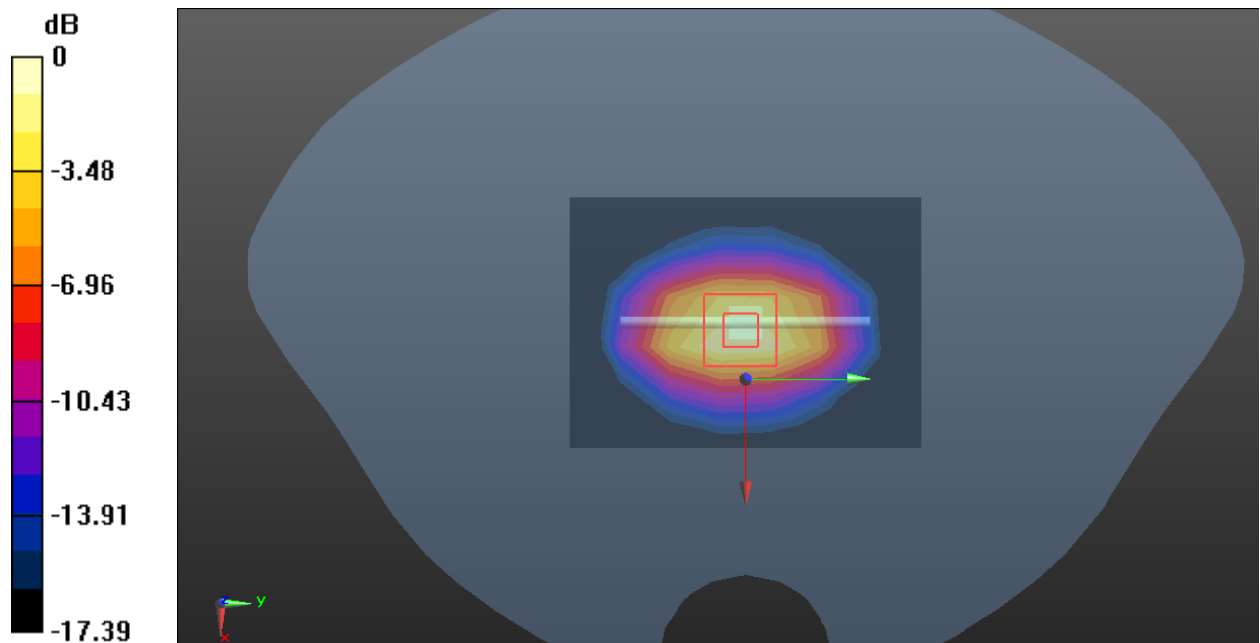
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 49.83 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 6.94 W/kg

SAR(1 g) = 3.63 W/kg; SAR(10 g) = 1.95 W/kg

Maximum value of SAR (measured) = 5.57 W/kg



0 dB = 5.57 W/kg = 7.46dBW/kg

System Performance 1900MHz

DUT: D1900V2; Type: 1900 MHz; Serial: 5d229

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.451$ S/m; $\epsilon_r = 39.467$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.93, 7.93, 7.93) @ 1900 MHz; Calibrated: 2023/6/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (6x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 6.57 W/kg

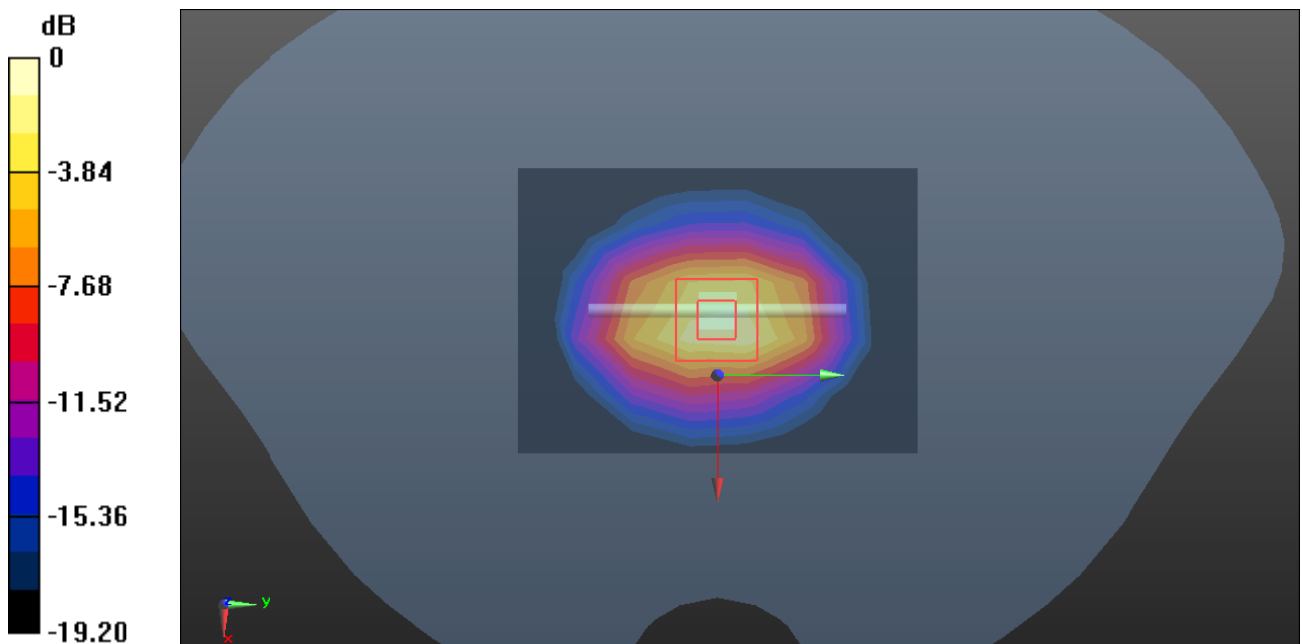
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 46.62 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 8.54 W/kg

SAR(1 g) = 3.95 W/kg; SAR(10 g) = 2.21 W/kg

Maximum value of SAR (measured) = 6.73 W/kg



0 dB = 6.73 W/kg = 8.28dBW/kg

System Performance 2450MHz Head

DUT: D2450V2; Type: 2450 MHz; Serial: 1014

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

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.861$ S/m; $\epsilon_r = 38.267$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.38, 7.38, 7.38) @ 2450 MHz; Calibrated: 2023/6/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (6x7x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (Measured) = 9.17 W/kg

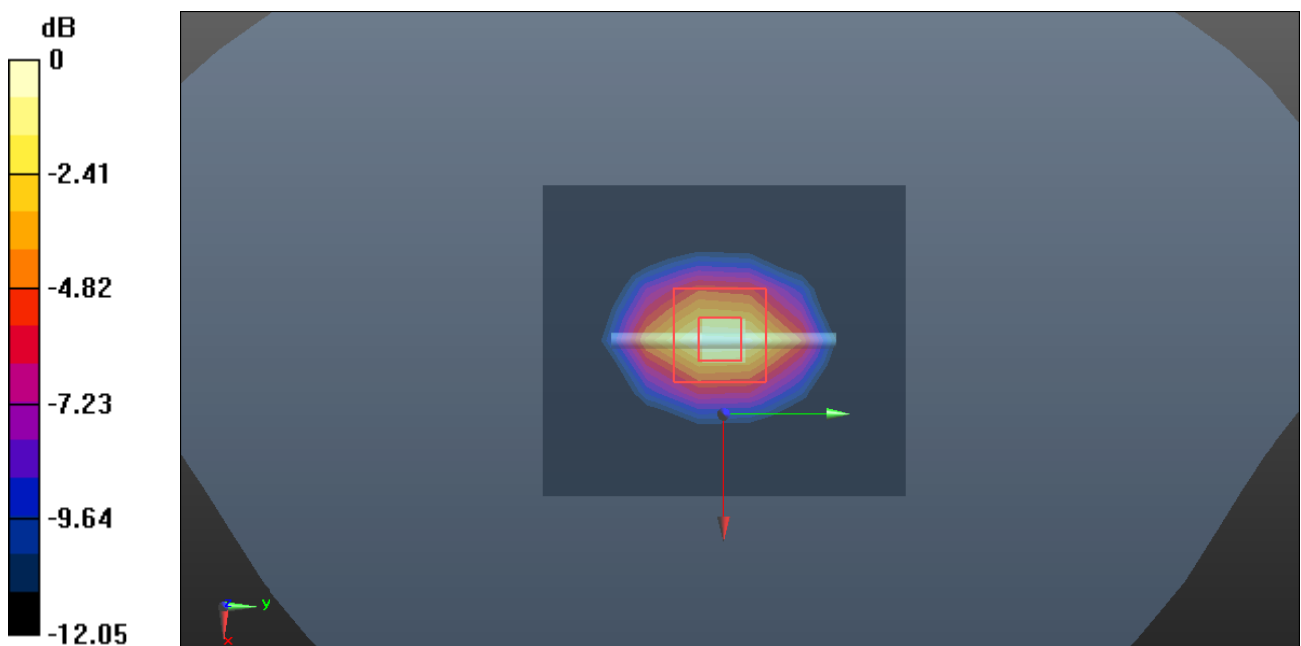
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.92 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 11.9 W/kg

SAR(1 g) = 5.13W/kg; SAR(10 g) = 2.49 W/kg

Maximum value of SAR (measured) = 9.23 W/kg



0 dB = 9.23W/kg = 9.65 dBW/kg

System Performance 2600MHz Head

DUT: D2600V2; Type: 2600 MHz; Serial: 1153

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

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.861$ S/m; $\epsilon_r = 38.267$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.16, 7.16, 7.16) @ 2600 MHz; Calibrated: 2023/6/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (6x7x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (Measured) = 10.5 W/kg

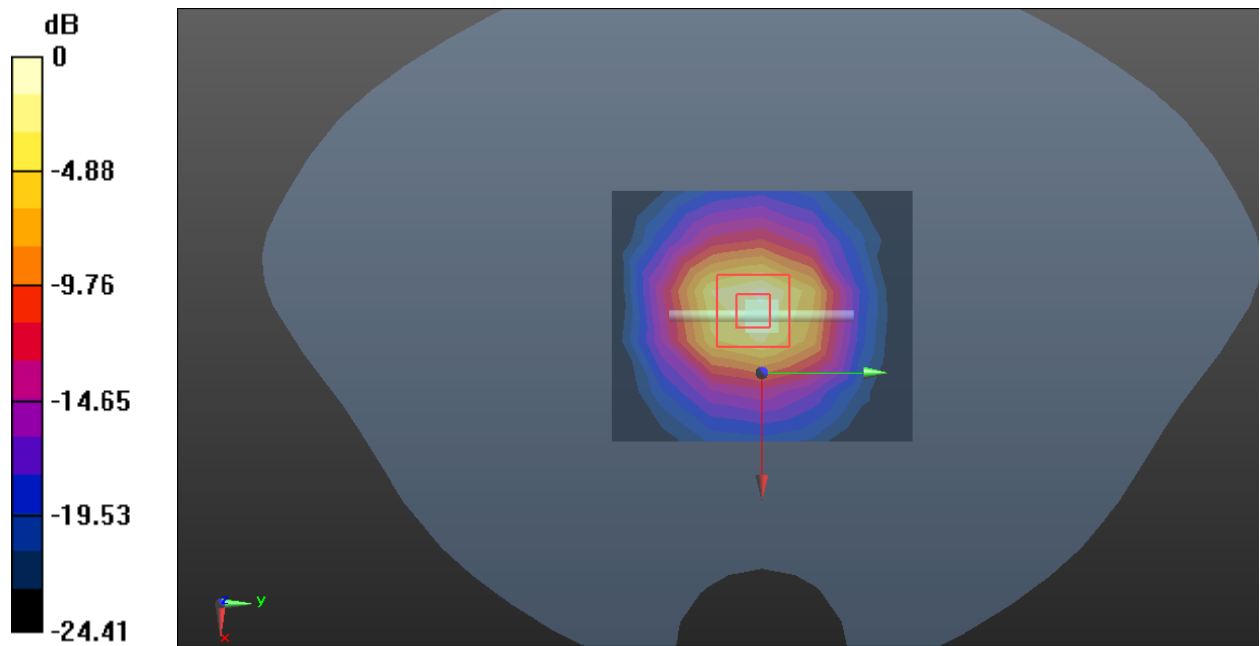
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 57.56 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 11.5 W/kg

SAR(1 g) = 5.72 W/kg; SAR(10 g) = 2.67 W/kg

Maximum value of SAR (measured) = 10.1 W/kg



0 dB = 10.1 W/kg = 10.04dBW/kg

System Performance 5250 MHz Head

DUT: D5GHzV2; Type: 5250 MHz; Serial: 1280

Communication System: CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5250$ MHz; $\sigma = 4.692$ S/m; $\epsilon_r = 35.123$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(5.19, 5.19, 5.19) @ 5250 MHz; Calibrated: 2023/6/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (9x11x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 23.1 W/kg

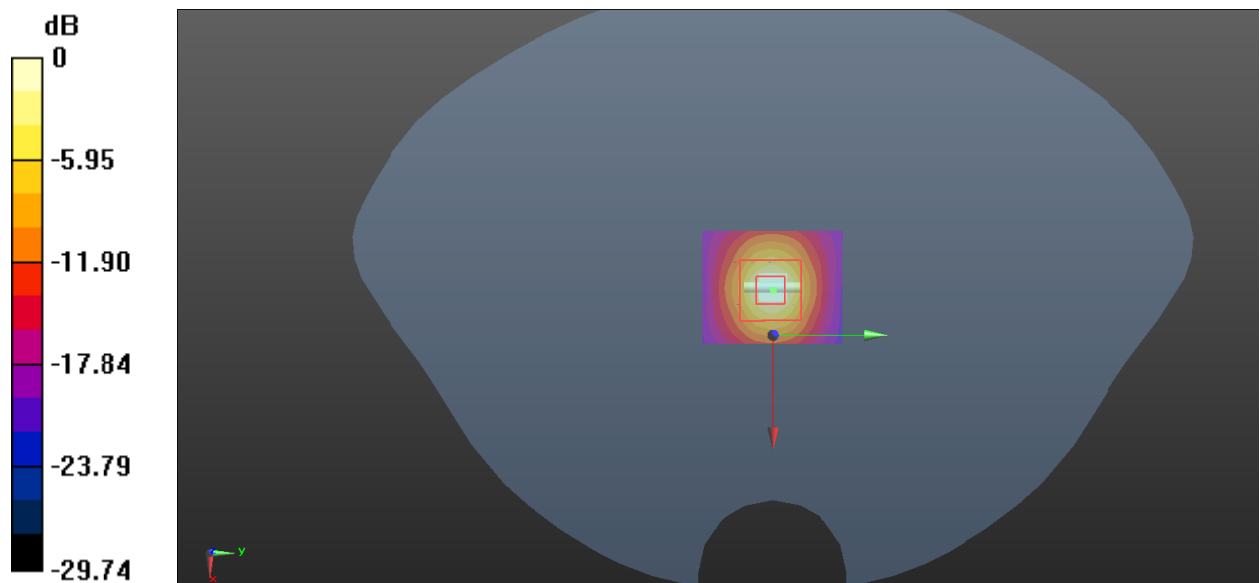
Zoom Scan (9x9x16)/Cube 0:: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 44.07 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 36.5 W/kg

SAR(1 g) = 8.06 W/kg; SAR(10 g) = 2.29 W/kg

Maximum value of SAR (measured) = 21.3 W/kg



0 dB = 21.3 W/kg = 13.28 dBW/kg

System Performance 5800 MHz Head

DUT: D5GHzV2; Type: 5800 MHz; Serial: 1280

Communication System: CW; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5800$ MHz; $\sigma = 5.325$ S/m; $\epsilon_r = 35.273$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(4.89, 4.89, 4.89) @ 5800 MHz; Calibrated: 2023/6/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (8x8x1): Measurement grid: dx=10 mm, dy=10 mm

Maximum value of SAR (measured) = 21.1 W/kg

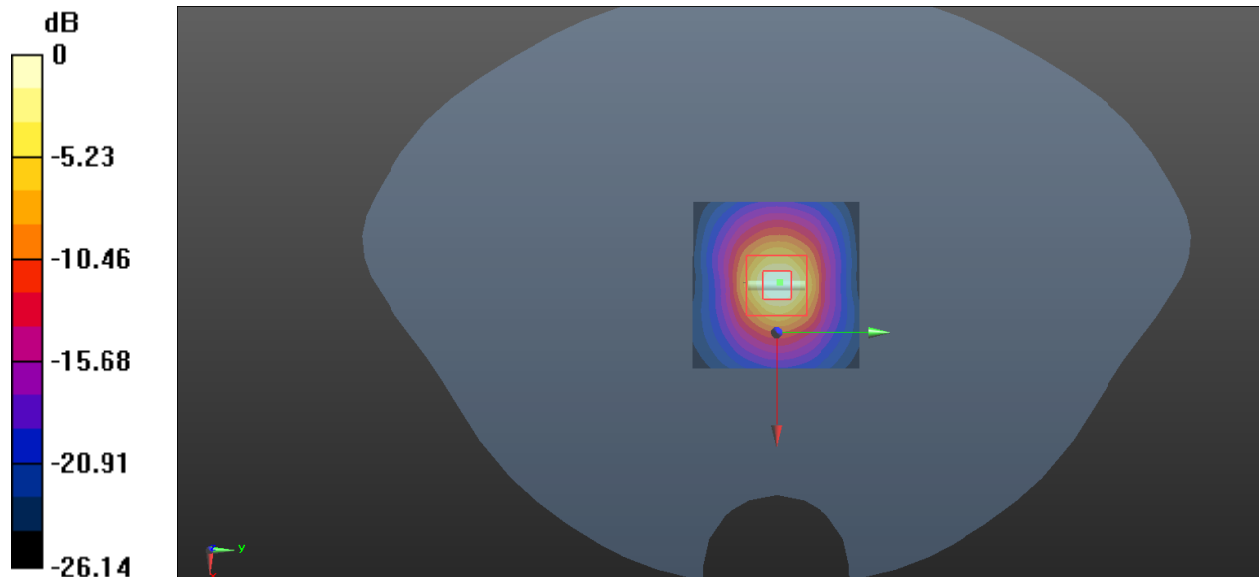
Zoom Scan (9x9x16)/Cube 0:: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 40.29 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 38.5 W/kg

SAR(1 g) = 7.98 W/kg; SAR(10 g) = 2.26 W/kg

Maximum value of SAR (measured) = 21.2 W/kg



0 dB = 21.2 W/kg = 13.26 dBW/kg

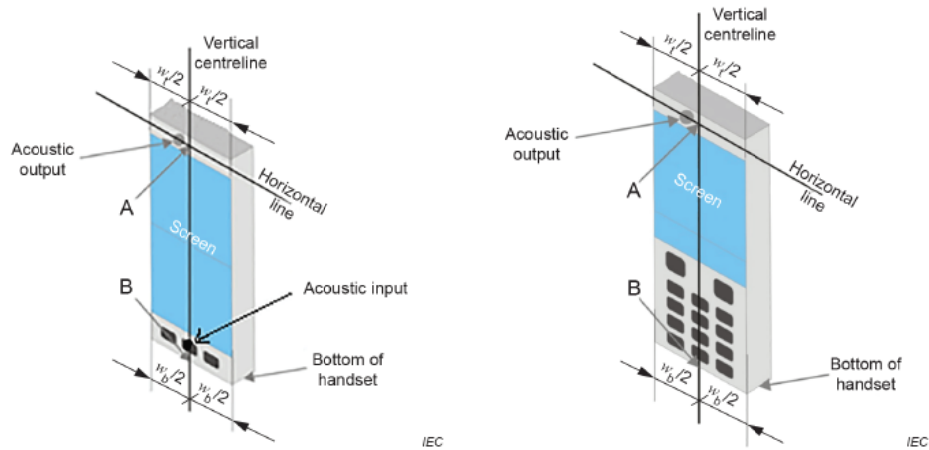
4 EUT Test Positions and Methodology

4.1 Test Positions for Device Operating Next to a Person's Ear

4.1.1 Definition of the cheek position

The cheek position is established using steps a) to j) as follows.

- a) Configure the DUT for voice operation, if necessary. For example, for a DUT with a flip, swivel, or slide cover piece, open the cover if this is consistent with voice operation. If the DUT can also be used with the cover closed, both configurations shall be tested.
- b) Define two imaginary lines on the DUT, the vertical centreline and the horizontal line, relative to the DUT in vertical orientation as shown in Figure 15.
- c) The vertical centreline passes through two points on the front side of the DUT: the midpoint of the width w_t of the DUT at the level of the acoustic output (Point A in Figure 15), and the midpoint of the width w_b at the bottom of the DUT (Point B). The horizontal line is perpendicular to the vertical centerline, and passes through the centre of the acoustic output (Figure 15). The two lines intersect at Point A. Note that for many DUTs, Point A coincides with the centre of the acoustic output. However, the acoustic output could be located elsewhere on the horizontal line. Also note that the vertical centreline is not necessarily parallel to the front face of the DUT, especially for clamshell DUTs, DUTs with flip cover pieces, and other irregularly shaped DUTs.
- d) Position the DUT close to the surface of the phantom such that Point A is on the (virtual) extension of the line passing through points RE (right-ear ear reference point) and LE (left-ear ear reference point) on the phantom (see Figure 16a) and Figure 16b)). The plane determined by the vertical centreline and the horizontal line of the DUT shall be parallel to the sagittal plane of the phantom.
- e) Translate the DUT towards the phantom along the line passing through RE and LE until the DUT touches the ear (see Figure 16c)).
- f) Rotate the DUT around the (virtual) LE-RE Line until the DUT vertical centreline is in the reference plane (see Figure 16d)).
- g) Rotate the DUT around its vertical centreline until the plane established by the DUT vertical centreline and horizontal line is parallel to the N-F line (see Annex G), and then translate the DUT towards the phantom along the LE-RE line until DUT Point A touches the ear at the ERP (ear reference point) (see Figure 16e)).
- h) While keeping Point A on the line passing through RE and LE and maintaining the DUT in contact with the pinna, rotate the DUT about the N-F line until any point on the DUT is in contact with a phantom point below the pinna (cheek) (see Figure 16f)). The physical angles of rotation shall be documented.
- i) While keeping DUT Point A in contact with the ERP, rotate the DUT around a line perpendicular to the plane established by the DUT vertical centreline and horizontal line and passing through DUT Point A, until the DUT vertical centreline is in the reference plane (see Figure 16g)).
- j) Verify that the cheek position is correct as follows:
 - 1) the N-F line is in the plane established by the DUT vertical centreline and horizontal line;
 - 2) DUT Point A touches the pinna at the ERP;
 - 3) the DUT vertical centreline is in the reference plane.



Key

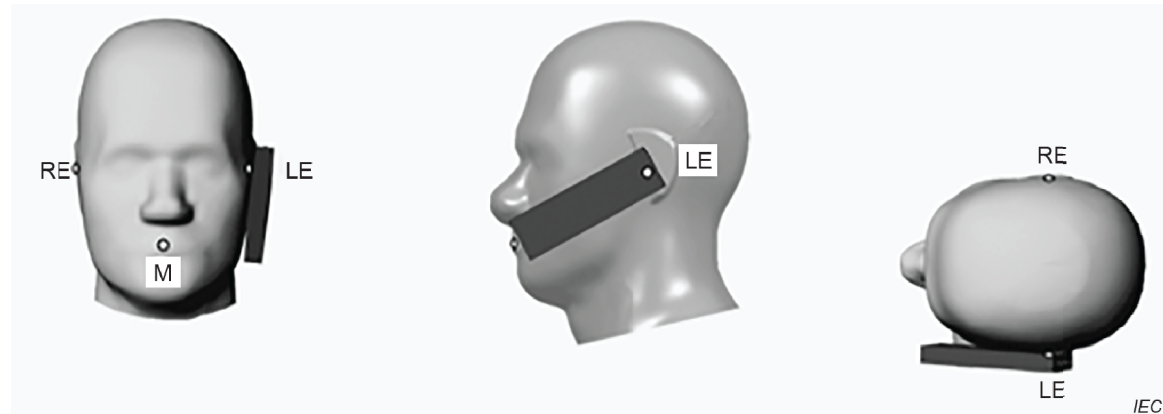
w_t Width of the DUT at the level of the acoustic output

w_b Width of the bottom of the DUT

A Midpoint of the width w_t of the DUT at the level of the acoustic output

B Midpoint of the width w_b of the bottom of the DUT

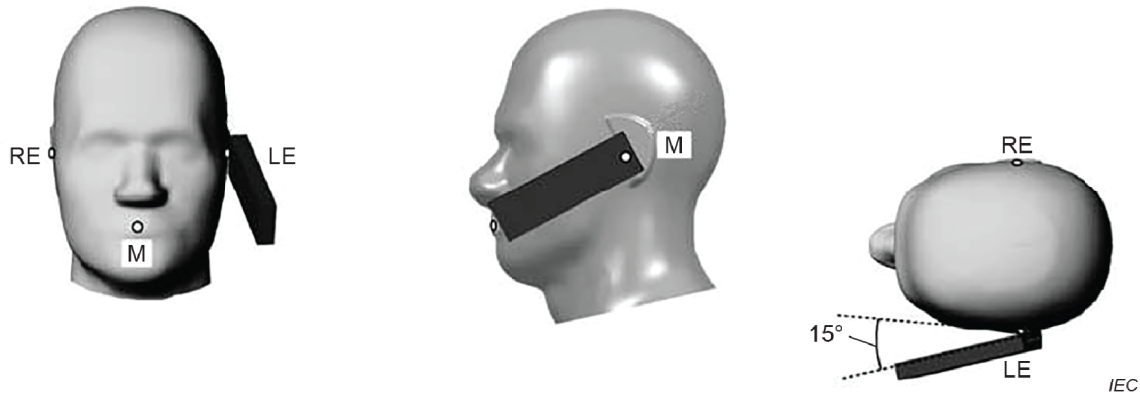
Figure 15 – Vertical and horizontal reference lines and reference



4.1.2 Definition of the tilt position

The tilt position is established using steps a) through d) as follows.

- Repeat steps a) through j) of 7.2.4.2.2 to place the DUT in the cheek position (see Figure 16).
- While maintaining the orientation of the DUT, move the DUT away from the pinna along the line passing through RE and LE far enough to allow a rotation of the DUT away from the cheek by 15° .
- Rotate the DUT around the horizontal line by 15° (see Figure 17).
- While maintaining the orientation of the DUT, move the DUT towards the phantom on a line passing through RE and LE until any part of the DUT touches the ear. The tilt position is obtained when the contact is on the pinna. If the contact is at any location other than the pinna, e.g. an extended antenna in contact with the back of the head phantom, the angle of the DUT shall be reduced. In this case, the tilt position is obtained if any part of the DUT is in contact with the pinna and a second point on the DUT is in contact with the phantom, e.g. the antenna in contact with the back of the head.



4.2 Test positions for body-supported device

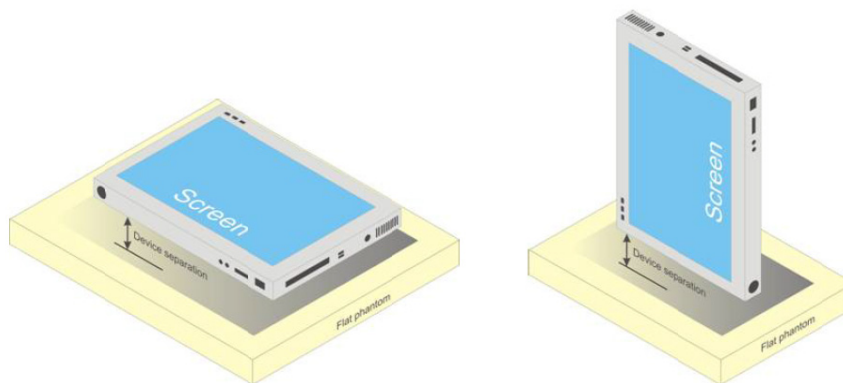
A typical example of a body supported device is a wireless enabled laptop device that among other orientations may be supported on the thighs of a sitting user. To represent this orientation, the device shall be positioned with its base against the flat phantom. Other orientations may be specified by the manufacturer in the user instructions. If the intended use is not specified, the device shall be tested directly against the flat phantom in all usable orientations.

The example in Figure 7b) shows a tablet form factor portable computer for which SAR should be separately assessed with

d) each surface and

e) the separation distances

positioned against the flat phantom that correspond to the intended use as specified by the manufacturer. If the intended use is not specified in the user instructions, the device shall be tested directly against the flat phantom in all usable orientations.

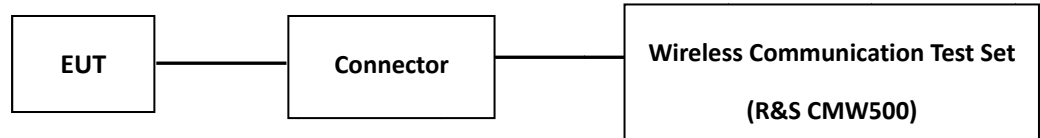


b) Tablet form factor portable computer

5 Conducted Output Power Measurements

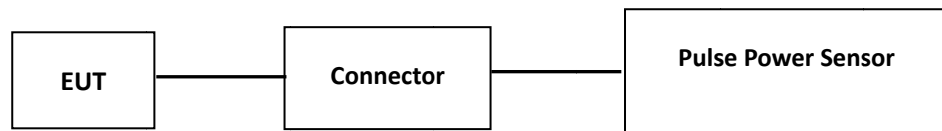
5.1 Test Procedure

The RF output of the transmitter was connected to the input of the Wireless Communication Test Set through Connector.



GSM/WCDMA/LTE

The RF output of the transmitter was connected to the input port of the Pulse Power Sensor through Connector.



BT/WLAN

5.2 Maximum Target Output Power

Mode/Band	Max. Target Power(dBm)		
	Low Channel	Middle Channel	High Channel
GSM 850	34.5	34.5	34.5
GPRS 850 1 Slot	34.4	34.4	34.4
GPRS 850 2 Slots	34	34	34
GPRS 850 3 Slots	30.6	30.6	30.6
GPRS 850 4 Slots	29.1	29.1	29.1
EDGE 850 1 Slot	27.2	27.2	27.2
EDGE 850 2 Slots	26.1	26.1	26.1
EDGE 850 3 Slots	24.2	24.2	24.2
EDGE 850 4 Slots	23.2	23.2	23.2
GSM 1900	31.5	31.5	31.5
GPRS 1900 1 Slot	31	31	31
GPRS 1900 2 Slots	30.9	30.9	30.9
GPRS 1900 3 Slots	26.9	26.9	26.9
GPRS 1900 4 Slots	25.3	25.3	25.3
EDGE 1900 1 Slot	25.8	25.8	25.8
EDGE 1900 2 Slots	24.7	24.7	24.7
EDGE 1900 3 Slots	22.7	22.7	22.7
EDGE 1900 4 Slots	21.7	21.7	21.7

WCDMA Band 2	23.4	23.4	23.4
HSDPA	21.1	21.1	21.1
HSUPA	20.9	20.9	20.9
HSPA+	21	21	21
WCDMA Band 5	23.2	23.2	23.2
HSDPA	20.7	20.7	20.7
HSUPA	20.6	20.6	20.6
HSPA+	20.7	20.7	20.7
LTE Band 2	23.4	23.4	23.4
LTE Band 5	23.1	23.1	23.1
LTE Band 12	23.2	23.2	23.2
LTE Band 13	22.9	22.9	22.9
LTE Band 41	24.8	24.8	24.8
5G NR n41	25.6	25.6	25.6
5G NR n66	17.8	17.8	17.8
2.4G WLAN (802.11b)	14.8	14.8	14.8
2.4G WLAN (802.11g)	14.3	14.3	14.3
2.4G WLAN (802.11 n20)	13	13	13
2.4G WLAN (802.11 n40)	10.9	10.9	10.9
5.2G WLAN (802.11a)	13.2	13.2	13.2
5.2G WLAN (802.11 ac20)	13.1	13.1	13.1
5.2G WLAN (802.11 ac40)	14.1	/	14.1
5.2G WLAN (802.11 ac80)	/	11	/
5.8G WLAN (802.11a)	16.1	16.1	16.1
5.8G WLAN (802.11 ac20)	16	16	16
5.8G WLAN (802.11 ac40)	15.9	/	15.9
5.8G WLAN (802.11 ac80)	/	13	/
Bluetooth(BDR/EDR)	0	0	0
BLE_1M	5	5	5
BLE_2M	5.5	5.5	5.5

5.3 Maximum Conducted Output Power

GSM:

Band	Channel No.	Frequency (MHz)	RF Output Power (dBm)
GSM 850	128	824.2	34.28
	190	836.6	34.36
	251	848.8	34.42
PCS 1900	512	1850.2	31.41
	661	1880	31.16
	810	1909.8	31.12

GPRS:

Band	Channel No.	Frequency (MHz)	RF Peak Output Power(dBm)			
			1 Slot	2 Slots	3 Slots	4 Slots
GSM 850	128	824.2	34.04	33.61	30.54	28.95
	190	836.6	34.27	33.69	30.37	28.73
	251	848.8	33.83	33.86	30.01	28.57
PCS 1900	512	1850.2	30.63	30.81	26.73	25.06
	661	1880	30.80	30.63	26.82	25.16
	810	1909.8	30.85	30.59	26.14	25.04

EDGE:

Band	Channel No.	Frequency (MHz)	RF Peak Output Power(dBm)			
			1 Slot	2 Slots	3 Slots	4 Slots
GSM 850	128	824.2	27.12	25.91	24.08	23.05
	190	836.6	26.91	25.96	23.92	22.87
	251	848.8	26.95	25.77	23.97	22.83
PCS 1900	512	1850.2	25.68	24.63	22.62	21.55
	661	1880	25.53	24.43	22.50	21.57
	810	1909.8	25.25	24.19	22.26	21.22

For SAR, the time based average power is relevant, the difference in between depends on the duty cycle of the TDMA signal.

Number of Time Slots	1 Slot	2 Slots	3 Slots	4 Slots
Duty Cycle	1:8	1:4	1:2.66	1:2
Time based Ave. power compared to slotted Ave. power	-9 dB	-6 dB	-4.25 dB	-3 dB
Crest Factor	8	4	2.66	2

GPRS:

Band	Channel No.	Frequency (MHz)	Time Based Average Power(dBm)			
			1 Slot	2 Slots	3 Slots	4 Slots
GSM 850	128	824.2	25.04	27.61	26.29	25.95
	190	836.6	25.27	27.69	26.12	25.73
	251	848.8	24.83	27.86	25.76	25.57
PCS 1900	512	1850.2	21.63	24.71	22.48	22.06
	661	1880	21.80	24.63	22.47	22.16
	810	1909.8	21.85	24.59	21.89	22.04

EDGE:

Band	Channel No.	Frequency (MHz)	Time Based Average Power(dBm)			
			1 Slot	2 Slots	3 Slots	4 Slots
GSM 850	128	824.2	18.12	19.91	19.83	20.05
	190	836.6	17.91	19.96	19.67	19.87
	251	848.8	17.95	19.77	19.72	19.83
PCS 1900	512	1850.2	16.68	18.63	18.27	18.55
	661	1880	16.53	18.43	18.25	18.57
	810	1909.8	16.25	18.19	18.01	18.22

Note:

1. Rohde & Schwarz Radio Communication Tester (CMW500) was used for the measurement of GSM peak and average output power for active timeslots.
2. For GSM voice, 1 timeslot has been activated with power level 5 (850 MHz band) and 0 (1900 MHz band).
3. For GPRS, 1, 2, 3 and 4 timeslots has been activated separately with power level 3 (850 MHz band) and 3 (1900 MHz band).

WCDMA Band 2:

Test Mode	Sub Test	Conducted Average Output Power(dBm)		
		Lowest Channel	Middle Channel	Highest Channel
RMC 12.2kbps		23.32	23.15	22.85
HSDPA	1	20.86	20.23	20.06
	2	20.87	20.29	20.05
	3	21.01	20.38	20.26
	4	21.06	20.44	20.22
HSUPA	1	20.57	20.27	19.86
	2	20.52	20.34	19.82
	3	20.64	20.45	20.00
	4	20.77	20.41	20.12
	5	20.78	20.54	20.07
HSPA+	1	20.87	20.57	20.19

WCDMA Band 5:

Test Mode	Sub Test	Conducted Average Output Power(dBm)		
		Lowest Channel	Middle Channel	Highest Channel
RMC 12.2kbps		23.08	23.13	23.09
HSDPA	1	20.43	20.34	20.49
	2	20.45	20.41	20.44
	3	20.65	20.50	20.57
	4	20.55	20.53	20.63
HSUPA	1	20.19	20.27	20.14
	2	20.33	20.35	20.18
	3	20.28	20.36	20.15
	4	20.41	20.48	20.27
	5	20.40	20.44	20.19
HSPA+	1	20.43	20.56	20.28

Note:

1. The default test configuration is to measure SAR with an established radio link between the EUT and a communication test set using a 12.2 kbps RMC (reference measurement Channel) Configured in Test Loop Model 1.
2. KDB 941225 D01-Body SAR is not required for HSDPA/HSUPA/HSPA+ when the maximum average output of each RF channel is less than ¼ dB higher than measured 12.2kbps RMC or the maximum SAR for 12.2kbps RMC is < 75% of SAR limit.

LTE Band 2:

Test Bandwidth	Test Modulation	Resource Block & RB offset	Target MPR	Meas. MPR	Lowest Channel (dBm)	Middle Channel (dBm)	Highest Channel (dBm)
1.4M	QPSK	RB1#0	0	0	23.05	22.96	22.71
		RB1#3	0	0	23.03	22.98	22.74
		RB1#5	0	0	23.14	22.96	22.77
		RB3#0	1	1	23.14	23.04	22.71
		RB3#3	1	1	23.11	22.96	22.60
		RB6#0	1	1	22.09	21.95	21.73
	16-QAM	RB1#0	1	1	22.24	22.12	21.91
		RB1#3	1	1	22.17	22.07	21.78
		RB1#5	1	1	22.09	22.02	21.79
		RB3#0	2	2	22.20	22.23	21.83
		RB3#3	2	2	22.10	22.27	21.69
		RB6#0	2	2	21.23	21.18	20.89
3M	QPSK	RB1#0	0	0	23.06	23.03	22.79
		RB1#8	0	0	22.96	23.02	22.53
		RB1#14	0	0	22.99	23.02	22.57
		RB6#0	1	1	22.15	21.97	21.76
		RB6#9	1	1	22.08	22.09	21.81
		RB15#0	1	1	22.04	22.00	21.66
	16-QAM	RB1#0	1	1	22.27	22.63	22.04
		RB1#8	1	1	22.18	22.57	21.89
		RB1#14	1	1	22.10	22.59	21.89
		RB6#0	2	2	21.08	21.15	20.87
		RB6#9	2	2	21.08	21.16	20.78
		RB15#0	2	2	21.31	21.13	20.91
5M	QPSK	RB1#0	0	0	23.23	23.10	22.99
		RB1#13	0	0	23.10	23.08	22.73
		RB1#24	0	0	23.25	23.12	22.72
		RB15#0	1	1	22.20	22.02	21.88
		RB15#10	1	1	22.24	22.08	21.74

		RB25#0	1	1	22.22	22.12	21.81
	16-QAM	RB1#0	1	1	22.22	22.02	22.16
		RB1#13	1	1	22.22	22.01	21.97
		RB1#24	1	1	22.21	21.96	21.91
		RB15#0	2	2	21.24	21.25	20.93
		RB15#10	2	2	21.27	21.10	20.82
		RB25#0	2	2	21.28	21.20	20.85
10M	QPSK	RB1#0	0	0	23.22	23.17	22.95
		RB1#25	0	0	23.20	23.01	22.86
		RB1#49	0	0	23.08	22.99	22.76
		RB25#0	1	1	22.17	22.14	21.83
		RB25#25	1	1	22.24	22.05	21.95
		RB50#0	1	1	22.18	22.05	21.88
	16-QAM	RB1#0	1	1	22.71	22.34	21.94
		RB1#25	1	1	22.74	22.34	21.96
		RB1#49	1	1	22.66	22.25	21.90
		RB25#0	2	2	21.19	21.20	21.15
		RB25#25	2	2	21.19	21.09	21.05
		RB50#0	2	2	21.18	21.06	20.99
15M	QPSK	RB1#0	0	0	23.25	23.20	22.91
		RB1#38	0	0	23.15	23.12	22.78
		RB1#74	0	0	23.16	23.04	22.94
		RB36#0	1	1	22.09	22.03	22.00
		RB36#39	1	1	22.13	22.13	21.86
		RB75#0	1	1	22.17	22.13	21.93
	16-QAM	RB1#0	1	1	22.51	22.57	22.39
		RB1#38	1	1	22.44	22.55	22.42
		RB1#74	1	1	22.40	22.37	22.25
		RB36#0	2	2	21.27	21.08	20.90
		RB36#39	2	2	21.20	21.03	21.00
		RB75#0	2	2	21.21	21.16	21.06
20M	QPSK	RB1#0	0	0	23.10	23.22	22.93
		RB1#50	0	0	23.06	23.11	22.83

		RB1#99	0	0	23.15	22.95	22.87
		RB50#0	1	1	22.15	22.16	22.09
		RB50#50	1	1	22.11	22.09	21.92
		RB100#0	1	1	22.17	22.14	21.88
	16-QAM	RB1#0	1	1	22.83	22.52	22.19
		RB1#50	1	1	22.71	22.49	22.24
		RB1#99	1	1	22.83	22.17	22.06
		RB50#0	2	2	21.24	21.21	21.07
		RB50#50	2	2	21.21	21.06	20.89
		RB100#0	2	2	21.20	21.22	21.05

LTE Band 5:

Test Bandwidth	Test Modulation	Resource Block & RB offset	Target MPR	Meas. MPR	Lowest Channel (dBm)	Middle Channel (dBm)	Highest Channel (dBm)
1.4M	QPSK	RB1#0	0	0	22.88	22.86	22.79
		RB1#3	0	0	22.79	22.95	22.75
		RB1#5	0	0	22.76	22.98	22.90
		RB3#0	1	1	22.81	22.84	22.84
		RB3#3	1	1	22.83	22.88	22.80
		RB6#0	1	1	21.77	21.89	21.86
	16-QAM	RB1#0	1	1	21.74	22.03	21.78
		RB1#3	1	1	21.77	21.96	21.87
		RB1#5	1	1	21.89	21.99	21.77
		RB3#0	2	2	21.91	21.86	21.96
		RB3#3	2	2	21.95	21.86	21.89
		RB6#0	2	2	20.84	21.00	20.67
3M	QPSK	RB1#0	0	0	22.75	22.97	22.81
		RB1#8	0	0	22.69	22.84	22.81
		RB1#14	0	0	22.76	22.77	22.72
		RB6#0	1	1	21.84	21.86	21.82
		RB6#9	1	1	21.88	21.80	21.88
		RB15#0	1	1	21.76	21.89	21.89
	16-QAM	RB1#0	1	1	21.90	22.55	21.90
		RB1#8	1	1	21.80	22.50	21.98
		RB1#14	1	1	21.89	22.52	21.89
		RB6#0	2	2	20.75	20.96	20.85
		RB6#9	2	2	20.82	21.01	20.85
		RB15#0	2	2	20.84	21.03	20.85
5M	QPSK	RB1#0	0	0	22.84	22.99	22.90
		RB1#13	0	0	22.74	22.94	22.94
		RB1#24	0	0	22.90	23.01	23.00
		RB15#0	1	1	21.95	21.99	21.95

		RB15#10	1	1	21.87	21.92	21.82
		RB25#0	1	1	21.88	21.92	21.85
	16-QAM	RB1#0	1	1	22.05	21.90	22.22
		RB1#13	1	1	21.88	21.94	22.13
		RB1#24	1	1	21.89	21.85	22.27
		RB15#0	2	2	21.00	20.97	20.99
		RB15#10	2	2	20.95	20.89	20.87
		RB25#0	2	2	20.95	21.06	20.92
10M	QPSK	RB1#0	0	0	22.97	22.80	22.95
		RB1#25	0	0	22.76	22.95	22.94
		RB1#49	0	0	22.88	22.94	22.76
		RB25#0	1	1	21.82	21.98	21.96
		RB25#25	1	1	21.94	21.90	21.81
		RB50#0	1	1	21.86	21.88	21.91
	16-QAM	RB1#0	1	1	22.13	21.92	22.54
		RB1#25	1	1	21.96	22.00	22.51
		RB1#49	1	1	22.10	21.95	22.38
		RB25#0	2	2	20.88	21.05	20.91
		RB25#25	2	2	20.99	20.97	20.81
		RB50#0	2	2	20.96	20.94	20.83

LTE Band 12:

Test Bandwidth	Test Modulation	Resource Block & RB offset	Target MPR	Meas. MPR	Lowest Channel (dBm)	Middle Channel (dBm)	Highest Channel (dBm)
1.4M	QPSK	RB1#0	0	0	23.01	22.91	22.89
		RB1#3	0	0	23.00	22.90	22.81
		RB1#5	0	0	23.02	22.97	22.81
		RB3#0	1	1	23.07	22.96	22.88
		RB3#3	1	1	23.01	22.89	22.79
		RB6#0	1	1	21.98	21.90	21.87
	16-QAM	RB1#0	1	1	22.03	21.97	22.05
		RB1#3	1	1	21.96	22.00	21.88
		RB1#5	1	1	21.95	21.92	21.87
		RB3#0	2	2	22.12	22.08	21.78
		RB3#3	2	2	22.07	22.14	21.91
		RB6#0	2	2	20.99	21.02	20.87
3M	QPSK	RB1#0	0	0	22.94	22.95	22.80
		RB1#8	0	0	22.90	22.84	22.87
		RB1#14	0	0	22.89	22.88	22.70
		RB6#0	1	1	22.00	21.93	22.00
		RB6#9	1	1	22.02	21.87	21.90
		RB15#0	1	1	22.07	21.90	21.86
	16-QAM	RB1#0	1	1	22.08	22.53	21.96
		RB1#8	1	1	22.00	22.52	22.04
		RB1#14	1	1	22.02	22.43	21.99
		RB6#0	2	2	20.91	21.11	20.89
		RB6#9	2	2	21.00	21.05	20.80
		RB15#0	2	2	21.03	20.96	20.80
5M	QPSK	RB1#0	0	0	23.15	23.00	23.03
		RB1#13	0	0	23.09	23.09	22.99
		RB1#24	0	0	23.05	23.00	22.93
		RB15#0	1	1	21.98	22.04	21.87
		RB15#10	1	1	22.09	21.95	21.96

		RB25#0	1	1	21.97	22.00	21.98
	16-QAM	RB1#0	1	1	22.18	21.94	22.19
		RB1#13	1	1	22.14	21.98	22.26
		RB1#24	1	1	22.01	21.86	22.08
		RB15#0	2	2	21.09	21.07	20.91
		RB15#10	2	2	21.15	21.09	20.90
		RB25#0	2	2	21.13	20.99	20.84
10M	QPSK	RB1#0	0	0	23.07	23.04	23.01
		RB1#25	0	0	23.01	22.95	22.80
		RB1#49	0	0	22.92	23.01	22.78
		RB25#0	1	1	21.96	22.06	22.03
		RB25#25	1	1	21.92	21.99	21.82
		RB50#0	1	1	21.94	22.12	22.03
	16-QAM	RB1#0	1	1	22.09	22.19	22.10
		RB1#25	1	1	22.03	22.23	21.83
		RB1#49	1	1	22.10	22.06	21.86
		RB25#0	2	2	21.12	21.07	21.05
		RB25#25	2	2	21.09	21.09	21.01
		RB50#0	2	2	20.94	20.95	20.86

LTE Band 13:

Test Bandwidth	Test Modulation	Resource Block & RB offset	Target MPR	Meas. MPR	Lowest Channel (dBm)	Middle Channel (dBm)	Highest Channel (dBm)
5M	QPSK	RB1#0	0	0	22.82	/	22.81
		RB1#13	0	0	22.73	/	22.84
		RB1#24	0	0	22.78	/	22.64
		RB15#0	1	1	21.63	/	21.76
		RB15#10	1	1	21.77	/	21.65
		RB25#0	1	1	21.76	/	21.82
	16-QAM	RB1#0	1	1	21.80	/	22.03
		RB1#13	1	1	21.64	/	21.97
		RB1#24	1	1	21.79	/	22.02
		RB15#0	2	2	20.91	/	20.82
		RB15#10	2	2	20.95	/	20.76
		RB25#0	2	2	20.86	/	20.98
10M	QPSK	RB1#0	0	0	/	22.70	/
		RB1#25	0	0	/	22.80	/
		RB1#49	0	0	/	22.77	/
		RB25#0	1	1	/	21.60	/
		RB25#25	1	1	/	21.93	/
		RB50#0	1	1	/	21.65	/
	16-QAM	RB1#0	1	1	/	21.74	/
		RB1#25	1	1	/	21.85	/
		RB1#49	1	1	/	21.78	/
		RB25#0	2	2	/	20.94	/
		RB25#25	2	2	/	20.89	/
		RB50#0	2	2	/	20.88	/

LTE Band 41:

Test Bandwidth	Test Modulation	Resource Block & RB offset	Target MPR	Meas. MPR	Lowest Channel (dBm)	2549.5 MHz (dBm)	Middle Channel (dBm)	2636.5 MHz (dBm)	Highest Channel (dBm)
5M	QPSK	RB1#0	0	0	24.41	24.15	23.60	24.15	24.13
		RB1#13	0	0	24.40	24.08	23.54	24.14	24.22
		RB1#24	0	0	24.44	24.06	23.62	24.25	24.23
		RB15#0	1	1	24.28	24.07	23.60	24.15	24.23
		RB15#10	1	1	24.17	24.01	23.51	24.15	24.34
		RB25#0	1	1	24.18	23.99	23.55	24.15	24.23
	16-QAM	RB1#0	1	1	24.22	24.06	23.67	24.14	24.42
		RB1#13	1	1	24.20	24.09	23.54	24.18	24.37
		RB1#24	1	1	24.19	24.07	23.59	24.08	24.37
		RB15#0	2	2	24.12	24.10	23.58	24.17	24.21
		RB15#10	2	2	24.14	23.96	23.60	24.16	24.28
		RB25#0	2	2	24.24	24.13	23.67	24.21	24.21
10M	QPSK	RB1#0	0	0	24.27	23.98	23.62	24.10	24.20
		RB1#25	0	0	24.15	24.05	23.65	24.13	24.07
		RB1#49	0	0	24.11	23.99	23.64	24.17	24.11
		RB25#0	1	1	24.32	24.12	23.53	24.10	24.14
		RB25#25	1	1	24.22	24.16	23.56	24.12	24.13
		RB50#0	1	1	24.24	24.14	23.49	24.13	24.11
	16-QAM	RB1#0	1	1	24.50	24.10	23.82	24.17	24.05
		RB1#25	1	1	24.21	23.94	23.68	24.16	24.06
		RB1#49	1	1	24.20	23.97	23.79	24.20	24.03
		RB25#0	2	2	24.22	24.04	23.58	24.14	24.30
		RB25#25	2	2	24.22	24.09	23.48	24.17	24.21
		RB50#0	2	2	24.24	24.02	23.55	24.08	24.22
15M	QPSK	RB1#0	0	0	24.34	24.10	23.62	24.02	24.05

		RB1#38	0	0	24.22	23.94	23.54	24.18	24.18
		RB1#74	0	0	24.05	24.06	23.60	24.05	24.13
		RB36#0	1	1	24.15	23.96	23.54	24.14	24.07
		RB36#39	1	1	24.13	24.09	23.47	24.09	24.22
		RB75#0	1	1	24.17	23.97	23.50	24.26	24.17
	16-QAM	RB1#0	1	1	24.38	24.12	23.85	24.15	24.13
		RB1#38	1	1	24.27	24.20	23.76	24.10	24.08
		RB1#74	1	1	24.32	24.08	23.86	24.12	24.02
		RB36#0	2	2	24.21	24.14	23.58	24.07	24.27
		RB36#39	2	2	24.07	24.07	23.55	24.11	24.26
		RB75#0	2	2	24.15	24.04	23.56	24.06	24.14
20M	QPSK	RB1#0	0	0	24.23	24.13	23.89	24.23	24.08
		RB1#50	0	0	24.03	24.15	23.94	24.27	24.23
		RB1#99	0	0	24.04	24.19	23.95	24.30	24.12
		RB50#0	1	1	24.17	24.13	24.06	24.29	24.11
		RB50#50	1	1	24.12	24.18	24.02	24.28	24.15
		RB100#0	1	1	24.11	24.23	24.04	24.24	24.22
	16-QAM	RB1#0	1	1	24.23	24.20	23.62	24.34	24.42
		RB1#50	1	1	24.12	24.10	23.55	24.22	24.64
		RB1#99	1	1	24.08	24.16	23.53	24.33	24.68
		RB50#0	2	2	24.26	24.13	23.69	24.24	24.15
		RB50#50	2	2	24.04	24.19	23.67	24.36	24.30
		RB100#0	2	2	24.14	24.17	23.59	24.32	24.22

5G NR n41:

Mode	Conducted Average Power(dBm)
n41_10MHz_30kHz_2501MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	21.17
n41_10MHz_30kHz_2501MHz_DFT-s-OFDM PI/2 BPSK_RB12@6	21.97
n41_10MHz_30kHz_2501MHz_DFT-s-OFDM PI/2 BPSK_RB1@23	21.58
n41_10MHz_30kHz_2501MHz_DFT-s-OFDM PI/2 BPSK_RB25@0	21.53
n41_10MHz_30kHz_2501MHz_DFT-s-OFDM QPSK_RB1@1	23.79
n41_10MHz_30kHz_2501MHz_DFT-s-OFDM QPSK_RB12@6	24.05
n41_10MHz_30kHz_2501MHz_DFT-s-OFDM QPSK_RB1@23	23.76
n41_10MHz_30kHz_2501MHz_DFT-s-OFDM QPSK_RB25@0	24.07
n41_10MHz_30kHz_2501MHz_DFT-s-OFDM 16 QAM_RB25@0	23.99
n41_10MHz_30kHz_2501MHz_DFT-s-OFDM 64 QAM_RB25@0	23.96
n41_10MHz_30kHz_2501MHz_DFT-s-OFDM 256 QAM_RB25@0	22.06
n41_10MHz_30kHz_2501MHz_CP-OFDM QPSK_RB1@1	22.52
n41_10MHz_30kHz_2501MHz_CP-OFDM QPSK_RB13@6	24.18
n41_10MHz_30kHz_2501MHz_CP-OFDM QPSK_RB1@23	22.37
n41_10MHz_30kHz_2501MHz_CP-OFDM QPSK_RB25@0	23.96
n41_10MHz_30kHz_2501MHz_CP-OFDM 16 QAM_RB25@0	24.06
n41_10MHz_30kHz_2501MHz_CP-OFDM 64 QAM_RB25@0	24.09
n41_10MHz_30kHz_2501MHz_CP-OFDM 256 QAM_RB25@0	23.84
n41_10MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	23.25
n41_10MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB12@6	23.38
n41_10MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB1@23	23.23
n41_10MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB25@0	23.34
n41_10MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB1@1	23.28
n41_10MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB12@6	23.45
n41_10MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB1@23	23.25
n41_10MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB25@0	23.43
n41_10MHz_30kHz_2593MHz_DFT-s-OFDM 16 QAM_RB25@0	24.53
n41_10MHz_30kHz_2593MHz_DFT-s-OFDM 64 QAM_RB25@0	23.59
n41_10MHz_30kHz_2593MHz_DFT-s-OFDM 256 QAM_RB25@0	23.08

n41_10MHz_30kHz_2593MHz_CP-OFDM QPSK_RB1@1	23.29
n41_10MHz_30kHz_2593MHz_CP-OFDM QPSK_RB13@6	23.41
n41_10MHz_30kHz_2593MHz_CP-OFDM QPSK_RB1@23	23.24
n41_10MHz_30kHz_2593MHz_CP-OFDM QPSK_RB25@0	23.36
n41_10MHz_30kHz_2593MHz_CP-OFDM 16 QAM_RB25@0	24.59
n41_10MHz_30kHz_2593MHz_CP-OFDM 64 QAM_RB25@0	24.57
n41_10MHz_30kHz_2593MHz_CP-OFDM 256 QAM_RB25@0	24.03
n41_10MHz_30kHz_2685MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	23.24
n41_10MHz_30kHz_2685MHz_DFT-s-OFDM PI/2 BPSK_RB12@6	24.48
n41_10MHz_30kHz_2685MHz_DFT-s-OFDM PI/2 BPSK_RB1@23	23.36
n41_10MHz_30kHz_2685MHz_DFT-s-OFDM PI/2 BPSK_RB25@0	24.42
n41_10MHz_30kHz_2685MHz_DFT-s-OFDM QPSK_RB1@1	22.66
n41_10MHz_30kHz_2685MHz_DFT-s-OFDM QPSK_RB12@6	24.48
n41_10MHz_30kHz_2685MHz_DFT-s-OFDM QPSK_RB1@23	22.74
n41_10MHz_30kHz_2685MHz_DFT-s-OFDM QPSK_RB25@0	25.02
n41_10MHz_30kHz_2685MHz_DFT-s-OFDM 16 QAM_RB25@0	24.24
n41_10MHz_30kHz_2685MHz_DFT-s-OFDM 64 QAM_RB25@0	24.36
n41_10MHz_30kHz_2685MHz_DFT-s-OFDM 256 QAM_RB25@0	23.75
n41_10MHz_30kHz_2685MHz_CP-OFDM QPSK_RB1@1	22.06
n41_10MHz_30kHz_2685MHz_CP-OFDM QPSK_RB13@6	24.23
n41_10MHz_30kHz_2685MHz_CP-OFDM QPSK_RB1@23	22.03
n41_10MHz_30kHz_2685MHz_CP-OFDM QPSK_RB25@0	24.18
n41_10MHz_30kHz_2685MHz_CP-OFDM 16 QAM_RB25@0	24.24
n41_10MHz_30kHz_2685MHz_CP-OFDM 64 QAM_RB25@0	24.37
n41_10MHz_30kHz_2685MHz_CP-OFDM 256 QAM_RB25@0	23.67
n41_15MHz_30kHz_2503.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	23.35
n41_15MHz_30kHz_2503.5MHz_DFT-s-OFDM PI/2 BPSK_RB25@12	24.25
n41_15MHz_30kHz_2503.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@50	23.27
n41_15MHz_30kHz_2503.5MHz_DFT-s-OFDM PI/2 BPSK_RB50@0	24.33
n41_15MHz_30kHz_2503.5MHz_DFT-s-OFDM QPSK_RB1@1	23.94
n41_15MHz_30kHz_2503.5MHz_DFT-s-OFDM QPSK_RB25@12	24.07
n41_15MHz_30kHz_2503.5MHz_DFT-s-OFDM QPSK_RB1@50	24.01
n41_15MHz_30kHz_2503.5MHz_DFT-s-OFDM QPSK_RB50@0	24.06

n41_15MHz_30kHz_2503.5MHz_DFT-s-OFDM 16 QAM_RB50@0	24.21
n41_15MHz_30kHz_2503.5MHz_DFT-s-OFDM 64 QAM_RB50@0	24.25
n41_15MHz_30kHz_2503.5MHz_DFT-s-OFDM 256 QAM_RB50@0	23.04
n41_15MHz_30kHz_2503.5MHz_CP-OFDM QPSK_RB1@1	21.57
n41_15MHz_30kHz_2503.5MHz_CP-OFDM QPSK_RB26@13	23.25
n41_15MHz_30kHz_2503.5MHz_CP-OFDM QPSK_RB1@50	21.33
n41_15MHz_30kHz_2503.5MHz_CP-OFDM QPSK_RB52@0	23.2
n41_15MHz_30kHz_2503.5MHz_CP-OFDM 16 QAM_RB52@0	23.83
n41_15MHz_30kHz_2503.5MHz_CP-OFDM 64 QAM_RB52@0	23.31
n41_15MHz_30kHz_2503.5MHz_CP-OFDM 256 QAM_RB52@0	23.37
n41_15MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	23.94
n41_15MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB25@12	23.86
n41_15MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB1@50	23.93
n41_15MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB50@0	23.85
n41_15MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB1@1	24.53
n41_15MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB25@12	24.41
n41_15MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB1@50	24.47
n41_15MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB50@0	24.44
n41_15MHz_30kHz_2593MHz_DFT-s-OFDM 16 QAM_RB50@0	24.45
n41_15MHz_30kHz_2593MHz_DFT-s-OFDM 64 QAM_RB50@0	24.53
n41_15MHz_30kHz_2593MHz_DFT-s-OFDM 256 QAM_RB50@0	24.07
n41_15MHz_30kHz_2593MHz_CP-OFDM QPSK_RB1@1	24.68
n41_15MHz_30kHz_2593MHz_CP-OFDM QPSK_RB26@13	24.44
n41_15MHz_30kHz_2593MHz_CP-OFDM QPSK_RB1@50	24.56
n41_15MHz_30kHz_2593MHz_CP-OFDM QPSK_RB52@0	24.47
n41_15MHz_30kHz_2593MHz_CP-OFDM 16 QAM_RB52@0	23.67
n41_15MHz_30kHz_2593MHz_CP-OFDM 64 QAM_RB52@0	23.73
n41_15MHz_30kHz_2593MHz_CP-OFDM 256 QAM_RB52@0	22.93
n41_15MHz_30kHz_2682.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	23.56
n41_15MHz_30kHz_2682.5MHz_DFT-s-OFDM PI/2 BPSK_RB25@12	24.16
n41_15MHz_30kHz_2682.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@50	23.52
n41_15MHz_30kHz_2682.5MHz_DFT-s-OFDM PI/2 BPSK_RB50@0	24.09
n41_15MHz_30kHz_2682.5MHz_DFT-s-OFDM QPSK_RB1@1	24.66

n41_15MHz_30kHz_2682.5MHz_DFT-s-OFDM QPSK_RB25@12	23.92
n41_15MHz_30kHz_2682.5MHz_DFT-s-OFDM QPSK_RB1@50	24.58
n41_15MHz_30kHz_2682.5MHz_DFT-s-OFDM QPSK_RB50@0	24.02
n41_15MHz_30kHz_2682.5MHz_DFT-s-OFDM 16 QAM_RB50@0	23.43
n41_15MHz_30kHz_2682.5MHz_DFT-s-OFDM 64 QAM_RB50@0	23.46
n41_15MHz_30kHz_2682.5MHz_DFT-s-OFDM 256 QAM_RB50@0	22.73
n41_15MHz_30kHz_2682.5MHz_CP-OFDM QPSK_RB1@1	24.06
n41_15MHz_30kHz_2682.5MHz_CP-OFDM QPSK_RB26@13	23.47
n41_15MHz_30kHz_2682.5MHz_CP-OFDM QPSK_RB1@50	24.08
n41_15MHz_30kHz_2682.5MHz_CP-OFDM QPSK_RB52@0	23.34
n41_15MHz_30kHz_2682.5MHz_CP-OFDM 16 QAM_RB52@0	23.33
n41_15MHz_30kHz_2682.5MHz_CP-OFDM 64 QAM_RB52@0	23.52
n41_15MHz_30kHz_2682.5MHz_CP-OFDM 256 QAM_RB52@0	22.77
n41_20MHz_30kHz_2506MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	23.13
n41_20MHz_30kHz_2506MHz_DFT-s-OFDM PI/2 BPSK_RB36@18	24.23
n41_20MHz_30kHz_2506MHz_DFT-s-OFDM PI/2 BPSK_RB1@77	23.08
n41_20MHz_30kHz_2506MHz_DFT-s-OFDM PI/2 BPSK_RB75@0	24.36
n41_20MHz_30kHz_2506MHz_DFT-s-OFDM QPSK_RB1@1	22.94
n41_20MHz_30kHz_2506MHz_DFT-s-OFDM QPSK_RB36@18	24.05
n41_20MHz_30kHz_2506MHz_DFT-s-OFDM QPSK_RB1@77	22.88
n41_20MHz_30kHz_2506MHz_DFT-s-OFDM QPSK_RB75@0	24.06
n41_20MHz_30kHz_2506MHz_DFT-s-OFDM 16 QAM_RB75@0	24.02
n41_20MHz_30kHz_2506MHz_DFT-s-OFDM 64 QAM_RB75@0	24.07
n41_20MHz_30kHz_2506MHz_DFT-s-OFDM 256 QAM_RB75@0	23.93
n41_20MHz_30kHz_2506MHz_CP-OFDM QPSK_RB1@1	21.67
n41_20MHz_30kHz_2506MHz_CP-OFDM QPSK_RB39@19	24.06
n41_20MHz_30kHz_2506MHz_CP-OFDM QPSK_RB1@77	21.56
n41_20MHz_30kHz_2506MHz_CP-OFDM QPSK_RB79@0	24.07
n41_20MHz_30kHz_2506MHz_CP-OFDM 16 QAM_RB79@0	24.04
n41_20MHz_30kHz_2506MHz_CP-OFDM 64 QAM_RB79@0	24.23
n41_20MHz_30kHz_2506MHz_CP-OFDM 256 QAM_RB79@0	23.89
n41_20MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	24.26
n41_20MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB36@18	24.37

n41_20MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB1@77	24.33
n41_20MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB75@0	24.41
n41_20MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB1@1	24.04
n41_20MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB36@18	24.17
n41_20MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB1@77	23.99
n41_20MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB75@0	24.12
n41_20MHz_30kHz_2593MHz_DFT-s-OFDM 16 QAM_RB75@0	24.32
n41_20MHz_30kHz_2593MHz_DFT-s-OFDM 64 QAM_RB75@0	24.57
n41_20MHz_30kHz_2593MHz_DFT-s-OFDM 256 QAM_RB75@0	23.74
n41_20MHz_30kHz_2593MHz_CP-OFDM QPSK_RB1@1	24.45
n41_20MHz_30kHz_2593MHz_CP-OFDM QPSK_RB39@19	24.42
n41_20MHz_30kHz_2593MHz_CP-OFDM QPSK_RB1@77	24.56
n41_20MHz_30kHz_2593MHz_CP-OFDM QPSK_RB79@0	24.63
n41_20MHz_30kHz_2593MHz_CP-OFDM 16 QAM_RB79@0	24.53
n41_20MHz_30kHz_2593MHz_CP-OFDM 64 QAM_RB79@0	24.55
n41_20MHz_30kHz_2593MHz_CP-OFDM 256 QAM_RB79@0	23.96
n41_20MHz_30kHz_2680MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	25.03
n41_20MHz_30kHz_2680MHz_DFT-s-OFDM PI/2 BPSK_RB36@18	24.06
n41_20MHz_30kHz_2680MHz_DFT-s-OFDM PI/2 BPSK_RB1@77	24.97
n41_20MHz_30kHz_2680MHz_DFT-s-OFDM PI/2 BPSK_RB75@0	24.08
n41_20MHz_30kHz_2680MHz_DFT-s-OFDM QPSK_RB1@1	21.87
n41_20MHz_30kHz_2680MHz_DFT-s-OFDM QPSK_RB36@18	24.47
n41_20MHz_30kHz_2680MHz_DFT-s-OFDM QPSK_RB1@77	21.82
n41_20MHz_30kHz_2680MHz_DFT-s-OFDM QPSK_RB75@0	24.05
n41_20MHz_30kHz_2680MHz_DFT-s-OFDM 16 QAM_RB75@0	24.25
n41_20MHz_30kHz_2680MHz_DFT-s-OFDM 64 QAM_RB75@0	24.18
n41_20MHz_30kHz_2680MHz_DFT-s-OFDM 256 QAM_RB75@0	23.68
n41_20MHz_30kHz_2680MHz_CP-OFDM QPSK_RB1@1	23.59
n41_20MHz_30kHz_2680MHz_CP-OFDM QPSK_RB39@19	24.27
n41_20MHz_30kHz_2680MHz_CP-OFDM QPSK_RB1@77	23.64
n41_20MHz_30kHz_2680MHz_CP-OFDM QPSK_RB79@0	24.15
n41_20MHz_30kHz_2680MHz_CP-OFDM 16 QAM_RB79@0	23.77
n41_20MHz_30kHz_2680MHz_CP-OFDM 64 QAM_RB79@0	23.63

n41_20MHz_30kHz_2680MHz_CP-OFDM 256 QAM_RB79@0	23.49
n41_40MHz_30kHz_2516MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	24.53
n41_40MHz_30kHz_2516MHz_DFT-s-OFDM PI/2 BPSK_RB50@25	23.96
n41_40MHz_30kHz_2516MHz_DFT-s-OFDM PI/2 BPSK_RB1@104	24.58
n41_40MHz_30kHz_2516MHz_DFT-s-OFDM PI/2 BPSK_RB100@0	23.83
n41_40MHz_30kHz_2516MHz_DFT-s-OFDM QPSK_RB1@1	24.29
n41_40MHz_30kHz_2516MHz_DFT-s-OFDM QPSK_RB50@25	23.9
n41_40MHz_30kHz_2516MHz_DFT-s-OFDM QPSK_RB1@104	24.32
n41_40MHz_30kHz_2516MHz_DFT-s-OFDM QPSK_RB100@0	23.9
n41_40MHz_30kHz_2516MHz_DFT-s-OFDM 16 QAM_RB100@0	24.44
n41_40MHz_30kHz_2516MHz_DFT-s-OFDM 64 QAM_RB100@0	24.17
n41_40MHz_30kHz_2516MHz_DFT-s-OFDM 256 QAM_RB100@0	23.94
n41_40MHz_30kHz_2516MHz_CP-OFDM QPSK_RB1@1	24.96
n41_40MHz_30kHz_2516MHz_CP-OFDM QPSK_RB53@26	24.11
n41_40MHz_30kHz_2516MHz_CP-OFDM QPSK_RB1@104	25.02
n41_40MHz_30kHz_2516MHz_CP-OFDM QPSK_RB106@0	24.18
n41_40MHz_30kHz_2516MHz_CP-OFDM 16 QAM_RB106@0	24.01
n41_40MHz_30kHz_2516MHz_CP-OFDM 64 QAM_RB106@0	24.13
n41_40MHz_30kHz_2516MHz_CP-OFDM 256 QAM_RB106@0	24.02
n41_40MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	24.39
n41_40MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB50@25	24.52
n41_40MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB1@104	24.64
n41_40MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB100@0	24.45
n41_40MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB1@1	24.66
n41_40MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB50@25	24.41
n41_40MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB1@104	24.63
n41_40MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB100@0	24.48
n41_40MHz_30kHz_2593MHz_DFT-s-OFDM 16 QAM_RB100@0	24.52
n41_40MHz_30kHz_2593MHz_DFT-s-OFDM 64 QAM_RB100@0	24.71
n41_40MHz_30kHz_2593MHz_DFT-s-OFDM 256 QAM_RB100@0	23.97
n41_40MHz_30kHz_2593MHz_CP-OFDM QPSK_RB1@1	24.74
n41_40MHz_30kHz_2593MHz_CP-OFDM QPSK_RB53@26	24.69
n41_40MHz_30kHz_2593MHz_CP-OFDM QPSK_RB1@104	24.84

n41_40MHz_30kHz_2593MHz_CP-OFDM QPSK_RB106@0	24.38
n41_40MHz_30kHz_2593MHz_CP-OFDM 16 QAM_RB106@0	24.26
n41_40MHz_30kHz_2593MHz_CP-OFDM 64 QAM_RB106@0	24.54
n41_40MHz_30kHz_2593MHz_CP-OFDM 256 QAM_RB106@0	23.81
n41_40MHz_30kHz_2670MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.06
n41_40MHz_30kHz_2670MHz_DFT-s-OFDM PI/2 BPSK_RB50@25	24.36
n41_40MHz_30kHz_2670MHz_DFT-s-OFDM PI/2 BPSK_RB1@104	22.19
n41_40MHz_30kHz_2670MHz_DFT-s-OFDM PI/2 BPSK_RB100@0	24.25
n41_40MHz_30kHz_2670MHz_DFT-s-OFDM QPSK_RB1@1	23.19
n41_40MHz_30kHz_2670MHz_DFT-s-OFDM QPSK_RB50@25	24.37
n41_40MHz_30kHz_2670MHz_DFT-s-OFDM QPSK_RB1@104	23.28
n41_40MHz_30kHz_2670MHz_DFT-s-OFDM QPSK_RB100@0	24.11
n41_40MHz_30kHz_2670MHz_DFT-s-OFDM 16 QAM_RB100@0	23.99
n41_40MHz_30kHz_2670MHz_DFT-s-OFDM 64 QAM_RB100@0	24.34
n41_40MHz_30kHz_2670MHz_DFT-s-OFDM 256 QAM_RB100@0	23.73
n41_40MHz_30kHz_2670MHz_CP-OFDM QPSK_RB1@1	23.19
n41_40MHz_30kHz_2670MHz_CP-OFDM QPSK_RB53@26	24.17
n41_40MHz_30kHz_2670MHz_CP-OFDM QPSK_RB1@104	23.02
n41_40MHz_30kHz_2670MHz_CP-OFDM QPSK_RB106@0	24.16
n41_40MHz_30kHz_2670MHz_CP-OFDM 16 QAM_RB106@0	24.01
n41_40MHz_30kHz_2670MHz_CP-OFDM 64 QAM_RB106@0	24.26
n41_40MHz_30kHz_2670MHz_CP-OFDM 256 QAM_RB106@0	23.71
n41_50MHz_30kHz_2521MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.81
n41_50MHz_30kHz_2521MHz_DFT-s-OFDM PI/2 BPSK_RB64@32	24.21
n41_50MHz_30kHz_2521MHz_DFT-s-OFDM PI/2 BPSK_RB1@131	22.75
n41_50MHz_30kHz_2521MHz_DFT-s-OFDM PI/2 BPSK_RB128@0	23.99
n41_50MHz_30kHz_2521MHz_DFT-s-OFDM QPSK_RB1@1	25.25
n41_50MHz_30kHz_2521MHz_DFT-s-OFDM QPSK_RB64@32	24.21
n41_50MHz_30kHz_2521MHz_DFT-s-OFDM QPSK_RB1@131	25.25
n41_50MHz_30kHz_2521MHz_DFT-s-OFDM QPSK_RB128@0	24.22
n41_50MHz_30kHz_2521MHz_DFT-s-OFDM 16 QAM_RB128@0	24.35
n41_50MHz_30kHz_2521MHz_DFT-s-OFDM 64 QAM_RB128@0	24.15
n41_50MHz_30kHz_2521MHz_DFT-s-OFDM 256 QAM_RB128@0	23.79

n41_50MHz_30kHz_2521MHz_CP-OFDM QPSK_RB1@1	25.38
n41_50MHz_30kHz_2521MHz_CP-OFDM QPSK_RB67@33	23.93
n41_50MHz_30kHz_2521MHz_CP-OFDM QPSK_RB1@131	25.46
n41_50MHz_30kHz_2521MHz_CP-OFDM QPSK_RB133@0	23.96
n41_50MHz_30kHz_2521MHz_CP-OFDM 16 QAM_RB133@0	23.97
n41_50MHz_30kHz_2521MHz_CP-OFDM 64 QAM_RB133@0	23.95
n41_50MHz_30kHz_2521MHz_CP-OFDM 256 QAM_RB133@0	23.96
n41_50MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	24.24
n41_50MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB64@32	24.51
n41_50MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB1@131	24.25
n41_50MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB128@0	24.48
n41_50MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB1@1	24.44
n41_50MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB64@32	24.44
n41_50MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB1@131	24.43
n41_50MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB128@0	24.37
n41_50MHz_30kHz_2593MHz_DFT-s-OFDM 16 QAM_RB128@0	24.54
n41_50MHz_30kHz_2593MHz_DFT-s-OFDM 64 QAM_RB128@0	24.54
n41_50MHz_30kHz_2593MHz_DFT-s-OFDM 256 QAM_RB128@0	24.04
n41_50MHz_30kHz_2593MHz_CP-OFDM QPSK_RB1@1	23.94
n41_50MHz_30kHz_2593MHz_CP-OFDM QPSK_RB67@33	23.87
n41_50MHz_30kHz_2593MHz_CP-OFDM QPSK_RB1@131	24.03
n41_50MHz_30kHz_2593MHz_CP-OFDM QPSK_RB133@0	23.84
n41_50MHz_30kHz_2593MHz_CP-OFDM 16 QAM_RB133@0	24.16
n41_50MHz_30kHz_2593MHz_CP-OFDM 64 QAM_RB133@0	23.97
n41_50MHz_30kHz_2593MHz_CP-OFDM 256 QAM_RB133@0	23.46
n41_50MHz_30kHz_2665MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	23.92
n41_50MHz_30kHz_2665MHz_DFT-s-OFDM PI/2 BPSK_RB64@32	23.89
n41_50MHz_30kHz_2665MHz_DFT-s-OFDM PI/2 BPSK_RB1@131	24.27
n41_50MHz_30kHz_2665MHz_DFT-s-OFDM PI/2 BPSK_RB128@0	23.74
n41_50MHz_30kHz_2665MHz_DFT-s-OFDM QPSK_RB1@1	24.09
n41_50MHz_30kHz_2665MHz_DFT-s-OFDM QPSK_RB64@32	24.25
n41_50MHz_30kHz_2665MHz_DFT-s-OFDM QPSK_RB1@131	24.13
n41_50MHz_30kHz_2665MHz_DFT-s-OFDM QPSK_RB128@0	24.18

n41_50MHz_30kHz_2665MHz_DFT-s-OFDM 16 QAM_RB128@0	24.21
n41_50MHz_30kHz_2665MHz_DFT-s-OFDM 64 QAM_RB128@0	23.97
n41_50MHz_30kHz_2665MHz_DFT-s-OFDM 256 QAM_RB128@0	23.49
n41_50MHz_30kHz_2665MHz_CP-OFDM QPSK_RB1@1	24.69
n41_50MHz_30kHz_2665MHz_CP-OFDM QPSK_RB67@33	24.07
n41_50MHz_30kHz_2665MHz_CP-OFDM QPSK_RB1@131	24.73
n41_50MHz_30kHz_2665MHz_CP-OFDM QPSK_RB133@0	24.11
n41_50MHz_30kHz_2665MHz_CP-OFDM 16 QAM_RB133@0	23.84
n41_50MHz_30kHz_2665MHz_CP-OFDM 64 QAM_RB133@0	23.75
n41_50MHz_30kHz_2665MHz_CP-OFDM 256 QAM_RB133@0	23.64
n41_60MHz_30kHz_2526MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	24.61
n41_60MHz_30kHz_2526MHz_DFT-s-OFDM PI/2 BPSK_RB80@40	24.24
n41_60MHz_30kHz_2526MHz_DFT-s-OFDM PI/2 BPSK_RB1@158	24.34
n41_60MHz_30kHz_2526MHz_DFT-s-OFDM PI/2 BPSK_RB160@0	24.24
n41_60MHz_30kHz_2526MHz_DFT-s-OFDM QPSK_RB1@1	22.83
n41_60MHz_30kHz_2526MHz_DFT-s-OFDM QPSK_RB80@40	24.18
n41_60MHz_30kHz_2526MHz_DFT-s-OFDM QPSK_RB1@158	22.74
n41_60MHz_30kHz_2526MHz_DFT-s-OFDM QPSK_RB160@0	24.04
n41_60MHz_30kHz_2526MHz_DFT-s-OFDM 16 QAM_RB160@0	23.87
n41_60MHz_30kHz_2526MHz_DFT-s-OFDM 64 QAM_RB160@0	23.87
n41_60MHz_30kHz_2526MHz_DFT-s-OFDM 256 QAM_RB160@0	23.47
n41_60MHz_30kHz_2526MHz_CP-OFDM QPSK_RB1@1	23.22
n41_60MHz_30kHz_2526MHz_CP-OFDM QPSK_RB80@40	24.16
n41_60MHz_30kHz_2526MHz_CP-OFDM QPSK_RB1@158	23.08
n41_60MHz_30kHz_2526MHz_CP-OFDM QPSK_RB160@0	24.07
n41_60MHz_30kHz_2526MHz_CP-OFDM 16 QAM_RB160@0	23.55
n41_60MHz_30kHz_2526MHz_CP-OFDM 64 QAM_RB160@0	23.82
n41_60MHz_30kHz_2526MHz_CP-OFDM 256 QAM_RB160@0	23.38
n41_60MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	23.93
n41_60MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB80@40	24.05
n41_60MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB1@158	24.02
n41_60MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB160@0	23.78
n41_60MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB1@1	23.92

n41_60MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB80@40	23.93
n41_60MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB1@158	24.09
n41_60MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB160@0	24.11
n41_60MHz_30kHz_2593MHz_DFT-s-OFDM 16 QAM_RB160@0	23.99
n41_60MHz_30kHz_2593MHz_DFT-s-OFDM 64 QAM_RB160@0	24.09
n41_60MHz_30kHz_2593MHz_DFT-s-OFDM 256 QAM_RB160@0	23.05
n41_60MHz_30kHz_2593MHz_CP-OFDM QPSK_RB1@1	24.06
n41_60MHz_30kHz_2593MHz_CP-OFDM QPSK_RB80@40	24.27
n41_60MHz_30kHz_2593MHz_CP-OFDM QPSK_RB1@158	24.22
n41_60MHz_30kHz_2593MHz_CP-OFDM QPSK_RB160@0	24.13
n41_60MHz_30kHz_2593MHz_CP-OFDM 16 QAM_RB160@0	23.94
n41_60MHz_30kHz_2593MHz_CP-OFDM 64 QAM_RB160@0	24.15
n41_60MHz_30kHz_2593MHz_CP-OFDM 256 QAM_RB160@0	23.63
n41_60MHz_30kHz_2660MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	23.76
n41_60MHz_30kHz_2660MHz_DFT-s-OFDM PI/2 BPSK_RB80@40	23.55
n41_60MHz_30kHz_2660MHz_DFT-s-OFDM PI/2 BPSK_RB1@158	23.64
n41_60MHz_30kHz_2660MHz_DFT-s-OFDM PI/2 BPSK_RB160@0	23.65
n41_60MHz_30kHz_2660MHz_DFT-s-OFDM QPSK_RB1@1	23.15
n41_60MHz_30kHz_2660MHz_DFT-s-OFDM QPSK_RB80@40	23.82
n41_60MHz_30kHz_2660MHz_DFT-s-OFDM QPSK_RB1@158	23.17
n41_60MHz_30kHz_2660MHz_DFT-s-OFDM QPSK_RB160@0	23.98
n41_60MHz_30kHz_2660MHz_DFT-s-OFDM 16 QAM_RB160@0	23.63
n41_60MHz_30kHz_2660MHz_DFT-s-OFDM 64 QAM_RB160@0	23.85
n41_60MHz_30kHz_2660MHz_DFT-s-OFDM 256 QAM_RB160@0	23.39
n41_60MHz_30kHz_2660MHz_CP-OFDM QPSK_RB1@1	23.24
n41_60MHz_30kHz_2660MHz_CP-OFDM QPSK_RB80@40	24.28
n41_60MHz_30kHz_2660MHz_CP-OFDM QPSK_RB1@158	23.06
n41_60MHz_30kHz_2660MHz_CP-OFDM QPSK_RB160@0	24.02
n41_60MHz_30kHz_2660MHz_CP-OFDM 16 QAM_RB160@0	24.06
n41_60MHz_30kHz_2660MHz_CP-OFDM 64 QAM_RB160@0	24.29
n41_60MHz_30kHz_2660MHz_CP-OFDM 256 QAM_RB160@0	23.86
n41_80MHz_30kHz_2536MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.94
n41_80MHz_30kHz_2536MHz_DFT-s-OFDM PI/2 BPSK_RB108@54	24.15

n41_80MHz_30kHz_2536MHz_DFT-s-OFDM PI/2 BPSK_RB1@214	23.18
n41_80MHz_30kHz_2536MHz_DFT-s-OFDM PI/2 BPSK_RB216@0	24.16
n41_80MHz_30kHz_2536MHz_DFT-s-OFDM QPSK_RB1@1	22.85
n41_80MHz_30kHz_2536MHz_DFT-s-OFDM QPSK_RB108@54	23.97
n41_80MHz_30kHz_2536MHz_DFT-s-OFDM QPSK_RB1@214	22.82
n41_80MHz_30kHz_2536MHz_DFT-s-OFDM QPSK_RB216@0	24.02
n41_80MHz_30kHz_2536MHz_DFT-s-OFDM 16 QAM_RB216@0	24.06
n41_80MHz_30kHz_2536MHz_DFT-s-OFDM 64 QAM_RB216@0	23.96
n41_80MHz_30kHz_2536MHz_DFT-s-OFDM 256 QAM_RB216@0	24.28
n41_80MHz_30kHz_2536MHz_CP-OFDM QPSK_RB1@1	22.86
n41_80MHz_30kHz_2536MHz_CP-OFDM QPSK_RB108@54	24.16
n41_80MHz_30kHz_2536MHz_CP-OFDM QPSK_RB1@214	22.94
n41_80MHz_30kHz_2536MHz_CP-OFDM QPSK_RB216@0	23.95
n41_80MHz_30kHz_2536MHz_CP-OFDM 16 QAM_RB216@0	24.16
n41_80MHz_30kHz_2536MHz_CP-OFDM 64 QAM_RB216@0	23.97
n41_80MHz_30kHz_2536MHz_CP-OFDM 256 QAM_RB216@0	23.73
n41_80MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	24.38
n41_80MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB108@54	24.24
n41_80MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB1@214	24.26
n41_80MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB216@0	24.24
n41_80MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB1@1	23.49
n41_80MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB108@54	23.45
n41_80MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB1@214	23.28
n41_80MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB216@0	23.39
n41_80MHz_30kHz_2593MHz_DFT-s-OFDM 16 QAM_RB216@0	24.73
n41_80MHz_30kHz_2593MHz_DFT-s-OFDM 64 QAM_RB216@0	24.54
n41_80MHz_30kHz_2593MHz_DFT-s-OFDM 256 QAM_RB216@0	23.74
n41_80MHz_30kHz_2593MHz_CP-OFDM QPSK_RB1@1	24.48
n41_80MHz_30kHz_2593MHz_CP-OFDM QPSK_RB108@54	24.36
n41_80MHz_30kHz_2593MHz_CP-OFDM QPSK_RB1@214	24.24
n41_80MHz_30kHz_2593MHz_CP-OFDM QPSK_RB216@0	24.38
n41_80MHz_30kHz_2593MHz_CP-OFDM 16 QAM_RB216@0	24.38
n41_80MHz_30kHz_2593MHz_CP-OFDM 64 QAM_RB216@0	24.55

n41_80MHz_30kHz_2593MHz_CP-OFDM 256 QAM_RB216@0	23.88
n41_80MHz_30kHz_2650MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	23.57
n41_80MHz_30kHz_2650MHz_DFT-s-OFDM PI/2 BPSK_RB108@54	24.27
n41_80MHz_30kHz_2650MHz_DFT-s-OFDM PI/2 BPSK_RB1@214	23.56
n41_80MHz_30kHz_2650MHz_DFT-s-OFDM PI/2 BPSK_RB216@0	24.16
n41_80MHz_30kHz_2650MHz_DFT-s-OFDM QPSK_RB1@1	24.81
n41_80MHz_30kHz_2650MHz_DFT-s-OFDM QPSK_RB108@54	24.06
n41_80MHz_30kHz_2650MHz_DFT-s-OFDM QPSK_RB1@214	24.87
n41_80MHz_30kHz_2650MHz_DFT-s-OFDM QPSK_RB216@0	24.14
n41_80MHz_30kHz_2650MHz_DFT-s-OFDM 16 QAM_RB216@0	24.06
n41_80MHz_30kHz_2650MHz_DFT-s-OFDM 64 QAM_RB216@0	24.24
n41_80MHz_30kHz_2650MHz_DFT-s-OFDM 256 QAM_RB216@0	23.67
n41_80MHz_30kHz_2650MHz_CP-OFDM QPSK_RB1@1	21.97
n41_80MHz_30kHz_2650MHz_CP-OFDM QPSK_RB108@54	24.02
n41_80MHz_30kHz_2650MHz_CP-OFDM QPSK_RB1@214	22.15
n41_80MHz_30kHz_2650MHz_CP-OFDM QPSK_RB216@0	24.14
n41_80MHz_30kHz_2650MHz_CP-OFDM 16 QAM_RB216@0	24.41
n41_80MHz_30kHz_2650MHz_CP-OFDM 64 QAM_RB216@0	24.27
n41_80MHz_30kHz_2650MHz_CP-OFDM 256 QAM_RB216@0	23.76
n41_90MHz_30kHz_2541MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	25.46
n41_90MHz_30kHz_2541MHz_DFT-s-OFDM PI/2 BPSK_RB120@60	24.26
n41_90MHz_30kHz_2541MHz_DFT-s-OFDM PI/2 BPSK_RB1@243	25.53
n41_90MHz_30kHz_2541MHz_DFT-s-OFDM PI/2 BPSK_RB243@0	24.39
n41_90MHz_30kHz_2541MHz_DFT-s-OFDM QPSK_RB1@1	24.24
n41_90MHz_30kHz_2541MHz_DFT-s-OFDM QPSK_RB120@60	24.08
n41_90MHz_30kHz_2541MHz_DFT-s-OFDM QPSK_RB1@243	24.31
n41_90MHz_30kHz_2541MHz_DFT-s-OFDM QPSK_RB243@0	24.19
n41_90MHz_30kHz_2541MHz_DFT-s-OFDM 16 QAM_RB243@0	24.03
n41_90MHz_30kHz_2541MHz_DFT-s-OFDM 64 QAM_RB243@0	23.99
n41_90MHz_30kHz_2541MHz_DFT-s-OFDM 256 QAM_RB243@0	23.85
n41_90MHz_30kHz_2541MHz_CP-OFDM QPSK_RB1@1	24.32
n41_90MHz_30kHz_2541MHz_CP-OFDM QPSK_RB123@61	24.04
n41_90MHz_30kHz_2541MHz_CP-OFDM QPSK_RB1@243	24.35

n41_90MHz_30kHz_2541MHz_CP-OFDM QPSK_RB245@0	23.93
n41_90MHz_30kHz_2541MHz_CP-OFDM 16 QAM_RB245@0	23.97
n41_90MHz_30kHz_2541MHz_CP-OFDM 64 QAM_RB245@0	24.03
n41_90MHz_30kHz_2541MHz_CP-OFDM 256 QAM_RB245@0	23.96
n41_90MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	24.34
n41_90MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB120@60	24.29
n41_90MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB1@243	24.48
n41_90MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB243@0	24.44
n41_90MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB1@1	24.47
n41_90MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB120@60	24.49
n41_90MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB1@243	24.46
n41_90MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB243@0	24.48
n41_90MHz_30kHz_2593MHz_DFT-s-OFDM 16 QAM_RB243@0	24.51
n41_90MHz_30kHz_2593MHz_DFT-s-OFDM 64 QAM_RB243@0	24.32
n41_90MHz_30kHz_2593MHz_DFT-s-OFDM 256 QAM_RB243@0	23.93
n41_90MHz_30kHz_2593MHz_CP-OFDM QPSK_RB1@1	24.66
n41_90MHz_30kHz_2593MHz_CP-OFDM QPSK_RB123@61	24.39
n41_90MHz_30kHz_2593MHz_CP-OFDM QPSK_RB1@243	24.62
n41_90MHz_30kHz_2593MHz_CP-OFDM QPSK_RB245@0	24.42
n41_90MHz_30kHz_2593MHz_CP-OFDM 16 QAM_RB245@0	24.39
n41_90MHz_30kHz_2593MHz_CP-OFDM 64 QAM_RB245@0	24.52
n41_90MHz_30kHz_2593MHz_CP-OFDM 256 QAM_RB245@0	23.87
n41_90MHz_30kHz_2645MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	23.28
n41_90MHz_30kHz_2645MHz_DFT-s-OFDM PI/2 BPSK_RB120@60	24.29
n41_90MHz_30kHz_2645MHz_DFT-s-OFDM PI/2 BPSK_RB1@243	23.16
n41_90MHz_30kHz_2645MHz_DFT-s-OFDM PI/2 BPSK_RB243@0	24.11
n41_90MHz_30kHz_2645MHz_DFT-s-OFDM QPSK_RB1@1	23.18
n41_90MHz_30kHz_2645MHz_DFT-s-OFDM QPSK_RB120@60	24.06
n41_90MHz_30kHz_2645MHz_DFT-s-OFDM QPSK_RB1@243	22.99
n41_90MHz_30kHz_2645MHz_DFT-s-OFDM QPSK_RB243@0	24.2
n41_90MHz_30kHz_2645MHz_DFT-s-OFDM 16 QAM_RB243@0	24.15
n41_90MHz_30kHz_2645MHz_DFT-s-OFDM 64 QAM_RB243@0	24.26
n41_90MHz_30kHz_2645MHz_DFT-s-OFDM 256 QAM_RB243@0	23.58

n41_90MHz_30kHz_2645MHz_CP-OFDM QPSK_RB1@1	22.04
n41_90MHz_30kHz_2645MHz_CP-OFDM QPSK_RB123@61	24.12
n41_90MHz_30kHz_2645MHz_CP-OFDM QPSK_RB1@243	22.06
n41_90MHz_30kHz_2645MHz_CP-OFDM QPSK_RB245@0	24.26
n41_90MHz_30kHz_2645MHz_CP-OFDM 16 QAM_RB245@0	24.13
n41_90MHz_30kHz_2645MHz_CP-OFDM 64 QAM_RB245@0	23.85
n41_90MHz_30kHz_2645MHz_CP-OFDM 256 QAM_RB245@0	23.48
n41_100MHz_30kHz_2546MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	21.39
n41_100MHz_30kHz_2546MHz_DFT-s-OFDM PI/2 BPSK_RB135@67	24.04
n41_100MHz_30kHz_2546MHz_DFT-s-OFDM PI/2 BPSK_RB1@271	21.38
n41_100MHz_30kHz_2546MHz_DFT-s-OFDM PI/2 BPSK_RB270@0	23.84
n41_100MHz_30kHz_2546MHz_DFT-s-OFDM QPSK_RB1@1	23.22
n41_100MHz_30kHz_2546MHz_DFT-s-OFDM QPSK_RB135@67	24.13
n41_100MHz_30kHz_2546MHz_DFT-s-OFDM QPSK_RB1@271	23.18
n41_100MHz_30kHz_2546MHz_DFT-s-OFDM QPSK_RB270@0	24.19
n41_100MHz_30kHz_2546MHz_DFT-s-OFDM 16 QAM_RB270@0	24.24
n41_100MHz_30kHz_2546MHz_DFT-s-OFDM 64 QAM_RB270@0	24.26
n41_100MHz_30kHz_2546MHz_DFT-s-OFDM 256 QAM_RB270@0	23.98
n41_100MHz_30kHz_2546MHz_CP-OFDM QPSK_RB1@1	25.45
n41_100MHz_30kHz_2546MHz_CP-OFDM QPSK_RB137@68	23.99
n41_100MHz_30kHz_2546MHz_CP-OFDM QPSK_RB1@271	25.41
n41_100MHz_30kHz_2546MHz_CP-OFDM QPSK_RB273@0	24.26
n41_100MHz_30kHz_2546MHz_CP-OFDM 16 QAM_RB273@0	24.08
n41_100MHz_30kHz_2546MHz_CP-OFDM 64 QAM_RB273@0	24.26
n41_100MHz_30kHz_2546MHz_CP-OFDM 256 QAM_RB273@0	23.87
n41_100MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	24.23
n41_100MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB135@67	24.51
n41_100MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB1@271	24.48
n41_100MHz_30kHz_2593MHz_DFT-s-OFDM PI/2 BPSK_RB270@0	24.22
n41_100MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB1@1	24.37
n41_100MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB135@67	24.37
n41_100MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB1@271	24.41
n41_100MHz_30kHz_2593MHz_DFT-s-OFDM QPSK_RB270@0	24.38

n41_100MHz_30kHz_2593MHz_DFT-s-OFDM 16 QAM_RB270@0	24.58
n41_100MHz_30kHz_2593MHz_DFT-s-OFDM 64 QAM_RB270@0	24.56
n41_100MHz_30kHz_2593MHz_DFT-s-OFDM 256 QAM_RB270@0	23.95
n41_100MHz_30kHz_2593MHz_CP-OFDM QPSK_RB1@1	24.46
n41_100MHz_30kHz_2593MHz_CP-OFDM QPSK_RB137@68	24.29
n41_100MHz_30kHz_2593MHz_CP-OFDM QPSK_RB1@271	24.18
n41_100MHz_30kHz_2593MHz_CP-OFDM QPSK_RB273@0	24.14
n41_100MHz_30kHz_2593MHz_CP-OFDM 16 QAM_RB273@0	24.38
n41_100MHz_30kHz_2593MHz_CP-OFDM 64 QAM_RB273@0	24.36
n41_100MHz_30kHz_2593MHz_CP-OFDM 256 QAM_RB273@0	23.99
n41_100MHz_30kHz_2640MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	23.08
n41_100MHz_30kHz_2640MHz_DFT-s-OFDM PI/2 BPSK_RB135@67	23.98
n41_100MHz_30kHz_2640MHz_DFT-s-OFDM PI/2 BPSK_RB1@271	23.16
n41_100MHz_30kHz_2640MHz_DFT-s-OFDM PI/2 BPSK_RB270@0	23.87
n41_100MHz_30kHz_2640MHz_DFT-s-OFDM QPSK_RB1@1	23.82
n41_100MHz_30kHz_2640MHz_DFT-s-OFDM QPSK_RB135@67	24.26
n41_100MHz_30kHz_2640MHz_DFT-s-OFDM QPSK_RB1@271	23.72
n41_100MHz_30kHz_2640MHz_DFT-s-OFDM QPSK_RB270@0	23.97
n41_100MHz_30kHz_2640MHz_DFT-s-OFDM 16 QAM_RB270@0	24.09
n41_100MHz_30kHz_2640MHz_DFT-s-OFDM 64 QAM_RB270@0	23.93
n41_100MHz_30kHz_2640MHz_DFT-s-OFDM 256 QAM_RB270@0	22.78
n41_100MHz_30kHz_2640MHz_CP-OFDM QPSK_RB1@1	23.97
n41_100MHz_30kHz_2640MHz_CP-OFDM QPSK_RB137@68	23.94
n41_100MHz_30kHz_2640MHz_CP-OFDM QPSK_RB1@271	23.96
n41_100MHz_30kHz_2640MHz_CP-OFDM QPSK_RB273@0	23.95
n41_100MHz_30kHz_2640MHz_CP-OFDM 16 QAM_RB273@0	23.98
n41_100MHz_30kHz_2640MHz_CP-OFDM 64 QAM_RB273@0	24.24
n41_100MHz_30kHz_2640MHz_CP-OFDM 256 QAM_RB273@0	23.53

5G NR n66:

Mode	Conducted Average Power(dBm)
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	16.85
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM PI/2 BPSK_RB12@6	16.96
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@23	16.92
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM PI/2 BPSK_RB25@0	16.62
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM QPSK_RB1@1	17.06
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM QPSK_RB12@6	16.85
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM QPSK_RB1@23	17.03
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM QPSK_RB25@0	15.9
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM 16 QAM_RB25@0	15.01
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM 64 QAM_RB25@0	14.43
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM 256 QAM_RB25@0	12.67
n66_5MHz_15kHz_1712.5MHz_CP-OFDM QPSK_RB1@1	15.47
n66_5MHz_15kHz_1712.5MHz_CP-OFDM QPSK_RB13@6	15.66
n66_5MHz_15kHz_1712.5MHz_CP-OFDM QPSK_RB1@23	15.41
n66_5MHz_15kHz_1712.5MHz_CP-OFDM QPSK_RB25@0	13.98
n66_5MHz_15kHz_1712.5MHz_CP-OFDM 16 QAM_RB25@0	13.91
n66_5MHz_15kHz_1712.5MHz_CP-OFDM 64 QAM_RB25@0	13.73
n66_5MHz_15kHz_1712.5MHz_CP-OFDM 256 QAM_RB25@0	10.63
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	17
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB12@6	17.29
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@23	16.96
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB25@0	16.54
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@1	16.87
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB12@6	17.19
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@23	16.96
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB25@0	15.9
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM 16 QAM_RB25@0	15.02
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM 64 QAM_RB25@0	14.73
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM 256 QAM_RB25@0	12.69

n66_5MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@1	15.45
n66_5MHz_15kHz_1745MHz_CP-OFDM QPSK_RB13@6	15.51
n66_5MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@23	15.68
n66_5MHz_15kHz_1745MHz_CP-OFDM QPSK_RB25@0	14.21
n66_5MHz_15kHz_1745MHz_CP-OFDM 16 QAM_RB25@0	14.11
n66_5MHz_15kHz_1745MHz_CP-OFDM 64 QAM_RB25@0	13.55
n66_5MHz_15kHz_1745MHz_CP-OFDM 256 QAM_RB25@0	10.68
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	17.48
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM PI/2 BPSK_RB12@6	17.47
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@23	17.59
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM PI/2 BPSK_RB25@0	16.68
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM QPSK_RB1@1	17.26
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM QPSK_RB12@6	17.49
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM QPSK_RB1@23	17.41
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM QPSK_RB25@0	16.55
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM 16 QAM_RB25@0	15.58
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM 64 QAM_RB25@0	14.68
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM 256 QAM_RB25@0	13.08
n66_5MHz_15kHz_1777.5MHz_CP-OFDM QPSK_RB1@1	15.97
n66_5MHz_15kHz_1777.5MHz_CP-OFDM QPSK_RB13@6	16
n66_5MHz_15kHz_1777.5MHz_CP-OFDM QPSK_RB1@23	16.06
n66_5MHz_15kHz_1777.5MHz_CP-OFDM QPSK_RB25@0	14.57
n66_5MHz_15kHz_1777.5MHz_CP-OFDM 16 QAM_RB25@0	14.51
n66_5MHz_15kHz_1777.5MHz_CP-OFDM 64 QAM_RB25@0	14.13
n66_5MHz_15kHz_1777.5MHz_CP-OFDM 256 QAM_RB25@0	11.08
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	16.87
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM PI/2 BPSK_RB25@12	16.95
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM PI/2 BPSK_RB1@50	16.73
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM PI/2 BPSK_RB50@0	16.41
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM QPSK_RB1@1	16.68
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM QPSK_RB25@12	16.77
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM QPSK_RB1@50	16.78
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM QPSK_RB50@0	16.05

n66_10MHz_15kHz_1715MHz_DFT-s-OFDM 16 QAM_RB50@0	14.87
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM 64 QAM_RB50@0	14.59
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM 256 QAM_RB50@0	12.54
n66_10MHz_15kHz_1715MHz_CP-OFDM QPSK_RB1@1	12.4
n66_10MHz_15kHz_1715MHz_CP-OFDM QPSK_RB26@13	12.64
n66_10MHz_15kHz_1715MHz_CP-OFDM QPSK_RB1@50	12.41
n66_10MHz_15kHz_1715MHz_CP-OFDM QPSK_RB52@0	12.44
n66_10MHz_15kHz_1715MHz_CP-OFDM 16 QAM_RB52@0	12.53
n66_10MHz_15kHz_1715MHz_CP-OFDM 64 QAM_RB52@0	12.49
n66_10MHz_15kHz_1715MHz_CP-OFDM 256 QAM_RB52@0	12.42
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	16.96
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB25@12	17.08
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@50	16.94
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB50@0	16.47
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@1	16.73
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB25@12	16.91
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@50	16.92
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB50@0	15.85
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM 16 QAM_RB50@0	15.21
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM 64 QAM_RB50@0	14.52
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM 256 QAM_RB50@0	12.73
n66_10MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@1	15.59
n66_10MHz_15kHz_1745MHz_CP-OFDM QPSK_RB26@13	15.44
n66_10MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@50	15.56
n66_10MHz_15kHz_1745MHz_CP-OFDM QPSK_RB52@0	13.89
n66_10MHz_15kHz_1745MHz_CP-OFDM 16 QAM_RB52@0	13.91
n66_10MHz_15kHz_1745MHz_CP-OFDM 64 QAM_RB52@0	13.44
n66_10MHz_15kHz_1745MHz_CP-OFDM 256 QAM_RB52@0	10.52
n66_10MHz_15kHz_1775MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	17.03
n66_10MHz_15kHz_1775MHz_DFT-s-OFDM PI/2 BPSK_RB25@12	17.51
n66_10MHz_15kHz_1775MHz_DFT-s-OFDM PI/2 BPSK_RB1@50	17.68
n66_10MHz_15kHz_1775MHz_DFT-s-OFDM PI/2 BPSK_RB50@0	17.13
n66_10MHz_15kHz_1775MHz_DFT-s-OFDM QPSK_RB1@1	17.44

n66_10MHz_15kHz_1775MHz_DFT-s-OFDM QPSK_RB25@12	17.38
n66_10MHz_15kHz_1775MHz_DFT-s-OFDM QPSK_RB1@50	17.57
n66_10MHz_15kHz_1775MHz_DFT-s-OFDM QPSK_RB50@0	16.65
n66_10MHz_15kHz_1775MHz_DFT-s-OFDM 16 QAM_RB50@0	15.56
n66_10MHz_15kHz_1775MHz_DFT-s-OFDM 64 QAM_RB50@0	14.94
n66_10MHz_15kHz_1775MHz_DFT-s-OFDM 256 QAM_RB50@0	13.16
n66_10MHz_15kHz_1775MHz_CP-OFDM QPSK_RB1@1	13.05
n66_10MHz_15kHz_1775MHz_CP-OFDM QPSK_RB26@13	13.25
n66_10MHz_15kHz_1775MHz_CP-OFDM QPSK_RB1@50	12.96
n66_10MHz_15kHz_1775MHz_CP-OFDM QPSK_RB52@0	12.97
n66_10MHz_15kHz_1775MHz_CP-OFDM 16 QAM_RB52@0	13.18
n66_10MHz_15kHz_1775MHz_CP-OFDM 64 QAM_RB52@0	13.14
n66_10MHz_15kHz_1775MHz_CP-OFDM 256 QAM_RB52@0	12.94
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	17.02
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM PI/2 BPSK_RB36@18	17.15
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@77	16.68
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM PI/2 BPSK_RB75@0	16.43
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM QPSK_RB1@1	16.78
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM QPSK_RB36@18	16.98
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM QPSK_RB1@77	16.84
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM QPSK_RB75@0	15.63
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM 16 QAM_RB75@0	15.29
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM 64 QAM_RB75@0	14.63
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM 256 QAM_RB75@0	12.55
n66_15MHz_15kHz_1717.5MHz_CP-OFDM QPSK_RB1@1	15.44
n66_15MHz_15kHz_1717.5MHz_CP-OFDM QPSK_RB39@19	15.52
n66_15MHz_15kHz_1717.5MHz_CP-OFDM QPSK_RB1@77	15.45
n66_15MHz_15kHz_1717.5MHz_CP-OFDM QPSK_RB79@0	14.17
n66_15MHz_15kHz_1717.5MHz_CP-OFDM 16 QAM_RB79@0	13.91
n66_15MHz_15kHz_1717.5MHz_CP-OFDM 64 QAM_RB79@0	13.34
n66_15MHz_15kHz_1717.5MHz_CP-OFDM 256 QAM_RB79@0	10.51
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	16.88
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB36@18	17.12

n66_15MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@77	16.98
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB75@0	16.62
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@1	17.17
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB36@18	17.11
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@77	17.13
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB75@0	16.16
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM 16 QAM_RB75@0	15.29
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM 64 QAM_RB75@0	14.54
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM 256 QAM_RB75@0	12.57
n66_15MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@1	15.21
n66_15MHz_15kHz_1745MHz_CP-OFDM QPSK_RB39@19	15.6
n66_15MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@77	15.41
n66_15MHz_15kHz_1745MHz_CP-OFDM QPSK_RB79@0	14.23
n66_15MHz_15kHz_1745MHz_CP-OFDM 16 QAM_RB79@0	14.06
n66_15MHz_15kHz_1745MHz_CP-OFDM 64 QAM_RB79@0	13.98
n66_15MHz_15kHz_1745MHz_CP-OFDM 256 QAM_RB79@0	10.78
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	17.1
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM PI/2 BPSK_RB36@18	17.55
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@77	17.39
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM PI/2 BPSK_RB75@0	16.93
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM QPSK_RB1@1	17.08
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM QPSK_RB36@18	17.47
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM QPSK_RB1@77	17.38
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM QPSK_RB75@0	16.71
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM 16 QAM_RB75@0	15.32
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM 64 QAM_RB75@0	14.88
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM 256 QAM_RB75@0	12.93
n66_15MHz_15kHz_1772.5MHz_CP-OFDM QPSK_RB1@1	15.97
n66_15MHz_15kHz_1772.5MHz_CP-OFDM QPSK_RB39@19	16.15
n66_15MHz_15kHz_1772.5MHz_CP-OFDM QPSK_RB1@77	16.02
n66_15MHz_15kHz_1772.5MHz_CP-OFDM QPSK_RB79@0	14.47
n66_15MHz_15kHz_1772.5MHz_CP-OFDM 16 QAM_RB79@0	14.33
n66_15MHz_15kHz_1772.5MHz_CP-OFDM 64 QAM_RB79@0	13.84

n66_15MHz_15kHz_1772.5MHz_CP-OFDM 256 QAM_RB79@0	10.99
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	16.76
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM PI/2 BPSK_RB50@25	17.29
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM PI/2 BPSK_RB1@104	17.09
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM PI/2 BPSK_RB100@0	16.52
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM QPSK_RB1@1	17.08
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM QPSK_RB50@25	17.11
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM QPSK_RB1@104	17.1
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM QPSK_RB100@0	16.38
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM 16 QAM_RB100@0	15.27
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM 64 QAM_RB100@0	14.49
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM 256 QAM_RB100@0	12.57
n66_20MHz_15kHz_1720MHz_CP-OFDM QPSK_RB1@1	15.8
n66_20MHz_15kHz_1720MHz_CP-OFDM QPSK_RB53@26	15.63
n66_20MHz_15kHz_1720MHz_CP-OFDM QPSK_RB1@104	15.76
n66_20MHz_15kHz_1720MHz_CP-OFDM QPSK_RB106@0	14.03
n66_20MHz_15kHz_1720MHz_CP-OFDM 16 QAM_RB106@0	14.25
n66_20MHz_15kHz_1720MHz_CP-OFDM 64 QAM_RB106@0	13.64
n66_20MHz_15kHz_1720MHz_CP-OFDM 256 QAM_RB106@0	10.53
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	17.04
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB50@25	16.97
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@104	17.17
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB100@0	16.43
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@1	16.96
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB50@25	17.15
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@104	16.83
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB100@0	16.18
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM 16 QAM_RB100@0	15.23
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM 64 QAM_RB100@0	14.58
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM 256 QAM_RB100@0	12.72
n66_20MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@1	17.11
n66_20MHz_15kHz_1745MHz_CP-OFDM QPSK_RB53@26	16.28
n66_20MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@104	17.05

n66_20MHz_15kHz_1745MHz_CP-OFDM QPSK_RB106@0	16.09
n66_20MHz_15kHz_1745MHz_CP-OFDM 16 QAM_RB106@0	13.88
n66_20MHz_15kHz_1745MHz_CP-OFDM 64 QAM_RB106@0	13.51
n66_20MHz_15kHz_1745MHz_CP-OFDM 256 QAM_RB106@0	10.66
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	16.75
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM PI/2 BPSK_RB50@25	17.25
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM PI/2 BPSK_RB1@104	17.15
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM PI/2 BPSK_RB100@0	16.59
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM QPSK_RB1@1	16.87
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM QPSK_RB50@25	17.21
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM QPSK_RB1@104	17.09
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM QPSK_RB100@0	16.37
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM 16 QAM_RB100@0	15.48
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM 64 QAM_RB100@0	14.68
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM 256 QAM_RB100@0	12.94
n66_20MHz_15kHz_1770MHz_CP-OFDM QPSK_RB1@1	15.32
n66_20MHz_15kHz_1770MHz_CP-OFDM QPSK_RB53@26	15.57
n66_20MHz_15kHz_1770MHz_CP-OFDM QPSK_RB1@104	15.88
n66_20MHz_15kHz_1770MHz_CP-OFDM QPSK_RB106@0	14.14
n66_20MHz_15kHz_1770MHz_CP-OFDM 16 QAM_RB106@0	14.07
n66_20MHz_15kHz_1770MHz_CP-OFDM 64 QAM_RB106@0	13.57
n66_20MHz_15kHz_1770MHz_CP-OFDM 256 QAM_RB106@0	10.76
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	17.04
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM PI/2 BPSK_RB64@32	16.90
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@131	17.29
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM PI/2 BPSK_RB128@0	16.71
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM QPSK_RB1@1	16.99
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM QPSK_RB64@32	16.84
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM QPSK_RB1@131	16.42
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM QPSK_RB128@0	15.75
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM 16 QAM_RB128@0	14.67
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM 64 QAM_RB128@0	12.65
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM 256 QAM_RB128@0	14.29

n66_25MHz_15kHz_1722.5MHz_CP-OFDM QPSK_RB1@1	15.72
n66_25MHz_15kHz_1722.5MHz_CP-OFDM QPSK_RB67@33	15.48
n66_25MHz_15kHz_1722.5MHz_CP-OFDM QPSK_RB1@131	15.25
n66_25MHz_15kHz_1722.5MHz_CP-OFDM QPSK_RB133@0	13.73
n66_25MHz_15kHz_1722.5MHz_CP-OFDM 16 QAM_RB133@0	13.86
n66_25MHz_15kHz_1722.5MHz_CP-OFDM 64 QAM_RB133@0	12.88
n66_25MHz_15kHz_1722.5MHz_CP-OFDM 256 QAM_RB133@0	13.04
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	17.10
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB64@32	17.28
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@131	17.27
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB128@0	15.76
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@1	16.45
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB64@32	16.19
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@131	16.54
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB128@0	15.18
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM 16 QAM_RB128@0	14.28
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM 64 QAM_RB128@0	13.78
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM 256 QAM_RB128@0	13.47
n66_25MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@1	15.49
n66_25MHz_15kHz_1745MHz_CP-OFDM QPSK_RB67@33	15.71
n66_25MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@131	15.58
n66_25MHz_15kHz_1745MHz_CP-OFDM QPSK_RB133@0	14.32
n66_25MHz_15kHz_1745MHz_CP-OFDM 16 QAM_RB133@0	14.19
n66_25MHz_15kHz_1745MHz_CP-OFDM 64 QAM_RB133@0	13.65
n66_25MHz_15kHz_1745MHz_CP-OFDM 256 QAM_RB133@0	9.62
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	17.21
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM PI/2 BPSK_RB64@32	17.49
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@131	17.44
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM PI/2 BPSK_RB128@0	16.76
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM QPSK_RB1@1	17.04
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM QPSK_RB64@32	17.55
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM QPSK_RB1@131	16.09
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM QPSK_RB128@0	13.88

n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM 16 QAM_RB128@0	17.38
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM 64 QAM_RB128@0	16.15
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM 256 QAM_RB128@0	14.89
n66_25MHz_15kHz_1767.5MHz_CP-OFDM QPSK_RB1@1	14.71
n66_25MHz_15kHz_1767.5MHz_CP-OFDM QPSK_RB67@33	11.96
n66_25MHz_15kHz_1767.5MHz_CP-OFDM QPSK_RB1@131	15.51
n66_25MHz_15kHz_1767.5MHz_CP-OFDM QPSK_RB133@0	15.89
n66_25MHz_15kHz_1767.5MHz_CP-OFDM 16 QAM_RB133@0	16.02
n66_25MHz_15kHz_1767.5MHz_CP-OFDM 64 QAM_RB133@0	14.28
n66_25MHz_15kHz_1767.5MHz_CP-OFDM 256 QAM_RB133@0	14.15
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	12.73
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM PI/2 BPSK_RB80@40	9.76
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM PI/2 BPSK_RB1@158	16.84
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM PI/2 BPSK_RB160@0	17.07
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM QPSK_RB1@1	17.14
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM QPSK_RB80@40	16.53
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM QPSK_RB1@158	16.71
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM QPSK_RB160@0	16.52
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM 16 QAM_RB160@0	16.76
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM 64 QAM_RB160@0	16.54
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM 256 QAM_RB160@0	16.51
n66_30MHz_15kHz_1725MHz_CP-OFDM QPSK_RB1@1	16.55
n66_30MHz_15kHz_1725MHz_CP-OFDM QPSK_RB80@40	16.47
n66_30MHz_15kHz_1725MHz_CP-OFDM QPSK_RB1@158	16.77
n66_30MHz_15kHz_1725MHz_CP-OFDM QPSK_RB160@0	16.56
n66_30MHz_15kHz_1725MHz_CP-OFDM 16 QAM_RB160@0	16.51
n66_30MHz_15kHz_1725MHz_CP-OFDM 64 QAM_RB160@0	16.75
n66_30MHz_15kHz_1725MHz_CP-OFDM 256 QAM_RB160@0	16.62
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	16.68
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB80@40	16.74
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@158	15.87
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB160@0	15.98
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@1	16.22

n66_30MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB80@40	15.46
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@158	15.80
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB160@0	15.94
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM 16 QAM_RB160@0	16.06
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM 64 QAM_RB160@0	14.99
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM 256 QAM_RB160@0	13.97
n66_30MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@1	13.55
n66_30MHz_15kHz_1745MHz_CP-OFDM QPSK_RB80@40	11.72
n66_30MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@158	14.31
n66_30MHz_15kHz_1745MHz_CP-OFDM QPSK_RB160@0	14.46
n66_30MHz_15kHz_1745MHz_CP-OFDM 16 QAM_RB160@0	14.57
n66_30MHz_15kHz_1745MHz_CP-OFDM 64 QAM_RB160@0	13.22
n66_30MHz_15kHz_1745MHz_CP-OFDM 256 QAM_RB160@0	13.15
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	12.54
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM PI/2 BPSK_RB80@40	9.73
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM PI/2 BPSK_RB1@158	15.94
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM PI/2 BPSK_RB160@0	16.51
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM QPSK_RB1@1	16.55
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM QPSK_RB80@40	17.16
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM QPSK_RB1@158	16.53
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM QPSK_RB160@0	17.12
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM 16 QAM_RB160@0	17.22
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM 64 QAM_RB160@0	16.46
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM 256 QAM_RB160@0	16.50
n66_30MHz_15kHz_1765MHz_CP-OFDM QPSK_RB1@1	16.77
n66_30MHz_15kHz_1765MHz_CP-OFDM QPSK_RB80@40	16.58
n66_30MHz_15kHz_1765MHz_CP-OFDM QPSK_RB1@158	16.94
n66_30MHz_15kHz_1765MHz_CP-OFDM QPSK_RB160@0	16.69
n66_30MHz_15kHz_1765MHz_CP-OFDM 16 QAM_RB160@0	16.48
n66_30MHz_15kHz_1765MHz_CP-OFDM 64 QAM_RB160@0	16.51
n66_30MHz_15kHz_1765MHz_CP-OFDM 256 QAM_RB160@0	17.04
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	16.69
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM PI/2 BPSK_RB108@54	16.99

n66_40MHz_15kHz_1730MHz_DFT-s-OFDM PI/2 BPSK_RB1@214	17.16
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM PI/2 BPSK_RB216@0	16.39
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM QPSK_RB1@1	17.13
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM QPSK_RB108@54	17.02
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM QPSK_RB1@214	17.15
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM QPSK_RB216@0	16.03
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM 16 QAM_RB216@0	15.02
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM 64 QAM_RB216@0	14.69
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM 256 QAM_RB216@0	11.47
n66_40MHz_15kHz_1730MHz_CP-OFDM QPSK_RB1@1	15.69
n66_40MHz_15kHz_1730MHz_CP-OFDM QPSK_RB108@54	15.55
n66_40MHz_15kHz_1730MHz_CP-OFDM QPSK_RB1@214	15.72
n66_40MHz_15kHz_1730MHz_CP-OFDM QPSK_RB216@0	13.94
n66_40MHz_15kHz_1730MHz_CP-OFDM 16 QAM_RB216@0	14.20
n66_40MHz_15kHz_1730MHz_CP-OFDM 64 QAM_RB216@0	13.47
n66_40MHz_15kHz_1730MHz_CP-OFDM 256 QAM_RB216@0	9.28
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	15.74
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB108@54	17.22
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@214	17.28
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB216@0	16.84
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@1	16.83
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB108@54	17.32
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@214	17.19
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB216@0	16.23
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM 16 QAM_RB216@0	15.30
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM 64 QAM_RB216@0	14.81
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM 256 QAM_RB216@0	14.74
n66_40MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@1	14.77
n66_40MHz_15kHz_1745MHz_CP-OFDM QPSK_RB108@54	14.65
n66_40MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@214	14.68
n66_40MHz_15kHz_1745MHz_CP-OFDM QPSK_RB216@0	14.70
n66_40MHz_15kHz_1745MHz_CP-OFDM 16 QAM_RB216@0	14.81
n66_40MHz_15kHz_1745MHz_CP-OFDM 64 QAM_RB216@0	14.56

n66_40MHz_15kHz_1745MHz_CP-OFDM 256 QAM_RB216@0	14.84
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	15.66
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM PI/2 BPSK_RB108@54	16.42
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM PI/2 BPSK_RB1@214	16.50
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM PI/2 BPSK_RB216@0	15.61
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM QPSK_RB1@1	15.81
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM QPSK_RB108@54	16.33
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM QPSK_RB1@214	17.27
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM QPSK_RB216@0	16.28
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM 16 QAM_RB216@0	15.34
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM 64 QAM_RB216@0	13.99
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM 256 QAM_RB216@0	13.85
n66_40MHz_15kHz_1760MHz_CP-OFDM QPSK_RB1@1	13.51
n66_40MHz_15kHz_1760MHz_CP-OFDM QPSK_RB108@54	15.78
n66_40MHz_15kHz_1760MHz_CP-OFDM QPSK_RB1@214	15.79
n66_40MHz_15kHz_1760MHz_CP-OFDM QPSK_RB216@0	14.44
n66_40MHz_15kHz_1760MHz_CP-OFDM 16 QAM_RB216@0	14.14
n66_40MHz_15kHz_1760MHz_CP-OFDM 64 QAM_RB216@0	13.91
n66_40MHz_15kHz_1760MHz_CP-OFDM 256 QAM_RB216@0	10.80

2.4G WLAN:

Test Mode	Channel [MHz]	Data Rate	Duty Cycle [%]	Max. Conducted Average Output Power [dBm]
802.11b	2412	1Mbps	100	14.39
	2437			14.48
	2462			14.76
802.11g	2412	6Mbps	100	14.23
	2437			12.68
	2462			13.39
802.11 n ht20	2412	MCS0	100	12.20
	2437			12.17
	2462			12.90
802.11 n ht40	2422	MCS0	100	10.69
	2437			10.78
	2452			10.73

5.2G WLAN:

Test Mode	Channel [MHz]	Data Rate	Duty Cycle [%]	Max. Conducted Average Output Power [dBm]
802.11a	5180	6Mbps	100	13.10
	5200			12.89
	5240			12.79
802.11n ht20	5180	MCS0	100	12.95
	5200			12.98
	5240			12.90
802.11 n ht40	5190	MCS0	100	13.92
	5230			13.97
802.11 ac80	5210	MCS0	100	10.90

5.8G WLAN:

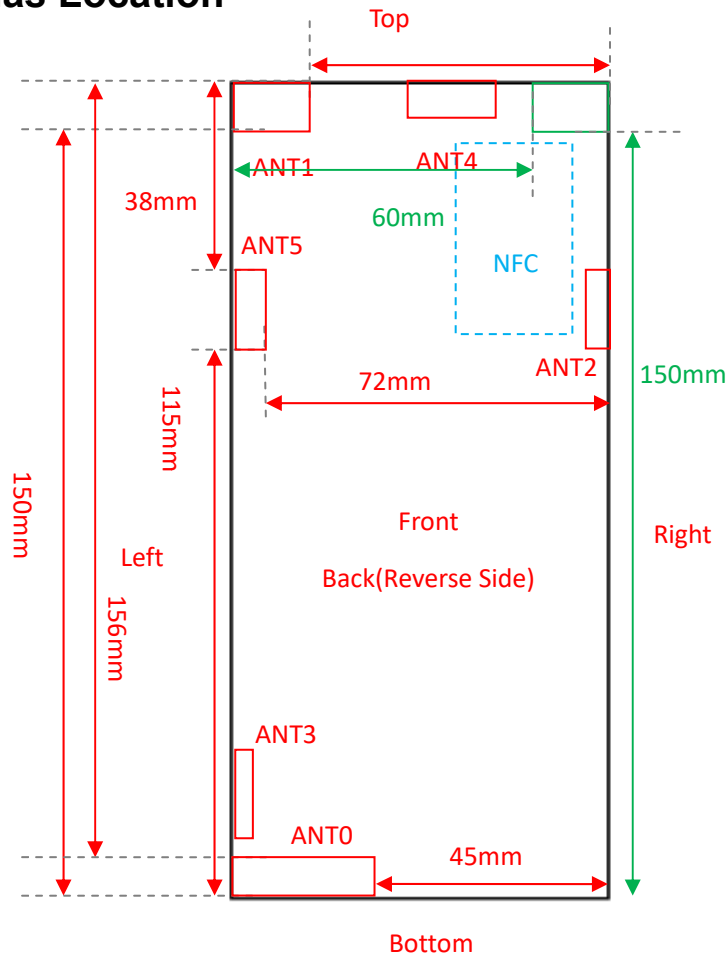
Test Mode	Channel [MHz]	Data Rate	Duty Cycle [%]	Max. Conducted Average Output Power [dBm]
802.11a	5745	6Mbps	52.94	15.87
	5785			16.01
	5825			15.95
802.11n ht20	5745	MCS0	51.93	15.88
	5785			15.70
	5825			15.75
802.11 n ht40	5755	MCS0	49.76	15.66
	5795			15.79
802.11 ac80	5775	MCS0	45.90	12.91

Bluetooth:

Test Mode	Channel [MHz]	Max. Peak Conducted Output Power [dBm]
BDR(GFSK)	2402	-2.58
	2441	-0.40
	2480	-1.43
EDR($\pi/4$ -DQPSK)	2402	-3.31
	2441	-1.07
	2480	-2.24
EDR(8DPSK)	2402	-3.30
	2441	-1.10
	2480	-2.14
BLE_1M	2402	2.49
	2440	4.92
	2480	3.92
BLE_2M	2402	2.80
	2440	5.04
	2480	4.43

6 Standalone SAR Test Exclusion Considerations

6.1 Antennas Location



Note: The ANT2, ANT3 only receive.

Each antenna supports the following frequency bands:

ANT0: 2G:GSM850 3G:B5 4G:B5/B12/B13/B41

ANT1: 2G:PCS1900 3G:B2 4G:B2 5G:N66

ANT5: 5G:N41

6.2 Antennas Distance To Edge

Antenna Distance To Edge(mm)						
Antenna	Back	Front	Left	Right	Top	Bottom
WWAN(GSM/WCDMA/LTE/5G NR) Antenna 0	< 5	< 5	< 5	45	156	< 5
WWAN(GSM/WCDMA/LTE) Antenna 1	< 5	< 5	< 5	60	< 5	150
WWAN(5G NR) Antenna 5	< 5	< 5	< 5	72	38	115
BT&2.4G/5G WLAN	< 5	< 5	60	< 5	< 5	150

6.3 Standalone SAR Test Exclusion Considerations

Mode	Frequency (MHz)	Output Power (dBm)	Output Power (mW)	Distance (mm)	Calculated value	Threshold (1-g)	SAR Test Exclusion
WLAN 2.4G	2462	14.8	30.2	0	9.5	3	NO
WLAN 5.2G	5240	14.1	25.7	0	11.8	3	NO
WLAN 5.8G	5825	16.1	40.74	0	19.7	3	NO
Bluetooth	2480	5.5	3.55	0	1.1	3	YES

NOTE:

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot$$

$$[\sqrt{f(\text{GHz})}] \leq 3.0$$
 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

1. $f(\text{GHz})$ is the RF channel transmit frequency in GHz.
2. Power and distance are rounded to the nearest mW and mm before calculation.
3. The result is rounded to one decimal place for comparison.
4. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test Exclusion.

Measurement Result:

For NFC, the power of EUT: E Field@3m is 65.60dBuV/m = -29.60dBm(0.0011mW)

Note: $E[\text{dB}\mu\text{V/m}] = \text{EIRP}[\text{dBm}] + 95.2$ for $d = 3$ m.

SAR test exclusion threshold for NFC(13.56MHz) separation distance < 50 mm

$$= [474 * (1 + \log(100/f(\text{MHz}))) / 2]$$

$$= 443\text{mW}$$

$$> 0.0011\text{mW}$$

Conclusion:

The NFC SAR evaluation can be exempted.

6.4 Standalone SAR estimation:

Mode	Frequency (MHz)	Output Power (dBm)	Output Power (mW)	Distance (mm)	Estimated 1-g (W/kg)
BT Head	2480	5.5	3.55	0	0.15
BT Body	2480	5.5	3.55	10	0.08

NOTE:

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:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot$$

$$[\sqrt{f(\text{GHz})}]$$

W/kg for test separation distances ≤ 50 mm;

where $x = 7.5$ for 1-g SAR.

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test Exclusion

6.5 SAR Test Exclusion For The EUT Edge Considerations Result

Mode	Back	Front	Left	Right	Top	Bottom
Antenna 0	Required	Required	Required	Exclusion	Exclusion	Required
Antenna 1	Required	Required	Required	Exclusion	Required	Exclusion
Antenna 5	Required	Required	Required	Exclusion	Exclusion	Exclusion
Wi-Fi 2.4G/5G	Required	Required	Exclusion	Required	Required	Exclusion
Bluetooth	Required	Required	Exclusion	Required	Required	Exclusion

Note:

Required: The distance to Edge is less than 25mm, testing is required.

Exclusion: The distance to Edge is more than 25 mm, testing is not required.

Exclusion*: SAR test exclusion evaluation has been done above.

Extremity Exposure Considerations

Per KDB 648474 D04 D04v01r03, this device is considered a “Phablet” since the diagonal dimension is >160mm and < 200mm, when hotspot mode applies, extremity SAR is required only for the surfaces and edges with hotspot mode scaled to the maximum output power (with tolerance is 1g SAR > 1.2W/kg)

Extremity Exposure Condition		
Worst Mode	Hotspot SAR value	Extremity Condition Test
LTE Band 41	0.79W/kg@1g	Exclusion

SAR test exclusion for the EUT edge considerations detail:

Distance < 50mm (To Edges)

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot$$

$$[\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$

1. $f(\text{GHz})$ is the RF channel transmit frequency in GHz.
2. Power and distance are rounded to the nearest mW and mm before calculation.
3. The result is rounded to one decimal place for comparison.
4. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test Exclusion.
5. The Time based average Power is used for calculation

Distance > 50mm (To Edges)

At 100 MHz to 6 GHz and for *test separation distances* > 50 mm, the SAR test exclusion threshold is determined according to the following:

- a) $[\text{Power allowed at numeric threshold for 50 mm in step 1}) + (\text{test separation distance} - 50 \text{ mm}) \cdot (f(\text{MHz})/150)] \text{ mW, at 100 MHz to 1500 MHz}$
- b) $[\text{Power allowed at numeric threshold for 50 mm in step 1}) + (\text{test separation distance} - 50 \text{ mm}) \cdot 10] \text{ mW at } > 1500 \text{ MHz and } \leq 6 \text{ GHz}$

7 SAR Measurement Results

7.1 SAR Test Conditions

Temperature:	22.9-23.6°C	22.5-23.2°C	22.7-23.4°C	22.2-22.9°C	21.9-22.5°C	22.1-23.1°C
Relative Humidity:	58%	61%	57%	54%	60%	57%
ATM Pressure:	101.5 kPa	101.3 kPa	101.2 kPa	101.1 kPa	100.4 kPa	101 kPa
Test Date:	2024/01/30	2024/01/31	2024/02/01	2024/02/02	2024/02/03	2024/02/04

Testing was performed by Eric Zhang, Mason Xu.

7.2 Measured and Reported (Scaled) SAR Results

GSM 850:

Test Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)			
					Scaled Factor	Meas. SAR	Scaled SAR	Plot No.
Head Left Cheek	824.2	GSM	/	/	/	/	/	/
	836.6	GSM	34.36	34.5	1.033	0.09	0.09	/
	848.8	GSM	/	/	/	/	/	/
Head Left Tilt	824.2	GSM	/	/	/	/	/	/
	836.6	GSM	34.36	34.5	1.033	0.05	0.05	/
	848.8	GSM	/	/	/	/	/	/
Head Right Cheek	824.2	GSM	/	/	/	/	/	/
	836.6	GSM	34.36	34.5	1.033	0.126	0.13	1#
	848.8	GSM	/	/	/	/	/	/
Head Right Tilt	824.2	GSM	/	/	/	/	/	/
	836.6	GSM	34.36	34.5	1.033	0.06	0.06	/
	848.8	GSM	/	/	/	/	/	/
Body Worn Front (10mm)	824.2	GSM	/	/	/	/	/	/
	836.6	GSM	34.36	34.5	1.033	0.142	0.15	/
	848.8	GSM	/	/	/	/	/	/
Body Worn Back (10mm)	824.2	GSM	/	/	/	/	/	/
	836.6	GSM	34.36	34.5	1.033	0.243	0.25	2#
	848.8	GSM	/	/	/	/	/	/
Body Front (10mm)	824.2	GPRS	/	/	/	/	/	/
	836.6	GPRS	33.69	34	1.074	0.109	0.12	/
	848.8	GPRS	/	/	/	/	/	/
Body Back (10mm)	824.2	GPRS	/	/	/	/	/	/
	836.6	GPRS	33.69	34	1.074	0.189	0.2	/
	848.8	GPRS	/	/	/	/	/	/
Body Left (10mm)	824.2	GPRS	/	/	/	/	/	/
	836.6	GPRS	33.69	34	1.074	0.04	0.04	/

	848.8	GPRS	/	/	/	/	/	/
Body Bottom (10mm)	824.2	GPRS	/	/	/	/	/	/
	836.6	GPRS	33.69	34	1.074	0.213	0.23	/
	848.8	GPRS	/	/	/	/	/	/

Note:

1. When the 1-g SAR is $\leq 0.8\text{W/Kg}$, testing for other channels are optional.
2. The EUT transmit and receive through the same GSM antenna while testing SAR.
3. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance.
4. When the maximum output power variation across the required test channels is $> 0.5\text{ dB}$, instead of the middle channel, the highest output power channel must be used.
5. The Multi-slot Classes of EUT is Class 12 which has maximum 4 Downlink slots and 4 Uplink slots, the maximum active slots is 5, when perform the multiple slots scan, 3DL+2UL is the worst case.
6. According to IEC/IEEE 62209-1528:2020, If the correction ΔSAR is within $\pm 5\%$, the measured SAR results should not be corrected.

PCS 1900:

Test Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)			
					Scaled Factor	Meas. SAR	Scaled SAR	Plot No.
Head Left Cheek	1850.2	GSM	/	/	/	/	/	/
	1880	GSM	31.16	31.5	1.081	0.439	0.47	/
	1909.8	GSM	/	/	/	/	/	/
Head Left Tilt	1850.2	GSM	/	/	/	/	/	/
	1880	GSM	31.16	31.5	1.081	0.549	0.59	/
	1909.8	GSM	/	/	/	/	/	/
Head Right Cheek	1850.2	GSM	/	/	/	/	/	/
	1880	GSM	31.16	31.5	1.081	0.68	0.74	3#
	1909.8	GSM	/	/	/	/	/	/
Head Right Tilt	1850.2	GSM	/	/	/	/	/	/
	1880	GSM	31.16	31.5	1.081	0.619	0.67	/
	1909.8	GSM	/	/	/	/	/	/

Body Worn Front (10mm)	1850.2	GSM	/	/	/	/	/	/
	1880	GSM	31.16	31.5	1.081	0.172	0.19	/
	1909.8	GSM	/	/	/	/	/	/
Body Worn Back (10mm)	1850.2	GSM	/	/	/	/	/	/
	1880	GSM	31.16	31.5	1.081	0.19	0.21	/
	1909.8	GSM	/	/	/	/	/	/
Body Front (10mm)	1850.2	GPRS	/	/	/	/	/	/
	1880	GPRS	30.63	30.9	1.064	0.278	0.3	/
	1909.8	GPRS	/	/	/	/	/	/
Body Back (10mm)	1850.2	GPRS	/	/	/	/	/	/
	1880	GPRS	30.63	30.9	1.064	0.465	0.49	/
	1909.8	GPRS	/	/	/	/	/	/
Body Left (10mm)	1850.2	GPRS	/	/	/	/	/	/
	1880	GPRS	30.63	30.9	1.064	0.377	0.4	/
	1909.8	GPRS	/	/	/	/	/	/
Body Top (10mm)	1850.2	GPRS	/	/	/	/	/	/
	1880	GPRS	30.63	30.9	1.064	0.599	0.64	4#
	1909.8	GPRS	/	/	/	/	/	/

Note:

1. When the 1-g SAR is $\leq 0.8\text{W/Kg}$, testing for other channels are optional.
2. The EUT transmit and receive through the same GSM antenna while testing SAR.
3. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance.
4. When the maximum output power variation across the required test channels is $> 0.5\text{ dB}$, instead of the middle channel, the highest output power channel must be used.
5. The Multi-slot Classes of EUT is Class 12 which has maximum 4 Downlink slots and 4 Uplink slots, the maximum active slots is 5, when perform the multiple slots scan, 1DL+4UL is the worst case.
6. According to IEC/IEEE 62209-1528:2020, If the correction ΔSAR is within $\pm 5\%$, the measured SAR results should not be corrected.

WCDMA Band 2:

Test Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)			
					Scaled Factor	Meas. SAR	Scaled SAR	Plot No.
Head Left Cheek	1852.4	RMC	/	/	/	/	/	/
	1880	RMC	23.15	23.4	1.059	0.287	0.3	/
	1907.6	RMC	/	/	/	/	/	/
Head Left Tilt	1852.4	RMC	/	/	/	/	/	/
	1880	RMC	23.15	23.4	1.059	0.407	0.43	/
	1907.6	RMC	/	/	/	/	/	/
Head Right Cheek	1852.4	RMC	/	/	/	/	/	/
	1880	RMC	23.15	23.4	1.059	0.546	0.58	5#
	1907.6	RMC	/	/	/	/	/	/
Head Right Tilt	1852.4	RMC	/	/	/	/	/	/
	1880	RMC	23.15	23.4	1.059	0.509	0.54	/
	1907.6	RMC	/	/	/	/	/	/
Body Front (10mm)	1852.4	RMC	/	/	/	/	/	/
	1880	RMC	23.15	23.4	1.059	0.132	0.14	/
	1907.6	RMC	/	/	/	/	/	/
Body Back (10mm)	1852.4	RMC	/	/	/	/	/	/
	1880	RMC	23.15	23.4	1.059	0.169	0.18	/
	1907.6	RMC	/	/	/	/	/	/
Body Left (10mm)	1852.4	RMC	/	/	/	/	/	/
	1880	RMC	23.15	23.4	1.059	0.032	0.03	/
	1907.6	RMC	/	/	/	/	/	/
Body Top (10mm)	1852.4	RMC	/	/	/	/	/	/
	1880	RMC	23.15	23.4	1.059	0.216	0.23	6#
	1907.6	RMC	/	/	/	/	/	/

WCDMA Band 5:

Test Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)			
					Scaled Factor	Meas. SAR	Scaled SAR	Plot No.
Head Left Cheek	826.4	RMC	/	/	/	/	/	/
	836.6	RMC	23.13	23.2	1.016	0.162	0.16	/
	846.6	RMC	/	/	/	/	/	/
Head Left Tilt	826.4	RMC	/	/	/	/	/	/
	836.6	RMC	23.13	23.2	1.016	0.099	0.1	/
	846.6	RMC	/	/	/	/	/	/
Head Right Cheek	826.4	RMC	/	/	/	/	/	/
	836.6	RMC	23.13	23.2	1.016	0.163	0.17	7#
	846.6	RMC	/	/	/	/	/	/
Head Right Tilt	826.4	RMC	/	/	/	/	/	/
	836.6	RMC	23.13	23.2	1.016	0.107	0.11	/
	846.6	RMC	/	/	/	/	/	/
Body Front (10mm)	826.4	RMC	/	/	/	/	/	/
	836.6	RMC	23.13	23.2	1.016	0.151	0.15	/
	846.6	RMC	/	/	/	/	/	/
Body Back (10mm)	826.4	RMC	/	/	/	/	/	/
	836.6	RMC	23.13	23.2	1.016	0.191	0.19	8#
	846.6	RMC	/	/	/	/	/	/
Body Left (10mm)	826.4	RMC	/	/	/	/	/	/
	836.6	RMC	23.13	23.2	1.016	0.134	0.14	/
	846.6	RMC	/	/	/	/	/	/
Body Bottom (10mm)	826.4	RMC	/	/	/	/	/	/
	836.6	RMC	23.13	23.2	1.016	0.143	0.15	/
	846.6	RMC	/	/	/	/	/	/

Note:

1. When the 1-g SAR is $\leq 0.8\text{W/Kg}$, testing for other channels are optional.
2. The EUT transmit and receive through the same antenna while testing SAR.
3. The default test configuration is to measure SAR with an established radio link between the EUT and a

communication test set using a 12.2 kbps RMC (reference measurement Channel) Configured in Test Loop Model.

4. KDB 941225 D01-Body SAR is not required for HSDPA/HSUPA/HSPA+ when the maximum average output of each RF channel is less than $\frac{1}{4}$ dB higher than measured 12.2kbps RMC or the maximum SAR for 12.2kbps RMC is $< 75\%$ of SAR limit.
5. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance.
6. According to IEC/IEEE 62209-1528:2020, If the correction Δ SAR is within $\pm 5\%$, the measured SAR results should not be corrected.

LTE Band 2:

Test Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)			
						Scaled Factor	Meas. SAR	Scaled SAR	Plot No.
Head Left Cheek	1860	20	1RB	/	/	/	/	/	/
	1880	20	1RB	23.22	23.4	1.042	0.213	0.22	/
	1900	20	1RB	/	/	/	/	/	/
	1880	20	50%RB	22.16	23.4	1.33	0.169	0.22	/
Head Left Tilt	1860	20	1RB	/	/	/	/	/	/
	1880	20	1RB	23.22	23.4	1.042	0.347	0.36	/
	1900	20	1RB	/	/	/	/	/	/
	1880	20	50%RB	22.16	23.4	1.33	0.276	0.37	/
Head Right Cheek	1860	20	1RB	/	/	/	/	/	/
	1880	20	1RB	23.22	23.4	1.042	0.456	0.48	9#
	1900	20	1RB	/	/	/	/	/	/
	1880	20	50%RB	22.16	23.4	1.33	0.362	0.48	/
Head Right Tilt	1860	20	1RB	/	/	/	/	/	/
	1880	20	1RB	23.22	23.4	1.042	0.343	0.36	/
	1900	20	1RB	/	/	/	/	/	/
	1880	20	50%RB	22.16	23.4	1.33	0.261	0.35	/
Body Front (10mm)	1860	20	1RB	/	/	/	/	/	/
	1880	20	1RB	23.22	23.4	1.042	0.113	0.12	/
	1900	20	1RB	/	/	/	/	/	/
	1880	20	50%RB	22.16	23.4	1.33	0.088	0.12	/
Body Back (10mm)	1860	20	1RB	/	/	/	/	/	/
	1880	20	1RB	23.22	23.4	1.042	0.138	0.14	/
	1900	20	1RB	/	/	/	/	/	/
	1880	20	50%RB	22.16	23.4	1.33	0.106	0.14	/
Body Left (10mm)	1860	20	1RB	/	/	/	/	/	/
	1880	20	1RB	23.22	23.4	1.042	0.122	0.13	/
	1900	20	1RB	/	/	/	/	/	/
	1880	20	50%RB	22.16	23.4	1.33	0.095	0.13	/
Body Top	1860	20	1RB	/	/	/	/	/	/

(10mm)	1880	20	1RB	23.22	23.4	1.042	0.149	0.16	10#
	1900	20	1RB	/	/	/	/	/	/
	1880	20	50%RB	22.16	23.4	1.33	0.12	0.16	/

LTE Band 5:

Test Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)			
						Scaled Factor	Meas. SAR	Scaled SAR	Plot No.
Head Left Cheek	829	10	1RB	/	/	/	/	/	/
	836.5	10	1RB	22.95	23.1	1.035	0.046	0.05	11#
	844	10	1RB	/	/	/	/	/	/
	836.5	10	50%RB	21.98	23.1	1.294	0.035	0.05	/
Head Left Tilt	829	10	1RB	/	/	/	/	/	/
	836.5	10	1RB	22.95	23.1	1.035	0.021	0.02	/
	844	10	1RB	/	/	/	/	/	/
	836.5	10	50%RB	21.98	23.1	1.294	0.021	0.03	/
Head Right Cheek	829	10	1RB	/	/	/	/	/	/
	836.5	10	1RB	22.95	23.1	1.035	0.034	0.04	/
	844	10	1RB	/	/	/	/	/	/
	836.5	10	50%RB	21.98	23.1	1.294	0.026	0.03	/
Head Right Tilt	829	10	1RB	/	/	/	/	/	/
	836.5	10	1RB	22.95	23.1	1.035	0.025	0.03	/
	844	10	1RB	/	/	/	/	/	/
	836.5	10	50%RB	21.98	23.1	1.294	0.019	0.02	/
Body Front (10mm)	829	10	1RB	/	/	/	/	/	/
	836.5	10	1RB	22.95	23.1	1.035	0.053	0.05	/
	844	10	1RB	/	/	/	/	/	/
	836.5	10	50%RB	21.98	23.1	1.294	0.051	0.07	/
Body Back (10mm)	829	10	1RB	/	/	/	/	/	/
	836.5	10	1RB	22.95	23.1	1.035	0.099	0.1	/
	844	10	1RB	/	/	/	/	/	/
	836.5	10	50%RB	21.98	23.1	1.294	0.076	0.1	/
Body Left (10mm)	829	10	1RB	/	/	/	/	/	/
	836.5	10	1RB	22.95	23.1	1.035	0.031	0.03	/
	844	10	1RB	/	/	/	/	/	/
	836.5	10	50%RB	21.98	23.1	1.294	0.024	0.03	/

Body Bottom (10mm)	829	10	1RB	/	/	/	/	/	/
	836.5	10	1RB	22.95	23.1	1.035	0.127	0.13	12#
	844	10	1RB	/	/	/	/	/	/
	836.5	10	50%RB	21.98	23.1	1.294	0.1	0.13	/

LTE Band 12:

Test Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)			
						Scaled Factor	Meas. SAR	Scaled SAR	Plot No.
Head Left Cheek	704	10	1RB	/	/	/	/	/	/
	707.5	10	1RB	23.04	23.2	1.038	0.017	0.02	13#
	711	10	1RB	/	/	/	/	/	/
	707.5	10	50%RB	22.06	23.2	1.3	0.014	0.02	/
Head Left Tilt	704	10	1RB	/	/	/	/	/	/
	707.5	10	1RB	23.04	23.2	1.038	0.011	0.01	/
	711	10	1RB	/	/	/	/	/	/
	707.5	10	50%RB	22.06	23.2	1.3	0.00923	0.01	/
Head Right Cheek	704	10	1RB	/	/	/	/	/	/
	707.5	10	1RB	23.04	23.2	1.038	0.016	0.02	/
	711	10	1RB	/	/	/	/	/	/
	707.5	10	50%RB	22.06	23.2	1.3	0.012	0.02	/
Head Right Tilt	704	10	1RB	/	/	/	/	/	/
	707.5	10	1RB	23.04	23.2	1.038	0.00846	0.01	/
	711	10	1RB	/	/	/	/	/	/
	707.5	10	50%RB	22.06	23.2	1.3	0.00613	0.01	/
Body Front (10mm)	704	10	1RB	/	/	/	/	/	/
	707.5	10	1RB	23.04	23.2	1.038	0.022	0.02	/
	711	10	1RB	/	/	/	/	/	/
	707.5	10	50%RB	22.06	23.2	1.3	0.017	0.02	/
Body Back (10mm)	704	10	1RB	/	/	/	/	/	/
	707.5	10	1RB	23.04	23.2	1.038	0.04	0.04	/
	711	10	1RB	/	/	/	/	/	/
	707.5	10	50%RB	22.06	23.2	1.3	0.032	0.04	/
Body Left (10mm)	704	10	1RB	/	/	/	/	/	/
	707.5	10	1RB	23.04	23.2	1.038	0.00586	0.01	/
	711	10	1RB	/	/	/	/	/	/
	707.5	10	50%RB	22.06	23.2	1.3	0.00354	0.01	/
Body Bottom	704	10	1RB	/	/	/	/	/	/

(10mm)	707.5	10	1RB	23.04	23.2	1.038	0.049	0.05	14#
	711	10	1RB	/	/	/	/	/	/
	707.5	10	50%RB	22.06	23.2	1.3	0.039	0.05	/

LTE Band 13:

Test Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)			
						Scaled Factor	Meas. SAR	Scaled SAR	Plot No.
Head Left Cheek	782	10	1RB	22.80	22.9	1.023	0.038	0.04	15#
	782	10	50%RB	21.93	22.9	1.25	0.021	0.03	/
Head Left Tilt	782	10	1RB	22.80	22.9	1.023	0.014	0.01	/
	782	10	50%RB	21.93	22.9	1.25	0.012	0.02	/
Head Right Cheek	782	10	1RB	22.80	22.9	1.023	0.022	0.02	/
	782	10	50%RB	21.93	22.9	1.25	0.028	0.04	/
Head Right Tilt	782	10	1RB	22.80	22.9	1.023	0.017	0.02	/
	782	10	50%RB	21.93	22.9	1.25	0.013	0.02	/
Body Front (10mm)	782	10	1RB	22.80	22.9	1.023	0.034	0.03	/
	782	10	50%RB	21.93	22.9	1.25	0.027	0.03	/
Body Back (10mm)	782	10	1RB	22.80	22.9	1.023	0.068	0.07	/
	782	10	50%RB	21.93	22.9	1.25	0.055	0.07	/
Body Left (10mm)	782	10	1RB	22.80	22.9	1.023	0.024	0.02	/
	782	10	50%RB	21.93	22.9	1.25	0.019	0.02	/
Body Bottom (10mm)	782	10	1RB	22.80	22.9	1.023	0.08	0.08	16#
	782	10	50%RB	21.93	22.9	1.25	0.067	0.08	/

LTE Band 41:

Test Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)			
						Scaled Factor	Meas. SAR	Scaled SAR	Plot No.
Head Left Cheek	2506	20	1RB	/	/	/	/	/	/
	2549.5	20	1RB	/	/	/	/	/	/
	2593	20	1RB	23.95	24.8	1.216	0.139	0.17	17#
	2636.5	20	1RB	/	/	/	/	/	/
	2680	20	1RB	/	/	/	/	/	/
	2593	20	50%RB	24.06	24.8	1.186	0.114	0.14	/
Head Left Tilt	2506	20	1RB	/	/	/	/	/	/
	2549.5	20	1RB						
	2593	20	1RB	23.95	24.8	1.216	0.042	0.05	/
	2636.5	20	1RB						
	2680	20	1RB	/	/	/	/	/	/
	2593	20	50%RB	24.06	24.8	1.186	0.035	0.04	/
Head Right Cheek	2506	20	1RB	/	/	/	/	/	/
	2549.5	20	1RB						
	2593	20	1RB	23.95	24.8	1.216	0.084	0.1	/
	2636.5	20	1RB						
	2680	20	1RB	/	/	/	/	/	/
	2593	20	50%RB	24.06	24.8	1.186	0.076	0.09	/
Head Right Tilt	2506	20	1RB	/	/	/	/	/	/
	2549.5	20	1RB						
	2593	20	1RB	23.95	24.8	1.216	0.057	0.07	/
	2636.5	20	1RB						
	2680	20	1RB	/	/	/	/	/	/
	2593	20	50%RB	24.06	24.8	1.186	0.051	0.06	/
Body Front (10mm)	2506	20	1RB	/	/	/	/	/	/
	2549.5	20	1RB						
	2593	20	1RB	23.95	24.8	1.216	0.267	0.32	/
	2636.5	20	1RB						

	2680	20	1RB	/	/	/	/	/	/
	2593	20	50%RB	24.06	24.8	1.186	0.208	0.25	/
Body Back (10mm)	2506	20	1RB	/	/	/	/	/	/
	2549.5	20	1RB						
	2593	20	1RB	23.95	24.8	1.216	0.419	0.51	/
	2636.5	20	1RB						
	2680	20	1RB	/	/	/	/	/	/
	2593	20	50%RB	24.06	24.8	1.186	0.363	0.43	/
Body Left (10mm)	2506	20	1RB	/	/	/	/	/	/
	2549.5	20	1RB						
	2593	20	1RB	23.95	24.8	1.216	0.111	0.13	/
	2636.5	20	1RB						
	2680	20	1RB	/	/	/	/	/	/
	2593	20	50%RB	24.06	24.8	1.186	0.101	0.12	/
Body Bottom (10mm)	2506	20	1RB	/	/	/	/	/	/
	2549.5	20	1RB						
	2593	20	1RB	23.95	24.8	1.216	0.646	0.79	18#
	2636.5	20	1RB						
	2680	20	1RB	/	/	/	/	/	/
	2593	20	50%RB	24.06	24.8	1.186	0.523	0.62	/

Note:

1. When the 1-g SAR is $\leq 0.8\text{W/Kg}$, testing for other channels are optional.
2. SAR for LTE band exposure configurations is measured according to the procedures of KDB 941225 D05 SAR for LTE Devices v02.
3. KDB941225D05-SAR for higher order modulation is required only when the highest maximum output power for the configuration in the higher order modulation is $> 0.5\text{ dB}$ higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is $> 1.45\text{ W/kg}$
4. KDB941225D05-For QPSK with 100% RB allocation, when the reported SAR measured for the Highest output power channel is $< 1.45\text{ W/kg}$, tests for the remaining required test channels are optional.
5. KDB941225D05- For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are $\leq 0.8\text{ W/kg}$.
6. KDB941225D05- Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation,

using the RB offset and required test channel combination with the highest maximum output power among RB offset the upper edge, middle and lower edge of each required test channel.

7. KDB941225D05- other channel bandwidths SAR test is required when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is > 0.5 dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.

8. Worst case SAR for 50% RB allocation is selected to be tested.

9. According to IEC/IEEE 62209-1528:2020, If the correction Δ SAR is within $\pm 5\%$, the measured SAR results should not be corrected.

5G NR n41:

Test Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)			
						Scaled Factor	Meas. SAR	Scaled SAR	Plot No.
Head Left Cheek	2546	100	1RB	/	/	/	/	/	/
	2593	100	1RB	24.46	25.6	1.3	0.091	0.12	/
	2640	100	1RB	/	/	/	/	/	/
	2593	100	50%RB	24.29	25.6	1.352	0.081	0.11	/
Head Left Tilt	2546	100	1RB	/	/	/	/	/	/
	2593	100	1RB	24.46	25.6	1.3	0.06	0.08	/
	2640	100	1RB	/	/	/	/	/	/
	2593	100	50%RB	24.29	25.6	1.352	0.049	0.07	/
Head Right Cheek	2546	100	1RB	/	/	/	/	/	/
	2593	100	1RB	24.46	25.6	1.3	0.321	0.42	19#
	2640	100	1RB	/	/	/	/	/	/
	2593	100	50%RB	24.29	25.6	1.352	0.28	0.38	/
Head Right Tilt	2546	100	1RB	/	/	/	/	/	/
	2593	100	1RB	24.46	25.6	1.3	0.089	0.12	/
	2640	100	1RB	/	/	/	/	/	/
	2593	100	50%RB	24.29	25.6	1.352	0.078	0.11	/
Body Front (10mm)	2546	100	1RB	/	/	/	/	/	/
	2593	100	1RB	24.46	25.6	1.3	0.064	0.08	/
	2640	100	1RB	/	/	/	/	/	/
	2593	100	50%RB	24.29	25.6	1.352	0.053	0.07	/
Body Back (10mm)	2546	100	1RB	/	/	/	/	/	/
	2593	100	1RB	24.46	25.6	1.3	0.136	0.18	20#
	2640	100	1RB	/	/	/	/	/	/
	2593	100	50%RB	24.29	25.6	1.352	0.116	0.16	/
Body Left (10mm)	2546	100	1RB	/	/	/	/	/	/
	2593	100	1RB	24.46	25.6	1.3	0.106	0.14	/
	2640	100	1RB	/	/	/	/	/	/
	2593	100	50%RB	24.29	25.6	1.352	0.094	0.13	/

5G NR n66:

Test Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)			
						Scaled Factor	Meas. SAR	Scaled SAR	Plot No.
Head Left Cheek	1730	40	1RB	/	/	/	/	/	/
	1745	40	1RB	17.19	17.8	1.151	0.346	0.4	/
	1760	40	1RB	/	/	/	/	/	/
	1745	40	50%RB	17.32	17.8	1.117	0.351	0.39	/
Head Left Tilt	1730	40	1RB	/	/	/	/	/	/
	1745	40	1RB	17.19	17.8	1.151	0.395	0.45	/
	1760	40	1RB	/	/	/	/	/	/
	1745	40	50%RB	17.32	17.8	1.117	0.4	0.45	/
Head Right Cheek	1730	40	1RB	/	/	/	/	/	/
	1745	40	1RB	17.19	17.8	1.151	0.674	0.78	/
	1760	40	1RB	/	/	/	/	/	/
	1745	40	50%RB	17.32	17.8	1.117	0.705	0.79	21#
Head Right Tilt	1730	40	1RB	/	/	/	/	/	/
	1745	40	1RB	17.19	17.8	1.151	0.488	0.56	/
	1760	40	1RB	/	/	/	/	/	/
	1745	40	50%RB	17.32	17.8	1.117	0.498	0.56	/
Body Front (10mm)	1730	40	1RB	/	/	/	/	/	/
	1745	40	1RB	17.19	17.8	1.151	0.137	0.16	/
	1760	40	1RB	/	/	/	/	/	/
	1745	40	50%RB	17.32	17.8	1.117	0.14	0.16	/
Body Back (10mm)	1730	40	1RB	/	/	/	/	/	/
	1745	40	1RB	17.19	17.8	1.151	0.138	0.16	/
	1760	40	1RB	/	/	/	/	/	/
	1745	40	50%RB	17.32	17.8	1.117	0.148	0.17	22#
Body Left (10mm)	1730	40	1RB	/	/	/	/	/	/
	1745	40	1RB	17.19	17.8	1.151	0.075	0.09	/
	1760	40	1RB	/	/	/	/	/	/
	1745	40	50%RB	17.32	17.8	1.117	0.078	0.09	/

Body Top (10mm)	1730	40	1RB	/	/	/		/	/
	1745	40	1RB	17.19	17.8	1.151	0.113	0.13	/
	1760	40	1RB	/	/	/		/	/
	1745	40	50%RB	17.32	17.8	1.117	0.115	0.13	/

2.4G WLAN

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
					Scaled Factor	Duty cycle Factor	Meas. SAR	Scaled SAR	Plot
Head Left Cheek	2412	802.11b	/	/	/	/	/	/	/
	2437	802.11b	14.48	14.8	1.076	1	0.281	0.3	23#
	2462	802.11b	/	/	/	/	/	/	/
Head Left Tilt	2412	802.11b	/	/	/	/	/	/	/
	2437	802.11b	14.48	14.8	1.076	1	0.204	0.22	/
	2462	802.11b	/	/	/	/	/	/	/
Head Right Cheek	2412	802.11b	/	/	/	/	/	/	/
	2437	802.11b	14.48	14.8	1.076	1	0.091	0.1	/
	2462	802.11b	/	/	/	/	/	/	/
Head Right Tilt	2412	802.11b	/	/	/	/	/	/	/
	2437	802.11b	14.48	14.8	1.076	1	0.1	0.11	/
	2462	802.11b	/	/	/	/	/	/	/
Body Front (10mm)	2412	802.11b	/	/	/	/	/	/	/
	2437	802.11b	14.48	14.8	1.076	1	0.041	0.04	/
	2462	802.11b	/	/	/	/	/	/	/
Body Back (10mm)	2412	802.11b	/	/	/	/	/	/	/
	2437	802.11b	14.48	14.8	1.076	1	0.052	0.06	24#
	2462	802.11b	/	/	/	/	/	/	/
Body Right (10mm)	2412	802.11b	/	/	/	/	/	/	/
	2437	802.11b	14.48	14.8	1.076	1	0.042	0.05	/
	2462	802.11b	/	/	/	/	/	/	/
Body Top (10mm)	2412	802.11b	/	/	/	/	/	/	/
	2437	802.11b	14.48	14.8	1.076	1	0.042	0.05	/
	2462	802.11b	/	/	/	/	/	/	/

Note:

1. When the 1-g SAR is $\leq 0.8\text{W/kg}$, testing for other channels are optional.
2. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual

channels tested to determine compliance.

3. For 802.11b mode power is the largest among 802.11b/g/n, 802.11 b mode as initial test configuration is selected to test.

4. According to IEC/IEEE 62209-1528:2020, If the correction Δ SAR is within $\pm 5\%$, the measured SAR results should not be corrected.

5.2G WLAN

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
					Scaled Factor	Duty cycle Factor	Meas. SAR	Scaled SAR	Plot
Head Left Cheek	5190	802.11n40	/	/	/	/	/	/	/
	5230	802.11n40	13.97	14.1	1.03	1	0.328	0.34	/
Head Left Tilt	5190	802.11n40	/	/	/	/	/	/	/
	5230	802.11n40	13.97	14.1	1.03	1	0.346	0.36	25#
Head Right Cheek	5190	802.11n40	/	/	/	/	/	/	/
	5230	802.11n40	13.97	14.1	1.03	1	0.252	0.26	/
Head Right Tilt	5190	802.11n40	/	/	/	/	/	/	/
	5230	802.11n40	13.97	14.1	1.03	1	0.311	0.32	/
Body Front (10mm)	5190	802.11n40	/	/	/	/	/	/	/
	5230	802.11n40	13.97	14.1	1.03	1	0.092	0.09	/
Body Back (10mm)	5190	802.11n40	/	/	/	/	/	/	/
	5230	802.11n40	13.97	14.1	1.03	1	0.198	0.2	26#
Body Right (10mm)	5190	802.11n40	/	/	/	/	/	/	/
	5230	802.11n40	13.97	14.1	1.03	1	0.055	0.06	/
Body Top (10mm)	5190	802.11n40	/	/	/	/	/	/	/
	5230	802.11n40	13.97	14.1	1.03	1	0.114	0.12	/

Note:

1. When the 1-g SAR is $\leq 0.8\text{W/kg}$, testing for other channels are optional.
2. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance.
3. For 802.11n40 mode power is the largest among 802.11a/n/ac, 802.11 n40 mode as initial test configuration is selected to test.
4. According to IEC/IEEE 62209-1528:2020, If the correction ΔSAR is within $\pm 5\%$, the measured SAR results should not be corrected.

5.8G WLAN

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
					Scaled Factor	Duty cycle Factor	Meas. SAR	Scaled SAR	Plot
Head Left Cheek	5745	802.11a	/	/	/	/	/	/	/
	5785	802.11a	16.01	16.1	1.021	1	0.273	0.28	27#
	5825	802.11a	/	/	/	/	/	/	/
Head Left Tilt	5745	802.11a	/	/	/	/	/	/	/
	5785	802.11a	16.01	16.1	1.021	1	0.227	0.23	/
	5825	802.11a	/	/	/	/	/	/	/
Head Right Cheek	5745	802.11a	/	/	/	/	/	/	/
	5785	802.11a	16.01	16.1	1.021	1	0.227	0.23	/
	5825	802.11a	/	/	/	/	/	/	/
Head Right Tilt	5745	802.11a	/	/	/	/	/	/	/
	5785	802.11a	16.01	16.1	1.021	1	0.205	0.21	/
	5825	802.11a	/	/	/	/	/	/	/
Body Front (10mm)	5745	802.11a	/	/	/	/	/	/	/
	5785	802.11a	16.01	16.1	1.021	1	0.054	0.06	/
	5825	802.11a	/	/	/	/	/	/	/
Body Back (10mm)	5745	802.11a	/	/	/	/	/	/	/
	5785	802.11a	16.01	16.1	1.021	1	0.123	0.13	/
	5825	802.11a	/	/	/	/	/	/	/
Body Right (10mm)	5745	802.11a	/	/	/	/	/	/	/
	5785	802.11a	16.01	16.1	1.021	1	0.059	0.06	/
	5825	802.11a	/	/	/	/	/	/	/
Body Top (10mm)	5745	802.11a	/	/	/	/	/	/	/
	5785	802.11a	16.01	16.1	1.021	1	0.136	0.14	28#
	5825	802.11a	/	/	/	/	/	/	/

Note:

1. When the 1-g SAR is $\leq 0.8\text{W/kg}$, testing for other channels are optional.
2. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance.

3. For 802.11a mode power is the largest among 802.11a/n/ac, 802.11 a mode as initial test configuration is selected to test.

4. According to IEC/IEEE 62209-1528:2020, If the correction ΔSAR is within $\pm 5\%$, the measured SAR results should not be corrected.

8 SAR Measurement Variability

In accordance with published RF Exposure KDB procedure 865664 D01 SAR measurement 100 MHz to 6 GHz v01. These additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results

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

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

The Highest Measured SAR Configuration in Each Frequency Band

Body

SAR probe calibration point	Frequency Band	Freq.(MHz)	EUT Position	Meas. SAR (W/kg)		Largest to Smallest SAR Ratio
				Original	Repeated	
/	/	/	/	/	/	/

Note:

1. Second Repeated Measurement is not required since the ratio of the largest to smallest SAR for the original and first repeated measurement is not > 1.20 .
2. The measured SAR results do not have to be scaled to the maximum tune-up tolerance to determine if repeated measurements are required.
3. SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements.

9 Simultaneous Transmission Description

9.1 Simultaneous Transmission

Description of Simultaneous Transmit Capabilities		
Transmitter Combination	Simultaneous?	Hotspot?
WWAN(GSM/WCDMA/LTE)Antenna + WLAN 2.4G/5G	√	√
WWAN(GSM/WCDMA/LTE)Antenna + Bluetooth	√	×
5G NR n41+LTE Band 2 + WLAN 2.4G/5G	√	√
5G NR n41+LTE Band 2 + Bluetooth	√	×
WLAN 2.4G/5G+ Bluetooth	×	×

9.2 Simultaneous SAR test exclusion considerations:

Mode(SAR1+SAR2)	Position	Reported SAR(W/kg)		ΣSAR < 1.6w/kg
		SAR1	SAR2	
WWAN(GSM/WCDMA/LTE) + Bluetooth	Head Left Cheek	0.47	0.15	0.62
	Head Left Tilt	0.59	0.15	0.74
	Head Right Cheek	0.79	0.15	0.94
	Head Right Tilt	0.67	0.15	0.82
	Body Front	0.32	0.08	0.4
	Body Back	0.51	0.08	0.59
WWAN(GSM/WCDMA/LTE) + 2.4G WLAN	Head Left Cheek	0.47	0.3	0.77
	Head Left Tilt	0.59	0.22	0.81
	Head Right Cheek	0.79	0.1	0.89
	Head Right Tilt	0.67	0.11	0.78
WWAN(GSM/WCDMA/LTE) + 2.4G WLAN (Hotspot)	Body Front	0.32	0.04	0.36
	Body Back	0.51	0.06	0.57
	Body Left	0.4	NA	0.4
	Body Right	NA	0.05	0.05
	Body Top	0.64	0.05	0.69
	Body Bottom	0.79	NA	0.79
WWAN(GSM/WCDMA/LTE) +	Head Left Cheek	0.47	0.34	0.81

5G WLAN	Head Left Tilt	0.59	0.36	0.95
	Head Right Cheek	0.79	0.26	1.05
	Head Right Tilt	0.67	0.32	0.99
WWAN(GSM/WCDMA/LTE) + 5G WLAN (Hotspot)	Body Front	0.32	0.09	0.41
	Body Back	0.51	0.2	0.71
	Body Left	0.4	NA	0.4
	Body Right	NA	0.06	0.06
	Body Top	0.64	0.14	0.78
	Body Bottom	0.79	NA	0.79

Mode(SAR1+SAR2)	Position	Reported SAR(W/kg)			ΣSAR < 1.6w/kg
		SAR1	SAR2	SAR3	
5G NR n41+LTE Band 2 + Bluetooth	Head Left Cheek	0.12	0.22	0.15	0.49
	Head Left Tilt	0.08	0.37	0.15	0.6
	Head Right Cheek	0.42	0.48	0.15	1.05
	Head Right Tilt	0.12	0.36	0.15	0.63
	Body Front	0.08	0.12	0.08	0.28
	Body Back	0.18	0.14	0.08	0.4
5G NR n41+LTE Band 2 + 2.4G WLAN	Head Left Cheek	0.12	0.22	0.3	0.64
	Head Left Tilt	0.08	0.37	0.22	0.67
	Head Right Cheek	0.42	0.48	0.1	1
	Head Right Tilt	0.12	0.36	0.11	0.59
5G NR n41+LTE Band 2 + 2.4G WLAN (Hotspot)	Body Front	0.08	0.12	0.04	0.24
	Body Back	0.18	0.14	0.06	0.38
	Body Left	0.14	0.13	NA	0.27
	Body Right	NA	NA	0.05	0.05
	Body Top	NA	0.16	0.05	0.21
5G NR n41+LTE Band 2 + 5G WLAN	Head Left Cheek	0.12	0.22	0.34	0.68
	Head Left Tilt	0.08	0.37	0.36	0.81
	Head Right Cheek	0.42	0.48	0.26	1.16
	Head Right Tilt	0.12	0.36	0.32	0.8
WWAN(GSM/WCDMA/LTE) + 5G WLAN	Body Front	0.08	0.12	0.09	0.29
	Body Back	0.18	0.14	0.2	0.52

(Hotspot)	Body Left	0.14	0.13	NA	0.27
	Body Right	NA	NA	0.06	0.06
	Body Top	NA	0.16	0.14	0.3

Note:

1. For the EIRP of NFC is 0.0011mW, per KDB447498 D01 clause 4.3, the estimated SAR is so lower, so the NFC almost have no influence on the results of simultaneous transmission.

Conclusion:

Sum of SAR: **$\Sigma \text{SAR} \leq 1.6 \text{ W/kg}$** , therefore simultaneous transmission SAR with Volume Scans is **not required**.

10 SAR Plots

Test Plot1#: GSM 850_Head Right Cheek_Middle

DUT: Smart phone; **Type:** PG2309GBA; **Serial:** 2DU0-1;

Communication System: Generic GSM (0); Frequency: 836.6 MHz; Duty Cycle: 1:8
Medium parameters used: $f=836.6$ MHz; $\sigma = 0.924$ S/m; $\epsilon_r = 41.416$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(9.49, 9.49, 9.49) @836.6 MHz; Calibrated: 2023/6/23;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (8x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.135 W/kg

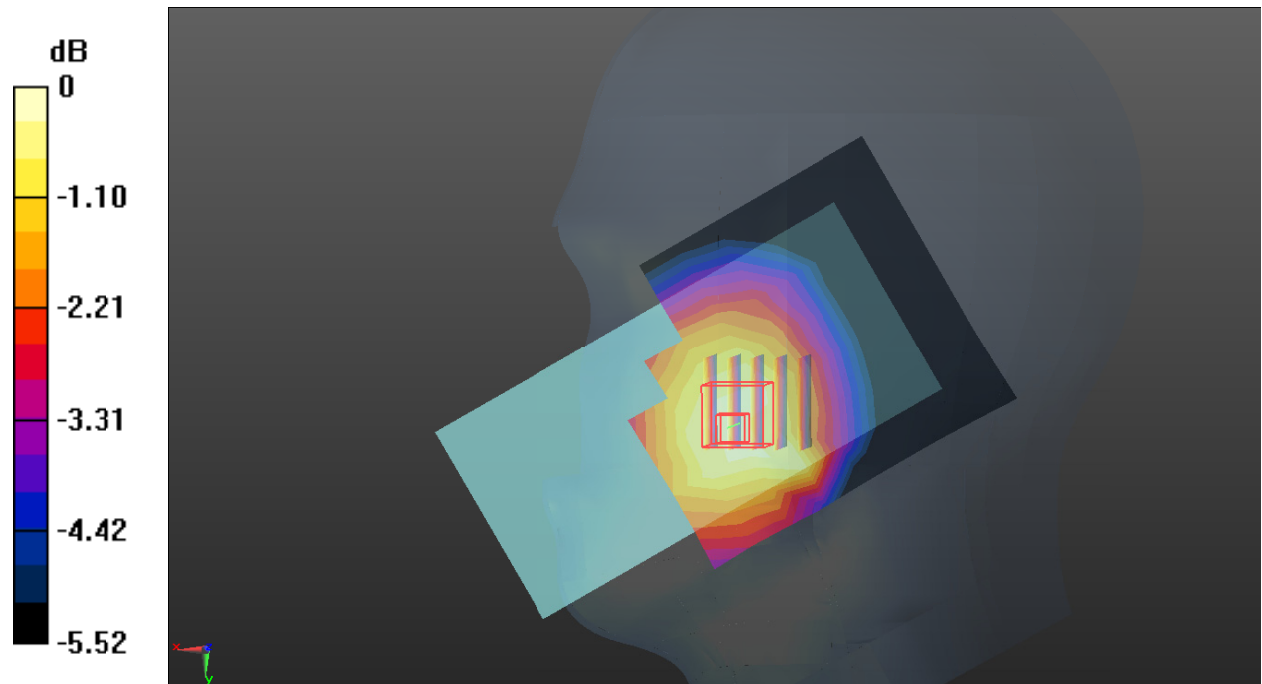
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.671 V/m; Power Drift = 0.1 dB

Peak SAR (interpolated) = 0.163 W/kg

SAR(1 g) = 0.126 W/kg; SAR(10 g) = 0.099 W/kg

Maximum value of SAR (measured) = 0.138 W/kg



0 dB = 0.138 W/kg = -8.60 dB dBW/kg

Test Plot2#: GSM 850_Body Worn Back_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: Generic GSM (0); Frequency: 836.6 MHz; Duty Cycle: 1:8
Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.924$ S/m; $\epsilon_r = 41.416$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(9.49, 9.49, 9.49) @836.6 MHz; Calibrated: 2023/6/23;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.283 W/kg

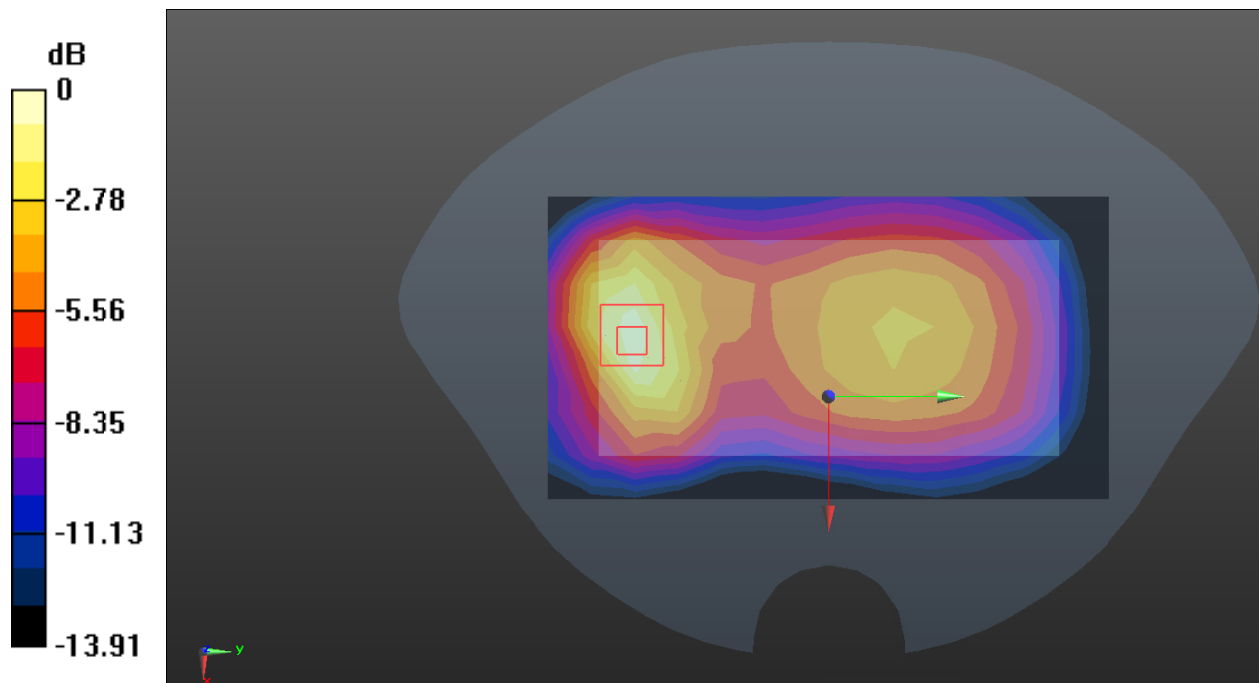
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.10 V/m; Power Drift = 0 dB

Peak SAR (interpolated) = 0.466 W/kg

SAR(1 g) = 0.243 W/kg; SAR(10 g) = 0.136 W/kg

Maximum value of SAR (measured) = 0.297 W/kg



0 dB = 0.297 W/kg = -5.27 dB dBW/kg

Test Plot3#: PCS 1900_Head Right Cheek_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: Generic GSM (0); Frequency: 1880 MHz;Duty Cycle: 1:8
Medium parameters used: $f=1880$ MHz; $\sigma = 1.405$ S/m; $\epsilon_r = 39.928$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.93, 7.93, 7.93)) @1880 MHz; Calibrated: 2023/6/23;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (8x7x1):Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.743 W/kg

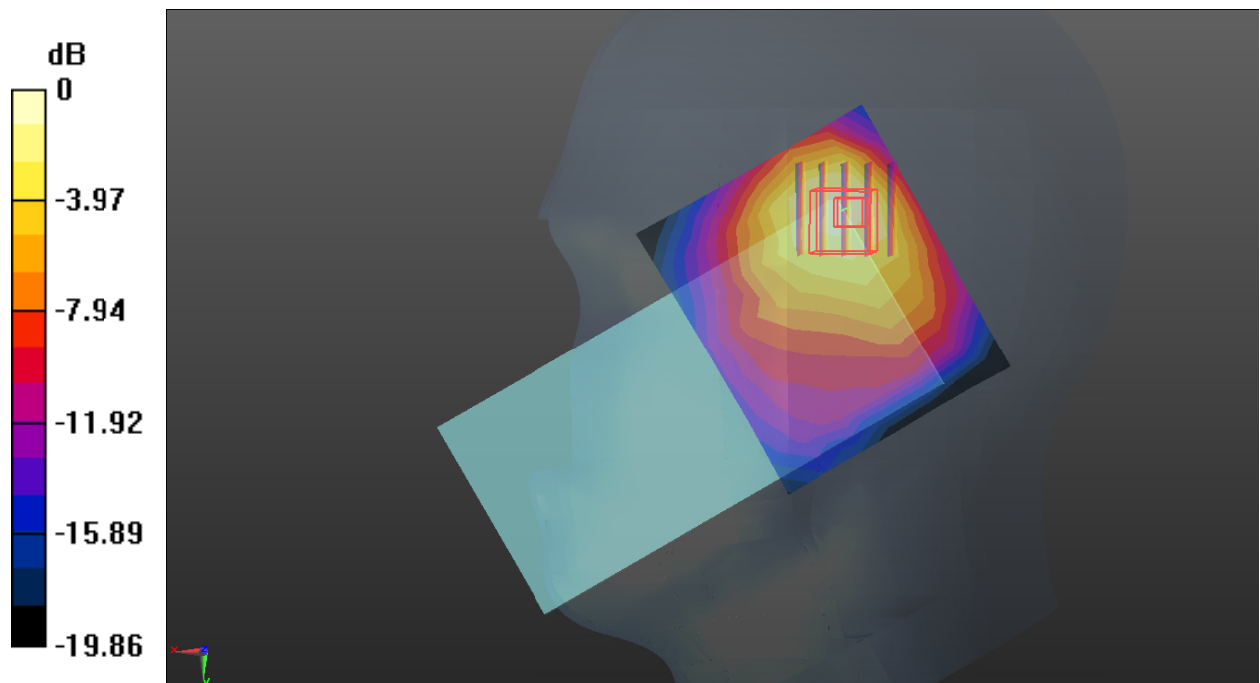
Zoom Scan (5x5x7)/Cube 0:Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.88 V/m; Power Drift = 0.04 dB

Peak SAR (interpolated) = 1.37 W/kg

SAR(1 g) = 0.680 W/kg; SAR(10 g) = 0.380 W/kg

Maximum value of SAR (measured) = 0.850 W/kg



0 dB = 0.850 W/kg = -0.71 dB dBW/kg

Test Plot4#: PCS 1900_Body Top_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: Generic GPRS-2 slots (0); Frequency: 1880 MHz; Duty Cycle: 1:4
Medium parameters used: $f = 1880$ MHz; $\sigma = 1.405$ S/m; $\epsilon_r = 39.928$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.93, 7.93, 7.93)) @1880 MHz; Calibrated: 2023/6/23;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.605 W/kg

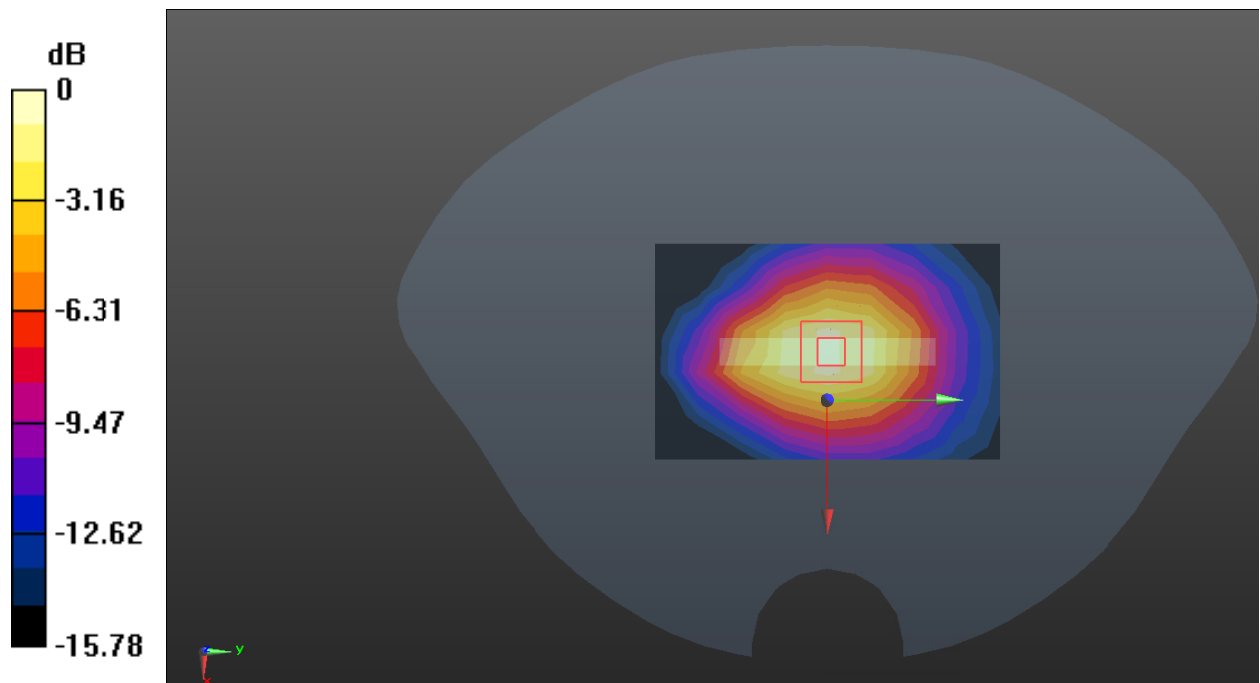
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.50 V/m; Power Drift = 0.14 dB

Peak SAR (interpolated) = 0.926 W/kg

SAR(1 g) = 0.599 W/kg; SAR(10 g) = 0.363 W/kg

Maximum value of SAR (measured) = 0.714 W/kg



0 dB = 0.714 W/kg = -1.46 dB dBW/kg

Test Plot5#: WCDMA Band 2_Head Right Cheek_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: Generic WCDMA (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: $f=1880$ MHz; $\sigma = 1.405$ S/m; $\epsilon_r = 39.928$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.93, 7.93, 7.93)) @1880 MHz; Calibrated: 2023/6/23;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (7x9x1):Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.636 W/kg

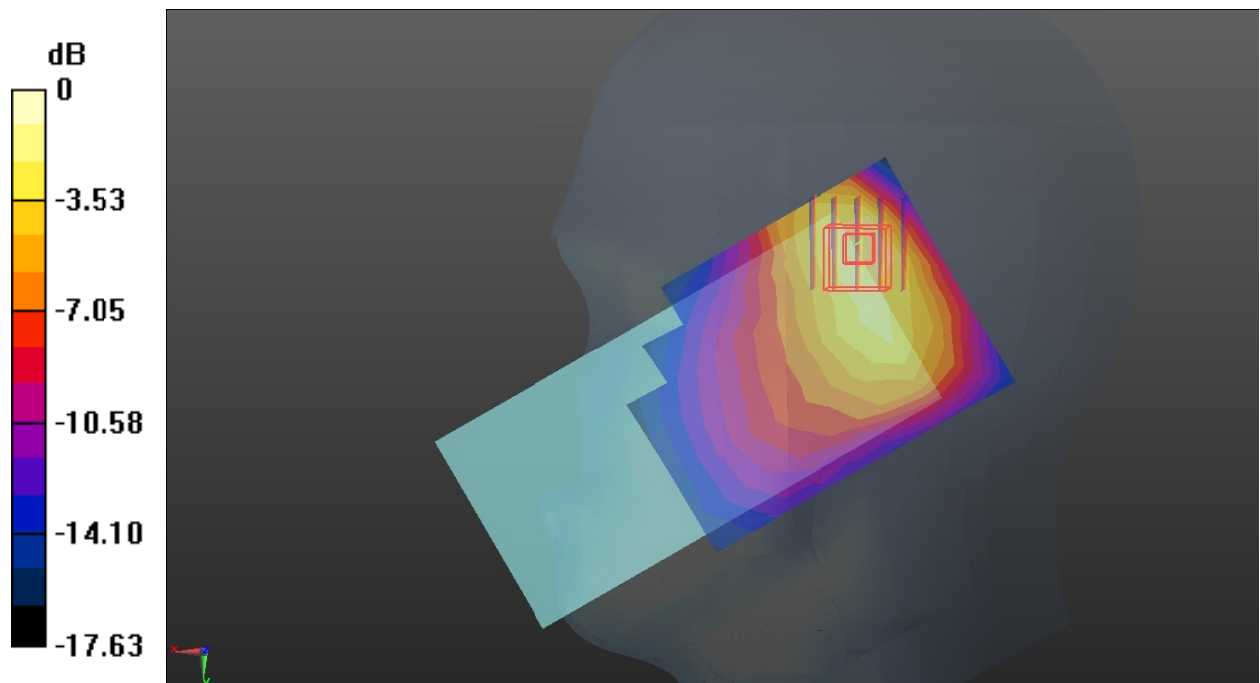
Zoom Scan (5x5x7)/Cube 0:Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.36 V/m; Power Drift = 0.13 dB

Peak SAR (interpolated) = 1.10 W/kg

SAR(1 g) = 0.546 W/kg; SAR(10 g) = 0.300 W/kg

Maximum value of SAR (measured) = 0.662 W/kg



0 dB = 0.662 W/kg = -1.79 dB dBW/kg

Test Plot6#: WCDMA Band 2_Body Top_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: Generic WCDMA (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: $f=1880$ MHz; $\sigma = 1.405$ S/m; $\epsilon_r = 39.928$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.93, 7.93, 7.93)) @1880 MHz; Calibrated: 2023/6/23;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (6x9x1):Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.237 W/kg

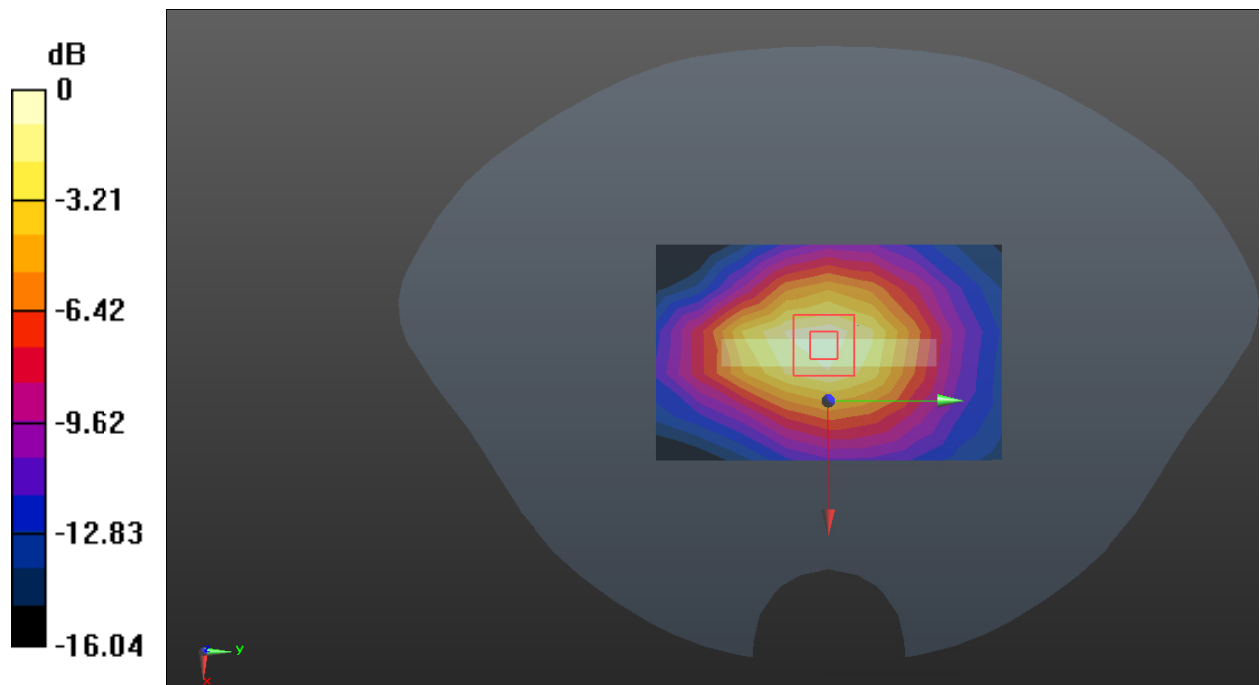
Zoom Scan (5x5x7)/Cube 0:Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.07 V/m; Power Drift = -0.15 dB

Peak SAR (interpolated) = 0.338 W/kg

SAR(1 g) = 0.216 W/kg; SAR(10 g) = 0.131 W/kg

Maximum value of SAR (measured) = 0.258 W/kg



0 dB = 0.258 W/kg = -5.88 dB dBW/kg

Test Plot7#: WCDMA Band 5_Head Right Cheek_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: Generic WCDMA (0); Frequency: 836.6 MHz; Duty Cycle: 1:1
Medium parameters used: $f=836.6$ MHz; $\sigma = 0.924$ S/m; $\epsilon_r = 41.416$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(9.49, 9.49, 9.49) @836.6 MHz; Calibrated: 2023/6/23;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (8x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.179 W/kg

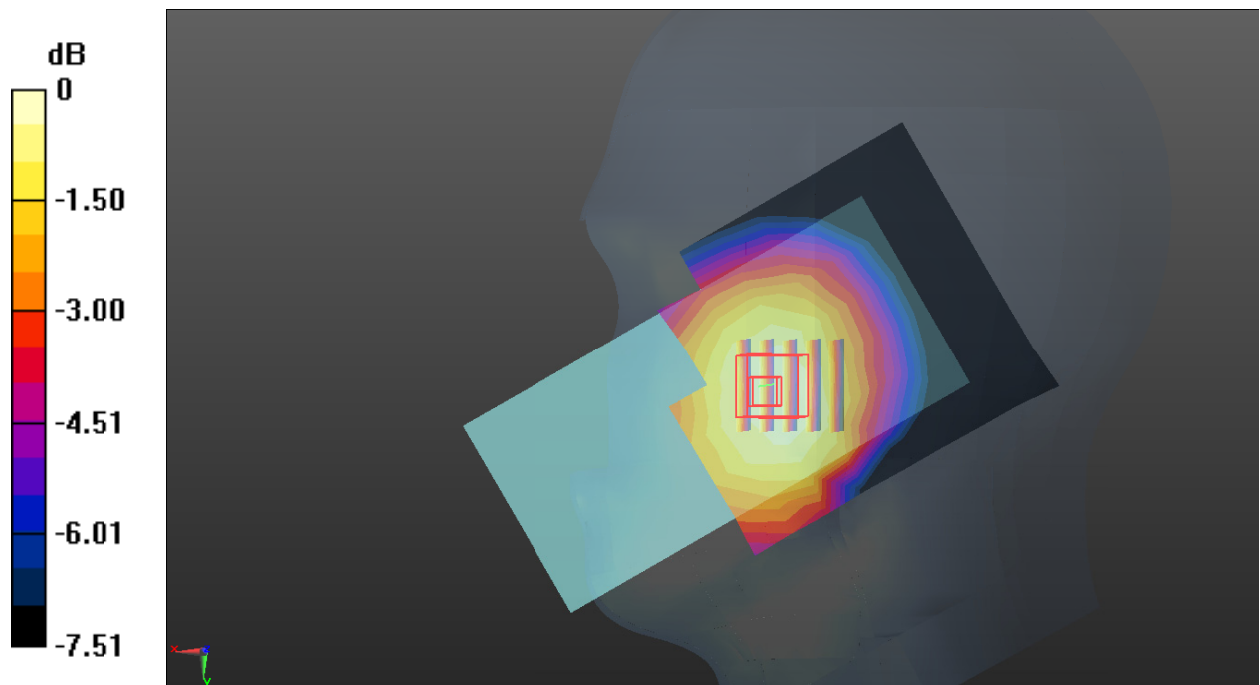
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.812 V/m; Power Drift = -0.08 dB

Peak SAR (interpolated) = 0.207 W/kg

SAR(1 g) = 0.163 W/kg; SAR(10 g) = 0.126 W/kg

Maximum value of SAR (measured) = 0.180 W/kg



0 dB = 0.180 W/kg = -7.45 dB dBW/kg

Test Plot8#: WCDMA Band 5_Body Back_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: Generic WCDMA (0); Frequency: 836.6 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.924 \text{ S/m}$; $\epsilon_r = 41.416$; $\rho = 1000 \text{ kg/m}^3$;
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(9.49, 9.49, 9.49) @836.6 MHz; Calibrated: 2023/6/23;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (8x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.218 W/kg

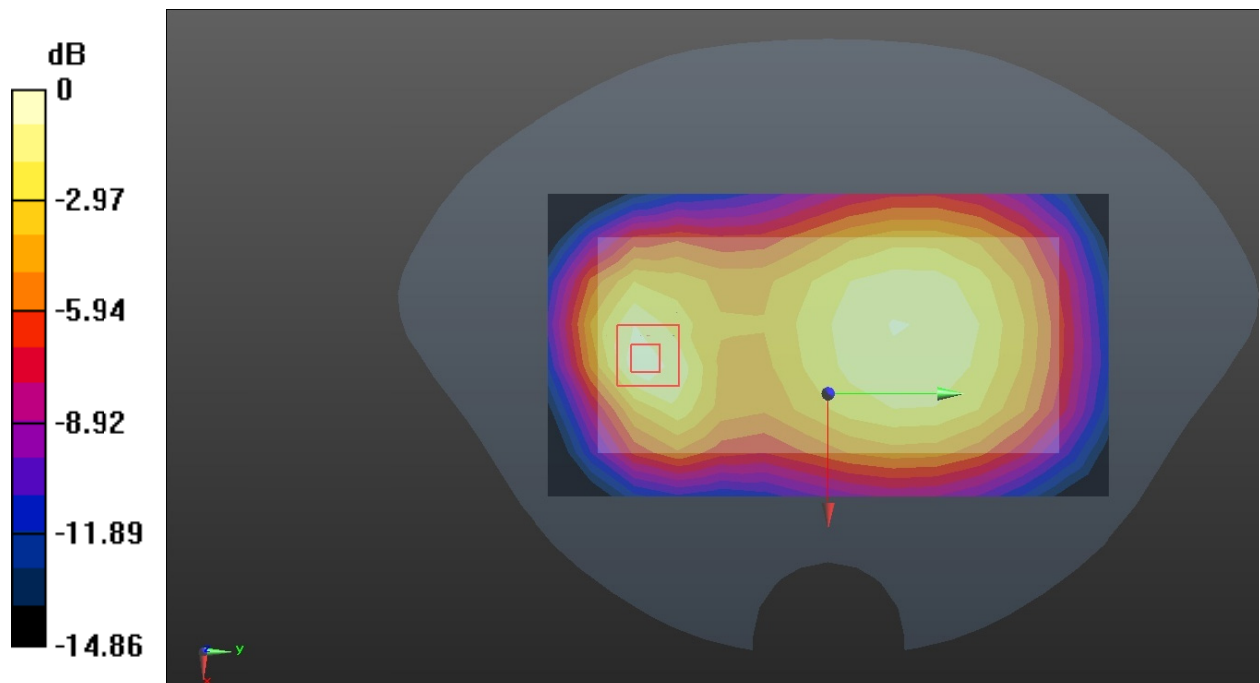
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.06 V/m; Power Drift = 0 dB

Peak SAR (interpolated) = 0.358 W/kg

SAR(1 g) = 0.191 W/kg; SAR(10 g) = 0.109 W/kg

Maximum value of SAR (measured) = 0.236 W/kg



0 dB = 0.236 W/kg = -6.27 dB dBW/kg

Test Plot9#: LTE Band 2_Head Right Cheek_1RB_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: Generic FDD-LTE (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: $f=1880$ MHz; $\sigma = 1.405$ S/m; $\epsilon_r = 39.928$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.93, 7.93, 7.93)) @1880 MHz; Calibrated: 2023/6/23;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (7x9x1):Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.507 W/kg

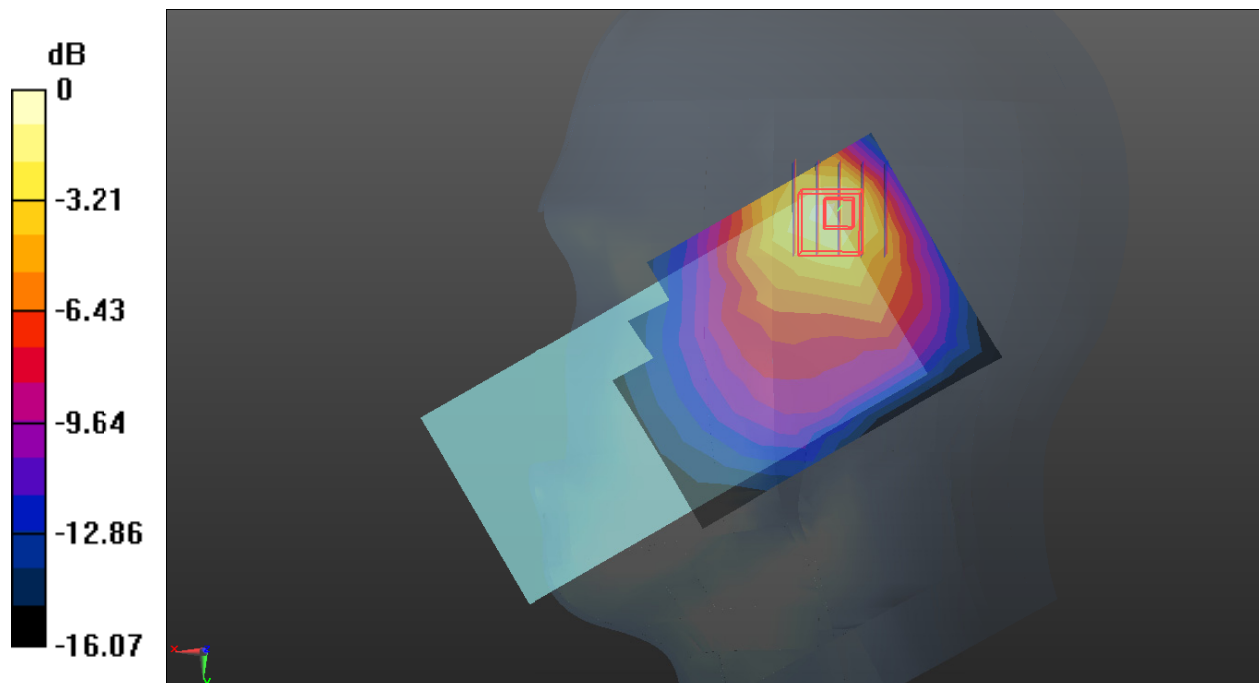
Zoom Scan (5x5x7)/Cube 0:Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.07 V/m; Power Drift = 0.07 dB

Peak SAR (interpolated) = 0.935 W/kg

SAR(1 g) = 0.456 W/kg; SAR(10 g) = 0.256 W/kg

Maximum value of SAR (measured) = 0.576 W/kg



0 dB = 0.576 W/kg = -2.40 dB dBW/kg

Test Plot10#: LTE Band 2_Body Top_1RB_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: Generic FDD-LTE (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: $f=1880$ MHz; $\sigma = 1.405$ S/m; $\epsilon_r = 39.928$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.93, 7.93, 7.93)) @1880 MHz; Calibrated: 2023/6/23;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (6x9x1):Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.155 W/kg

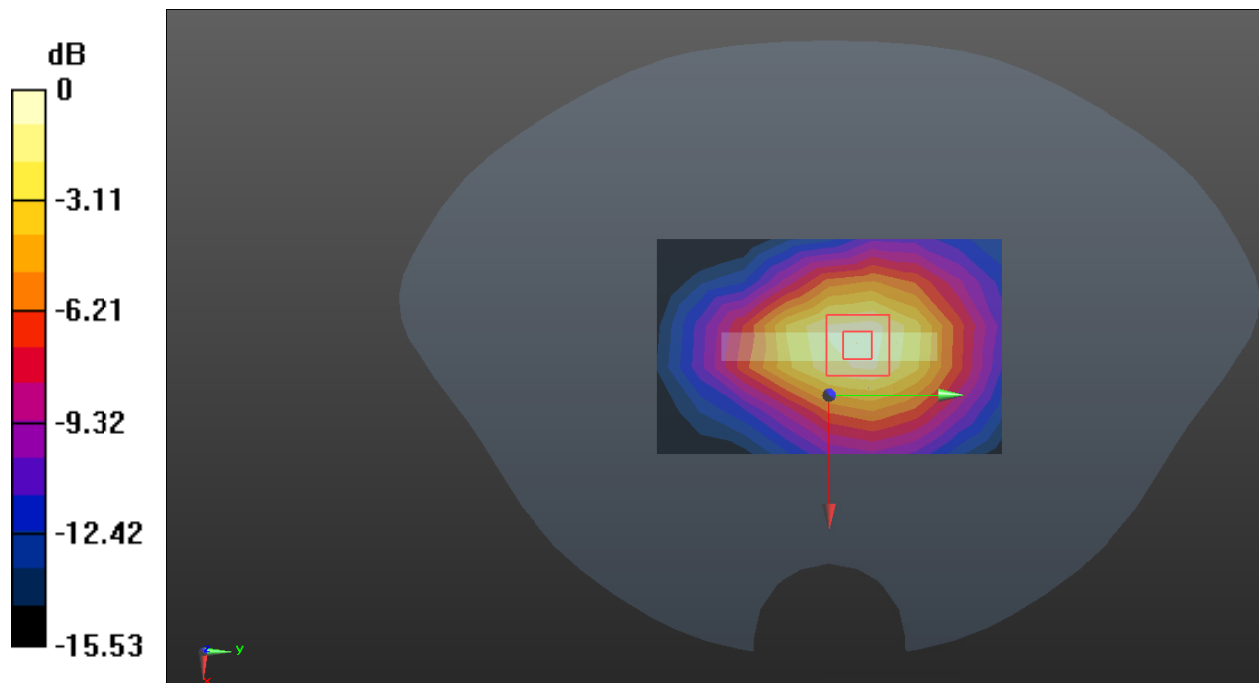
Zoom Scan (5x5x7)/Cube 0:Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.19 V/m; Power Drift = 0.01 dB

Peak SAR (interpolated) = 0.225 W/kg

SAR(1 g) = 0.149 W/kg; SAR(10 g) = 0.087 W/kg

Maximum value of SAR (measured) = 0.174 W/kg



0 dB = 0.174 W/kg = -7.59 dB dBW/kg

Test Plot11#: LTE Band 5_Head Left Cheek_1RB_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: Generic FDD-LTE (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used: $f=836.5$ MHz; $\sigma = 0.921$ S/m; $\epsilon_r = 41.467$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(9.49, 9.49, 9.49) @836.5 MHz; Calibrated: 2023/6/23;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (7x9x1):Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0502 W/kg

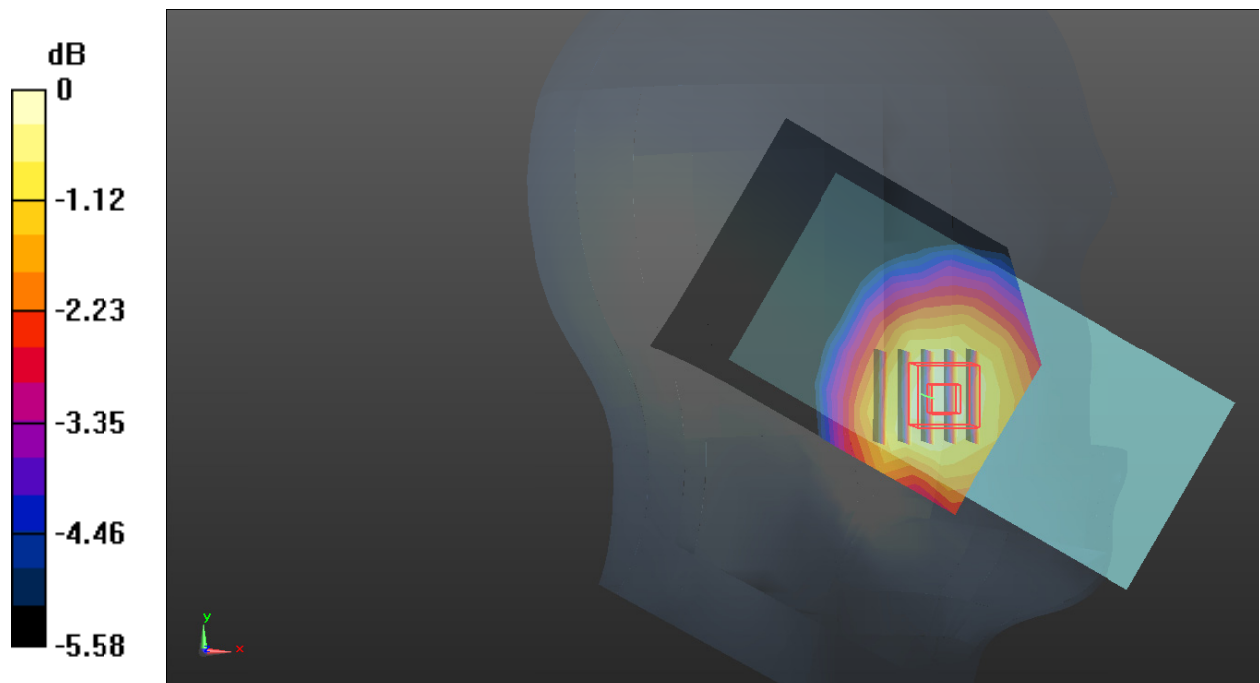
Zoom Scan (5x5x7)/Cube 0:Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.002 V/m; Power Drift = 0.13 dB

Peak SAR (interpolated) = 0.0620 W/kg

SAR(1 g) = 0.046 W/kg; SAR(10 g) = 0.035 W/kg

Maximum value of SAR (measured) = 0.0513 W/kg



0 dB = 0.0513 W/kg = -12.90 dB dBW/kg

Test Plot12#: LTE Band 5 _Body Bottom_1RB_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: Generic FDD-LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 836.5$ MHz; $\sigma = 0.921$ S/m; $\epsilon_r = 41.467$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(9.49, 9.49, 9.49) @836.5 MHz; Calibrated: 2023/6/23;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.129 W/kg

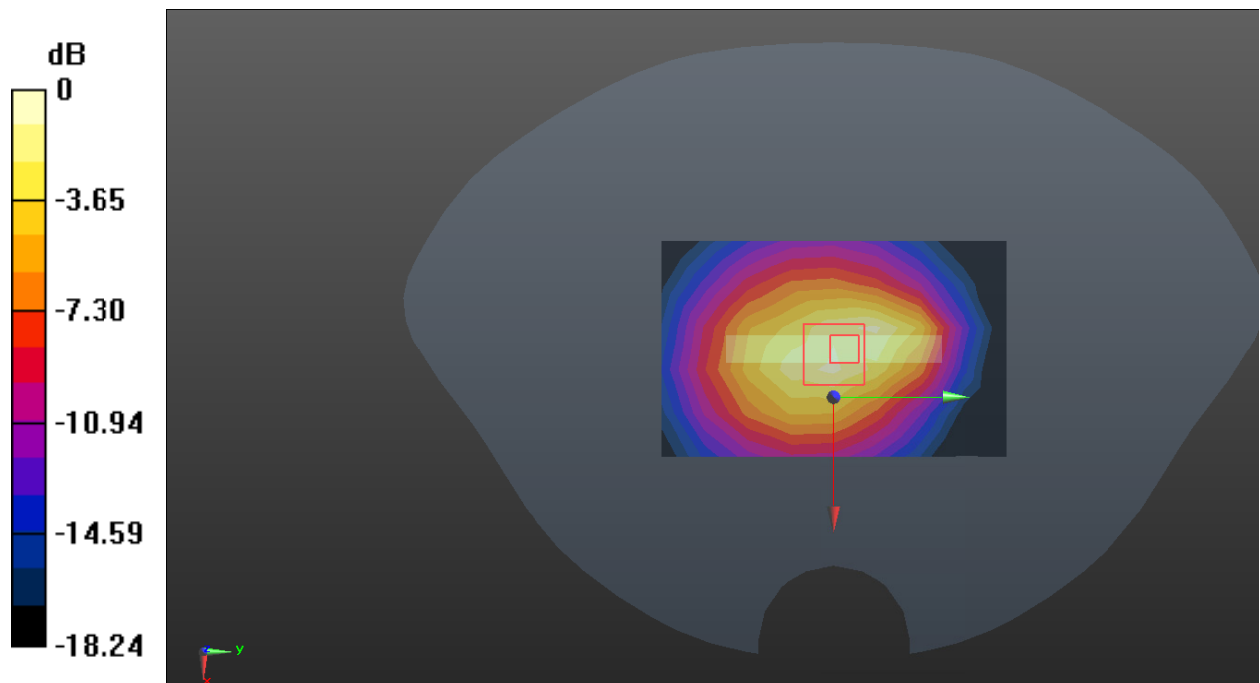
Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.54 V/m; Power Drift = 0.02 dB

Peak SAR (interpolated) = 0.245 W/kg

SAR(1 g) = 0.127 W/kg; SAR(10 g) = 0.073 W/kg

Maximum value of SAR (measured) = 0.157 W/kg



0 dB = 0.157 W/kg = -8.04 dB dBW/kg

Test Plot13#: LTE Band 12_Head Left Cheek_1RB_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: Generic FDD-LTE (0); Frequency: 707.5 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 707.5$ MHz; $\sigma = 0.859$ S/m; $\epsilon_r = 42.496$; $\rho = 1000$ kg/m³;
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(9.49, 9.49, 9.49) @707.5 MHz; Calibrated: 2023/6/23;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (8x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0253 W/kg

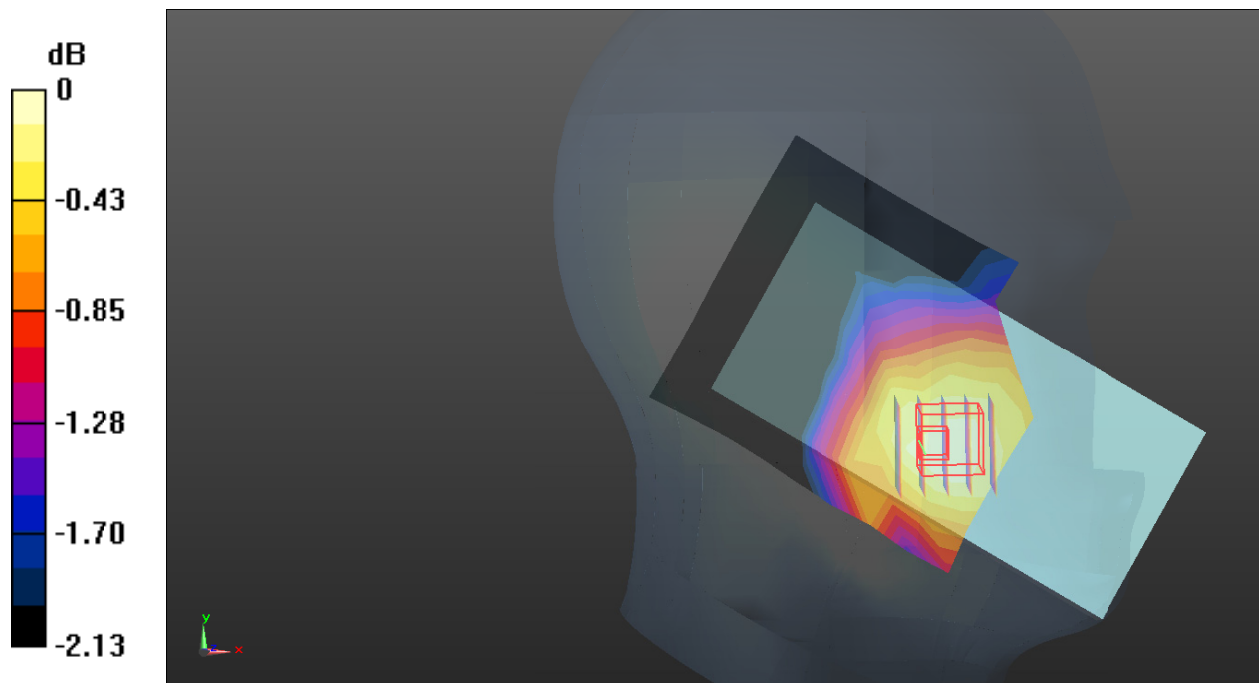
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.353 V/m; Power Drift = 0.03 dB

Peak SAR (interpolated) = 0.0210 W/kg

SAR(1 g) = 0.017 W/kg; SAR(10 g) = 0.013 W/kg

Maximum value of SAR (measured) = 0.0182 W/kg



0 dB = 0.0182 W/kg = -17.40 dB dBW/kg

Test Plot14#: LTE Band 12_Body Bottom_1RB_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: Generic FDD-LTE (0); Frequency: 707.5 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 707.5$ MHz; $\sigma = 0.859$ S/m; $\epsilon_r = 42.496$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(9.49, 9.49, 9.49) @707.5 MHz; Calibrated: 2023/6/23;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0504 W/kg

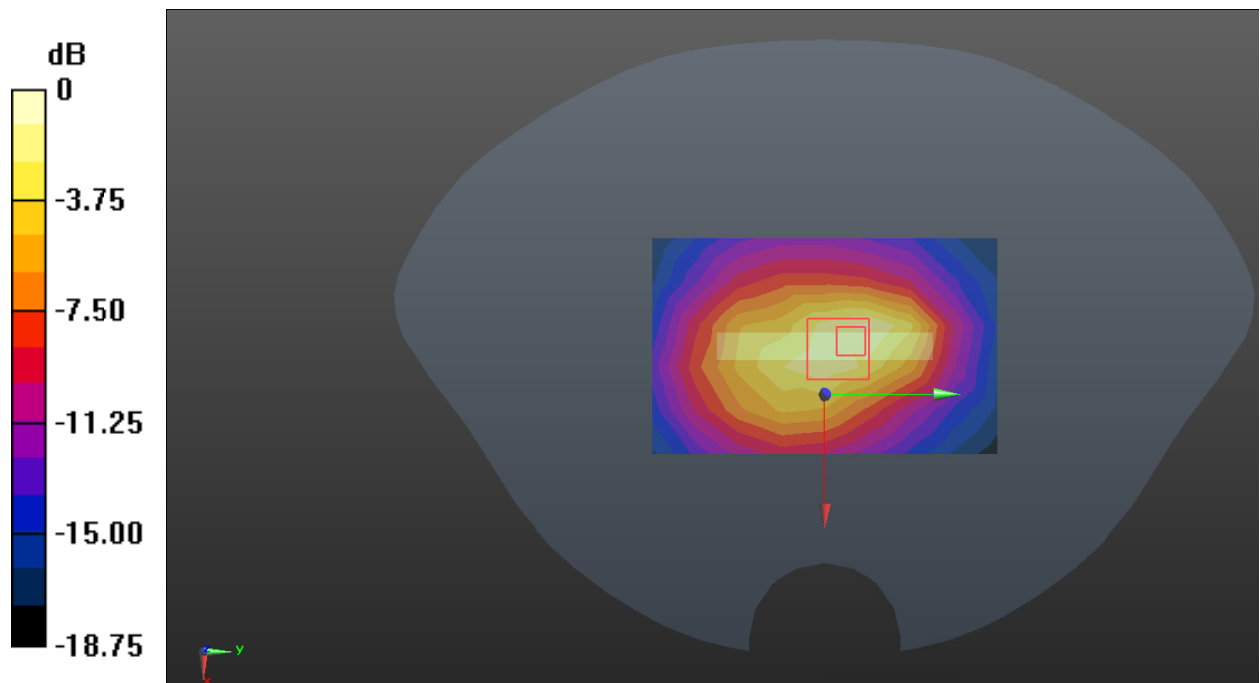
Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.590 V/m; Power Drift = 0.13 dB

Peak SAR (interpolated) = 0.104 W/kg

SAR(1 g) = 0.049 W/kg; SAR(10 g) = 0.026 W/kg

Maximum value of SAR (measured) = 0.0626 W/kg



0 dB = 0.0626 W/kg = -12.03 dB dBW/kg

Test Plot15#: LTE Band 13_Head Left Cheek_1RB_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: Generic FDD-LTE (0); Frequency: 782 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.892 \text{ S/m}$; $\epsilon_r = 41.729$; $\rho = 1000 \text{ kg/m}^3$;
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(9.49, 9.49, 9.49) @782 MHz; Calibrated: 2023/6/23;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (8x9x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.0353 W/kg

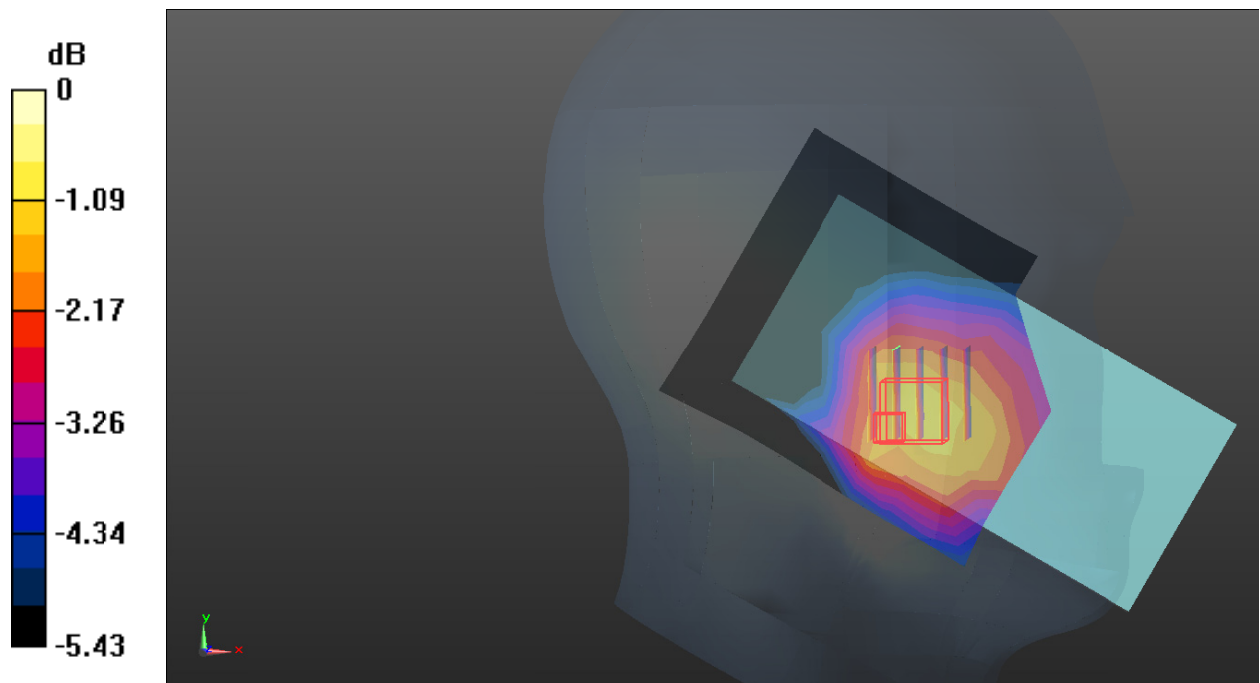
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.454 V/m ; Power Drift = 0.09 dB

Peak SAR (interpolated) = 0.0810 W/kg

SAR(1 g) = 0.038 W/kg ; SAR(10 g) = 0.031 W/kg

Maximum value of SAR (measured) = 0.0470 W/kg



$0 \text{ dB} = 0.0470 \text{ W/kg} = -13.28 \text{ dB dBW/kg}$

Test Plot16#: LTE Band 13_Body Bottom_1RB_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: Generic FDD-LTE (0); Frequency: 782 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 782$ MHz; $\sigma = 0.892$ S/m; $\epsilon_r = 41.729$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(9.49, 9.49, 9.49) @782 MHz; Calibrated: 2023/6/23;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0966 W/kg

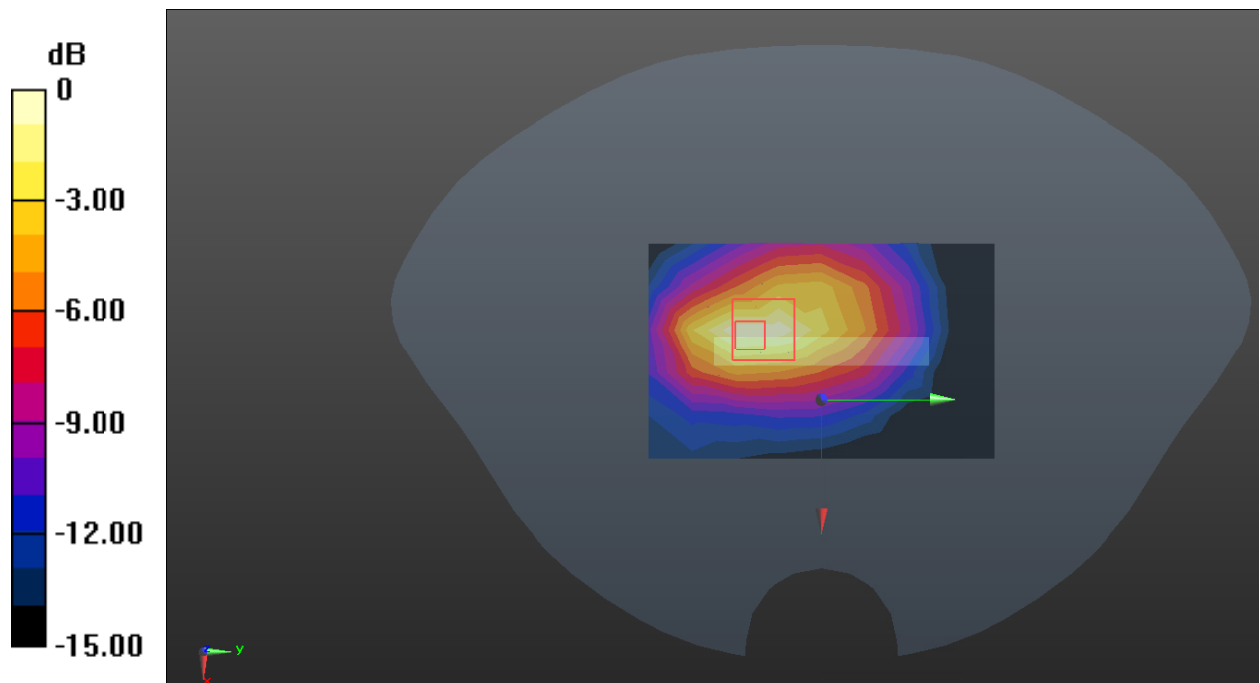
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.844 V/m; Power Drift = -0.17 dB

Peak SAR (interpolated) = 0.172 W/kg

SAR(1 g) = 0.080 W/kg; SAR(10 g) = 0.042 W/kg

Maximum value of SAR (measured) = 0.100 W/kg



0 dB = 0.100 W/kg = -10.00 dB dBW/kg

Test Plot17#: LTE Band 41_Head Left Cheek_1RB_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: Generic TDD-LTE (0); Frequency: 2593 MHz;Duty Cycle: 1:1.58
Medium parameters used: $f=2593$ MHz; $\sigma = 1.935$ S/m; $\epsilon_r = 38.847$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.16, 7.16, 7.16) @2593 MHz; Calibrated: 2023/6/23;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (10x11x1):Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 0.161 W/kg

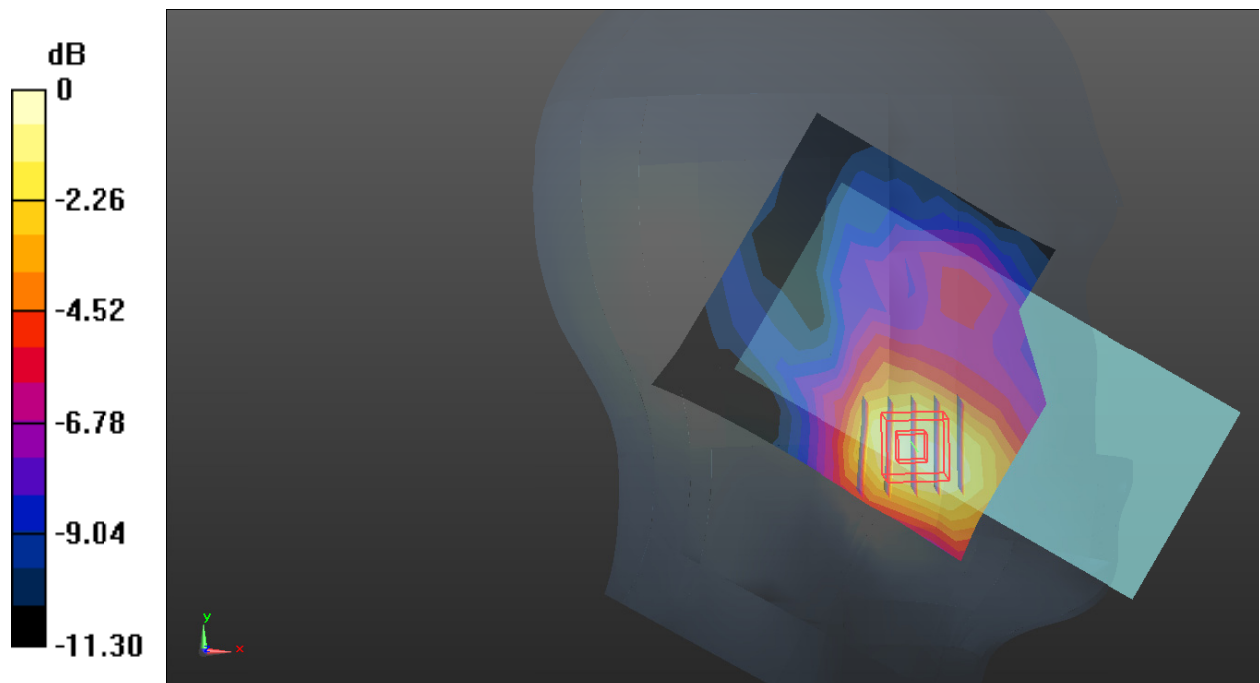
Zoom Scan (5x5x7)/Cube 0:Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.970 V/m; Power Drift = 0.19 dB

Peak SAR (interpolated) = 0.235 W/kg

SAR(1 g) = 0.139 W/kg; SAR(10 g) = 0.085 W/kg

Maximum value of SAR (measured) = 0.168 W/kg



0 dB = 0.168 W/kg = -7.75 dB dBW/kg

Test Plot18#: LTE Band 41_Body Bottom_1RB_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: Generic TDD-LTE (0); Frequency: 2593 MHz; Duty Cycle: 1:1.58
Medium parameters used: $f = 2593$ MHz; $\sigma = 1.935$ S/m; $\epsilon_r = 38.847$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.16, 7.16, 7.16) @2593 MHz; Calibrated: 2023/6/23;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (6x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 0.608 W/kg

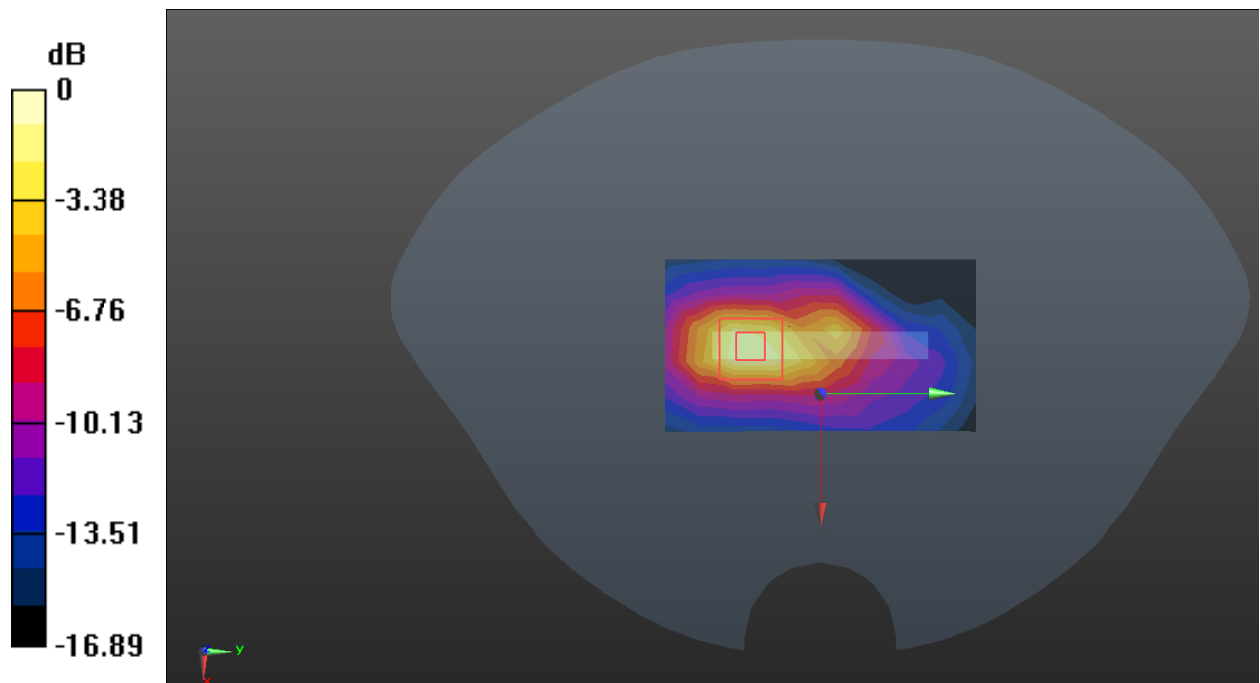
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.45 V/m; Power Drift = -0.17 dB

Peak SAR (interpolated) = 1.29 W/kg

SAR(1 g) = 0.646 W/kg; SAR(10 g) = 0.299 W/kg

Maximum value of SAR (measured) = 0.862 W/kg



0 dB = 0.862 W/kg = -0.64 dB dBW/kg

Test Plot19#: FR1 n 41 _Head Right Cheek _1RB _Middle

DUT: Smart phone; **Type:** PG2309GBA; **Serial:** 2DU0-1;

Communication System: Generic TDD-FR1 n 41 (0); Frequency: 2595 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2593$ MHz; $\sigma = 1.935$ S/m; $\epsilon_r = 38.847$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.16, 7.16, 7.16) @2593 MHz; Calibrated: 2023/6/23;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (11x11x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.465 W/kg

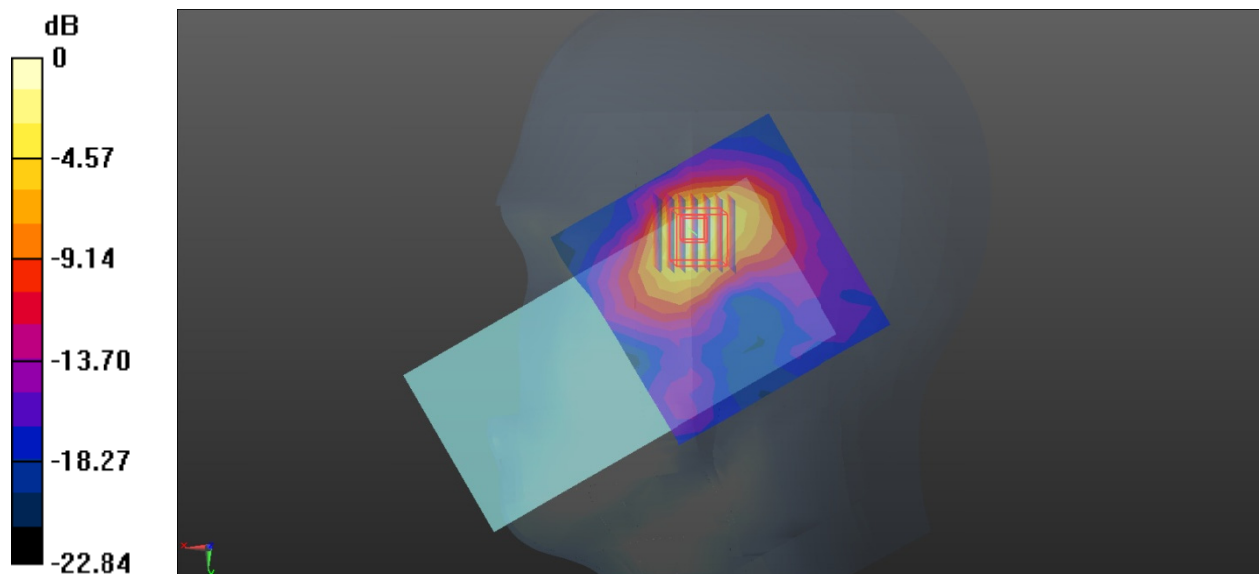
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.360 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.814 W/kg

SAR(1 g) = 0.321 W/kg; SAR(10 g) = 0.141 W/kg

Maximum value of SAR (measured) = 0.603 W/kg



0 dB = 0.603 W/kg = -2.20 dBW/kg

Test Plot20#: FR1 n 41_Body Back_1RB_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: Generic TDD-FR1 n 41 (0); Frequency: 2595 MHz;Duty Cycle: 1:1.58

Medium parameters used: $f = 2593$ MHz; $\sigma = 1.935$ S/m; $\epsilon_r = 38.847$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.16, 7.16, 7.16) @2593 MHz; Calibrated: 2023/6/23;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (11x11x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.227 W/kg

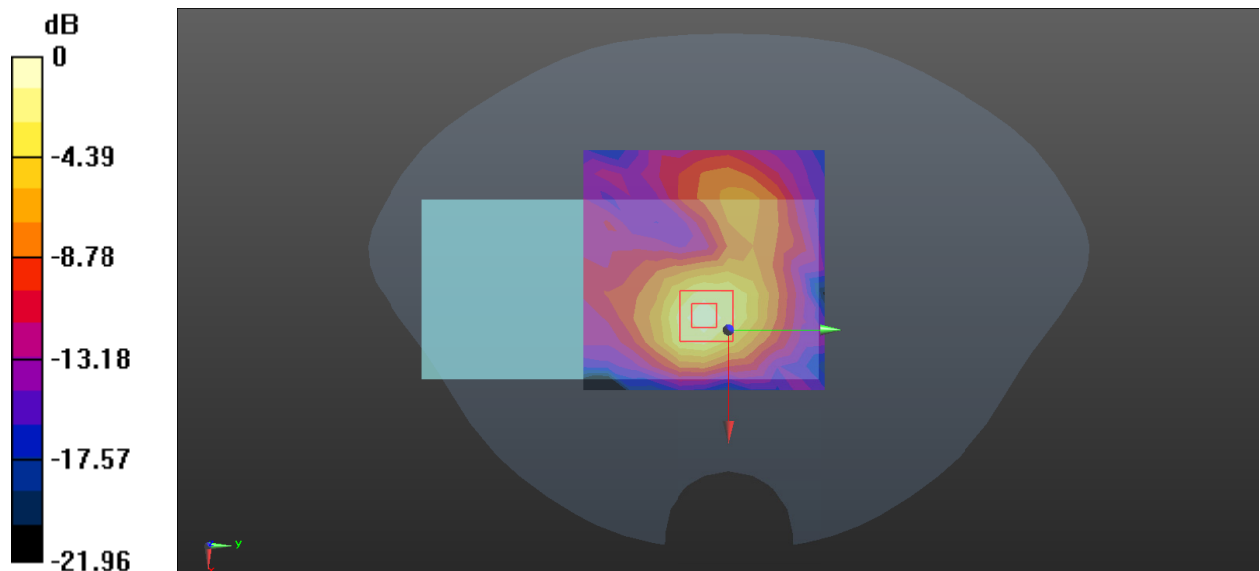
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.953 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.282 W/kg

SAR(1 g) = 0.136 W/kg; SAR(10 g) = 0.065 W/kg

Maximum value of SAR (measured) = 0.224 W/kg



0 dB = 0.224 W/kg = -6.50 dBW/kg

Test Plot21#: FR1 n 66_Head Right Cheek_50%RB_Middle

DUT: Smart phone; **Type:** PG2309GBA; **Serial:** 2DU0-1;

Communication System: FDD-5G NR (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.322$ S/m; $\epsilon_r = 40.477$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(8.22, 8.22, 8.22) @1745 MHz; Calibrated: 2023/6/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (8x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.02 W/kg

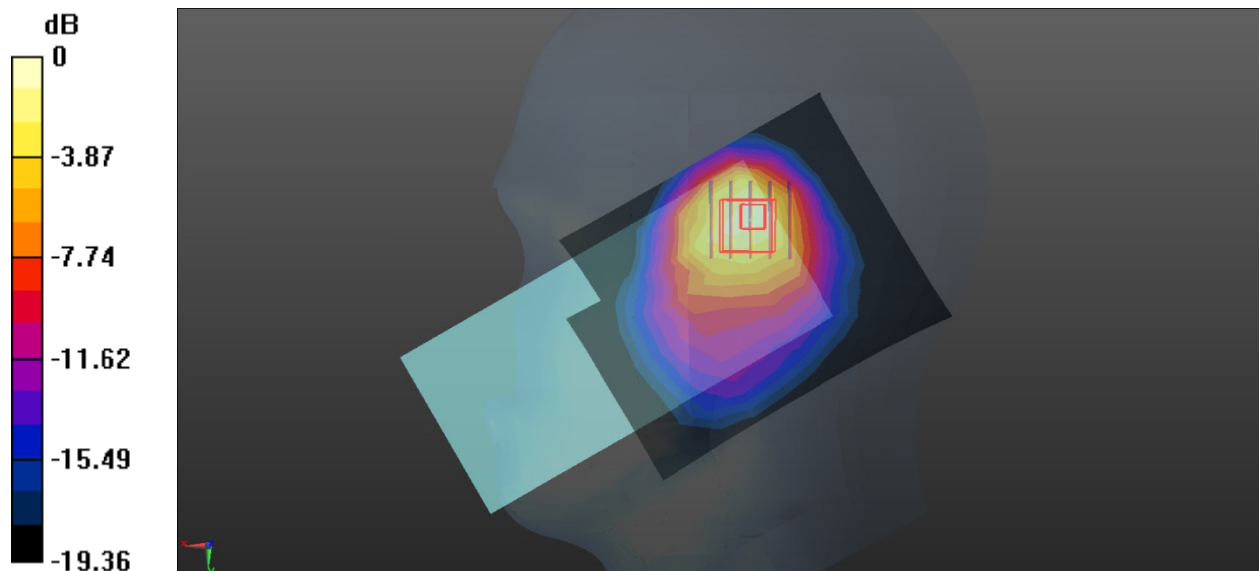
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.65 V/m; Power Drift = 0.06 dB

Peak SAR (interpolated) = 1.40 W/kg

SAR(1 g) = 0.705 W/kg; SAR(10 g) = 0.385 W/kg

Maximum value of SAR (measured) = 0.977 W/kg



0 dB = 0.977 W/kg = -0.10 dBW/kg

Test Plot22#: FR1 n 66_Body Back_50%RB_Middle

DUT: Smart phone; **Type:** PG2309GBA; **Serial:** 2DU0-1;

Communication System: FDD-5G NR (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.322$ S/m; $\epsilon_r = 40.477$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(8.22, 8.22, 8.22) @1745 MHz; Calibrated: 2023/6/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (8x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.186 W/kg

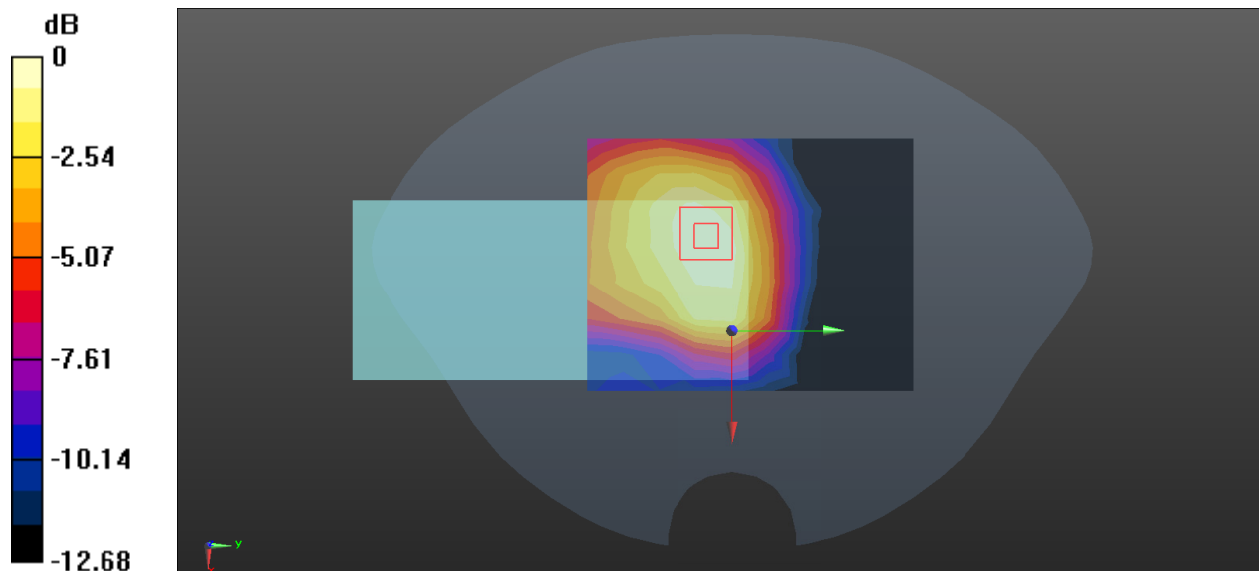
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.83 V/m; Power Drift = -0.07 dB

Peak SAR (interpolated) = 0.218 W/kg

SAR(1 g) = 0.148 W/kg; SAR(10 g) = 0.095 W/kg

Maximum value of SAR (measured) = 0.189 W/kg



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

Test Plot23#: 2.4G WIFI_Head Left Cheek_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: 802.11b (0); Frequency: 2437 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.747$ S/m; $\epsilon_r = 39.883$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.38, 7.38, 7.38) @ 2437 MHz; Calibrated: 2023/6/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (9x11x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.499 W/kg

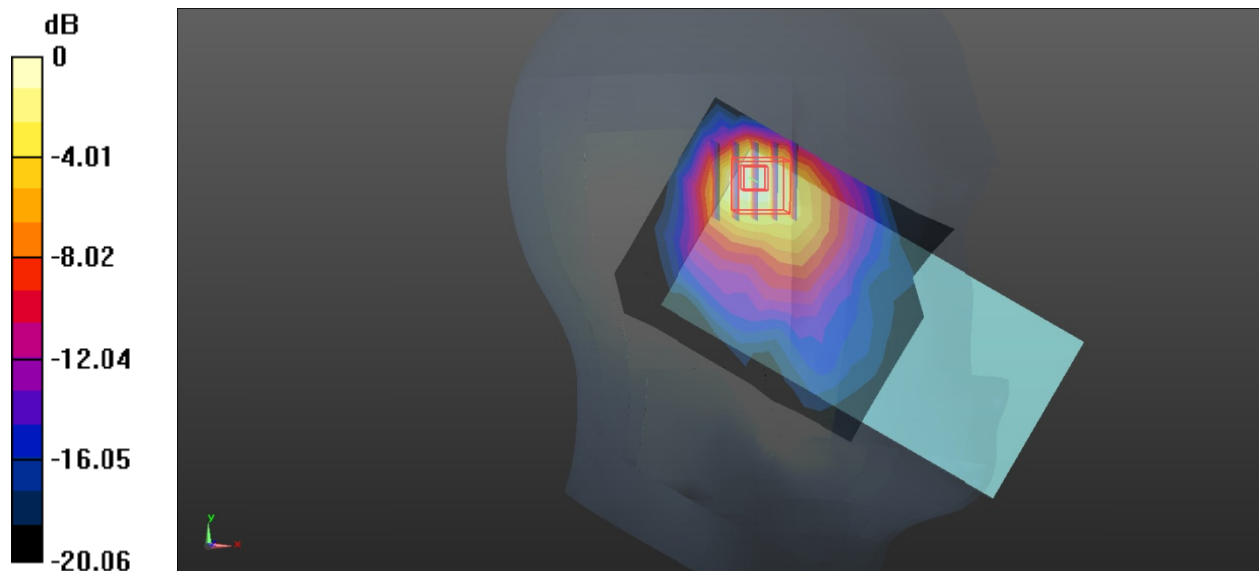
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.172 V/m; Power Drift = -0.05 dB

Peak SAR (interpolated) = 0.673 W/kg

SAR(1 g) = 0.281 W/kg; SAR(10 g) = 0.146 W/kg

Maximum value of SAR (measured) = 0.426 W/kg



0 dB = 0.426 W/kg = -3.71 dBW/kg

Test Plot24#: 2.4G WIFI_Body Back_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: 802.11b (0); Frequency: 2437 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.747$ S/m; $\epsilon_r = 39.883$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.38, 7.38, 7.38) @ 2437 MHz; Calibrated: 2023/6/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (10x16x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.0840 W/kg

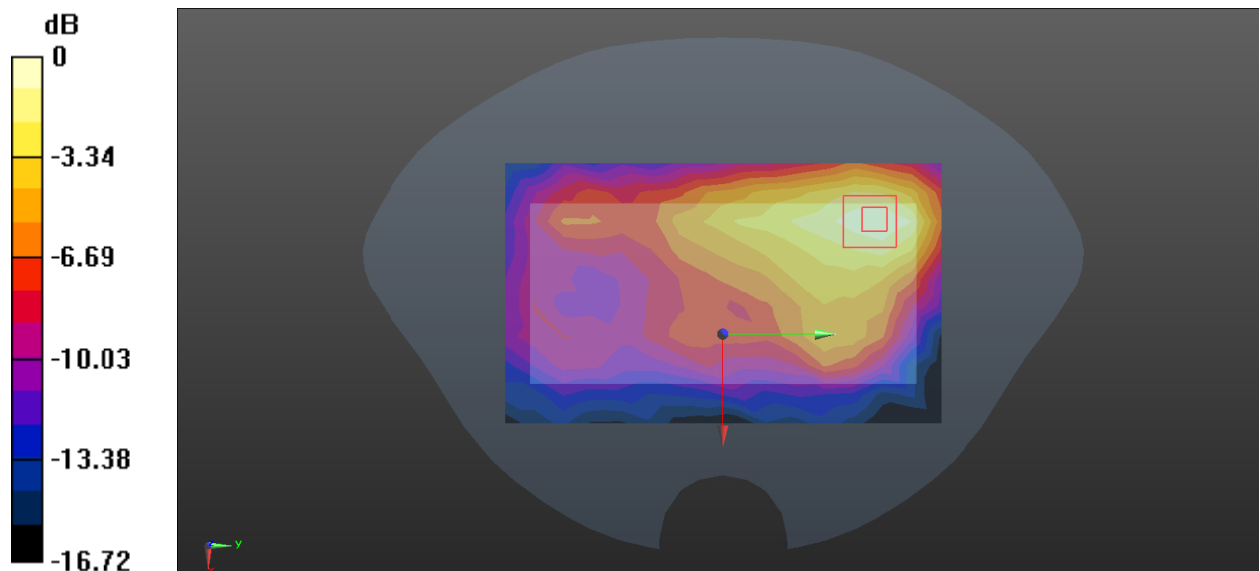
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.891 V/m; Power Drift = 0.03 dB

Peak SAR (interpolated) = 0.105 W/kg

SAR(1 g) = 0.052 W/kg; SAR(10 g) = 0.028 W/kg

Maximum value of SAR (measured) = 0.0813 W/kg



0 dB = 0.0813 W/kg = -10.90 dBW/kg

Test Plot25#: 5.2G WIFI_Head Left Tilt_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: 802.11a (0); Frequency: 5230 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5230$ MHz; $\sigma = 4.725$ S/m; $\epsilon_r = 35.996$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(5.19, 5.19, 5.19) @ 5230 MHz; Calibrated: 2023/6/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.660 W/kg

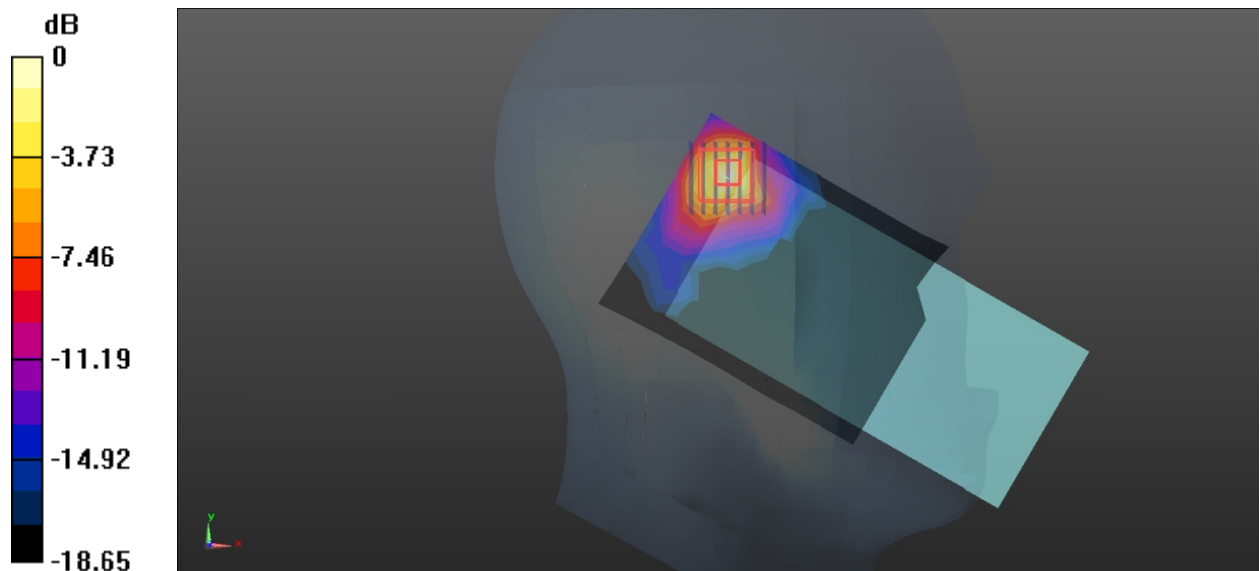
Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.026 V/m; Power Drift = 0.16 dB

Peak SAR (interpolated) = 1.23 W/kg

SAR(1 g) = 0.346 W/kg; SAR(10 g) = 0.117 W/kg

Maximum value of SAR (measured) = 0.824 W/kg



0 dB = 0.824 W/kg = -0.84 dBW/kg

Test Plot26#: 5.2G WIFI_Body Back_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: 802.11a (0); Frequency: 5230 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5230$ MHz; $\sigma = 4.725$ S/m; $\epsilon_r = 35.996$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(5.19, 5.19, 5.19) @ 5230 MHz; Calibrated: 2023/6/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (12x20x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.299 W/kg

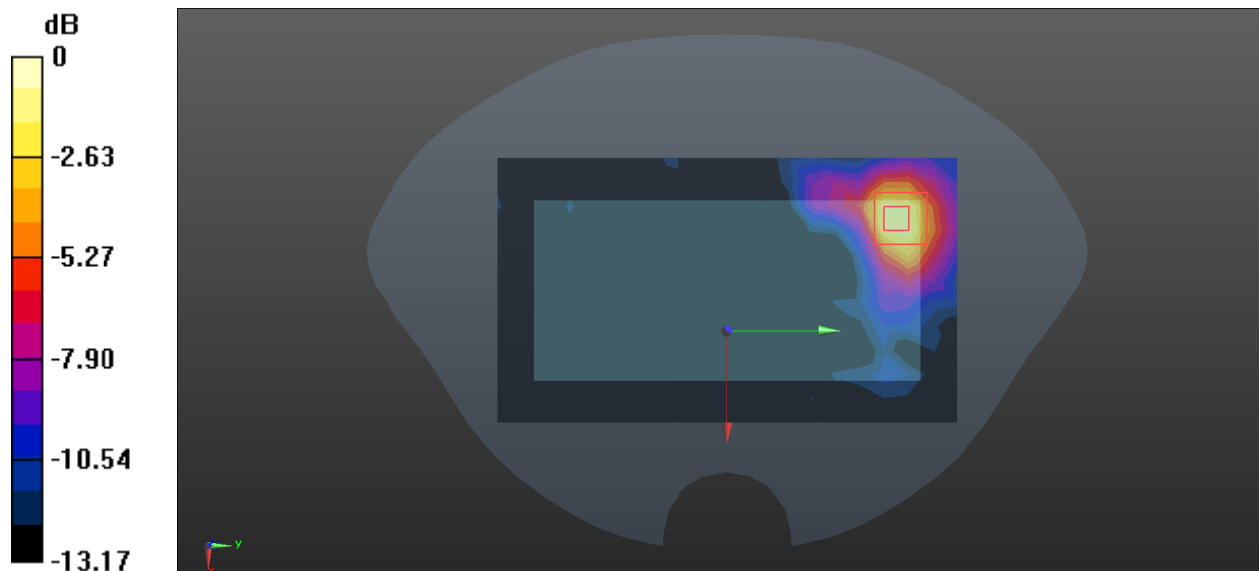
Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.915 V/m; Power Drift = 0.04 dB

Peak SAR (interpolated) = 0.570 W/kg

SAR(1 g) = 0.198 W/kg; SAR(10 g) = 0.091 W/kg

Maximum value of SAR (measured) = 0.393 W/kg



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

Test Plot27#: 5.8G WIFI_Head Left Cheek_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: 802.11a (0); Frequency: 5785 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5785 \text{ MHz}$; $\sigma = 5.206 \text{ S/m}$; $\epsilon_r = 35.225$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(4.89, 4.89, 4.89) @ 5785 MHz; Calibrated: 2023/6/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (10x13x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.433 W/kg

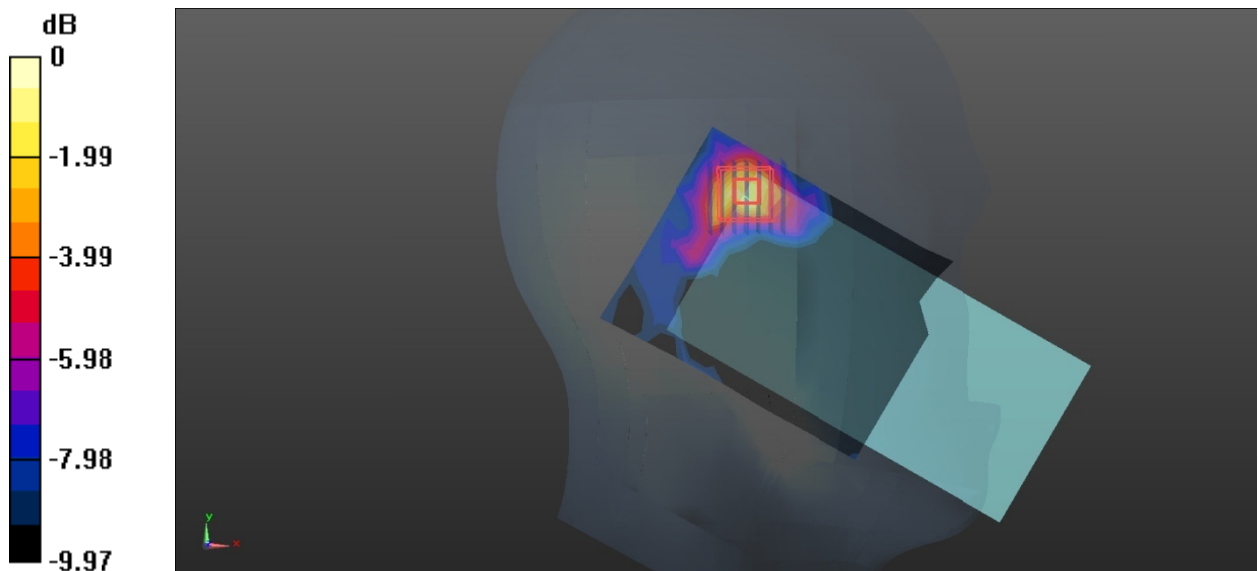
Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 4.827 V/m; Power Drift = 0.11 dB

Peak SAR (interpolated) = 0.955 W/kg

SAR(1 g) = 0.273 W/kg; SAR(10 g) = 0.140 W/kg

Maximum value of SAR (measured) = 0.535 W/kg



0 dB = 0.535 W/kg = -2.72 dBW/kg

Test Plot28#: 5.8G WIFI_Body Top_Middle

DUT: Smart phone; Type: PG2309GBA; Serial: 2DU0-1;

Communication System: 802.11a (0); Frequency: 5785 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5785$ MHz; $\sigma = 5.206$ S/m; $\epsilon_r = 35.225$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(4.89, 4.89, 4.89) @ 5785 MHz; Calibrated: 2023/6/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1354; Calibrated: 2023/11/17
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: TP:1470
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (7x13x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.267 W/kg

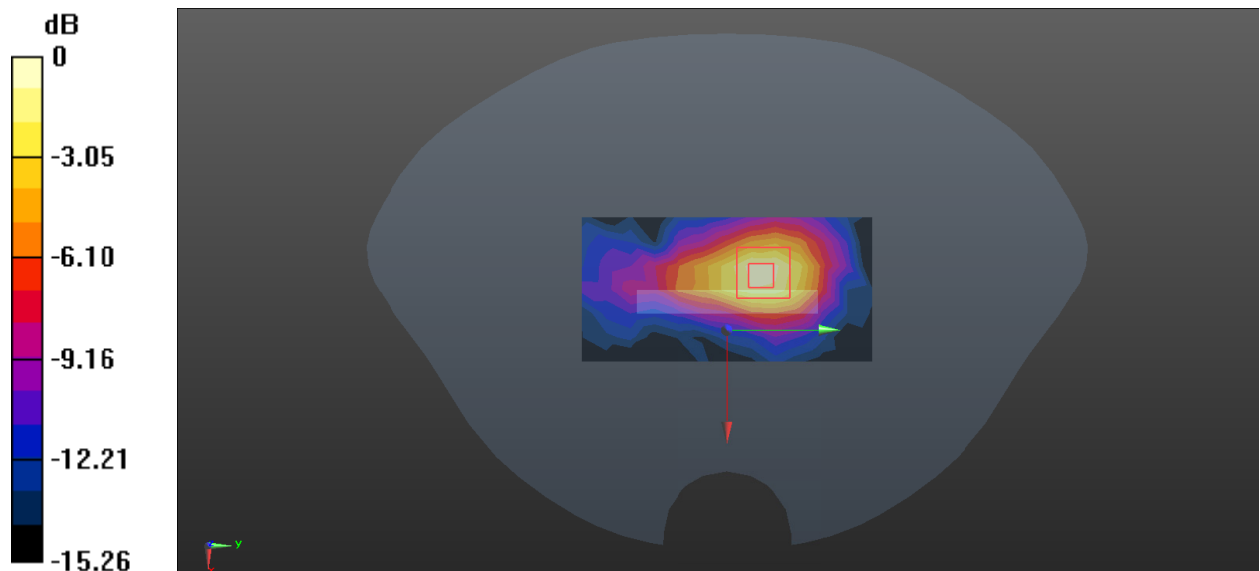
Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.907 V/m; Power Drift = -0.06 dB

Peak SAR (interpolated) = 0.492 W/kg

SAR(1 g) = 0.136 W/kg; SAR(10 g) = 0.053 W/kg

Maximum value of SAR (measured) = 0.302 W/kg



0 dB = 0.302 W/kg = -5.20 dBW/kg

Appendix A Measurement Uncertainty

The uncertainty budget has been determined for the measurement system and is given in the following Table.

Measurement uncertainty evaluation for IEC62209-1 SAR test

Source of uncertainty	Tolerance/ uncertainty ± %	Probability distribution	Divisor	ci (1 g)	ci (10 g)	Standard uncertainty ± %, (1 g)	Standard uncertainty ± %, (10 g)
Measurement system							
Probe calibration	6.0	N	1	1	1	6.0	6.0
Axial Isotropy	1.5	R	$\sqrt{3}$	1	1	0.9	0.9
Hemispherical Isotropy	9.4	R	$\sqrt{3}$	0	0	0.0	0.0
Boundary effect	1.2	R	$\sqrt{3}$	1	1	0.7	0.7
Linearity	0.9	R	$\sqrt{3}$	1	1	0.5	0.5
Detection limits	1.1	R	$\sqrt{3}$	1	1	0.6	0.6
Readout electronics	0.5	N	1	1	1	0.5	0.5
Response time	0	R	$\sqrt{3}$	1	1	0.0	0.0
Integration time	0	R	$\sqrt{3}$	1	1	0.0	0.0
RF ambient conditions – noise	1.1	R	$\sqrt{3}$	1	1	0.6	0.6
RF ambient conditions–reflections	1.2	R	$\sqrt{3}$	1	1	0.7	0.7
Probe positioner mech. Restrictions	0.9	R	$\sqrt{3}$	1	1	0.5	0.5
Probe positioning with respect to phantom shell	6.9	R	$\sqrt{3}$	1	1	4.0	4.0
Post-processing	2.1	R	$\sqrt{3}$	1	1	1.2	1.2
Test sample related							
Test sample positioning	2.2	N	1	1	1	2.2	2.2
Device holder uncertainty	6.1	N	1	1	1	6.1	6.1
Drift of output power	5.3	R	$\sqrt{3}$	1	1	3.1	3.1
Power scaling	3.98	R	$\sqrt{3}$	1	1	2.3	2.3
Phantom and set-up							
Phantom uncertainty (shape and thickness tolerances)	4.1	R	$\sqrt{3}$	1	1	2.4	2.4
Liquid conductivity target)	4.1	R	$\sqrt{3}$	0.64	0.43	1.5	1.0
Liquid conductivity meas.)	3	N	1	0.64	0.43	1.9	1.3
Liquid permittivity target)	4.3	R	$\sqrt{3}$	0.6	0.49	1.5	1.2
Liquid permittivity meas.)	2.9	N	1	0.6	0.49	1.7	1.4
Combined standard uncertainty		RSS				11.4	11.2
Expanded uncertainty 95 % confidence interval)						22.8	22.4

Measurement uncertainty evaluation for IEC62209-2 SAR test

Source of uncertainty	Tolerance/ uncertainty ± %	Probability distribution	Divisor	ci (1 g)	ci (10 g)	Standard uncertainty ± %, (1 g)	Standard uncertainty ± %, (10 g)
Measurement system							
Probe calibration	6.0	N	1	1	1	6.0	6.0
Axial Isotropy	1.5	R	$\sqrt{3}$	1	1	0.9	0.9
Hemispherical Isotropy	9.4	R	$\sqrt{3}$	0	0	0.0	0.0
Linearity	0.9	R	$\sqrt{3}$	1	1	0.5	0.5
Modulation Response	0	R	$\sqrt{3}$	1	1	0.0	0.0
Detection limits	1.1	R	$\sqrt{3}$	1	1	0.6	0.6
Boundary effect	1.2	R	$\sqrt{3}$	1	1	0.7	0.7
Readout electronics	0.5	N	1	1	1	0.5	0.5
Response time	0	R	$\sqrt{3}$	1	1	0.0	0.0
Integration time	0	R	$\sqrt{3}$	1	1	0.0	0.0
RF ambient conditions – noise	1.1	R	$\sqrt{3}$	1	1	0.6	0.6
RF ambient conditions–reflections	1.2	R	$\sqrt{3}$	1	1	0.7	0.7
Probe positioner mech. Restrictions	0.9	R	$\sqrt{3}$	1	1	0.5	0.5
Probe positioning with respect to phantom shell	6.9	R	$\sqrt{3}$	1	1	4.0	4.0
Post-processing	2.1	R	$\sqrt{3}$	1	1	1.2	1.2
Probe calibration							
Device holder Uncertainty	6.1	N	1	1	1	6.1	6.1
Test sample positioning	2.2	N	1	1	1	2.2	2.2
Power scaling	3.98	R	$\sqrt{3}$	1	1	2.3	2.3
Drift of output power	5.3	R	$\sqrt{3}$	1	1	3.1	3.1
Phantom and set-up							
Phantom uncertainty (shape and thickness tolerances)	4.1	R	$\sqrt{3}$	1	1	2.4	2.4
Algorithm for correcting SAR for deviations in permittivity and conductivity	2.3	N	1	1	0.84	2.3	1.9
Liquid conductivity (meas.)	2.7	N	1	0.64	0.43	1.7	1.2
Liquid permittivity (meas.)	2.9	N	1	0.6	0.49	1.7	1.4
Temp. unc. - Conductivity	1.5	R	$\sqrt{3}$	0.78	0.71	0.7	0.6
Temp. unc. - Permittivity	0.6	R	$\sqrt{3}$	0.23	0.26	0.1	0.1
Combined standard uncertainty		RSS				11.5	11.3
Expanded uncertainty 95 % confidence interval)						23.0	22.6

Appendix B Test Setup Photos

Please refer to the attachment (SAR EUT Test Position Photos_A).

Appendix C Probe Calibration Certificates

Please refer to the attachment (Appendix Probe and Dipole Calibration Certificates).

Appendix D Dipole Calibration Certificates

Please refer to the attachment (Appendix Probe and Dipole Calibration Certificates).

---End of Report---