



SAR EVALUATION REPORT

Applicant Name:
Apple, Inc.
One Apple Park Way
Cupertino, CA 95014 USA

Date of Testing:
06/16/2021 - 08/18/2021
Test Site/Location:
PCTEST Lab, Morgan Hill, CA, USA
Document Serial No.:
1C2106070044-22.BCG (Rev 1)

FCC ID: BCG-A2476

APPLICANT: APPLE, INC.

DUT Type: Watch
Application Type: Certification
FCC Rule Part(s): CFR §2.1093
Model: A2476

Equipment Class	Band & Mode	Tx Frequency	SAR	
			1g Head (W/kg)	10g Extremity (W/kg)
PCT	UMTS 850	826.40 - 846.60 MHz	< 0.1	0.20
PCT	UMTS 1750	1712.4 - 1752.6 MHz	0.28	0.16
PCT	UMTS 1900	1852.4 - 1907.6 MHz	0.45	0.26
PCT	LTE Band 26 (Cell)	814.7 - 848.3 MHz	< 0.1	0.12
PCT	LTE Band 5 (Cell)	824.7 - 848.3 MHz	< 0.1	0.23
PCT	LTE Band 66 (AWS)	1710.7 - 1779.3 MHz	0.32	0.21
PCT	LTE Band 4 (AWS)	1710.7 - 1754.3 MHz	N/A	N/A
PCT	LTE Band 25 (PCS)	1850.7 - 1914.3 MHz	0.47	0.31
PCT	LTE Band 2 (PCS)	1850.7 - 1909.3 MHz	N/A	N/A
PCT	LTE Band 7	2502.5 - 2567.5 MHz	1.08	1.51
PCT	LTE Band 41	2498.5 - 2687.5 MHz	0.46	1.15
DTS	2.4 GHz WLAN	2412 - 2472 MHz	0.34	0.40
NII	U-NII-1	5180 - 5240 MHz	N/A	N/A
NII	U-NII-2A	5260 - 5320 MHz	< 0.1	< 0.1
NII	U-NII-2C	5500 - 5720 MHz	< 0.1	< 0.1
NII	U-NII-3	5745 - 5825 MHz	< 0.1	< 0.1
DSS/DTS	Bluetooth	2402 - 2480 MHz	< 0.1	0.14
Simultaneous SAR per KDB 690783 D01v01r03:			1.42	1.91

Note: This revised Test Report supersedes and replaces the previously issued test report on the same subject device for the same type of testing as indicated. Please discard or destroy the previously issued test report(s) and dispose of it accordingly.

This wireless portable device has been shown to be capable of compliance for localized specific absorption rate (SAR) for uncontrolled environment/general population exposure limits specified in ANSI/IEEE C95.1-1992 and has been tested in accordance with the measurement procedures specified in Section 1.8 of this report; for North American frequency bands only.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them. Test results reported herein relate only to the item(s) tested.


Randy Ortanez
President



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1 DEVICE UNDER TEST

1.1 Device Overview

Band & Mode	Operating Modes	Tx Frequency
UMTS 850	Voice/Data	826.40 - 846.60 MHz
UMTS 1750	Voice/Data	1712.4 - 1752.6 MHz
UMTS 1900	Voice/Data	1852.4 - 1907.6 MHz
LTE Band 26 (Cell)	Voice/Data	814.7 - 848.3 MHz
LTE Band 5 (Cell)	Voice/Data	824.7 - 848.3 MHz
LTE Band 66 (AWS)	Voice/Data	1710.7 - 1779.3 MHz
LTE Band 4 (AWS)	Voice/Data	1710.7 - 1754.3 MHz
LTE Band 25 (PCS)	Voice/Data	1850.7 - 1914.3 MHz
LTE Band 2 (PCS)	Voice/Data	1850.7 - 1909.3 MHz
LTE Band 7	Voice/Data	2502.5 - 2567.5 MHz
LTE Band 41	Voice/Data	2498.5 - 2687.5 MHz
2.4 GHz WLAN	Voice/Data	2412 - 2472 MHz
U-NII-1	Voice/Data	5180 - 5240 MHz
U-NII-2A	Voice/Data	5260 - 5320 MHz
U-NII-2C	Voice/Data	5500 - 5720 MHz
U-NII-3	Voice/Data	5745 - 5825 MHz
Bluetooth	Data	2402 - 2480 MHz
NFC	Data	13.56 MHz
UWB	Data	6489.6 - 7987.2 MHz

1.2 Power Reduction for SAR

There is no power reduction used for any band/mode implemented in this device for SAR purposes.

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1.3 Nominal and Maximum Output Power Specifications

This device operates using the following maximum and nominal output power specifications. SAR values were scaled to the maximum allowed power to determine compliance per KDB Publication 447498 D01v06.

1.3.1 3G/4G Output Power for Portable Use Conditions

Mode/Band		Modulated Average Output Power (in dBm)		
		3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6
UMTS Band 5 (850 MHz)	Max allowed power	25.00	25.00	24.00
	Nominal	24.00	24.00	23.00
UMTS Band 4 (1750 MHz)	Max allowed power	24.00	24.00	23.00
	Nominal	23.00	23.00	22.00
UMTS Band 2 (1900 MHz)	Max allowed power	24.00	24.00	23.00
	Nominal	23.00	23.00	22.00

Mode / Band		Modulated Average Output Power (in dBm)
LTE FDD Band 26	Max allowed power	25.50
	Nominal	24.50
LTE FDD Band 5	Max allowed power	25.50
	Nominal	24.50
LTE FDD Band 4	Max allowed power	24.50
	Nominal	23.50
LTE FDD Band 66	Max allowed power	24.50
	Nominal	23.50
LTE FDD Band 2	Max allowed power	24.50
	Nominal	23.50
LTE FDD Band 25	Max allowed power	24.50
	Nominal	23.50
LTE FDD Band 7	Max allowed power	23.50
	Nominal	22.50
LTE TDD Band 41 (PC3)	Max allowed power	23.50
	Nominal	22.50

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1.3.1 Summary Maximum and Nominal Conducted Powers – WiFi Mode

Mode/ Band			IEEE 802.11b (2.4 GHz)		IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm)	20 MHz Bandwidth	1	19.00	18.00	17.00	16.00	17.00	16.00
		2	19.00	18.00	18.50	17.50	18.50	17.50
		3	19.00	18.00	18.50	17.50	18.50	17.50
		4	19.00	18.00	18.50	17.50	18.50	17.50
		5	19.00	18.00	18.50	17.50	18.50	17.50
		6	19.00	18.00	18.50	17.50	18.50	17.50
		7	19.00	18.00	18.50	17.50	18.50	17.50
		8	19.00	18.00	18.50	17.50	18.50	17.50
		9	19.00	18.00	18.50	17.50	18.50	17.50
		10	19.00	18.00	18.00	17.00	18.00	17.00
		11	19.00	18.00	16.50	15.50	16.50	15.50
		12	18.00	17.00	15.50	14.50	15.50	14.50
		13	17.00	16.00	4.50	3.50	4.50	3.50

	Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)	
			Channel	Maximum	Nominal	Maximum	Nominal
	Modulated Average - Single Tx Chain (dBm)	20 MHz Bandwidth	36	17.00	16.00	17.00	16.00
			40	17.00	16.00	17.00	16.00
			44	17.00	16.00	17.00	16.00
			48	17.00	16.00	17.00	16.00
			52	17.00	16.00	17.00	16.00
			56	17.00	16.00	17.00	16.00
			60	17.00	16.00	17.00	16.00
			64	17.00	16.00	17.00	16.00
			100	17.00	16.00	17.00	16.00
			104	17.00	16.00	17.00	16.00
			108	17.00	16.00	17.00	16.00
			112	17.00	16.00	17.00	16.00
			116	17.00	16.00	17.00	16.00
			120	17.00	16.00	17.00	16.00
			124	17.00	16.00	17.00	16.00
			128	17.00	16.00	17.00	16.00
			132	17.00	16.00	17.00	16.00
			136	17.00	16.00	17.00	16.00
			140	14.00	13.00	14.00	13.00
			144	17.00	16.00	17.00	16.00
			149	17.00	16.00	17.00	16.00
			153	17.00	16.00	17.00	16.00
			157	17.00	16.00	17.00	16.00
161			17.00	16.00	17.00	16.00	
165			17.00	16.00	17.00	16.00	

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Mode / Band		Modulated Average - Single Tx Chain (dBm)
Bluetooth BDR/LE	Maximum	13.00
	Nominal	12.00
Bluetooth EDR	Maximum	13.00
	Nominal	12.00
Bluetooth HDR	Maximum	13.00
	Nominal	12.00

1.4 DUT Antenna Locations

A diagram showing the location of the device antennas can be found in Appendix E

1.5 Near Field Communications (NFC) Antenna

This DUT has NFC operations. The NFC antenna is integrated into the device for this model. Therefore, all SAR tests were performed with the device which already incorporates the NFC antenna. A diagram showing the location of the NFC antenna can be found in Appendix E.

1.6 Simultaneous Transmission Capabilities

According to FCC KDB Publication 447498 D01v06, transmitters are considered to be operating simultaneously when there is overlapping transmission, with the exception of transmissions during network hand-offs with maximum hand-off duration less than 30 seconds.

This device contains multiple transmitters that may operate simultaneously, and therefore requires a simultaneous transmission analysis according to FCC KDB Publication 447498 D01v06 4.3.2 procedures.

Table 1-1
Simultaneous Transmission Scenarios

No.	Capable Transmit Configuration	Head	Extremity
1	UMTS + 2.4 GHz Wi-Fi	Yes	Yes
2	UMTS + 5 GHz Wi-Fi	Yes	Yes
3	UMTS + 2.4 GHz Bluetooth	Yes	Yes
4	UMTS + 2.4 GHz Bluetooth + 5 GHz Wi-Fi	Yes	Yes
5	LTE + 2.4 GHz Wi-Fi	Yes	Yes
6	LTE + 5 GHz Wi-Fi	Yes	Yes
7	LTE + 2.4 GHz Bluetooth	Yes	Yes
8	LTE + 2.4 GHz Bluetooth + 5 GHz Wi-Fi	Yes	Yes
9	2.4 GHz Bluetooth + 5 GHz Wi-Fi	Yes	Yes

- 2.4 GHz WLAN and 2.4 GHz Bluetooth share the same antenna path and cannot transmit simultaneously.
- 2.4 GHz WLAN and 5 GHz WLAN share the same antenna path and cannot transmit simultaneously.
- All licensed modes cannot transmit simultaneously.
- When the user utilizes multiple services in UMTS 3G mode it uses multi-Radio Access Bearer or multi-RAB. The power control is based on a physical control channel (Dedicated Physical Control Channel)

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[DPCCH]) and power control will be adjusted to meet the needs of both services. Therefore, the UMTS+WLAN scenario also represents the UMTS Voice/DATA + WLAN scenario.

5. This device supports VOLTE.
6. This device supports VOWIFI.

1.7 Miscellaneous SAR Test Considerations

(A) WIFI/BT

This device supports channel 1-13 for 2.4 GHz WLAN. However, since channels 12 and 13 have equal or less maximum output power, channels 1, 6, and 11 were considered for SAR testing per KDB 248227 D01v02r02.

Since U-NII-1 and U-NII-2A bands have the same maximum output power and the highest reported SAR for U-NII-2A is less than 1.2 W/kg, SAR is not required for U-NII-1 band according to FCC KDB Publication 248227 D01v02r02.

(B) Licensed Transmitter(s)

This device is only capable of QPSK HSUPA in the uplink. Therefore, no additional SAR tests are required beyond that described for devices with HSUPA in KDB 941225 D01v03r01.

LTE SAR for the higher modulations and lower bandwidths were not tested since the maximum average output power of all required channels and configurations was not more than 0.5 dB higher than the highest bandwidth; and the reported LTE SAR for the highest bandwidth was less than 1.45 W/kg for all configurations according to FCC KDB 941225 D05v02r04.

This device supports LTE capabilities with overlapping transmission frequency ranges. When the supported frequency range of an LTE Band falls completely within an LTE band with a larger transmission frequency range, both LTE bands have the same target power (or the band with the larger transmission frequency range has a higher target power), and both LTE bands share the same transmission path and signal characteristics, SAR was only assessed for the band with the larger transmission frequency range.

This device is limited to 27 RB on the uplink for 16QAM modulation. Additional measurements were evaluated to support SAR test exclusion for 16 QAM as described in Section 7.5.4.

1.8 Guidance Applied

- FCC KDB Publication 941225 D01v03r01, D05v02r04 (3G/4G)
- FCC KDB Publication 248227 D01v02r02 (SAR Considerations for 802.11 Devices)
- FCC KDB Publication 447498 D01v06 (General SAR Guidance, Wrist-worn Device Guidance)
- FCC KDB Publication 865664 D01v01r04, D02v01r02 (SAR Measurements up to 6 GHz)
- IEEE 1528-2013

1.9 Device Serial Numbers

Several samples with identical hardware were used to support SAR testing. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units. The serial numbers used for each test are indicated alongside the results in Section 10.

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1.10 Device Housing Types and Wristband Types

This device has three housing types that were evaluated independently for SAR: Aluminum, Stainless Steel, and Titanium. The device can also be used with different wristband accessories. The non-metallic wrist accessory, sport band, was evaluated for all exposure conditions. The available metallic wrist accessories, metal links band and metal loop band, were additionally evaluated.

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LTE Information					
Form Factor	Watch				
Frequency Range of each LTE transmission band	LTE Band 26 (Cell) (814.7 - 848.3 MHz)				
	LTE Band 5 (Cell) (824.7 - 848.3 MHz)				
	LTE Band 66 (AWS) (1710.7 - 1779.3 MHz)				
	LTE Band 4 (AWS) (1710.7 - 1754.3 MHz)				
	LTE Band 25 (PCS) (1850.7 - 1914.3 MHz)				
	LTE Band 2 (PCS) (1850.7 - 1909.3 MHz)				
	LTE Band 7 (2502.5 - 2567.5 MHz)				
Channel Bandwidths	LTE Band 41 (2498.5 - 2687.5 MHz)				
	LTE Band 26 (Cell): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz				
	LTE Band 5 (Cell): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz				
	LTE Band 66 (AWS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 4 (AWS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 25 (PCS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 2 (PCS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
Channel Numbers and Frequencies (MHz)	LTE Band 7: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 41: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	Low	Low-Mid	Mid	Mid-High	High
LTE Band 26 (Cell): 1.4 MHz	814.7 (26697)		831.5 (26865)		848.3 (27033)
LTE Band 26 (Cell): 3 MHz	815.5 (26705)		831.5 (26865)		847.5 (27025)
LTE Band 26 (Cell): 5 MHz	816.5 (26715)		831.5 (26865)		846.5 (27015)
LTE Band 26 (Cell): 10 MHz	819 (26740)		831.5 (26865)		844 (26990)
LTE Band 5 (Cell): 1.4 MHz	824.7 (20407)		836.5 (20525)		848.3 (20643)
LTE Band 5 (Cell): 3 MHz	825.5 (20415)		836.5 (20525)		847.5 (20635)
LTE Band 5 (Cell): 5 MHz	826.5 (20425)		836.5 (20525)		846.5 (20625)
LTE Band 5 (Cell): 10 MHz	829 (20450)		836.5 (20525)		844 (20600)
LTE Band 66 (AWS): 1.4 MHz	1710.7 (131979)		1745 (132322)		1779.3 (132665)
LTE Band 66 (AWS): 3 MHz	1711.5 (131987)		1745 (132322)		1778.5 (132657)
LTE Band 66 (AWS): 5 MHz	1712.5 (131997)		1745 (132322)		1777.5 (132647)
LTE Band 66 (AWS): 10 MHz	1715 (132022)		1745 (132322)		1775 (132622)
LTE Band 66 (AWS): 15 MHz	1717.5 (132047)		1745 (132322)		1772.5 (132597)
LTE Band 66 (AWS): 20 MHz	1720 (132072)		1745 (132322)		1770 (132572)
LTE Band 4 (AWS): 1.4 MHz	1710.7 (19957)		1732.5 (20175)		1754.3 (20393)
LTE Band 4 (AWS): 3 MHz	1711.5 (19965)		1732.5 (20175)		1753.5 (20385)
LTE Band 4 (AWS): 5 MHz	1712.5 (19975)		1732.5 (20175)		1752.5 (20375)
LTE Band 4 (AWS): 10 MHz	1715 (20000)		1732.5 (20175)		1750 (20350)
LTE Band 4 (AWS): 15 MHz	1717.5 (20025)		1732.5 (20175)		1747.5 (20325)
LTE Band 4 (AWS): 20 MHz	1720 (20050)		1732.5 (20175)		1745 (20300)
LTE Band 25 (PCS): 1.4 MHz	1850.7 (26047)		1882.5 (26365)		1914.3 (26683)
LTE Band 25 (PCS): 3 MHz	1851.5 (26055)		1882.5 (26365)		1913.5 (26675)
LTE Band 25 (PCS): 5 MHz	1852.5 (26065)		1882.5 (26365)		1912.5 (26665)
LTE Band 25 (PCS): 10 MHz	1855 (26090)		1882.5 (26365)		1910 (26640)
LTE Band 25 (PCS): 15 MHz	1857.5 (26115)		1882.5 (26365)		1907.5 (26615)
LTE Band 25 (PCS): 20 MHz	1860 (26140)		1882.5 (26365)		1905 (26590)
LTE Band 2 (PCS): 1.4 MHz	1850.7 (18607)		1880 (18900)		1909.3 (19193)
LTE Band 2 (PCS): 3 MHz	1851.5 (18615)		1880 (18900)		1908.5 (19185)
LTE Band 2 (PCS): 5 MHz	1852.5 (18625)		1880 (18900)		1907.5 (19175)
LTE Band 2 (PCS): 10 MHz	1855 (18650)		1880 (18900)		1905 (19150)
LTE Band 2 (PCS): 15 MHz	1857.5 (18675)		1880 (18900)		1902.5 (19125)
LTE Band 2 (PCS): 20 MHz	1860 (18700)		1880 (18900)		1900 (19100)
LTE Band 7: 5 MHz	2502.5 (20775)		2535 (21100)		2567.5 (21425)
LTE Band 7: 10 MHz	2505 (20800)		2535 (21100)		2565 (21400)
LTE Band 7: 15 MHz	2507.5 (20825)		2535 (21100)		2562.5 (21375)
LTE Band 7: 20 MHz	2510 (20850)		2535 (21100)		2560 (21350)
LTE Band 41: 5 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 10 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 15 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 20 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
UE Category	1				
Modulations Supported in UL	QPSK, 16QAM				
LTE MPR Permanently implemented per 3GPP TS 36.101 section 6.2.3-6.2.5? (manufacturer attestation to be provided)	YES				
A-MPR (Additional MPR) disabled for SAR Testing?	YES				
LTE Additional Information	This device does not support full CA features on 3GPP Release 12. All uplink communications are identical to the Release 8 Specifications. The following LTE Release 12 Features are not supported: Carrier Aggregation, Relay, HetNet, Enhanced MIMO, eCIC, WIFI Offloading, eMBMS, Cross-Carrier Scheduling, Enhanced SC-FDMA.				

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3 INTRODUCTION

The FCC and Innovation, Science, and Economic Development Canada have adopted the guidelines for evaluating the environmental effects of radio frequency (RF) radiation in ET Docket 93-62 on Aug. 6, 1996 and Health Canada Safety Code 6 to protect the public and workers from the potential hazards of RF emissions due to FCC-regulated portable devices. [1]

The safety limits used for the environmental evaluation measurements are based on the criteria published by the American National Standards Institute (ANSI) for localized specific absorption rate (SAR) in IEEE/ANSI C95.1-1992 Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz [3] and Health Canada RF Exposure Guidelines Safety Code 6 [22]. The measurement procedure described in IEEE/ANSI C95.3-2002 Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave [4] is used for guidance in measuring the Specific Absorption Rate (SAR) due to the RF radiation exposure from the Equipment Under Test (EUT). These criteria for SAR evaluation are similar to those recommended by the International Committee for Non-Ionizing Radiation Protection (ICNIRP) in Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields,” Report No. Vol 74. SAR is a measure of the rate of energy absorption due to exposure to an RF transmitting source. SAR values have been related to threshold levels for potential biological hazards.

3.1 SAR Definition

Specific Absorption Rate is defined as the time derivative (rate) of the incremental energy (dU) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dV) of a given density (ρ). It is also defined as the rate of RF energy absorption per unit mass at a point in an absorbing body (see Equation 3-1).

Equation 3-1
SAR Mathematical Equation

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

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

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

where:

- σ = conductivity of the tissue-simulating material (S/m)
- ρ = mass density of the tissue-simulating material (kg/m³)
- E = Total RMS electric field strength (V/m)

NOTE: The primary factors that control rate of energy absorption were found to be the wavelength of the incident field in relation to the dimensions and geometry of the irradiated organism, the orientation of the organism in relation to the polarity of field vectors, the presence of reflecting surfaces, and whether conductive contact is made by the organism with a ground plane.[6]

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4 DOSIMETRIC ASSESSMENT

4.1 Measurement Procedure

The evaluation was performed using the following procedure compliant to FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013:

1. The SAR distribution at the exposed side of the head or body was measured at a distance no greater than 5.0 mm from the inner surface of the shell. The area covered the entire dimension of the device-head and body interface and the horizontal grid resolution was determined per FCC KDB Publication 865664 D01v01r04 (See Table 4-1) and IEEE 1528-2013.
2. The point SAR measurement was taken at the maximum SAR region determined from Step 1 to enable the monitoring of SAR fluctuations/drifts during the 1g/10g cube evaluation. SAR at this fixed point was measured and used as a reference value.
3. Based on the area scan data, the peak of the region with maximum SAR was determined by spline interpolation. Around this point, a volume was assessed according to the measurement resolution and volume size requirements of FCC KDB Publication 865664 D01v01r04 (See Table 4-1) and IEEE 1528-2013. On the basis of this data set, the spatial peak SAR value was evaluated with the following procedure (see references or the DASY manual online for more details):
 - a. SAR values at the inner surface of the phantom are extrapolated from the measured values along the line away from the surface with spacing no greater than that in Table 4-1. The extrapolation was based on a least-squares algorithm. A polynomial of the fourth order was calculated through the points in the z-axis (normal to the phantom shell).
 - b. After the maximum interpolated values were calculated between the points in the cube, the SAR was averaged over the spatial volume (1g or 10g) using a 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the “Not a knot” condition (in x, y, and z directions). The volume was then integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were obtained through interpolation, in order to calculate the averaged SAR.
 - c. All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.
4. The SAR reference value, at the same location as step 2, was re-measured after the zoom scan was complete to calculate the SAR drift. If the drift deviated by more than 5%, the SAR test and drift measurements were repeated.

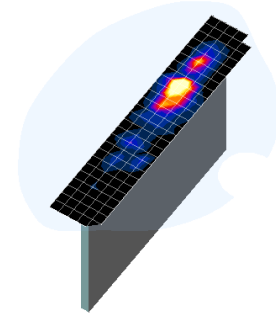


Figure 4-1
Sample SAR Area
Scan

Table 4-1
Area and Zoom Scan Resolutions per FCC KDB Publication 865664 D01v01r04*

Frequency	Maximum Area Scan Resolution (mm) ($\Delta x_{\text{area}}, \Delta y_{\text{area}}$)	Maximum Zoom Scan Resolution (mm) ($\Delta x_{\text{zoom}}, \Delta y_{\text{zoom}}$)	Maximum Zoom Scan Spatial Resolution (mm)			Minimum Zoom Scan Volume (mm) (x,y,z)
			Uniform Grid	Graded Grid		
				$\Delta z_{\text{zoom}}(n)$	$\Delta z_{\text{zoom}}(1)^*$	
≤2 GHz	≤15	≤8	≤5	≤4	≤1.5* $\Delta z_{\text{zoom}}(n-1)$	≥30
2-3 GHz	≤12	≤5	≤5	≤4	≤1.5* $\Delta z_{\text{zoom}}(n-1)$	≥30
3-4 GHz	≤12	≤5	≤4	≤3	≤1.5* $\Delta z_{\text{zoom}}(n-1)$	≥28
4-5 GHz	≤10	≤4	≤3	≤2.5	≤1.5* $\Delta z_{\text{zoom}}(n-1)$	≥25
5-6 GHz	≤10	≤4	≤2	≤2	≤1.5* $\Delta z_{\text{zoom}}(n-1)$	≥22

*Also compliant to IEEE 1528-2013 Table 6

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5 TEST CONFIGURATION POSITIONS

5.1 Device Holder

The device holder is made out of low-loss POM material having the following dielectric parameters: relative permittivity $\epsilon = 3$ and loss tangent $\delta = 0.02$. Additionally, a manufacturer provided low-loss foam was used to position the device for head SAR evaluations.

5.2 Positioning for Head

Devices that are designed to be worn on the wrist may operate in speaker mode for voice communication, with the device worn on the wrist and positioned next to the mouth. When next-to-mouth SAR evaluation is required, the device is positioned at 10 mm from a flat phantom filled with head tissue-equivalent medium. The device is evaluated with wrist bands strapped together to represent normal use conditions.

5.3 Extremity Exposure Configurations

Devices that are designed or intended for use on extremities or mainly operated in extremity only exposure conditions; i.e., hands, wrists, feet and ankles, may require extremity SAR evaluation. When the device also operates in close proximity to the user's body, SAR compliance for the body is also required. When extremity SAR evaluation is required, the device is evaluated with the back of the device touching the flat phantom, which is filled with body tissue-equivalent medium. The device was evaluated with Sport wristband unstrapped and touching the phantom. For Metal Loop and Metal Links wristbands, the device was evaluated with wristbands strapped and the distance between wristbands and the phantom was minimized to represent the spacing created by actual use conditions.

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6 RF EXPOSURE LIMITS

6.1 Uncontrolled Environment

UNCONTROLLED ENVIRONMENTS are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

6.2 Controlled Environment

CONTROLLED ENVIRONMENTS are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Table 6-1
SAR Human Exposure Specified in ANSI/IEEE C95.1-1992 and Health Canada Safety Code 6

HUMAN EXPOSURE LIMITS		
	UNCONTROLLED ENVIRONMENT <i>General Population</i> (W/kg) or (mW/g)	CONTROLLED ENVIRONMENT <i>Occupational</i> (W/kg) or (mW/g)
Peak Spatial Average SAR Head	1.6	8.0
Whole Body SAR	0.08	0.4
Peak Spatial Average SAR Hands, Feet, Ankle, Wrists, etc.	4.0	20

1. The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.
2. The Spatial Average value of the SAR averaged over the whole body.
3. The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

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7 FCC MEASUREMENT PROCEDURES

Power measurements for licensed transmitters are performed using a base station simulator under digital average power.

7.1 Measured and Reported SAR

Per FCC KDB Publication 447498 D01v06, when SAR 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. For simultaneous transmission, the measured aggregate SAR must be scaled according to the sum of the differences between the maximum tune-up tolerance and actual power used to test each transmitter. When SAR is measured at or scaled to the maximum tune-up tolerance limit, the results are referred to as *reported* SAR. The highest *reported* SAR results are identified on the grant of equipment authorization according to procedures in KDB 690783 D01v01r03.

7.2 3G SAR Test Reduction Procedure

In FCC KDB Publication 941225 D01v03r01, certain transmission modes within a frequency band and wireless mode evaluated for SAR are defined as primary modes. The equivalent modes considered for SAR test reduction are denoted as secondary modes. When the maximum output power including tune-up tolerance specified for production units in a secondary mode is ≤ 0.25 dB higher than the primary mode or when the highest reported SAR of the primary mode, scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode, is ≤ 1.2 W/kg, SAR measurements are not required for the secondary mode. These criteria are referred to as the 3G SAR test reduction procedure. When the 3G SAR test reduction procedure is not satisfied, SAR measurements are additionally required for the secondary mode.

7.3 Procedures Used to Establish RF Signal for SAR

The following procedures are according to FCC KDB Publication 941225 D01v03r01 “3G SAR Measurement Procedures.”

The device is placed into a simulated call using a base station simulator in a RF shielded chamber. Establishing connections in this manner ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. Devices under test are evaluated prior to testing, with a fully charged battery and were configured to operate at maximum output power. In order to verify that the device is tested throughout the SAR test at maximum output power, the SAR measurement system measures a “point SAR” at an arbitrary reference point at the start and end of the 1 gram SAR evaluation, to assess for any power drifts during the evaluation. If the power drift deviates by more than 5%, the SAR test and drift measurements are repeated.

7.4 SAR Measurement Conditions for UMTS

7.4.1 Output Power Verification

Maximum output power is verified on the High, Middle and Low channels according to the general descriptions in section 5.2 of 3GPP TS 34.121, using the appropriate RMC with TPC (transmit power control) set to all “1s” or applying the required inner loop power control procedures to maintain maximum output power while HSUPA is active. Results for all applicable physical channel configurations (DPCCH, DPDCHn and spreading codes, HS-DPCCH etc) are tabulated in this test report. All configurations that are not supported by the DUT or cannot be measured due to technical or equipment limitations are identified.

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7.4.2 Head SAR Measurements

SAR for next to the ear head exposure is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”. The 3G SAR test reduction procedure is applied to AMR configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for 12.2 kbps AMR in 3.4 kbps SRB (signaling radio bearer) using the highest reported SAR configuration in 12.2 kbps RMC for head exposure.

7.4.3 Body SAR Measurements

SAR for body exposure configurations is measured using the 12.2 kbps RMC with the TPC bits all “1s”. The 3G SAR test reduction procedure is applied to other spreading codes and multiple DPDCH_n configurations supported by the handset with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured using an applicable RMC configuration with the corresponding spreading code or DPDCH_n, for the highest reported SAR configuration in 12.2 kbps RMC.

7.4.4 SAR Measurements with Rel 5 HSDPA

The 3G SAR test reduction procedure is applied to HSDPA body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSDPA is measured using an FRC with H-Set 1 in Sub-test 1 and a 12.2 kbps RMC configured in Test Loop Mode 1, for the highest reported SAR configuration in 12.2 kbps RMC without HSDPA. Handsets with both HSDPA and HSUPA are tested according to Release 6 HSPA test procedures.

7.4.5 SAR Measurements with Rel 6 HSUPA

The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set 1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 and power control algorithm 2, according to the highest reported body SAR configuration in 12.2 kbps RMC without HSPA.

When VOIP applies to head exposure, the 3G SAR test reduction procedure is applied with 12.2 kbps RMC as the primary mode; otherwise, the same HSPA configuration used for body SAR measurements are applied to head exposure testing.

7.5 SAR Measurement Conditions for LTE

LTE modes are tested according to FCC KDB 941225 D05v02r04 publication. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. The R&S CMW500 or Anritsu MT8820C simulators are used for LTE output power measurements and SAR testing. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).

7.5.1 Spectrum Plots for RB Configurations

A properly configured base station simulator was used for SAR tests and power measurements. Therefore, spectrum plots for RB configurations were not required to be included in this report.

7.5.2 MPR

MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.

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7.5.3 A-MPR

A-MPR (Additional MPR) has been disabled for all SAR tests by setting NS=01 on the base station simulator.

7.5.4 Required RB Size and RB Offsets for SAR Testing

According to FCC KDB 941225 D05v02r04:

- a. Per Section 5.2.1, SAR is required for QPSK 1 RB Allocation for the largest bandwidth
 - i. The required channel and offset combination with the highest maximum output power is required for SAR.
 - ii. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required. Otherwise, SAR is required for the remaining required test channels using the RB offset configuration with highest output power for that channel.
 - iii. When the reported SAR for a required test channel is > 1.45 W/kg, SAR is required for all RB offset configurations for that channel.
- b. Per Section 5.2.2, SAR is required for 50% RB allocation using the largest bandwidth following the same procedures outlined in Section 5.2.1.
- c. Per Section 5.2.3, QPSK SAR is not required for the 100% allocation when the highest maximum output power for the 100% allocation is less than the highest maximum output power of the 1 RB and 50% RB allocations and the reported SAR for the 1 RB and 50% RB allocations is < 0.8 W/kg and < 2.0 W/kg for 10g SAR..
- d. Per Section 5.2.4 and 5.3, SAR tests for higher order modulations and lower bandwidths configurations are not required when the conducted power of the required test configurations determined by Sections 5.2.1 through 5.2.3 is less than or equal to $\frac{1}{2}$ dB higher than the equivalent configuration using QPSK modulation and when the QPSK SAR for those configurations is < 1.45 W/kg for 1g SAR and < 3.625 W/kg for 10g SAR.
- e. This device can only operate with 16QAM on the uplink with less than or equal to 27 RB. For 16 QAM configurations with 10 MHz, 15 MHz, and 20 MHz bandwidths, LTE powers for RB size or 15 ("50% RB") and 27 ("100% RB") with offsets to upper edge, middle, and lower edge of the channel are additionally measured for both QPSK and 16 QAM modulations to support comparison and SAR test exclusion per section 5.2.4 and 5.3.

7.5.5 TDD

LTE TDD testing is performed using the SAR test guidance provided in FCC KDB 941225 D05v02r04. TDD is tested at the highest duty factor using UL-DL configuration 0 with special subframe configuration 6 and applying the FDD LTE procedures in KDB 941225 D05v02r04. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211 Section 4.

7.6 SAR Testing with 802.11 Transmitters

The normal network operating configurations of 802.11 transmitters are not suitable for SAR measurements. Unpredictable fluctuations in network traffic and antenna diversity conditions can introduce undesirable variations in SAR results. The SAR for these devices should be measured using chipset based test mode software to ensure the results are consistent and reliable. See KDB Publication 248227 D01v02r02 for more details.

7.6.1 General Device Setup

Chipset based test mode software is hardware dependent and generally varies among manufacturers. The device operating parameters established in test mode for SAR measurements must be identical to those

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programmed in production units, including output power levels, amplifier gain settings and other RF performance tuning parameters.

A periodic duty factor is required for current generation SAR systems to measure SAR. When 802.11 frame gaps are accounted for in the transmission, a maximum transmission duty factor of 92 - 96% is typically achievable in most test mode configurations. A minimum transmission duty factor of 85% is required to avoid certain hardware and device implementation issues related to wide range SAR scaling. The reported SAR is scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

7.6.2 U-NII-1 and U-NII-2A

For devices that operate in both U-NII-1 and U-NII-2A bands, when the same maximum output power is specified for both bands, SAR measurement using OFDM SAR test procedures is not required for U-NII-1 unless the highest reported SAR for U-NII-2A is > 1.2 W/kg. When different maximum output powers are specified for the bands, SAR measurement for the U-NII band with the lower maximum output power is not required unless the highest reported SAR for the U-NII band with the higher maximum output power, adjusted by the ratio of lower to higher specified maximum output power for the two bands, is > 1.2 W/kg. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

7.6.3 U-NII-2C and U-NII-3

The frequency range covered by U-NII-2C and U-NII-3 is 380 MHz (5.47 – 5.85 GHz), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. When Terminal Doppler Weather Radar (TDWR) restriction applies, the channels at 5.60 – 5.65 GHz in U-NII-2C band must be disabled with acceptable mechanisms and documented in the equipment certification. Unless band gap channels are permanently disabled, SAR must be considered for these channels. Each band is tested independently according to the normally required OFDM SAR measurement and probe calibration frequency points requirements.

7.6.4 2.4 GHz SAR Test Requirements

SAR is measured for 2.4 GHz 802.11b DSSS using either the fixed test position or, when applicable, the initial test position procedure. SAR test reduction is determined according to the following:

- 1) When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.
- 2) When the reported SAR is > 0.8 W/kg, SAR is required for that position using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.

2.4 GHz 802.11 g/n/ax OFDM are additionally evaluated for SAR if the highest reported SAR for 802.11b, adjusted by the ratio of the OFDM to DSSS specified maximum output power, is > 1.2 W/kg. When SAR is required for OFDM modes in 2.4 GHz band, the Initial Test Configuration Procedures should be followed. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

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7.6.5 OFDM Transmission Mode and SAR Test Channel Selection

When the same maximum output power was specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration with the largest channel bandwidth, lowest order modulation and lowest data rate. When the maximum output power of a channel is the same for equivalent OFDM configurations; for example, 802.11a, 802.11n and 802.11ac or 802.11g and 802.11n with the same channel bandwidth, modulation, and data rate etc., the lower order 802.11 mode i.e., 802.11a, then 802.11n and 802.11ac or 802.11g then 802.11n, is used for SAR measurement. Per April 2019 TCB Workshop guidance, 802.11ax was considered the highest order 802.11 mode. When the maximum output power is the same for multiple test channels, either according to the default or additional power measurement requirements, SAR is measured using the channel closest to the middle of the frequency band or aggregated band. When there are multiple channels with the same maximum output power, SAR is measured using the higher number channel.

7.6.6 Initial Test Configuration Procedure

For OFDM, an initial test configuration is determined for each frequency band and aggregated band, according to the transmission mode with the highest maximum output power specified for SAR measurements. When the same maximum output power is specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration(s) with the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order IEEE 802.11 mode. The channel of the transmission mode with the highest average RF output conducted power will be the initial test configuration.

When the reported SAR is ≤ 0.8 W/kg, no additional measurements on other test channels are required. Otherwise, SAR is evaluated using the subsequent highest average RF output channel until the reported SAR result is ≤ 1.2 W/kg or all channels are measured. When there are multiple untested channels having the same subsequent highest average RF output power, the channel with higher frequency from the lowest 802.11 mode is considered for SAR measurements (See Section 0). When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

7.6.7 Subsequent Test Configuration Procedures

For OFDM configurations in each frequency band and aggregated band, SAR is evaluated for initial test configuration using the fixed test position or the initial test position procedure. When the highest reported SAR (for the initial test configuration), adjusted by the ratio of the specified maximum output power of the subsequent test configuration to initial test configuration, is ≤ 1.2 W/kg, no additional SAR tests for the subsequent test configurations are required. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

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8 RF CONDUCTED POWERS

8.1 UMTS Conducted Powers

3GPP Release Version	Mode	3GPP 34.121 Subtest	Cellular Band [dBm]			AWS Band [dBm]			PCS Band [dBm]			3GPP MPR [dB]
			4132	4183	4233	1312	1412	1513	9262	9400	9538	
99	WCDMA	12.2 kbps RMC	24.08	24.12	23.90	23.04	23.03	22.70	23.00	23.06	22.57	-
99		12.2 kbps AMR	24.09	24.15	24.13	23.07	22.95	22.80	23.12	23.11	23.01	-
6	HSDPA	Subtest 1	24.58	24.67	24.65	23.63	23.65	23.52	23.52	23.47	23.45	0
6		Subtest 2	23.47	23.67	23.40	22.42	22.79	22.61	22.57	22.31	22.54	0
6		Subtest 3	23.14	23.15	23.08	22.21	22.31	22.12	22.10	22.15	22.11	0.5
6		Subtest 4	22.89	23.01	22.83	21.91	22.04	21.86	21.86	21.92	21.84	0.5
6	HSUPA	Subtest 1	22.61	22.74	22.63	22.67	22.63	22.62	22.56	22.62	22.52	0
6		Subtest 2	21.36	21.49	21.33	20.36	20.45	20.40	20.40	20.41	20.32	2
6		Subtest 3	22.34	22.48	22.36	21.14	21.30	21.09	21.13	21.17	21.06	1
6		Subtest 4	21.65	21.73	21.60	20.60	20.81	20.64	20.64	20.68	20.57	2
6		Subtest 5	22.63	22.74	22.60	22.65	22.77	22.63	22.58	22.62	22.49	0

This device does not support DC-HSDPA.



Figure 8-1
Power Measurement Setup

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8.2 LTE Conducted Powers

Per FCC KDB Publication 941225 D05v02r05, LTE SAR for the lower bandwidths was not required for testing since the maximum average output power of all required channels and configurations was not more than 0.5 dB higher than the highest bandwidth and the reported LTE SAR for the highest bandwidth was less than 1.45 W/kg. Lower bandwidth conducted powers for all LTE bands can be found in appendix F.

8.2.1 LTE Band 26

Table 8-1
LTE Band 26 Conducted Powers – 10 MHz Bandwidth

LTE Band 26 (Cell) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	Design MPR [dB]
			26740 (819.0 MHz)	26865 (831.5 MHz)	26990 (844.0 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	24.04	24.05	24.47	0	0
	1	25	24.48	24.00	23.93		0
	1	49	24.42	24.43	24.20		0
	25	0	23.28	23.00	23.36	0-1	1
	25	12	23.45	23.07	23.08		1
	25	25	23.58	23.29	23.03		1
	50	0	23.56	23.18	23.23		1
	15	0	23.14	23.02	23.48		1
	15	17	23.44	23.05	23.06		1
	15	35	23.50	23.39	23.12		1
	27	0	23.29	22.98	23.33		1
	27	12	23.49	23.05	23.06		1
	27	23	23.57	23.28	23.03		1
16QAM	1	0	23.17	23.12	23.47	0-1	1
	1	25	23.55	23.09	23.15		1
	1	49	23.56	23.28	23.33		1
	25	0	21.97	21.76	22.10	0-2	2
	25	12	22.14	21.80	21.84		2
	25	25	22.34	22.04	21.71		2
	15	0	21.90	21.81	22.24		2
	15	17	22.14	21.80	21.82		2
	15	35	22.31	22.11	21.75		2
	27	0	22.03	21.79	22.09		2
	27	12	22.18	21.80	21.83		2
	27	23	22.36	21.97	21.73		2

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8.2.2 LTE Band 5

Table 8-2
LTE Band 5 Conducted Powers – 10 MHz Bandwidth

LTE Band 5 (Cell) 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			20525 (836.5 MHz)		
			Conducted Power [dBm]		
QPSK	1	0	24.09	0	0
	1	25	24.50		0
	1	49	24.45		0
	25	0	23.40	0-1	1
	25	12	23.54		1
	25	25	23.58		1
	50	0	23.57		1
	15	0	23.25		1
	15	17	23.54		1
	15	35	23.55		1
	27	0	23.40		1
	27	12	23.53		1
	27	23	23.56		1
16QAM	1	0	23.43	0-1	1
	1	25	23.60		1
	1	49	23.53		1
	25	0	22.19	0-2	2
	25	12	22.29		2
	25	25	22.38		2
	15	0	22.07		2
	15	17	22.34		2
	15	35	22.40		2
	27	0	22.13		2
	27	12	22.25		2
	27	23	22.30		2

Note: LTE Band 5 (Cell) at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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8.2.3 LTE Band 66

Table 8-3
LTE Band 66 Conducted Powers – 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	Design MPR [dB]
			132072 (1720.0 MHz)	132322 (1745.0 MHz)	132572 (1770.0 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	23.19	23.56	23.06	0	0
	1	50	22.75	23.16	22.79		0
	1	99	23.19	23.26	22.76		0
	50	0	22.18	22.59	22.58	0-1	1
	50	25	22.15	22.42	22.43		1
	50	50	22.30	22.29	22.31		1
	100	0	22.50	22.58	22.30	0	1
	15	0	22.93	23.16	23.10		0
	15	42	22.64	22.81	22.88		0
	15	85	23.01	22.85	22.79	0	
	27	0	22.36	22.46	22.58	0-1	1
	27	37	22.05	22.18	22.40		1
27	73	22.42	22.16	22.26	1		
16QAM	1	0	22.41	22.42	22.40	0-1	1
	1	50	22.32	22.31	22.31		1
	1	99	22.50	22.24	22.12		1
	15	0	21.80	21.80	21.72	0-1	1
	15	42	21.72	21.62	21.73		1
	15	85	21.87	21.60	21.62		1
	27	0	21.13	21.10	21.10	0-2	2
	27	37	21.44	20.94	21.05		2
27	73	21.10	20.89	20.95	2		

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8.2.4 LTE Band 25

Table 8-4
LTE Band 25 Conducted Powers – 20 MHz Bandwidth

LTE Band 25 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	Design MPR [dB]
			26140 (1860.0 MHz)	26365 (1882.5 MHz)	26590 (1905.0 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	23.13	23.35	23.00	0	0
	1	50	23.36	23.08	22.75		0
	1	99	23.60	23.10	23.08		0
	50	0	22.21	22.33	22.24	0-1	1
	50	25	22.38	22.25	22.10		1
	50	50	22.55	22.17	22.13		1
	100	0	22.54	22.52	22.33	0	1
	15	0	23.05	23.40	23.13		0
	15	42	23.24	23.14	22.88		0
	15	85	23.58	23.09	23.14	0-1	0
	27	0	22.07	22.41	22.22		1
	27	37	22.31	22.19	21.88		1
27	73	22.50	22.08	22.00	1		
16QAM	1	0	22.36	22.62	22.60	0-1	1
	1	50	22.50	22.41	22.33		1
	1	99	22.63	22.30	22.65		1
	15	0	22.05	22.38	22.21	0-1	1
	15	42	22.27	22.20	22.01		1
	15	85	22.50	22.09	22.22		1
	27	0	21.02	21.34	21.25	0-2	2
	27	37	21.27	21.15	21.05		2
27	73	21.37	21.05	21.13	2		

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8.2.5 LTE Band 7

Table 8-5
LTE Band 7 Conducted Powers – 20 MHz Bandwidth

LTE Band 7 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	Design MPR [dB]
			20850 (2510.0 MHz)	21100 (2535.0 MHz)	21350 (2560.0 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	22.05	22.06	21.85	0	0
	1	50	22.14	21.97	21.75		0
	1	99	22.16	22.12	22.35		0
	50	0	21.09	20.98	20.92	0-1	1
	50	25	21.16	21.00	21.00		1
	50	50	21.26	21.04	21.27		1
	100	0	21.25	21.18	21.26		1
	15	0	22.10	21.92	21.96	0	0
	15	42	22.22	21.99	21.88		0
	15	85	22.20	22.04	22.19		0
	27	0	21.08	20.89	20.88	0-1	1
	27	37	21.24	21.02	20.94		1
	27	73	21.21	20.98	21.15		1
16QAM	1	0	21.32	21.40	21.24	0-1	1
	1	50	21.51	21.22	21.11		1
	1	99	21.63	21.32	21.52		1
	15	0	21.20	21.00	20.95	0-1	1
	15	42	21.28	20.98	20.91		1
	15	85	21.23	21.03	21.18		1
	27	0	20.13	19.93	19.90	0-2	2
	27	37	20.26	19.94	19.92		2
	27	73	20.22	19.98	20.09		2

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8.2.6 LTE Band 41

Table 8-6
LTE Band 41 Conducted Powers – 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	Design MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	21.53	21.54	21.85	22.04	22.19	0	0
	1	50	21.65	21.59	21.98	22.07	22.31		0
	1	99	21.57	21.51	21.93	22.11	22.35		0
	50	0	20.56	20.50	20.86	21.00	21.13	0-1	1
	50	25	20.61	20.53	20.91	20.93	21.16		1
	50	50	20.57	20.51	20.92	20.94	21.20		1
	100	0	20.71	20.50	20.91	20.95	21.19	0	1
	15	0	21.62	21.52	21.90	21.98	22.13		0
	15	42	21.68	21.55	21.95	22.01	22.20		0
	15	85	21.61	21.60	21.98	22.02	22.25	0-1	0
	27	0	20.58	20.50	21.80	20.98	21.10		1
	27	37	20.64	20.51	20.93	21.00	21.17		1
16QAM	27	73	20.58	20.53	20.91	20.97	21.19	0-1	1
	1	0	21.07	20.90	21.12	21.21	21.32		1
	1	50	21.04	20.95	21.17	21.40	21.50		1
	1	99	20.92	20.86	21.33	21.37	21.40	0-1	1
	15	0	21.00	20.82	21.15	21.29	21.32		1
	15	42	21.04	20.92	21.25	21.30	21.47		1
	15	85	21.10	20.80	21.40	21.29	21.49	1	
	27	0	20.01	19.90	20.15	20.30	20.32	0-2	2
	27	37	20.04	19.88	20.23	20.34	20.40		2
	27	73	20.00	19.82	20.24	20.26	20.42		2

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8.3 WLAN Conducted Powers

Table 8-7
2.4 GHz WLAN Maximum Average RF Power

2.4GHz Conducted Power [dBm]				
Freq [MHz]	Channel	IEEE Transmission Mode		
		802.11b	802.11g	802.11n
		Average	Average	Average
2412	1	18.00	16.05	16.07
2417	2		17.53	17.50
2437	6	17.90	17.49	17.48
2452	9		17.51	17.46
2457	10		17.06	17.02
2462	11	18.01	15.53	15.50

Table 8-8
5 GHz WLAN Maximum Average RF Power

5GHz (20MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11a	802.11n
		Average	Average
5180	36	16.06	16.00
5200	40	16.04	16.10
5220	44	16.02	16.11
5240	48	15.99	16.03
5260	52	15.96	16.02
5280	56	16.00	16.12
5300	60	16.04	16.04
5320	64	15.97	15.99
5500	100	16.01	16.08
5600	120	15.97	16.07
5620	124	16.06	16.09
5720	144	16.00	16.04
5745	149	16.08	16.01
5785	157	16.06	16.11
5825	165	16.01	16.10

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Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02:

- Power measurements were performed for the transmission mode configuration with the highest maximum output power specified for production units.
- For transmission modes with the same maximum output power specification, powers were measured for the largest channel bandwidth, lowest order modulation and lowest data rate.
- For transmission modes with identical maximum specified output power, channel bandwidth, modulation and data rates, power measurements were required for all identical configurations.
- For each transmission mode configuration, powers were measured for the highest and lowest channels; and at the mid-band channel(s) when there were at least 3 channels supported. For configurations with multiple mid-band channels, due to an even number of channels, both channels were measured

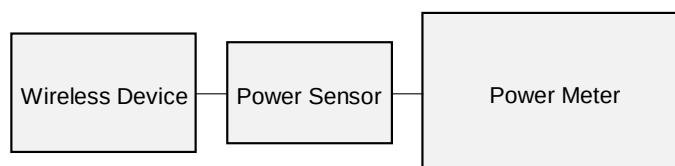


Figure 8-2
Power Measurement Setup

8.4 Bluetooth Conducted Powers

Table 8-9
Bluetooth Average RF Power

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	11.77	15.031
2441	GFSK	1.0	39	11.98	15.776
2480	GFSK	1.0	78	11.80	15.136

Note 1: Bluetooth was evaluated with a test mode with 100% transmission duty factor.

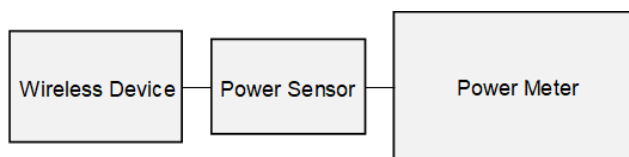


Figure 8-3
Power Measurement Setup

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9 SYSTEM VERIFICATION

9.1 Tissue Verification

Table 9-1
Measured Head Tissue Properties

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ϵ	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ϵ	% dev σ	% dev ϵ
06/27/2021	835 Head	21.2	800	0.932	41.258	0.897	41.682	3.90%	-1.02%
			820	0.939	41.200	0.899	41.578	4.45%	-0.91%
			835	0.945	41.260	0.900	41.500	5.00%	-0.82%
			850	0.950	41.124	0.916	41.500	3.71%	-0.91%
			820	0.932	40.807	0.899	41.578	3.67%	-1.83%
08/12/2021	835 Head	21.9	835	0.938	40.764	0.900	41.500	4.22%	-1.77%
			850	0.944	40.746	0.916	41.500	1.05%	-1.82%
			1710	1.354	39.716	1.348	40.142	0.45%	-1.06%
			1720	1.359	39.699	1.354	40.126	0.37%	-1.06%
			1745	1.375	39.656	1.368	40.087	0.51%	-1.08%
06/22/2021	1750 Head	21.3	1720	1.378	39.648	1.371	40.079	0.51%	-1.08%
			1770	1.389	39.615	1.383	40.047	0.43%	-1.08%
			1790	1.400	39.575	1.394	40.016	0.43%	-1.10%
			1710	1.351	39.243	1.348	40.142	0.22%	-2.24%
			1720	1.357	39.227	1.354	40.126	0.22%	-2.24%
07/20/2021	1750 Head	21.3	1745	1.372	39.200	1.368	40.087	0.29%	-2.21%
			1750	1.375	39.184	1.371	40.079	0.29%	-2.21%
			1770	1.386	39.179	1.383	40.047	0.22%	-2.18%
			1790	1.398	39.142	1.394	40.016	0.29%	-2.18%
			1850	1.410	38.486	1.400	40.000	0.71%	-3.79%
06/20/2021	1900 Head	21.5	1860	1.415	38.471	1.400	40.000	1.07%	-3.82%
			1880	1.426	38.437	1.400	40.000	1.86%	-3.91%
			1900	1.438	38.415	1.400	40.000	2.71%	-3.98%
			1905	1.440	38.411	1.400	40.000	2.86%	-3.97%
			1910	1.443	38.407	1.400	40.000	3.07%	-3.98%
07/21/21	1900 Head	21.4	1850	1.432	39.214	1.400	40.000	2.29%	-1.87%
			1860	1.438	39.197	1.400	40.000	2.71%	-2.01%
			1880	1.451	39.180	1.400	40.000	3.64%	-2.10%
			1900	1.463	39.131	1.400	40.000	4.50%	-2.17%
			1905	1.466	39.127	1.400	40.000	4.71%	-2.18%
06/16/2021	2450 Head	22.1	1910	1.469	39.121	1.400	40.000	4.93%	-2.20%
			2400	1.806	39.164	1.756	39.289	2.83%	-0.32%
			2450	1.848	39.092	1.800	39.200	2.67%	-0.28%
			2480	1.871	39.035	1.833	39.162	2.07%	-0.32%
			2500	1.887	38.984	1.855	39.136	1.73%	-0.36%
			2510	1.896	38.978	1.866	39.123	1.61%	-0.37%
			2535	1.917	38.945	1.893	39.092	1.27%	-0.38%
			2550	1.929	38.921	1.909	39.071	1.05%	-0.39%
			2560	1.937	38.902	1.920	39.060	0.89%	-0.40%
			2600	1.972	38.819	1.964	39.009	0.41%	-0.49%
			2650	2.013	38.727	2.018	38.945	-0.25%	-0.56%
			2680	2.038	38.661	2.051	38.907	-0.63%	-0.63%
			2700	2.055	38.615	2.071	38.882	-0.87%	-0.69%
			2400	1.801	37.531	1.756	39.289	2.56%	-4.47%
			2450	1.839	37.470	1.800	39.200	2.17%	-4.41%
07/21/2021	2450 Head	21.6	2480	1.856	37.459	1.833	39.162	1.36%	-4.45%
			2500	1.875	37.372	1.855	39.136	1.08%	-4.51%
			2400	1.787	36.704	1.756	39.289	1.77%	-1.49%
			2450	1.825	36.641	1.800	39.200	1.39%	-1.43%
			2480	1.846	36.596	1.833	39.162	0.71%	-1.45%
			2500	1.861	36.561	1.855	39.136	0.32%	-1.47%
			2400	1.746	36.887	1.756	39.289	-0.57%	-1.02%
			2450	1.786	36.827	1.800	39.200	-0.78%	-0.95%
			2480	1.807	36.776	1.833	39.162	-1.42%	-0.99%
			2500	1.821	36.732	1.855	39.136	-1.73%	-1.03%
			2510	1.832	36.715	1.866	39.123	-1.82%	-1.04%
			2535	1.852	36.668	1.893	39.092	-2.17%	-1.03%
			2550	1.865	36.620	1.909	39.071	-2.41%	-1.03%
			2560	1.870	36.653	1.920	39.060	-2.60%	-1.04%
			2600	1.902	36.578	1.964	39.009	-3.16%	-1.10%
08/12/2021	2450 Head	22.7	2650	1.942	36.508	2.018	38.945	-3.77%	-1.12%
			2680	1.961	36.449	2.051	38.907	-4.29%	-1.18%
			2700	1.980	36.411	2.073	38.882	-4.49%	-1.21%
			5180	4.508	36.015	4.635	36.009	-2.74%	0.02%
			5190	4.519	35.996	4.645	35.998	-2.71%	-0.01%
			5200	4.530	35.981	4.655	35.986	-2.69%	-0.01%
			5210	4.543	35.973	4.666	35.975	-2.64%	-0.01%
			5220	4.555	35.961	4.676	35.963	-2.59%	-0.01%
			5240	4.577	35.931	4.696	35.940	-2.53%	-0.08%
			5250	4.587	35.901	4.706	35.929	-2.53%	-0.11%
			5260	4.600	35.878	4.717	35.917	-2.48%	-0.11%
			5270	4.612	35.865	4.727	35.906	-2.43%	-0.11%
			5280	4.623	35.844	4.737	35.894	-2.41%	-0.14%
			5290	4.633	35.824	4.748	35.883	-2.42%	-0.16%
			5300	4.644	35.807	4.758	35.871	-2.40%	-0.18%
07/23/2021	5200-5800 Head	21.6	5310	4.653	35.792	4.768	35.860	-2.41%	-0.19%
			5320	4.664	35.774	4.778	35.849	-2.39%	-0.21%
			5500	4.856	35.426	4.963	35.643	-2.16%	-0.51%
			5510	4.868	35.400	4.973	35.632	-2.11%	-0.65%
			5520	4.882	35.383	4.983	35.620	-2.03%	-0.67%
			5530	4.895	35.371	4.994	35.609	-1.98%	-0.67%
			5540	4.909	35.355	5.004	35.597	-1.92%	-0.68%
			5550	4.921	35.338	5.014	35.586	-1.85%	-0.70%
			5560	4.932	35.322	5.024	35.574	-1.83%	-0.71%
			5580	4.954	35.294	5.045	35.551	-1.80%	-0.72%
			5600	4.979	35.265	5.065	35.529	-1.70%	-0.74%
			5610	4.992	35.251	5.076	35.518	-1.65%	-0.75%
			5620	5.005	35.229	5.086	35.506	-1.59%	-0.78%
			5640	5.030	35.190	5.106	35.483	-1.49%	-0.83%
			5660	5.055	35.171	5.127	35.460	-1.40%	-0.81%
			5670	5.068	35.158	5.137	35.449	-1.34%	-0.82%
			5680	5.079	35.141	5.147	35.437	-1.32%	-0.84%
			5690	5.087	35.122	5.158	35.426	-1.28%	-0.86%
			5700	5.096	35.105	5.168	35.414	-1.24%	-0.87%
			5710	5.113	35.088	5.178	35.403	-1.26%	-0.89%
			5720	5.127	35.074	5.188	35.391	-1.18%	-0.90%
			5745	5.160	35.032	5.214	35.363	-1.04%	-0.94%
			5750	5.160	35.021	5.219	35.357	-1.03%	-0.93%
			5755	5.172	35.009	5.224	35.351	-1.00%	-0.97%
			5765	5.183	34.987	5.234	35.340	-0.97%	-1.00%
			5775	5.192	34.969	5.245	35.329	-1.01%	-1.02%
			5785	5.204	34.957	5.255	35.317	-0.97%	-1.02%
			5795	5.215	34.946	5.265	35.305	-0.95%	-1.02%
			5800	5.219	34.941	5.270	35.300	-0.97%	-1.02%
			5800	5.219	34.941	5.270	35.300	-0.97%	-1.02%
			5805	5.225	34.933	5.275	35.294	-0.95%	-1.02%
			5825	5.247	34.901	5.296	35.271	-0.93%	-1.05%

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Table 9-2
Measured Body Tissue Properties

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration [°C]	Measured Frequency [MHz]	Measured Conductivity, σ [S/m]	Measured Dielectric Constant, ϵ	TARGET Dielectric Conductivity, σ [S/m]	TARGET Dielectric Constant, ϵ	% dev σ	% dev ϵ
6/27/2021	835 Body	21.5	815	0.98	55	0.969	55.258	1.14%	-0.47%
			820	0.986	54.951	0.969	55.258	1.75%	-0.56%
			835	1.002	54.798	0.970	55.200	3.30%	-0.73%
			850	1.015	54.649	0.988	55.154	3.04%	-0.92%
			815	0.951	54.108	0.968	55.271	-1.76%	-2.10%
08/04/2021	835 Body	21.9	820	0.956	54.054	0.969	55.258	-1.34%	-2.18%
			835	0.972	53.898	0.970	55.200	0.21%	-2.36%
			850	0.988	53.750	0.988	55.154	0.00%	-2.55%
			815	0.940	54.088	0.968	55.271	-2.80%	-2.14%
			820	0.942	54.069	0.969	55.258	-2.79%	-2.15%
8/18/2021	835 Body	22.8	835	0.948	54.025	0.970	55.200	-2.27%	-2.13%
			850	0.954	53.991	0.988	55.154	-3.44%	-2.11%
			1710	1.459	54.105	1.463	53.537	-0.27%	1.06%
			1720	1.464	54.096	1.469	53.511	-0.34%	1.09%
			1745	1.478	54.087	1.485	53.445	-0.47%	1.20%
06/22/2021	1750 Body	21.6	1750	1.481	54.088	1.488	53.432	-0.47%	1.23%
			1770	1.494	54.082	1.501	53.379	-0.47%	1.84%
			1790	1.507	54.088	1.514	53.326	-0.46%	1.43%
			1710	1.438	51.953	1.463	53.537	-1.71%	-2.96%
			1720	1.448	51.920	1.469	53.511	-1.43%	-2.97%
08/03/2021	1750 Body	21.4	1745	1.475	51.853	1.485	53.445	-0.67%	-2.98%
			1750	1.479	51.832	1.488	53.412	-0.60%	-2.99%
			1770	1.497	51.776	1.501	53.379	-0.27%	-3.00%
			1790	1.516	51.687	1.514	53.326	0.13%	-3.07%
			1850	1.530	52.102	1.520	53.300	0.66%	-2.25%
08/05/2021	1900 Body	22.6	1860	1.540	52.072	1.520	53.300	1.32%	-2.30%
			1880	1.560	52.010	1.520	53.300	2.61%	-2.42%
			1900	1.579	51.955	1.520	53.300	3.88%	-2.52%
			1905	1.583	51.942	1.520	53.300	4.14%	-2.55%
			1910	1.588	51.927	1.520	53.300	4.47%	-2.58%
08/09/2021	1900 Body	20.8	1850	1.497	52.075	1.520	53.300	-1.51%	-2.30%
			1860	1.508	52.035	1.520	53.300	-0.79%	-2.37%
			1880	1.531	51.957	1.520	53.300	0.72%	-2.52%
			1900	1.553	51.893	1.520	53.300	2.17%	-2.64%
			1905	1.559	51.879	1.520	53.300	2.57%	-2.67%
06/18/2021	2450 Body	20.4	1910	1.564	51.864	1.520	53.300	2.89%	-2.69%
			2400	1.919	50.313	1.902	52.767	0.89%	-4.65%
			2450	1.966	50.254	1.950	52.700	0.82%	-4.64%
			2480	1.990	50.198	1.993	52.662	-0.15%	-4.68%
			2500	2.009	50.157	2.021	52.636	-0.39%	-4.71%
06/28/2021	2450 Body	21	2510	2.019	50.141	2.035	52.623	-0.79%	-4.72%
			2535	2.043	50.113	2.071	52.592	-1.35%	-4.71%
			2550	2.055	50.092	2.092	52.573	-1.77%	-4.72%
			2560	2.064	50.072	2.106	52.560	-1.99%	-4.73%
			2600	2.104	50.009	2.163	52.509	-2.73%	-4.79%
07/18/2021	2450 Body	21.4	2650	2.151	49.921	2.234	52.445	-3.72%	-4.81%
			2680	2.179	49.856	2.277	52.407	-4.30%	-4.87%
			2700	2.199	49.817	2.305	52.382	-4.60%	-4.90%
			2400	1.931	50.549	1.902	52.767	1.52%	-4.20%
			2450	1.977	50.489	1.950	52.700	1.38%	-4.20%
07/27/2021	2450 Body	22.7	2480	2.002	50.441	1.993	52.662	0.45%	-4.22%
			2500	2.021	50.409	2.021	52.636	0.00%	-4.23%
			2510	2.031	50.399	2.035	52.623	-0.20%	-4.23%
			2515	2.054	50.376	2.071	52.592	-0.67%	-4.21%
			2550	2.067	50.356	2.092	52.573	-1.20%	-4.22%
07/23/2021	5200-5800 Body	22.4	2560	2.076	50.339	2.106	52.560	-1.42%	-4.23%
			2600	2.115	50.273	2.163	52.509	-2.22%	-4.26%
			2650	2.164	50.200	2.234	52.445	-3.13%	-4.28%
			2680	2.194	50.139	2.277	52.407	-3.65%	-4.33%
			2700	2.213	50.098	2.305	52.382	-3.99%	-4.36%
07/27/2021	2450 Body	21.4	2400	1.975	52.530	1.902	52.767	3.84%	-0.45%
			2450	2.025	52.517	1.950	52.700	3.85%	-0.35%
			2480	2.054	52.486	1.993	52.662	3.06%	-0.33%
			2500	2.075	52.461	2.021	52.636	2.67%	-0.33%
			2400	1.974	51.188	1.902	52.767	3.79%	-2.99%
07/23/2021	5200-5800 Body	22.4	2450	2.030	51.033	1.950	52.700	4.10%	-3.16%
			2480	2.069	50.961	1.993	52.662	3.81%	-3.23%
			2500	2.093	50.919	2.021	52.636	3.56%	-3.26%
			5180	5.311	48.378	5.276	49.041	0.66%	-1.35%
			5190	5.327	48.362	5.288	49.028	0.74%	-1.36%
07/23/2021	5200-5800 Body	22.4	5200	5.340	48.349	5.299	49.014	0.77%	-1.36%
			5210	5.353	48.341	5.311	49.001	0.79%	-1.35%
			5220	5.368	48.325	5.323	48.987	0.85%	-1.35%
			5240	5.395	48.270	5.346	48.960	0.92%	-1.41%
			5250	5.410	48.246	5.358	48.947	0.97%	-1.43%
07/23/2021	5200-5800 Body	22.4	5260	5.425	48.225	5.369	48.933	1.04%	-1.45%
			5270	5.441	48.200	5.381	48.919	1.12%	-1.43%
			5280	5.456	48.202	5.393	48.906	1.17%	-1.44%
			5290	5.469	48.181	5.404	48.892	1.20%	-1.45%
			5300	5.481	48.157	5.416	48.879	1.20%	-1.48%
07/23/2021	5200-5800 Body	22.4	5310	5.492	48.136	5.428	48.865	1.18%	-1.49%
			5320	5.507	48.120	5.439	48.851	1.25%	-1.50%
			5500	5.765	47.778	5.650	48.607	2.04%	-1.71%
			5510	5.780	47.748	5.661	48.594	2.10%	-1.74%
			5520	5.795	47.731	5.673	48.580	2.15%	-1.75%
07/23/2021	5200-5800 Body	22.4	5530	5.810	47.710	5.685	48.566	2.20%	-1.76%
			5540	5.827	47.699	5.696	48.553	2.30%	-1.76%
			5550	5.841	47.679	5.708	48.539	2.33%	-1.77%
			5560	5.855	47.658	5.720	48.526	2.36%	-1.79%
			5580	5.886	47.623	5.743	48.499	2.49%	-1.81%
07/23/2021	5200-5800 Body	22.4	5600	5.917	47.582	5.766	48.471	2.62%	-1.83%
			5610	5.930	47.561	5.778	48.458	2.63%	-1.85%
			5620	5.944	47.548	5.790	48.444	2.66%	-1.85%
			5640	5.977	47.513	5.813	48.417	2.82%	-1.87%
			5660	6.005	47.483	5.837	48.390	2.88%	-1.87%
07/23/2021	5200-5800 Body	22.4	5670	6.019	47.459	5.848	48.376	2.92%	-1.90%
			5680	6.030	47.430	5.860	48.363	2.90%	-1.93%
			5690	6.042	47.403	5.872	48.349	2.90%	-1.96%
			5700	6.059	47.390	5.883	48.336	2.90%	-1.96%
			5710	6.077	47.382	5.895	48.322	3.09%	-1.95%
07/23/2021	5200-5800 Body	22.4	5720	6.096	47.359	5.907	48.309	3.20%	-1.97%
			5745	6.131	47.331	5.936	48.275	3.29%	-1.96%
			5750	6.140	47.325	5.942	48.268	3.33%	-1.95%
			5755	6.150	47.317	5.947	48.261	3.41%	-1.96%
			5765	6.165	47.289	5.959	48.248	3.46%	-1.99%
07/23/2021	5200-5800 Body	22.4	5775	6.178	47.259	5.971	48.234	3.47%	-2.02%
			5785	6.190	47.245	5.982	48.220	3.48%	-2.02%
			5785	6.204	47.238	5.994	48.207	3.50%	-2.03%
			5800	6.211	47.222	6.000	48.200	3.52%	-2.03%
			5805	6.220	47.216	6.006	48.193	3.56%	-2.03%
07/23/2021	5200-5800 Body	22.4	5825	6.249	47.172	6.029	48.166	3.65%	-2.06%

The above measured tissue parameters were used in the DASY software. The DASY software was used to perform interpolation to determine the dielectric parameters at the SAR test device frequencies (per KDB Publication 865664 D01v01r04 and IEEE 1528-2013 6.6.1.2). The tissue parameters listed in the SAR test plots may slightly differ from the table above due to significant digit rounding in the software.

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9.2 Test System Verification

Prior to SAR assessment, the system is verified to $\pm 10\%$ of the SAR measurement on the reference dipole at the time of calibration by the calibration facility. Full system validation status and result summary can be found in Appendix D.

Table 9-3
1g System Verification Results

System Verification												
TARGET & MEASURED												
SAR System #	Tissue Frequency (MHz)	Tissue Type	Date	Amb. Temp (°C)	Liquid Temp (°C)	Input Power (W)	Source SN	Probe SN	Measured SAR _{1g} (W/kg)	1 W Target SAR _{1g} (W/kg)	1 W Normalized SAR _{1g} (W/kg)	Deviation _{1g} (%)
AM4a	850	HEAD	06/27/2021	22.2	21.1	0.200	1010	7427	1.960	9.840	9.800	-0.41%
AM7	850	HEAD	08/12/2021	21.4	21.7	0.200	1010	7420	2.090	9.840	10.450	6.20%
AM5	1750	HEAD	06/22/2021	22.5	21.1	0.100	1083	3949	3.820	36.100	38.200	5.82%
AM4b	1750	HEAD	07/20/2021	23.3	21.4	0.100	1083	7640	3.800	36.100	38.000	5.26%
AM4a	1900	HEAD	06/20/2021	22.9	21.5	0.100	5d030	7427	4.000	39.900	40.000	0.25%
AM10	1900	HEAD	07/21/2021	23.2	22.9	0.100	5d181	7639	4.010	40.100	40.100	0.00%
AM5	2450	HEAD	06/16/2021	22.3	22.0	0.100	750	3949	5.390	53.100	53.900	1.51%
AM4b	2450	HEAD	07/22/2021	23.1	21.5	0.100	750	7640	5.030	53.100	50.300	-5.27%
AM4b	2450	HEAD	07/26/2021	22.9	22.8	0.100	750	7640	4.990	53.100	49.900	-6.03%
AM8	2450	HEAD	08/12/2021	22.5	21.9	0.100	921	7558	5.380	53.100	53.800	1.32%
AM5	2600	HEAD	06/16/2021	22.3	22.0	0.100	1042	3949	5.720	57.700	57.200	-0.87%
AM8	2600	HEAD	08/12/2021	22.5	21.9	0.100	1042	7558	5.570	57.700	55.700	-3.47%
AM8	5250	HEAD	07/23/2021	21.1	20.6	0.050	1123	7558	3.910	82.200	78.200	-4.87%
AM8	5600	HEAD	07/23/2021	21.1	20.6	0.050	1123	7558	3.990	84.500	79.800	-5.56%
AM8	5750	HEAD	07/23/2021	21.1	20.6	0.050	1123	7558	3.790	81.300	75.800	-6.77%

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Table 9-4
10g System Verification Results

System Verification TARGET & MEASURED												
SAR System #	Tissue Frequency (MHz)	Tissue Type	Date	Amb. Temp (°C)	Liquid Temp (°C)	Input Power (W)	Source SN	Probe SN	Measured SAR _{10g} (W/kg)	1 W Target SAR _{10g} (W/kg)	1 W Normalized SAR _{10g} (W/kg)	Deviation _{10g} (%)
AM5	835	BODY	06/27/2021	21.0	20.5	0.200	4d040	3949	1.310	6.240	6.550	4.97%
AM4b	835	BODY	08/04/2021	23.5	21.6	0.200	4d040	7640	1.320	6.240	6.600	5.77%
AM2	835	BODY	08/18/2021	22.1	21.9	0.200	4d040	7532	1.340	6.240	6.700	7.37%
AM10	1750	BODY	06/22/2021	23.7	21.6	0.100	1083	7639	1.880	19.700	18.800	-4.57%
AM10	1750	BODY	08/03/2021	20.5	21.0	0.100	1083	7639	1.840	19.700	18.400	-6.60%
AM10	1900	BODY	08/05/2021	22.7	21.3	0.100	5d030	7639	1.990	21.100	19.900	-5.69%
AM4b	1900	BODY	08/09/2021	22.9	21.2	0.100	5d030	7640	2.040	21.100	20.400	-3.32%
AM2	2450	BODY	06/18/2021	21.8	19.2	0.100	750	7532	2.340	24.100	23.400	-2.90%
AM2	2450	BODY	06/28/2021	21.1	20.7	0.100	750	7532	2.330	24.100	23.300	-3.32%
AM8	2450	BODY	07/18/2021	22.7	22.5	0.100	750	7558	2.360	24.100	23.600	-2.07%
AM4b	2450	BODY	07/27/2021	22.7	22.5	0.100	750	7640	2.350	24.100	23.500	-2.49%
AM2	2600	BODY	06/18/2021	21.8	19.2	0.100	1042	7532	2.560	24.900	25.600	2.81%
AM2	2600	BODY	06/28/2021	21.1	20.7	0.100	1042	7532	2.680	24.900	26.800	7.63%
AM9	5250	BODY	07/23/2021	21.5	20.4	0.050	1123	7638	1.070	20.300	21.400	5.42%
AM9	5600	BODY	07/23/2021	21.5	20.4	0.050	1123	7638	1.130	21.200	22.600	6.60%
AM9	5750	BODY	07/23/2021	21.5	20.4	0.050	1123	7638	1.080	20.100	21.600	7.46%

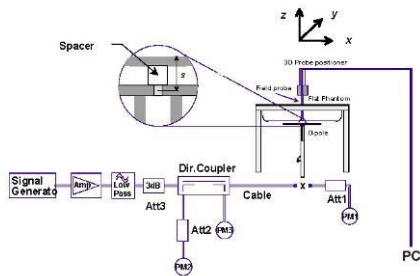


Figure 9-1
System Verification Setup Diagram



Figure 9-2
System Verification Setup Photo

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10 SAR DATA SUMMARY

10.1 Standalone Head SAR Data

Table 10-1
UMTS 850 Head SAR

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Spacing	Housing type	Wristband Type	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
836.60	4183	UMTS 850	RMC	25.0	24.12	0.05	Front	10 mm	Aluminum	Sport	JKV6G7NLW7	1:1	0.000	1.225	0.000	
836.60	4183	UMTS 850	RMC	25.0	24.12	-0.15	Front	10 mm	Aluminum	Metal Links	JKV6G7NLW7	1:1	0.000	1.225	0.000	
836.60	4183	UMTS 850	RMC	25.0	24.12	0.05	Front	10 mm	Aluminum	Metal Loop	JKV6G7NLW7	1:1	0.000	1.225	0.000	
836.60	4183	UMTS 850	RMC	25.0	24.12	0.15	Front	10 mm	Stainless Steel	Sport	N30HR994T9	1:1	0.000	1.225	0.000	
836.60	4183	UMTS 850	RMC	25.0	24.12	0.03	Front	10 mm	Stainless Steel	Metal Links	N30HR994T9	1:1	0.000	1.225	0.000	
836.60	4183	UMTS 850	RMC	25.0	24.12	-0.03	Front	10 mm	Stainless Steel	Metal Loop	N30HR994T9	1:1	0.000	1.225	0.000	
836.60	4183	UMTS 850	RMC	25.0	24.12	0.10	Front	10 mm	Titanium	Sport	VFMF42DWC	1:1	0.000	1.225	0.000	
836.60	4183	UMTS 850	RMC	25.0	24.12	-0.03	Front	10 mm	Titanium	Metal Links	VFMF42DWC	1:1	0.000	1.225	0.000	A1
836.60	4183	UMTS 850	RMC	25.0	24.12	0.10	Front	10 mm	Titanium	Metal Loop	M36F9H2RPG	1:1	0.000	1.225	0.000	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 10-2
UMTS 1750 Head SAR

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Spacing	Housing type	Wristband Type	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
1712.40	1312	UMTS 1750	RMC	24.0	23.04	0.05	Front	10 mm	Aluminum	Sport	GXJFJWLPX2	1:1	0.102	1.247	0.127	
1712.40	1312	UMTS 1750	RMC	24.0	23.04	0.05	Front	10 mm	Aluminum	Metal Links	GXJFJWLPX2	1:1	0.156	1.247	0.195	
1712.40	1312	UMTS 1750	RMC	24.0	23.04	0.02	Front	10 mm	Aluminum	Metal Loop	P442RF7J2Y	1:1	0.193	1.247	0.241	
1712.40	1312	UMTS 1750	RMC	24.0	23.04	0.07	Front	10 mm	Stainless Steel	Sport	NPCGG762LQ	1:1	0.105	1.247	0.131	
1712.40	1312	UMTS 1750	RMC	24.0	23.04	0.01	Front	10 mm	Stainless Steel	Metal Links	NPCGG762LQ	1:1	0.223	1.247	0.278	A2
1712.40	1312	UMTS 1750	RMC	24.0	23.04	-0.05	Front	10 mm	Stainless Steel	Metal Loop	N30HR994T9	1:1	0.191	1.247	0.238	
1712.40	1312	UMTS 1750	RMC	24.0	23.04	0.03	Front	10 mm	Titanium	Sport	NR7GRHXRQF	1:1	0.097	1.247	0.121	
1712.40	1312	UMTS 1750	RMC	24.0	23.04	0.00	Front	10 mm	Titanium	Metal Links	NR7GRHXRQF	1:1	0.168	1.247	0.209	
1712.40	1312	UMTS 1750	RMC	24.0	23.04	-0.02	Front	10 mm	Titanium	Metal Loop	R412440X64	1:1	0.203	1.247	0.253	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Head 1.6 W/kg (mW/g) averaged over 1 gram								

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Table 10-3
UMTS 1900 Head SAR

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Spacing	Housing type	Wristband Type	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
1880.00	9400	UMTS 1900	RMC	24.0	23.06	-0.08	Front	10 mm	Aluminum	Sport	P442RF7J2Y	1:1	0.089	1.242	0.111	
1880.00	9400	UMTS 1900	RMC	24.0	23.06	0.05	Front	10 mm	Aluminum	Metal Links	GXJFJWLXP2	1:1	0.198	1.242	0.246	
1880.00	9400	UMTS 1900	RMC	24.0	23.06	-0.03	Front	10 mm	Aluminum	Metal Loop	P442RF7J2Y	1:1	0.232	1.242	0.288	
1880.00	9400	UMTS 1900	RMC	24.0	23.06	-0.12	Front	10 mm	Stainless Steel	Sport	KP2LOG7MGM	1:1	0.133	1.242	0.165	
1880.00	9400	UMTS 1900	RMC	24.0	23.06	-0.04	Front	10 mm	Stainless Steel	Metal Links	KP2LOG7MGM	1:1	0.263	1.242	0.327	
1880.00	9400	UMTS 1900	RMC	24.0	23.06	-0.11	Front	10 mm	Stainless Steel	Metal Loop	KP2LOG7MGM	1:1	0.358	1.242	0.445	A3
1880.00	9400	UMTS 1900	RMC	24.0	23.06	-0.17	Front	10 mm	Titanium	Sport	VWJNVFTH0G	1:1	0.148	1.242	0.184	
1880.00	9400	UMTS 1900	RMC	24.0	23.06	-0.09	Front	10 mm	Titanium	Metal Links	G06WQL944T	1:1	0.265	1.242	0.329	
1880.00	9400	UMTS 1900	RMC	24.0	23.06	0.06	Front	10 mm	Titanium	Metal Loop	VWJNVFTH0G	1:1	0.307	1.242	0.381	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 10-4
LTE Band 26 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Spacing	Housing type	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.	(W/kg)																(W/kg)			
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	25.5	24.48	0.07	0	Front	10 mm	Aluminum	QPSK	1	25	GXJFJWLXP2	1:1	0.001	1.265	0.001	
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	24.5	23.58	0.14	1	Front	10 mm	Aluminum	QPSK	25	25	GXJFJWLXP2	1:1	0.001	1.236	0.001	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	25.5	24.48	0.18	0	Front	10 mm	Aluminum	QPSK	1	25	LQYHX9Q3LX	1:1	0.001	1.265	0.001	A4
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	24.5	23.58	-0.06	1	Front	10 mm	Aluminum	QPSK	25	25	LQYHX9Q3LX	1:1	0.001	1.236	0.001	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	25.5	24.48	-0.12	0	Front	10 mm	Aluminum	QPSK	1	25	QCDWW5LXNW	1:1	0.001	1.265	0.001	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	24.5	23.58	0.11	1	Front	10 mm	Aluminum	QPSK	25	25	QCDWW5LXNW	1:1	0.001	1.236	0.001	
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	25.5	24.48	0.03	0	Front	10 mm	Stainless Steel	QPSK	1	25	J5R4HK2CF0	1:1	0.001	1.265	0.001	
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	24.5	23.58	0.15	1	Front	10 mm	Stainless Steel	QPSK	25	25	J5R4HK2CF0	1:1	0.001	1.236	0.001	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	25.5	24.48	0.10	0	Front	10 mm	Stainless Steel	QPSK	1	25	NPCGG762LQ	1:1	0.000	1.265	0.000	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	24.5	23.58	0.00	1	Front	10 mm	Stainless Steel	QPSK	25	25	NPCGG762LQ	1:1	0.000	1.236	0.000	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	25.5	24.48	0.10	0	Front	10 mm	Stainless Steel	QPSK	1	25	NPCGG762LQ	1:1	0.000	1.265	0.000	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	24.5	23.58	0.10	1	Front	10 mm	Stainless Steel	QPSK	25	25	NPCGG762LQ	1:1	0.000	1.236	0.000	
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	25.5	24.48	0.07	0	Front	10 mm	Titanium	QPSK	1	25	RX7P26W23Q	1:1	0.001	1.265	0.001	
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	24.5	23.58	0.03	1	Front	10 mm	Titanium	QPSK	25	25	RX7P26W23Q	1:1	0.001	1.236	0.001	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	25.5	24.48	0.06	0	Front	10 mm	Titanium	QPSK	1	25	R412440X64	1:1	0.001	1.265	0.001	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	24.5	23.58	0.20	1	Front	10 mm	Titanium	QPSK	25	25	R412440X64	1:1	0.001	1.236	0.001	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	25.5	24.48	0.14	0	Front	10 mm	Titanium	QPSK	1	25	VFMFC42DWC	1:1	0.001	1.265	0.001	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	24.5	23.58	-0.03	1	Front	10 mm	Titanium	QPSK	25	25	VFMFC42DWC	1:1	0.001	1.236	0.001	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram											

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Table 10-5
LTE Band 5 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Spacing	Housing type	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (Ig)	Scaling Factor	Reported SAR (Ig)	Plot #	
MHz	Ch.																(W/kg)		(W/kg)		
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	25.5	24.50	0.08	0	Front	10 mm	Aluminum	QPSK	1	25	QCDWW5LXNW	1:1	0.003	1.259	0.004	A5
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	24.5	23.58	0.05	1	Front	10 mm	Aluminum	QPSK	25	25	QCDWW5LXNW	1:1	0.002	1.236	0.002	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	25.5	24.50	0.17	0	Front	10 mm	Aluminum	QPSK	1	25	P442RF7J2Y	1:1	0.002	1.259	0.003	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	24.5	23.58	0.03	1	Front	10 mm	Aluminum	QPSK	25	25	P442RF7J2Y	1:1	0.001	1.236	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	25.5	24.50	0.05	0	Front	10 mm	Aluminum	QPSK	1	25	P442RF7J2Y	1:1	0.001	1.259	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	24.5	23.58	0.03	1	Front	10 mm	Aluminum	QPSK	25	25	P442RF7J2Y	1:1	0.001	1.236	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	25.5	24.50	0.19	0	Front	10 mm	Stainless Steel	QPSK	1	25	VWL41W2VT3	1:1	0.001	1.259	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	24.5	23.58	0.04	1	Front	10 mm	Stainless Steel	QPSK	25	25	VWL41W2VT3	1:1	0.001	1.236	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	25.5	24.50	0.07	0	Front	10 mm	Stainless Steel	QPSK	1	25	N30HR994T9	1:1	0.001	1.259	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	24.5	23.58	0.15	1	Front	10 mm	Stainless Steel	QPSK	25	25	N30HR994T9	1:1	0.001	1.236	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	25.5	24.50	0.20	0	Front	10 mm	Stainless Steel	QPSK	1	25	VTJN0N1W4J	1:1	0.001	1.259	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	24.5	23.58	0.04	1	Front	10 mm	Stainless Steel	QPSK	25	25	VTJN0N1W4J	1:1	0.001	1.236	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	25.5	24.50	0.20	0	Front	10 mm	Titanium	QPSK	1	25	G06WQL944T	1:1	0.001	1.259	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	24.5	23.58	0.03	1	Front	10 mm	Titanium	QPSK	25	25	G06WQL944T	1:1	0.001	1.236	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	25.5	24.50	-0.04	0	Front	10 mm	Titanium	QPSK	1	25	RX7P26W23Q	1:1	0.001	1.259	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	24.5	23.58	0.10	1	Front	10 mm	Titanium	QPSK	25	25	RX7P26W23Q	1:1	0.001	1.236	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	25.5	24.50	0.02	0	Front	10 mm	Titanium	QPSK	1	25	R412440X64	1:1	0.001	1.259	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	24.5	23.58	-0.03	1	Front	10 mm	Titanium	QPSK	25	25	R412440X64	1:1	0.001	1.236	0.001	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 10-6
LTE Band 66 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Spacing	Housing type	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (Ig)	Scaling Factor	Reported SAR (Ig)	Plot #	
MHz	Ch.																(W/kg)		(W/kg)		
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	24.5	23.56	-0.14	0	Front	10 mm	Aluminum	QPSK	1	0	QCDWW5LXNW	1:1	0.122	1.242	0.152	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	23.5	22.59	-0.04	1	Front	10 mm	Aluminum	QPSK	50	0	QCDWW5LXNW	1:1	0.102	1.233	0.126	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	24.5	23.56	0.00	0	Front	10 mm	Aluminum	QPSK	1	0	LQYHX9Q3LX	1:1	0.163	1.242	0.202	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	23.5	22.59	-0.03	1	Front	10 mm	Aluminum	QPSK	50	0	LQYHX9Q3LX	1:1	0.141	1.233	0.174	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	24.5	23.56	-0.05	0	Front	10 mm	Aluminum	QPSK	1	0	QCDWW5LXNW	1:1	0.240	1.242	0.298	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	23.5	22.59	-0.02	1	Front	10 mm	Aluminum	QPSK	50	0	QCDWW5LXNW	1:1	0.202	1.233	0.249	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	24.5	23.56	-0.03	0	Front	10 mm	Stainless Steel	QPSK	1	0	G9M7R64FPP	1:1	0.136	1.242	0.169	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	23.5	22.59	-0.11	1	Front	10 mm	Stainless Steel	QPSK	50	0	G9M7R64FPP	1:1	0.111	1.233	0.137	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	24.5	23.56	-0.02	0	Front	10 mm	Stainless Steel	QPSK	1	0	VWL41W2VT3	1:1	0.233	1.242	0.289	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	23.5	22.59	0.00	1	Front	10 mm	Stainless Steel	QPSK	50	0	VWL41W2VT3	1:1	0.197	1.233	0.243	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	24.5	23.56	-0.06	0	Front	10 mm	Stainless Steel	QPSK	1	0	G9M7R64FPP	1:1	0.221	1.242	0.274	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	23.5	22.59	-0.05	1	Front	10 mm	Stainless Steel	QPSK	50	0	G9M7R64FPP	1:1	0.187	1.233	0.231	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	24.5	23.56	-0.03	0	Front	10 mm	Titanium	QPSK	1	0	RX7P26W23Q	1:1	0.138	1.242	0.171	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	23.5	22.59	-0.07	1	Front	10 mm	Titanium	QPSK	50	0	RX7P26W23Q	1:1	0.112	1.233	0.138	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	24.5	23.56	-0.11	0	Front	10 mm	Titanium	QPSK	1	0	VFMFC42DWC	1:1	0.209	1.242	0.260	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	23.5	22.59	-0.11	1	Front	10 mm	Titanium	QPSK	50	0	VFMFC42DWC	1:1	0.175	1.233	0.216	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	24.5	23.56	-0.21	0	Front	10 mm	Titanium	QPSK	1	0	R412440X64	1:1	0.260	1.242	0.323	A6
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	23.5	22.59	-0.09	1	Front	10 mm	Titanium	QPSK	50	0	R412440X64	1:1	0.214	1.233	0.264	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram											

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Table 10-7
LTE Band 25 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Spacing	Housing type	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (lg)	Scaling Factor	Reported SAR (lg)	Plot #	
MHz	Ch.																(W/kg)		(W/kg)		
1860.00	26140	Low	LTE Band 25 (PCS)	20	Sport	24.5	23.60	0.02	0	Front	10 mm	Aluminum	QPSK	1	99	QCDWW5LXNW	1:1	0.113	1.230	0.139	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Sport	23.5	22.55	0.05	1	Front	10 mm	Aluminum	QPSK	50	50	QCDWW5LXNW	1:1	0.088	1.245	0.110	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Links	24.5	23.60	-0.06	0	Front	10 mm	Aluminum	QPSK	1	99	LQYH9Q3LX	1:1	0.252	1.230	0.310	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Links	23.5	22.55	0.01	1	Front	10 mm	Aluminum	QPSK	50	50	LQYH9Q3LX	1:1	0.193	1.245	0.240	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Loop	24.5	23.60	0.02	0	Front	10 mm	Aluminum	QPSK	1	99	P442RF7J2Y	1:1	0.275	1.230	0.338	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Loop	23.5	22.55	0.07	1	Front	10 mm	Aluminum	QPSK	50	50	P442RF7J2Y	1:1	0.214	1.245	0.266	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Sport	24.5	23.60	-0.20	0	Front	10 mm	Stainless Steel	QPSK	1	99	VTJN0N1W4J	1:1	0.164	1.230	0.202	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Sport	23.5	22.55	-0.02	1	Front	10 mm	Stainless Steel	QPSK	50	50	VTJN0N1W4J	1:1	0.130	1.245	0.162	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Links	24.5	23.60	0.10	0	Front	10 mm	Stainless Steel	QPSK	1	99	TL4J3YJV4V	1:1	0.321	1.230	0.395	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Links	23.5	22.55	0.03	1	Front	10 mm	Stainless Steel	QPSK	50	50	TL4J3YJV4V	1:1	0.249	1.245	0.310	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Loop	24.5	23.60	0.07	0	Front	10 mm	Stainless Steel	QPSK	1	99	J5R4H-K2CF0	1:1	0.383	1.230	0.471	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Loop	23.5	22.55	0.00	1	Front	10 mm	Stainless Steel	QPSK	50	50	J5R4H-K2CF0	1:1	0.299	1.245	0.372	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Sport	24.5	23.60	-0.21	0	Front	10 mm	Titanium	QPSK	1	99	M86F9H2RPG	1:1	0.155	1.230	0.191	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Sport	23.5	22.55	-0.17	1	Front	10 mm	Titanium	QPSK	50	50	M86F9H2RPG	1:1	0.124	1.245	0.154	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Links	24.5	23.60	-0.02	0	Front	10 mm	Titanium	QPSK	1	99	VFMFC42DWC	1:1	0.287	1.230	0.353	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Links	23.5	22.55	0.01	1	Front	10 mm	Titanium	QPSK	50	50	VFMFC42DWC	1:1	0.222	1.245	0.276	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Loop	24.5	23.60	-0.01	0	Front	10 mm	Titanium	QPSK	1	99	R412440X64	1:1	0.346	1.230	0.426	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Loop	23.5	22.55	-0.01	1	Front	10 mm	Titanium	QPSK	50	50	R412440X64	1:1	0.275	1.245	0.342	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 10-8
LTE Band 7 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Spacing	Housing type	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (lg)	Scaling Factor	Reported SAR (lg)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2510.00	20850	Low	LTE Band 7	20	Sport	23.5	22.16	0.02	0	Front	10 mm	Aluminum	QPSK	1	99	W4CVH32F97	1:1	0.699	1.361	0.951	A8
2535.00	21100	Md	LTE Band 7	20	Sport	23.5	22.12	-0.01	0	Front	10 mm	Aluminum	QPSK	1	99	W4CVH32F97	1:1	0.710	1.374	0.976	
2560.00	21350	High	LTE Band 7	20	Sport	23.5	22.35	-0.14	0	Front	10 mm	Aluminum	QPSK	1	99	W4CVH32F97	1:1	0.832	1.303	1.084	
2560.00	21350	High	LTE Band 7	20	Sport	22.5	21.27	-0.08	1	Front	10 mm	Aluminum	QPSK	50	50	W4CVH32F97	1:1	0.578	1.327	0.767	
2560.00	21350	High	LTE Band 7	20	Sport	22.5	21.26	-0.15	1	Front	10 mm	Aluminum	QPSK	100	0	W4CVH32F97	1:1	0.581	1.330	0.773	
2560.00	21350	High	LTE Band 7	20	Metal Links	23.5	22.35	-0.05	0	Front	10 mm	Aluminum	QPSK	1	99	W4CVH32F97	1:1	0.313	1.303	0.408	
2560.00	21350	High	LTE Band 7	20	Metal Links	22.5	21.27	-0.06	1	Front	10 mm	Aluminum	QPSK	50	50	W4CVH32F97	1:1	0.228	1.327	0.303	
2560.00	21350	High	LTE Band 7	20	Metal Loop	23.5	22.35	-0.04	0	Front	10 mm	Aluminum	QPSK	1	99	QCDWW5LXNW	1:1	0.499	1.303	0.650	
2560.00	21350	High	LTE Band 7	20	Metal Loop	22.5	21.27	-0.04	1	Front	10 mm	Aluminum	QPSK	50	50	QCDWW5LXNW	1:1	0.364	1.327	0.483	
2560.00	21350	High	LTE Band 7	20	Sport	23.5	22.35	-0.02	0	Front	10 mm	Stainless Steel	QPSK	1	99	G9M7R64FPP	1:1	0.613	1.303	0.799	
2560.00	21350	High	LTE Band 7	20	Sport	22.5	21.27	0.00	1	Front	10 mm	Stainless Steel	QPSK	50	50	G9M7R64FPP	1:1	0.491	1.327	0.652	
2560.00	21350	High	LTE Band 7	20	Metal Links	23.5	22.35	-0.05	0	Front	10 mm	Stainless Steel	QPSK	1	99	VTJN0N1W4J	1:1	0.318	1.303	0.414	
2560.00	21350	High	LTE Band 7	20	Metal Links	22.5	21.27	-0.08	1	Front	10 mm	Stainless Steel	QPSK	50	50	VTJN0N1W4J	1:1	0.251	1.327	0.333	
2560.00	21350	High	LTE Band 7	20	Metal Loop	23.5	22.35	-0.16	0	Front	10 mm	Stainless Steel	QPSK	1	99	VTJN0N1W4J	1:1	0.332	1.303	0.433	
2560.00	21350	High	LTE Band 7	20	Metal Loop	22.5	21.27	-0.19	1	Front	10 mm	Stainless Steel	QPSK	50	50	VTJN0N1W4J	1:1	0.310	1.327	0.411	
2510.00	20850	Low	LTE Band 7	20	Sport	23.5	22.16	-0.06	0	Front	10 mm	Titanium	QPSK	1	99	VFMFC42DWC	1:1	0.705	1.361	0.960	
2535.00	21100	Md	LTE Band 7	20	Sport	23.5	22.12	-0.13	0	Front	10 mm	Titanium	QPSK	1	99	VFMFC42DWC	1:1	0.533	1.374	0.732	
2560.00	21350	High	LTE Band 7	20	Sport	23.5	22.35	-0.03	0	Front	10 mm	Titanium	QPSK	1	99	VFMFC42DWC	1:1	0.650	1.303	0.847	
2560.00	21350	High	LTE Band 7	20	Sport	22.5	21.27	-0.01	1	Front	10 mm	Titanium	QPSK	50	50	VFMFC42DWC	1:1	0.365	1.327	0.484	
2560.00	21350	High	LTE Band 7	20	Sport	22.5	21.26	-0.15	1	Front	10 mm	Titanium	QPSK	100	0	VFMFC42DWC	1:1	0.398	1.330	0.529	
2560.00	21350	High	LTE Band 7	20	Metal Links	23.5	22.35	-0.18	0	Front	10 mm	Titanium	QPSK	1	99	RX7P26W23Q	1:1	0.321	1.303	0.418	
2560.00	21350	High	LTE Band 7	20	Metal Links	22.5	21.27	-0.16	1	Front	10 mm	Titanium	QPSK	50	50	RX7P26W23Q	1:1	0.245	1.327	0.325	
2560.00	21350	High	LTE Band 7	20	Metal Loop	23.5	22.35	-0.17	0	Front	10 mm	Titanium	QPSK	1	99	M86F9H2RPG	1:1	0.348	1.303	0.453	
2560.00	21350	High	LTE Band 7	20	Metal Loop	22.5	21.27	-0.02	1	Front	10 mm	Titanium	QPSK	50	50	M86F9H2RPG	1:1	0.265	1.327	0.352	
2560.00	21350	High	LTE Band 7	20	Sport	23.5	22.35	-0.11	0	Front	10 mm	Aluminum	QPSK	1	99	W4CVH32F97	1:1	0.820	1.303	1.068	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram											

Note: Blue entry indicates variability measurement.

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Table 10-9
LTE Band 41 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Spacing	Housing type	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (lg)	Scaling Factor	Reported SAR (lg)	Plot #	
MHz	Ch.																(W/kg)		(W/kg)		
2680.00	41490	High	LTE Band 41	20	Sport	23.5	22.35	-0.08	0	Front	10 mm	Aluminum	QPSK	1	99	QCDWW5LXNW	1:1.58	0.247	1.303	0.322	
2680.00	41490	High	LTE Band 41	20	Sport	22.5	21.20	-0.02	1	Front	10 mm	Aluminum	QPSK	50	50	QCDWW5LXNW	1:1.58	0.181	1.349	0.244	
2680.00	41490	High	LTE Band 41	20	Metal Links	23.5	22.35	-0.03	0	Front	10 mm	Aluminum	QPSK	1	99	W4CVH32F97	1:1.58	0.215	1.303	0.280	
2680.00	41490	High	LTE Band 41	20	Metal Links	22.5	21.20	-0.03	1	Front	10 mm	Aluminum	QPSK	50	50	W4CVH32F97	1:1.58	0.159	1.349	0.214	
2680.00	41490	High	LTE Band 41	20	Metal Loop	23.5	22.35	-0.12	0	Front	10 mm	Aluminum	QPSK	1	99	QCDWW5LXNW	1:1.58	0.165	1.303	0.215	
2680.00	41490	High	LTE Band 41	20	Metal Loop	22.5	21.20	-0.05	1	Front	10 mm	Aluminum	QPSK	50	50	QCDWW5LXNW	1:1.58	0.123	1.349	0.166	
2680.00	41490	High	LTE Band 41	20	Sport	23.5	22.35	-0.11	0	Front	10 mm	Stainless Steel	QPSK	1	99	TL4J3YJ4V	1:1.58	0.353	1.303	0.460	A9
2680.00	41490	High	LTE Band 41	20	Sport	22.5	21.20	-0.16	1	Front	10 mm	Stainless Steel	QPSK	50	50	TL4J3YJ4V	1:1.58	0.257	1.349	0.347	
2680.00	41490	High	LTE Band 41	20	Metal Links	23.5	22.35	0.10	0	Front	10 mm	Stainless Steel	QPSK	1	99	J5R4H42CF0	1:1.58	0.142	1.303	0.185	
2680.00	41490	High	LTE Band 41	20	Metal Links	22.5	21.20	0.06	1	Front	10 mm	Stainless Steel	QPSK	50	50	J5R4H42CF0	1:1.58	0.113	1.349	0.152	
2680.00	41490	High	LTE Band 41	20	Metal Loop	23.5	22.35	-0.06	0	Front	10 mm	Stainless Steel	QPSK	1	99	VTJNNI4J	1:1.58	0.222	1.303	0.289	
2680.00	41490	High	LTE Band 41	20	Metal Loop	22.5	21.20	-0.10	1	Front	10 mm	Stainless Steel	QPSK	50	50	VTJNNI4J	1:1.58	0.167	1.349	0.225	
2680.00	41490	High	LTE Band 41	20	Sport	23.5	22.35	-0.20	0	Front	10 mm	Titanium	QPSK	1	99	M36F9K2RPG	1:1.58	0.276	1.303	0.360	
2680.00	41490	High	LTE Band 41	20	Sport	22.5	21.20	-0.19	1	Front	10 mm	Titanium	QPSK	50	50	M36F9K2RPG	1:1.58	0.205	1.349	0.277	
2680.00	41490	High	LTE Band 41	20	Metal Links	23.5	22.35	0.19	0	Front	10 mm	Titanium	QPSK	1	99	VFMFC42DWC	1:1.58	0.179	1.303	0.233	
2680.00	41490	High	LTE Band 41	20	Metal Links	22.5	21.20	-0.15	1	Front	10 mm	Titanium	QPSK	50	50	VFMFC42DWC	1:1.58	0.141	1.349	0.190	
2680.00	41490	High	LTE Band 41	20	Metal Loop	23.5	22.35	0.05	0	Front	10 mm	Titanium	QPSK	1	99	RX7P26W23Q	1:1.58	0.197	1.303	0.257	
2680.00	41490	High	LTE Band 41	20	Metal Loop	22.5	21.20	-0.21	1	Front	10 mm	Titanium	QPSK	50	50	RX7P26W23Q	1:1.58	0.166	1.349	0.224	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 10-10
2.4 GHz WLAN Head SAR

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Spacing	Housing type	Wristband Type	Device Serial Number	Data Rate (Mbps)	Duty Cycle (%)	SAR (lg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (lg) (W/kg)	Plot #
MHz	Ch.														(W/kg)				
2462	11	802.11b	DSSS	22	19.0	18.01	0.02	Front	10 mm	Aluminum	Sport	GXJFJWLFX2	1	99.7	0.266	1.256	1.003	0.335	A10
2462	11	802.11b	DSSS	22	19.0	18.01	0.01	Front	10 mm	Aluminum	Metal Links	GXJFJWLFX2	1	99.7	0.166	1.256	1.003	0.209	
2462	11	802.11b	DSSS	22	19.0	18.01	0.01	Front	10 mm	Aluminum	Metal Loop	GXJFJWLFX2	1	99.7	0.166	1.256	1.003	0.209	
2462	11	802.11b	DSSS	22	19.0	18.01	0.09	Front	10 mm	Stainless Steel	Sport	NPCGG762LQ	1	99.7	0.131	1.256	1.003	0.165	
2462	11	802.11b	DSSS	22	19.0	18.01	0.12	Front	10 mm	Stainless Steel	Metal Links	NPCGG762LQ	1	99.7	0.069	1.256	1.003	0.087	
2462	11	802.11b	DSSS	22	19.0	18.01	0.12	Front	10 mm	Stainless Steel	Metal Loop	NPCGG762LQ	1	99.7	0.073	1.256	1.003	0.092	
2462	11	802.11b	DSSS	22	19.0	18.01	0.09	Front	10 mm	Titanium	Sport	VWJNVFTHOG	1	99.7	0.243	1.256	1.003	0.306	
2462	11	802.11b	DSSS	22	19.0	18.01	-0.02	Front	10 mm	Titanium	Metal Links	VWJNVFTHOG	1	99.7	0.143	1.256	1.003	0.180	
2462	11	802.11b	DSSS	22	19.0	18.01	-0.05	Front	10 mm	Titanium	Metal Loop	VWJNVFTHOG	1	99.7	0.189	1.256	1.003	0.238	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram									

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Table 10-11
5 GHz WLAN Head SAR

MEASUREMENT RESULTS																				
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Spacing	Housing type	Wristband Type	Device Serial Number	Data Rate (Mbps)	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #	
MHz	Ch.														(W/kg)			(W/kg)		
5300	60	802.11a	OFDM	20	17.0	16.04	0.10	Front	10 mm	Aluminum	Sport	G66LGQYVJT	6	97.5	0.022	1.247	1.026	0.028		
5300	60	802.11a	OFDM	20	17.0	16.04	0.08	Front	10 mm	Aluminum	Metal Links	G66LGQYVJT	6	97.5	0.022	1.247	1.026	0.028		
5300	60	802.11a	OFDM	20	17.0	16.04	0.05	Front	10 mm	Aluminum	Metal Loop	G66LGQYVJT	6	97.5	0.025	1.247	1.026	0.032		
5300	60	802.11a	OFDM	20	17.0	16.04	0.12	Front	10 mm	Stainless Steel	Sport	G9M7R64FPP	6	97.5	0.044	1.247	1.026	0.056		
5300	60	802.11a	OFDM	20	17.0	16.04	0.04	Front	10 mm	Stainless Steel	Metal Links	G9M7R64FPP	6	97.5	0.039	1.247	1.026	0.050		
5300	60	802.11a	OFDM	20	17.0	16.04	0.02	Front	10 mm	Stainless Steel	Metal Loop	G9M7R64FPP	6	97.5	0.043	1.247	1.026	0.055		
5300	60	802.11a	OFDM	20	17.0	16.04	-0.07	Front	10 mm	Titanium	Sport	NR7GRHXRQF	6	97.5	0.044	1.247	1.026	0.056		
5300	60	802.11a	OFDM	20	17.0	16.04	0.04	Front	10 mm	Titanium	Metal Links	NR7GRHXRQF	6	97.5	0.039	1.247	1.026	0.050		
5300	60	802.11a	OFDM	20	17.0	16.04	-0.09	Front	10 mm	Titanium	Metal Loop	NR7GRHXRQF	6	97.5	0.046	1.247	1.026	0.059		
5620	124	802.11a	OFDM	20	17.0	16.06	-0.04	Front	10 mm	Aluminum	Sport	LQYHX9Q3LX	6	97.5	0.028	1.242	1.026	0.036		
5620	124	802.11a	OFDM	20	17.0	16.06	0.04	Front	10 mm	Aluminum	Metal Links	LQYHX9Q3LX	6	97.5	0.034	1.242	1.026	0.043		
5620	124	802.11a	OFDM	20	17.0	16.06	0.13	Front	10 mm	Aluminum	Metal Loop	LQYHX9Q3LX	6	97.5	0.030	1.242	1.026	0.038		
5620	124	802.11a	OFDM	20	17.0	16.06	-0.04	Front	10 mm	Stainless Steel	Sport	TL4J3YJV4V	6	97.5	0.033	1.242	1.026	0.042		
5620	124	802.11a	OFDM	20	17.0	16.06	-0.08	Front	10 mm	Stainless Steel	Metal Links	TL4J3YJV4V	6	97.5	0.036	1.242	1.026	0.046		
5620	124	802.11a	OFDM	20	17.0	16.06	0.06	Front	10 mm	Stainless Steel	Metal Loop	TL4J3YJV4V	6	97.5	0.031	1.242	1.026	0.040		
5620	124	802.11a	OFDM	20	17.0	16.06	-0.15	Front	10 mm	Titanium	Sport	NR7GRHXRQF	6	97.5	0.042	1.242	1.026	0.054		
5620	124	802.11a	OFDM	20	17.0	16.06	0.09	Front	10 mm	Titanium	Metal Links	NR7GRHXRQF	6	97.5	0.038	1.242	1.026	0.048		
5620	124	802.11a	OFDM	20	17.0	16.06	0.15	Front	10 mm	Titanium	Metal Loop	NR7GRHXRQF	6	97.5	0.032	1.242	1.026	0.041		
5745	149	802.11a	OFDM	20	17.0	16.08	-0.07	Front	10 mm	Aluminum	Sport	GXFJWLPX2	6	97.5	0.040	1.236	1.026	0.051		
5745	149	802.11a	OFDM	20	17.0	16.08	0.10	Front	10 mm	Aluminum	Metal Links	GXFJWLPX2	6	97.5	0.038	1.236	1.026	0.048		
5745	149	802.11a	OFDM	20	17.0	16.08	-0.11	Front	10 mm	Aluminum	Metal Loop	GXFJWLPX2	6	97.5	0.042	1.236	1.026	0.053		
5745	149	802.11a	OFDM	20	17.0	16.08	0.05	Front	10 mm	Stainless Steel	Sport	G9M7R64FPP	6	97.5	0.043	1.236	1.026	0.055		
5745	149	802.11a	OFDM	20	17.0	16.08	0.03	Front	10 mm	Stainless Steel	Metal Links	G9M7R64FPP	6	97.5	0.047	1.236	1.026	0.060		
5745	149	802.11a	OFDM	20	17.0	16.08	0.03	Front	10 mm	Stainless Steel	Metal Loop	G9M7R64FPP	6	97.5	0.058	1.236	1.026	0.074	A11	
5745	149	802.11a	OFDM	20	17.0	16.08	0.06	Front	10 mm	Titanium	Sport	NR7GRHXRQF	6	97.5	0.029	1.236	1.026	0.037		
5745	149	802.11a	OFDM	20	17.0	16.08	0.03	Front	10 mm	Titanium	Metal Links	NR7GRHXRQF	6	97.5	0.035	1.236	1.026	0.044		
5745	149	802.11a	OFDM	20	17.0	16.08	-0.06	Front	10 mm	Titanium	Metal Loop	NR7GRHXRQF	6	97.5	0.037	1.236	1.026	0.047		
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Head 1.6 W/kg (mW/g) averaged over 1 gram												

Table 10-12
Bluetooth Head SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Spacing	Housing type	Wristband Type	Device Serial Number	Data Rate (Mbps)	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.													(W/kg)			(W/kg)	
2441.00	39	Bluetooth	FHSS	13.0	11.98	-0.02	Front	10 mm	Aluminum	Sport	JKV6G7NLW7	1	100	0.071	1.265	1.000	0.090	A12
2441.00	39	Bluetooth	FHSS	13.0	11.98	0.18	Front	10 mm	Aluminum	Metal Links	JKV6G7NLW7	1	100	0.033	1.265	1.000	0.042	
2441.00	39	Bluetooth	FHSS	13.0	11.98	0.09	Front	10 mm	Aluminum	Metal Loop	JKV6G7NLW7	1	100	0.043	1.265	1.000	0.054	
2441.00	39	Bluetooth	FHSS	13.0	11.98	0.02	Front	10 mm	Stainless Steel	Sport	NPCGG762LQ	1	100	0.042	1.265	1.000	0.053	
2441.00	39	Bluetooth	FHSS	13.0	11.98	0.03	Front	10 mm	Stainless Steel	Metal Links	NPCGG762LQ	1	100	0.019	1.265	1.000	0.024	
2441.00	39	Bluetooth	FHSS	13.0	11.98	0.18	Front	10 mm	Stainless Steel	Metal Loop	NPCGG762LQ	1	100	0.020	1.265	1.000	0.025	
2441.00	39	Bluetooth	FHSS	13.0	11.98	-0.01	Front	10 mm	Titanium	Sport	VFMFC42DWC	1	100	0.062	1.265	1.000	0.078	
2441.00	39	Bluetooth	FHSS	13.0	11.98	0.17	Front	10 mm	Titanium	Metal Links	VFMFC42DWC	1	100	0.027	1.265	1.000	0.034	
2441.00	39	Bluetooth	FHSS	13.0	11.98	0.03	Front	10 mm	Titanium	Metal Loop	VFMFC42DWC	1	100	0.040	1.265	1.000	0.051	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Head 1.6 W/kg (mW/g) averaged over 1 gram										

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10.2 Standalone Extremity SAR Data

Table 10-13
UMTS 850 Extremity SAR

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Housing type	Wristband Type	Device Serial Number	Duty Cycle	Side	Scaling Factor	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.													(W/kg)	(W/kg)	
836.60	4183	UMTS 850	RMC	25.0	24.12	0.15	0 mm	Aluminum	Sport	G66LGQYVJT	1:1	back	1.225	0.057	0.070	A13
836.60	4183	UMTS 850	RMC	25.0	24.12	0.02	0 mm	Aluminum	Metal Links	G66LGQYVJT	1:1	back	1.225	0.160	0.196	
836.60	4183	UMTS 850	RMC	25.0	24.12	0.13	0 mm	Aluminum	Metal Loop	LQYHX9Q3LX	1:1	back	1.225	0.092	0.113	
836.60	4183	UMTS 850	RMC	25.0	24.12	0.13	0 mm	Stainless Steel	Sport	VTJNXN1W4J	1:1	back	1.225	0.061	0.075	
836.60	4183	UMTS 850	RMC	25.0	24.12	0.02	0 mm	Stainless Steel	Metal Links	VTJNXN1W4J	1:1	back	1.225	0.110	0.135	
836.60	4183	UMTS 850	RMC	25.0	24.12	-0.05	0 mm	Stainless Steel	Metal Loop	VTJNXN1W4J	1:1	back	1.225	0.089	0.109	
836.60	4183	UMTS 850	RMC	25.0	24.12	0.04	0 mm	Titanium	Sport	G06WQL944T	1:1	back	1.225	0.064	0.078	
836.60	4183	UMTS 850	RMC	25.0	24.12	0.03	0 mm	Titanium	Metal Links	M36F9H2RPG	1:1	back	1.225	0.123	0.151	
836.60	4183	UMTS 850	RMC	25.0	24.12	0.11	0 mm	Titanium	Metal Loop	R412440X64	1:1	back	1.225	0.088	0.108	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Extremity 4.0 W/kg (mW/g) averaged over 10 grams									

Table 10-14
UMTS 1750 Extremity SAR

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Housing type	Wristband Type	Device Serial Number	Duty Cycle	Side	Scaling Factor	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.													(W/kg)	(W/kg)	
1712.40	1312	UMTS 1750	RMC	24.0	23.04	-0.20	0 mm	Aluminum	Sport	GXJF3WLPX2	1:1	back	1.247	0.021	0.026	
1712.40	1312	UMTS 1750	RMC	24.0	23.04	-0.07	0 mm	Aluminum	Metal Links	QCDWW5LXNW	1:1	back	1.247	0.066	0.082	
1712.40	1312	UMTS 1750	RMC	24.0	23.04	0.06	0 mm	Aluminum	Metal Loop	QCDWW5LXNW	1:1	back	1.247	0.090	0.112	
1712.40	1312	UMTS 1750	RMC	24.0	23.04	-0.01	0 mm	Stainless Steel	Sport	KP2L0G7MGM	1:1	back	1.247	0.021	0.026	
1712.40	1312	UMTS 1750	RMC	24.0	23.04	0.01	0 mm	Stainless Steel	Metal Links	J5R4HK2CF0	1:1	back	1.247	0.119	0.148	
1712.40	1312	UMTS 1750	RMC	24.0	23.04	-0.04	0 mm	Stainless Steel	Metal Loop	NPCGG762LQ	1:1	back	1.247	0.124	0.155	A14
1712.40	1312	UMTS 1750	RMC	24.0	23.04	-0.20	0 mm	Titanium	Sport	VFMFC42DWC	1:1	back	1.247	0.021	0.026	
1712.40	1312	UMTS 1750	RMC	24.0	23.04	0.09	0 mm	Titanium	Metal Links	M36F9H2RPG	1:1	back	1.247	0.055	0.069	
1712.40	1312	UMTS 1750	RMC	24.0	23.04	0.03	0 mm	Titanium	Metal Loop	VFMFC42DWC	1:1	back	1.247	0.108	0.135	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Extremity 4.0 W/kg (mW/g) averaged over 10 grams									

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Table 10-15
UMTS 1900 Extremity SAR

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Housing type	Wristband Type	Device Serial Number	Duty Cycle	Side	Scaling Factor	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.													(W/kg)	(W/kg)	
1880.00	9400	UMTS 1900	RMC	24.0	23.06	0.07	0 mm	Aluminum	Sport	JKV6G7NLW7	1:1	back	1.242	0.056	0.070	
1880.00	9400	UMTS 1900	RMC	24.0	23.06	0.21	0 mm	Aluminum	Metal Links	P442RF7J2Y	1:1	back	1.242	0.065	0.081	
1880.00	9400	UMTS 1900	RMC	24.0	23.06	0.04	0 mm	Aluminum	Metal Loop	P442RF7J2Y	1:1	back	1.242	0.097	0.120	
1880.00	9400	UMTS 1900	RMC	24.0	23.06	0.10	0 mm	Stainless Steel	Sport	NPCGG762LQ	1:1	back	1.242	0.119	0.148	
1880.00	9400	UMTS 1900	RMC	24.0	23.06	-0.04	0 mm	Stainless Steel	Metal Links	N30HR994T9	1:1	back	1.242	0.071	0.088	
1880.00	9400	UMTS 1900	RMC	24.0	23.06	0.02	0 mm	Stainless Steel	Metal Loop	NPCGG762LQ	1:1	back	1.242	0.208	0.258	A15
1880.00	9400	UMTS 1900	RMC	24.0	23.06	0.14	0 mm	Titanium	Sport	VWJNVFTH0G	1:1	back	1.242	0.046	0.057	
1880.00	9400	UMTS 1900	RMC	24.0	23.06	-0.03	0 mm	Titanium	Metal Links	R412440X64	1:1	back	1.242	0.104	0.129	
1880.00	9400	UMTS 1900	RMC	24.0	23.06	-0.18	0 mm	Titanium	Metal Loop	R412440X64	1:1	back	1.242	0.114	0.142	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Extremity 4.0 W/kg (mW/g) averaged over 10 grams									

Table 10-16
LTE Band 26 Extremity SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Housing type	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	Scaling Factor	SAR (10g)	Reported SAR (10g)	Plot #	
MHz	Ch.																	(W/kg)	(W/kg)		
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	25.5	24.48	0.12	0	Aluminum	JKV6G7NLW7	QPSK	1	25	0 mm	back	1:1	1.265	0.048	0.061	
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	24.5	23.58	0.05	1	Aluminum	GXFJWJLPX2	QPSK	25	25	0 mm	back	1:1	1.236	0.034	0.042	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	25.5	24.48	0.06	0	Aluminum	P442RF7J2Y	QPSK	1	25	0 mm	back	1:1	1.265	0.092	0.116	A16
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	24.5	23.58	0.03	1	Aluminum	P442RF7J2Y	QPSK	25	25	0 mm	back	1:1	1.236	0.066	0.082	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	25.5	24.48	0.04	0	Aluminum	JKV6G7NLW7	QPSK	1	25	0 mm	back	1:1	1.265	0.067	0.085	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	24.5	23.58	0.03	1	Aluminum	GXFJWJLPX2	QPSK	25	25	0 mm	back	1:1	1.236	0.050	0.062	
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	25.5	24.48	0.09	0	Stainless Steel	N30HR994T9	QPSK	1	25	0 mm	back	1:1	1.265	0.058	0.073	
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	24.5	23.58	0.19	1	Stainless Steel	N30HR994T9	QPSK	25	25	0 mm	back	1:1	1.236	0.048	0.059	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	25.5	24.48	0.08	0	Stainless Steel	G9M7R64FPP	QPSK	1	25	0 mm	back	1:1	1.265	0.083	0.105	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	24.5	23.58	0.02	1	Stainless Steel	G9M7R64FPP	QPSK	25	25	0 mm	back	1:1	1.236	0.070	0.087	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	25.5	24.48	0.04	0	Stainless Steel	VTJN0N1W4J	QPSK	1	25	0 mm	back	1:1	1.265	0.078	0.099	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	24.5	23.58	0.09	1	Stainless Steel	VTJN0N1W4J	QPSK	25	25	0 mm	back	1:1	1.236	0.065	0.080	
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	25.5	24.48	0.03	0	Titanium	G06WQL944T	QPSK	1	25	0 mm	back	1:1	1.265	0.053	0.067	
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	24.5	23.58	0.03	1	Titanium	G06WQL944T	QPSK	25	25	0 mm	back	1:1	1.236	0.043	0.053	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	25.5	24.48	0.08	0	Titanium	NR7GRHXRQF	QPSK	1	25	0 mm	back	1:1	1.265	0.085	0.108	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	24.5	23.58	0.06	1	Titanium	NR7GRHXRQF	QPSK	25	25	0 mm	back	1:1	1.236	0.077	0.095	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	25.5	24.48	0.06	0	Titanium	R412440X64	QPSK	1	25	0 mm	back	1:1	1.265	0.073	0.092	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	24.5	23.58	0.16	1	Titanium	R412440X64	QPSK	25	25	0 mm	back	1:1	1.236	0.060	0.074	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Extremity 4.0 W/kg (mW/g) averaged over 10 grams												

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Table 10-17
LTE Band 5 Extremity SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Housing type	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	Scaling Factor	SAR (10g)	Reported SAR (10g)	Plot #	
MHz	Ch.																	(W/kg)	(W/kg)		
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	25.5	24.50	0.05	0	Aluminum	LQYHX9Q3LX	QPSK	1	25	0 mm	back	1:1	1.259	0.055	0.069	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	24.5	23.58	0.04	1	Aluminum	LQYHX9Q3LX	QPSK	25	25	0 mm	back	1:1	1.236	0.045	0.056	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	25.5	24.50	0.14	0	Aluminum	P442RF7J2Y	QPSK	1	25	0 mm	back	1:1	1.259	0.107	0.135	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	24.5	23.58	0.20	1	Aluminum	P442RF7J2Y	QPSK	25	25	0 mm	back	1:1	1.236	0.086	0.106	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	25.5	24.50	0.05	0	Aluminum	GXJFJWLXP2	QPSK	1	25	0 mm	back	1:1	1.259	0.077	0.097	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	24.5	23.58	0.05	1	Aluminum	GXJFJWLXP2	QPSK	25	25	0 mm	back	1:1	1.236	0.062	0.077	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	25.5	24.50	0.09	0	Stainless Steel	G9M7R64FPP	QPSK	1	25	0 mm	back	1:1	1.259	0.060	0.076	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	24.5	23.58	0.10	1	Stainless Steel	G9M7R64FPP	QPSK	25	25	0 mm	back	1:1	1.236	0.049	0.061	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	25.5	24.50	0.19	0	Stainless Steel	VTJNNXW4J	QPSK	1	25	0 mm	back	1:1	1.259	0.099	0.125	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	24.5	23.58	0.17	1	Stainless Steel	VTJNNXW4J	QPSK	25	25	0 mm	back	1:1	1.236	0.080	0.099	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	25.5	24.50	0.00	0	Stainless Steel	N30HR994T9	QPSK	1	25	0 mm	back	1:1	1.259	0.085	0.107	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	24.5	23.58	0.16	1	Stainless Steel	N30HR994T9	QPSK	25	25	0 mm	back	1:1	1.236	0.068	0.084	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	25.5	24.50	0.13	0	Titanium	R412440X64	QPSK	1	25	0 mm	back	1:1	1.259	0.065	0.082	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	24.5	23.58	0.14	1	Titanium	R412440X64	QPSK	25	25	0 mm	back	1:1	1.236	0.052	0.064	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	25.5	24.50	0.16	0	Titanium	G06WQL944T	QPSK	1	25	0 mm	back	1:1	1.259	0.183	0.230	A17
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	24.5	23.58	-0.01	1	Titanium	G06WQL944T	QPSK	25	25	0 mm	back	1:1	1.236	0.138	0.171	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	25.5	24.50	0.08	0	Titanium	VWJNVFTH0G	QPSK	1	25	0 mm	back	1:1	1.259	0.084	0.106	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	24.5	23.58	0.09	1	Titanium	VWJNVFTH0G	QPSK	25	25	0 mm	back	1:1	1.236	0.066	0.082	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Extremity 4.0 W/kg (mW/g) averaged over 10 grams												

Table 10-18
LTE Band 66 Extremity SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drit [dB]	MPR [dB]	Housing type	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	Scaling Factor	SAR (10g)	Reported SAR (10g)	Plot #	
MHz	Ch.																	(W/kg)	(W/kg)		
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	24.5	23.56	0.02	0	Aluminum	W4CVH32F97	QPSK	1	0	0 mm	back	1:1	1.242	0.028	0.035	A18
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	23.5	22.59	0.00	1	Aluminum	W4CVH32F97	QPSK	50	0	0 mm	back	1:1	1.233	0.023	0.028	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	24.5	23.56	-0.14	0	Aluminum	JKV6G7NLW7	QPSK	1	0	0 mm	back	1:1	1.242	0.171	0.212	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	23.5	22.59	-0.01	1	Aluminum	JKV6G7NLW7	QPSK	50	0	0 mm	back	1:1	1.233	0.144	0.178	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	24.5	23.56	0.08	0	Aluminum	W4CVH32F97	QPSK	1	0	0 mm	back	1:1	1.242	0.155	0.193	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	23.5	22.59	0.05	1	Aluminum	W4CVH32F97	QPSK	50	0	0 mm	back	1:1	1.233	0.130	0.160	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	24.5	23.56	-0.04	0	Stainless Steel	NPCGG762LQ	QPSK	1	0	0 mm	back	1:1	1.242	0.037	0.046	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	23.5	22.59	0.00	1	Stainless Steel	NPCGG762LQ	QPSK	50	0	0 mm	back	1:1	1.233	0.032	0.039	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	24.5	23.56	-0.05	0	Stainless Steel	KP2LOG7MGM	QPSK	1	0	0 mm	back	1:1	1.242	0.092	0.114	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	23.5	22.59	-0.17	1	Stainless Steel	KP2LOG7MGM	QPSK	50	0	0 mm	back	1:1	1.233	0.083	0.102	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	24.5	23.56	-0.11	0	Stainless Steel	KP2LOG7MGM	QPSK	1	0	0 mm	back	1:1	1.242	0.139	0.173	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	23.5	22.59	0.04	1	Stainless Steel	KP2LOG7MGM	QPSK	50	0	0 mm	back	1:1	1.233	0.121	0.149	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	24.5	23.56	-0.03	0	Titanium	RX7P26W23Q	QPSK	1	0	0 mm	back	1:1	1.242	0.029	0.036	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	23.5	22.59	-0.12	1	Titanium	RX7P26W23Q	QPSK	50	0	0 mm	back	1:1	1.233	0.022	0.027	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	24.5	23.56	-0.19	0	Titanium	NR7GRHXRQF	QPSK	1	0	0 mm	back	1:1	1.242	0.092	0.114	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	23.5	22.59	-0.02	1	Titanium	NR7GRHXRQF	QPSK	50	0	0 mm	back	1:1	1.233	0.073	0.090	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	24.5	23.56	-0.07	0	Titanium	VFMFC42DWC	QPSK	1	0	0 mm	back	1:1	1.242	0.120	0.149	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	23.5	22.59	-0.08	1	Titanium	VFMFC42DWC	QPSK	50	0	0 mm	back	1:1	1.233	0.110	0.136	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Extremity 4.0 W/kg (mW/g) averaged over 10 grams												

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Table 10-19
LTE Band 25 Extremity SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Housing type	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	Scaling Factor	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																		(W/kg)	(W/kg)	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Sport	24.5	23.60	0.05	0	Aluminum	G66LGQYVJT	QPSK	1	99	0 mm	back	1:1	1.230	0.052	0.064	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Sport	23.5	22.55	0.05	1	Aluminum	G66LGQYVJT	QPSK	50	50	0 mm	back	1:1	1.245	0.038	0.047	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Links	24.5	23.60	0.14	0	Aluminum	JKV6G7NLW7	QPSK	1	99	0 mm	back	1:1	1.230	0.100	0.123	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Links	23.5	22.55	0.10	1	Aluminum	JKV6G7NLW7	QPSK	50	50	0 mm	back	1:1	1.245	0.080	0.100	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Loop	24.5	23.60	0.03	0	Aluminum	JKV6G7NLW7	QPSK	1	99	0 mm	back	1:1	1.230	0.254	0.312	A19
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Loop	23.5	22.55	-0.08	1	Aluminum	JKV6G7NLW7	QPSK	50	50	0 mm	back	1:1	1.245	0.134	0.167	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Sport	24.5	23.60	0.03	0	Stainless Steel	NPCGG762LQ	QPSK	1	99	0 mm	back	1:1	1.230	0.137	0.169	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Sport	23.5	22.55	0.02	1	Stainless Steel	NPCGG762LQ	QPSK	50	50	0 mm	back	1:1	1.245	0.108	0.134	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Links	24.5	23.60	0.11	0	Stainless Steel	VTJNN1W4J	QPSK	1	99	0 mm	back	1:1	1.230	0.145	0.178	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Links	23.5	22.55	0.02	1	Stainless Steel	VTJNN1W4J	QPSK	50	50	0 mm	back	1:1	1.245	0.115	0.143	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Loop	24.5	23.60	-0.17	0	Stainless Steel	TL4J3YJV4V	QPSK	1	99	0 mm	back	1:1	1.230	0.141	0.173	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Loop	23.5	22.55	-0.14	1	Stainless Steel	TL4J3YJV4V	QPSK	50	50	0 mm	back	1:1	1.245	0.110	0.137	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Sport	24.5	23.60	0.04	0	Titanium	VFMC42DWC	QPSK	1	99	0 mm	back	1:1	1.230	0.052	0.064	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Sport	23.5	22.55	0.04	1	Titanium	VFMC42DWC	QPSK	50	50	0 mm	back	1:1	1.245	0.040	0.050	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Links	24.5	23.60	0.14	0	Titanium	VWJNVFTHOG	QPSK	1	99	0 mm	back	1:1	1.230	0.139	0.171	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Links	23.5	22.55	0.19	1	Titanium	VWJNVFTHOG	QPSK	50	50	0 mm	back	1:1	1.245	0.114	0.142	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Loop	24.5	23.60	0.13	0	Titanium	N30HRQL994T	QPSK	1	99	0 mm	back	1:1	1.230	0.055	0.068	
1860.00	26140	Low	LTE Band 25 (PCS)	20	Metal Loop	23.5	22.55	0.04	1	Titanium	N30HRQL994T	QPSK	50	50	0 mm	back	1:1	1.245	0.045	0.056	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Extremity 4.0 W/kg (mW/g) averaged over 10 grams												

Table 10-20
LTE Band 7 Extremity SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Housing type	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	Scaling Factor	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.	(W/kg)																	(W/kg)		
2560.00	21350	High	LTE Band 7	20	Sport	23.5	22.35	-0.12	0	Aluminum	JKV6G7NLW7	QPSK	1	99	0 mm	back	1:1	1.303	0.781	1.018	
2560.00	21350	High	LTE Band 7	20	Sport	22.5	21.27	-0.02	1	Aluminum	JKV6G7NLW7	QPSK	50	50	0 mm	back	1:1	1.327	0.576	0.764	
2560.00	21350	High	LTE Band 7	20	Metal Links	23.5	22.35	-0.10	0	Aluminum	W4CVH32F97	QPSK	1	99	0 mm	back	1:1	1.303	1.060	1.381	
2560.00	21350	High	LTE Band 7	20	Metal Links	22.5	21.27	-0.08	1	Aluminum	W4CVH32F97	QPSK	50	50	0 mm	back	1:1	1.327	0.843	1.119	
2510.00	20850	Low	LTE Band 7	20	Metal Loop	23.5	22.16	-0.02	0	Aluminum	QCDWW5LXNW	QPSK	1	99	0 mm	back	1:1	1.361	0.706	0.961	
2535.00	21100	Mid	LTE Band 7	20	Metal Loop	23.5	22.12	-0.04	0	Aluminum	QCDWW5LXNW	QPSK	1	99	0 mm	back	1:1	1.374	0.939	1.290	
2560.00	21350	High	LTE Band 7	20	Metal Loop	23.5	22.35	-0.18	0	Aluminum	QCDWW5LXNW	QPSK	1	99	0 mm	back	1:1	1.303	1.160	1.511	A20
2560.00	21350	High	LTE Band 7	20	Metal Loop	22.5	21.27	-0.09	1	Aluminum	QCDWW5LXNW	QPSK	50	50	0 mm	back	1:1	1.327	0.915	1.214	
2560.00	21350	High	LTE Band 7	20	Sport	23.5	22.35	-0.07	0	Stainless Steel	VTJNN1W4J	QPSK	1	99	0 mm	back	1:1	1.303	0.607	0.791	
2560.00	21350	High	LTE Band 7	20	Sport	22.5	21.27	0.05	1	Stainless Steel	VTJNN1W4J	QPSK	50	50	0 mm	back	1:1	1.327	0.318	0.422	
2560.00	21350	High	LTE Band 7	20	Metal Links	23.5	22.35	-0.07	0	Stainless Steel	TL4J3YJV4V	QPSK	1	99	0 mm	back	1:1	1.303	0.304	0.396	
2560.00	21350	High	LTE Band 7	20	Metal Links	22.5	21.27	-0.01	1	Stainless Steel	TL4J3YJV4V	QPSK	50	50	0 mm	back	1:1	1.327	0.236	0.313	
2560.00	21350	High	LTE Band 7	20	Metal Loop	23.5	22.35	-0.01	0	Stainless Steel	J5R4HK2CF0	QPSK	1	99	0 mm	back	1:1	1.303	0.547	0.713	
2560.00	21350	High	LTE Band 7	20	Metal Loop	22.5	21.27	-0.19	1	Stainless Steel	J5R4HK2CF0	QPSK	50	50	0 mm	back	1:1	1.327	0.422	0.560	
2560.00	21350	High	LTE Band 7	20	Sport	23.5	22.35	0.04	0	Titanium	VFMFC42DWC	QPSK	1	99	0 mm	back	1:1	1.303	0.501	0.653	
2560.00	21350	High	LTE Band 7	20	Sport	22.5	21.27	-0.02	1	Titanium	VFMFC42DWC	QPSK	50	50	0 mm	back	1:1	1.327	0.481	0.638	
2560.00	21350	High	LTE Band 7	20	Metal Links	23.5	22.35	-0.02	0	Titanium	RX7P26W23Q	QPSK	1	99	0 mm	back	1:1	1.303	0.457	0.595	
2560.00	21350	High	LTE Band 7	20	Metal Links	22.5	21.27	0.12	1	Titanium	RX7P26W23Q	QPSK	50	50	0 mm	back	1:1	1.327	0.375	0.498	
2560.00	21350	High	LTE Band 7	20	Metal Loop	23.5	22.35	0.01	0	Titanium	M86F9H2RPG	QPSK	1	99	0 mm	back	1:1	1.303	0.683	0.890	
2560.00	21350	High	LTE Band 7	20	Metal Loop	22.5	21.27	0.03	1	Titanium	M86F9H2RPG	QPSK	50	50	0 mm	back	1:1	1.327	0.588	0.780	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT																					
Spatial Peak									Extremity												
Uncontrolled Exposure/General Population									4.0 W/kg (mW/g)												
									averaged over 10 grams												

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Table 10-21
LTE Band 41 Extremity SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Housing type	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	Scaling Factor	SAR (10g)	Reported SAR (10g)	Plot #	
MHz	Ch.																	(W/kg)	(W/kg)		
2680.00	41490	High	LTE Band 41	20	Sport	23.5	22.35	-0.04	0	Aluminum	LQYHX9Q3LX	QPSK	1	99	0 mm	back	1:1.58	1.303	0.610	0.795	
2680.00	41490	High	LTE Band 41	20	Sport	22.5	21.20	-0.02	1	Aluminum	LQYHX9Q3LX	QPSK	50	50	0 mm	back	1:1.58	1.349	0.478	0.645	
2680.00	41490	High	LTE Band 41	20	Metal Links	23.5	22.35	-0.08	0	Aluminum	G66LQGYYJT	QPSK	1	99	0 mm	back	1:1.58	1.303	0.723	0.942	
2680.00	41490	High	LTE Band 41	20	Metal Links	22.5	21.20	-0.03	1	Aluminum	G66LQGYYJT	QPSK	50	50	0 mm	back	1:1.58	1.349	0.547	0.738	
2680.00	41490	High	LTE Band 41	20	Metal Loop	23.5	22.35	0.05	0	Aluminum	LQYHX9Q3LX	QPSK	1	99	0 mm	back	1:1.58	1.303	0.882	1.149	A21
2680.00	41490	High	LTE Band 41	20	Metal Loop	22.5	21.20	-0.02	1	Aluminum	LQYHX9Q3LX	QPSK	50	50	0 mm	back	1:1.58	1.349	0.694	0.923	
2680.00	41490	High	LTE Band 41	20	Sport	23.5	22.35	-0.04	0	Stainless Steel	VWL41W2VT3	QPSK	1	99	0 mm	back	1:1.58	1.303	0.387	0.504	
2680.00	41490	High	LTE Band 41	20	Sport	22.5	21.20	0.00	1	Stainless Steel	VWL41W2VT3	QPSK	50	50	0 mm	back	1:1.58	1.349	0.298	0.402	
2680.00	41490	High	LTE Band 41	20	Metal Links	23.5	22.35	0.05	0	Stainless Steel	G9M7R64FPP	QPSK	1	99	0 mm	back	1:1.58	1.303	0.185	0.241	
2680.00	41490	High	LTE Band 41	20	Metal Links	22.5	21.20	-0.01	1	Stainless Steel	G9M7R64FPP	QPSK	50	50	0 mm	back	1:1.58	1.349	0.149	0.201	
2680.00	41490	High	LTE Band 41	20	Metal Loop	23.5	22.35	0.03	0	Stainless Steel	VWL41W2VT3	QPSK	1	99	0 mm	back	1:1.58	1.303	0.414	0.539	
2680.00	41490	High	LTE Band 41	20	Metal Loop	22.5	21.20	0.00	1	Stainless Steel	VWL41W2VT3	QPSK	50	50	0 mm	back	1:1.58	1.349	0.322	0.434	
2680.00	41490	High	LTE Band 41	20	Sport	23.5	22.35	-0.02	0	Titanium	VFMC42DWC	QPSK	1	99	0 mm	back	1:1.58	1.303	0.398	0.519	
2680.00	41490	High	LTE Band 41	20	Sport	22.5	21.20	0.02	1	Titanium	VFMC42DWC	QPSK	50	50	0 mm	back	1:1.58	1.349	0.308	0.415	
2680.00	41490	High	LTE Band 41	20	Metal Links	23.5	22.35	-0.02	0	Titanium	RX7P26W23Q	QPSK	1	99	0 mm	back	1:1.58	1.303	0.506	0.659	
2680.00	41490	High	LTE Band 41	20	Metal Links	22.5	21.20	0.12	1	Titanium	RX7P26W23Q	QPSK	50	50	0 mm	back	1:1.58	1.349	0.415	0.560	
2680.00	41490	High	LTE Band 41	20	Metal Loop	23.5	22.35	0.07	0	Titanium	M86F9H2RPG	QPSK	1	99	0 mm	back	1:1.58	1.303	0.709	0.924	
2680.00	41490	High	LTE Band 41	20	Metal Loop	22.5	21.20	0.06	1	Titanium	M86F9H2RPG	QPSK	50	50	0 mm	back	1:1.58	1.349	0.549	0.741	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak									Extremity 4.0 W/kg (mW/g)												
Uncontrolled Exposure/General Population									averaged over 10 grams												

Table 10-22
2.4 GHz WLAN Extremity SAR

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Housing type	Wristband Type	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)	(W/kg)	
2462	11	802.11b	DSSS	22	19.0	18.01	0.02	0 mm	Aluminum	Sport	QCDWW5LXNW	1	Back	99.7	1.256	1.003	0.163	0.205	
2462	11	802.11b	DSSS	22	19.0	18.01	0.02	0 mm	Aluminum	Metal Links	WGNXN65J7W	1	Back	99.7	1.256	1.003	0.314	0.396	A22
2462	11	802.11b	DSSS	22	19.0	18.01	0.00	0 mm	Aluminum	Metal Loop	QCDWW5LXNW	1	Back	99.7	1.256	1.003	0.158	0.199	
2462	11	802.11b	DSSS	22	19.0	18.01	0.07	0 mm	Stainless Steel	Sport	G9M7R64FPP	1	Back	99.7	1.256	1.003	0.076	0.096	
2462	11	802.11b	DSSS	22	19.0	18.01	0.00	0 mm	Stainless Steel	Metal Links	G9M7R64FPP	1	Back	99.7	1.256	1.003	0.082	0.103	
2462	11	802.11b	DSSS	22	19.0	18.01	0.04	0 mm	Stainless Steel	Metal Loop	G9M7R64FPP	1	Back	99.7	1.256	1.003	0.065	0.082	
2462	11	802.11b	DSSS	22	19.0	18.01	-0.04	0 mm	Titanium	Sport	G06WQL944T	1	Back	99.7	1.256	1.003	0.085	0.107	
2462	11	802.11b	DSSS	22	19.0	18.01	0.02	0 mm	Titanium	Metal Links	G06WQL944T	1	Back	99.7	1.256	1.003	0.094	0.118	
2462	11	802.11b	DSSS	22	19.0	18.01	-0.01	0 mm	Titanium	Metal Loop	G06WQL944T	1	Back	99.7	1.256	1.003	0.157	0.198	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Extremity 4.0 W/kg (mW/g) averaged over 10 grams									

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Table 10-23
5 GHz WLAN Extremity SAR

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Housing type	Wristband Type	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)	(W/kg)	
5300	60	802.11a	OFDM	20	17.0	16.04	0.02	0 mm	Aluminum	Sport	G66LGQYVJT	6	Back	97.5	1.247	1.026	0.000	0.000	
5300	60	802.11a	OFDM	20	17.0	16.04	0.08	0 mm	Aluminum	Metal Links	G66LGQYVJT	6	Back	97.5	1.247	1.026	0.001	0.001	
5300	60	802.11a	OFDM	20	17.0	16.04	0.19	0 mm	Aluminum	Metal Loop	G66LGQYVJT	6	Back	97.5	1.247	1.026	0.000	0.000	
5300	60	802.11a	OFDM	20	17.0	16.04	0.17	0 mm	Stainless Steel	Sport	G9M7R64FPP	6	Back	97.5	1.247	1.026	0.001	0.001	
5300	60	802.11a	OFDM	20	17.0	16.04	0.17	0 mm	Stainless Steel	Metal Links	G9M7R64FPP	6	Back	97.5	1.247	1.026	0.000	0.000	
5300	60	802.11a	OFDM	20	17.0	16.04	-0.19	0 mm	Stainless Steel	Metal Loop	G9M7R64FPP	6	Back	97.5	1.247	1.026	0.000	0.000	
5300	60	802.11a	OFDM	20	17.0	16.04	0.18	0 mm	Titanium	Sport	RX7P26W23Q	6	Back	97.5	1.247	1.026	0.000	0.000	
5300	60	802.11a	OFDM	20	17.0	16.04	0.04	0 mm	Titanium	Metal Links	RX7P26W23Q	6	Back	97.5	1.247	1.026	0.002	0.003	
5300	60	802.11a	OFDM	20	17.0	16.04	0.14	0 mm	Titanium	Metal Loop	RX7P26W23Q	6	Back	97.5	1.247	1.026	0.000	0.000	
5620	124	802.11a	OFDM	20	17.0	16.06	0.04	0 mm	Aluminum	Sport	G66LGQYVJT	6	Back	97.5	1.242	1.026	0.002	0.003	
5620	124	802.11a	OFDM	20	17.0	16.06	0.02	0 mm	Aluminum	Metal Links	G66LGQYVJT	6	Back	97.5	1.242	1.026	0.001	0.001	
5620	124	802.11a	OFDM	20	17.0	16.06	0.21	0 mm	Aluminum	Metal Loop	G66LGQYVJT	6	Back	97.5	1.242	1.026	0.003	0.004	
5620	124	802.11a	OFDM	20	17.0	16.06	0.13	0 mm	Stainless Steel	Sport	TL4J3YJV4V	6	Back	97.5	1.242	1.026	0.000	0.000	
5620	124	802.11a	OFDM	20	17.0	16.06	0.06	0 mm	Stainless Steel	Metal Links	TL4J3YJV4V	6	Back	97.5	1.242	1.026	0.008	0.010	
5620	124	802.11a	OFDM	20	17.0	16.06	-0.17	0 mm	Stainless Steel	Metal Loop	TL4J3YJV4V	6	Back	97.5	1.242	1.026	0.010	0.013	
5620	124	802.11a	OFDM	20	17.0	16.06	0.10	0 mm	Titanium	Sport	RX7P26W23Q	6	Back	97.5	1.242	1.026	0.009	0.011	
5620	124	802.11a	OFDM	20	17.0	16.06	0.05	0 mm	Titanium	Metal Links	RX7P26W23Q	6	Back	97.5	1.242	1.026	0.009	0.011	
5620	124	802.11a	OFDM	20	17.0	16.06	0.10	0 mm	Titanium	Metal Loop	RX7P26W23Q	6	Back	97.5	1.242	1.026	0.007	0.009	
5745	149	802.11a	OFDM	20	17.0	16.08	0.13	0 mm	Aluminum	Sport	LQYH9Q3LX	6	Back	97.5	1.236	1.026	0.003	0.004	
5745	149	802.11a	OFDM	20	17.0	16.08	0.03	0 mm	Aluminum	Metal Links	LQYH9Q3LX	6	Back	97.5	1.236	1.026	0.004	0.005	
5745	149	802.11a	OFDM	20	17.0	16.08	0.14	0 mm	Aluminum	Metal Loop	LQYH9Q3LX	6	Back	97.5	1.236	1.026	0.007	0.009	
5745	149	802.11a	OFDM	20	17.0	16.08	0.11	0 mm	Stainless Steel	Sport	G9M7R64FPP	6	Back	97.5	1.236	1.026	0.010	0.013	
5745	149	802.11a	OFDM	20	17.0	16.08	0.06	0 mm	Stainless Steel	Metal Links	G9M7R64FPP	6	Back	97.5	1.236	1.026	0.013	0.016	A23
5745	149	802.11a	OFDM	20	17.0	16.08	0.04	0 mm	Stainless Steel	Metal Loop	G9M7R64FPP	6	Back	97.5	1.236	1.026	0.013	0.016	
5745	149	802.11a	OFDM	20	17.0	16.08	-0.02	0 mm	Titanium	Sport	RX7P26W23Q	6	Back	97.5	1.236	1.026	0.012	0.015	
5745	149	802.11a	OFDM	20	17.0	16.08	0.02	0 mm	Titanium	Metal Links	RX7P26W23Q	6	Back	97.5	1.236	1.026	0.008	0.010	
5745	149	802.11a	OFDM	20	17.0	16.08	0.04	0 mm	Titanium	Metal Loop	RX7P26W23Q	6	Back	97.5	1.236	1.026	0.010	0.013	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT								Extremity											
Spatial Peak								4.0 W/kg (mW/g)											
Uncontrolled Exposure/General Population								averaged over 10 grams											

Table 10-24
Bluetooth Extremity SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Housing type	Wristband Type	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.															(W/kg)	(W/kg)	
2441	39	Bluetooth	FHSS	13.0	11.98	-0.06	0 mm	Aluminum	Sport	P442RF7J2Y	1	back	100	1.265	1.000	0.080	0.101	
2441	39	Bluetooth	FHSS	13.0	11.98	0.09	0 mm	Aluminum	Metal Links	P442RF7J2Y	1	back	100	1.265	1.000	0.109	0.138	A24
2441	39	Bluetooth	FHSS	13.0	11.98	0.01	0 mm	Aluminum	Metal Loop	P442RF7J2Y	1	back	100	1.265	1.000	0.096	0.121	
2441	39	Bluetooth	FHSS	13.0	11.98	-0.04	0 mm	Stainless Steel	Sport	VTJNXN1W4J	1	back	100	1.265	1.000	0.041	0.052	
2441	39	Bluetooth	FHSS	13.0	11.98	0.11	0 mm	Stainless Steel	Metal Links	VTJNXN1W4J	1	back	100	1.265	1.000	0.039	0.049	
2441	39	Bluetooth	FHSS	13.0	11.98	0.06	0 mm	Stainless Steel	Metal Loop	VTJNXN1W4J	1	back	100	1.265	1.000	0.048	0.061	
2441	39	Bluetooth	FHSS	13.0	11.98	0.12	0 mm	Titanium	Sport	VWJNVFTHOG	1	back	100	1.265	1.000	0.044	0.056	
2441	39	Bluetooth	FHSS	13.0	11.98	0.11	0 mm	Titanium	Metal Links	VWJNVFTHOG	1	back	100	1.265	1.000	0.058	0.073	
2441	39	Bluetooth	FHSS	13.0	11.98	0.06	0 mm	Titanium	Metal Loop	VWJNVFTHOG	1	back	100	1.265	1.000	0.049	0.062	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT								Extremity										
Spatial Peak								4.0 W/kg (mW/g)										
Uncontrolled Exposure/General Population								averaged over 10 grams										

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10.3 SAR Test Notes

General Notes:

1. The test data reported are the worst-case SAR values according to test procedures specified in FCC KDB Publication 447498 D01v06.
2. Batteries are fully charged at the beginning of the SAR measurements.
3. Liquid tissue depth was at least 15.0 cm for all frequencies.
4. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
5. SAR results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB Publication 447498 D01v06.
6. Per FCC KDB 865664 D01v01r04, variability SAR tests were performed when the measured SAR results for a frequency band were greater than or equal to 0.8 W/kg. Repeated SAR measurements are highlighted in the tables above for clarity. Please see Section 12.1 for variability analysis.
7. This device has three housing types: Aluminum, Stainless Steel, and Titanium. The non-metallic wrist accessory, sport band, was evaluated for all exposure conditions. The available metallic wrist accessories, metal links band and metal loop band, were additionally evaluated.
8. This device is a portable wrist-worn device and does not support any other use conditions. Therefore, the procedures in FCC KDB Publication 447498 D01v06 Section 6.2 have been applied for extremity and next to mouth (head) conditions.
9. Unless otherwise noted, when 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds below.
10. The orange highlights throughout the report represent the highest scaled SAR per equipment class.

UMTS Notes:

1. UMTS mode was tested under RMC 12.2 kbps with HSPA Inactive per KDB Publication 941225 D01v03r01. AMR and HSPA SAR was not required per the 3G Test Reduction Procedure in KDB Publication 941225 D01v03r01.
2. Per FCC KDB Publication 447498 D01v06, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg for 1g evaluations and ≤ 2.0 W/kg for 10g SAR then testing at the other channels is not required for such test configuration(s). When the maximum output power variation across the required test channels is $> \frac{1}{2}$ dB, instead of the middle channel, the highest output power channel was used.

LTE Notes:

1. LTE test configurations are determined according to SAR Evaluation Considerations for LTE Devices in FCC KDB Publication 941225 D05v02r04. The general test procedures used for testing can be found in Section 7.5.4.
2. MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.
3. A-MPR was disabled for all SAR tests by setting NS=01 and MCC=001 on the base station simulator. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).
4. Per FCC KDB Publication 447498 D01v06, when the reported LTE Band 41 SAR measured at the highest output power channel in a given a test configuration was > 0.6 W/kg for 1g evaluations and > 1.5 W/kg for 10g SAR, testing at the other channels was required for such test configurations.
5. TDD LTE was tested per the guidance provided in FCC KDB Publication 941225 D05v02r04. Testing was performed using UL-DL configuration 0 with 6 UL subframes and 2 S subframes using extended cyclic prefix only and special subframe configuration 6. SAR tests were performed at maximum output power and worst-case transmission duty factor in extended cyclic prefix. Per 3GPP 36.211 Section 4, the duty factor for special subframe configuration 6 using extended cyclic prefix is 0.633.

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- This device can only operate with 16 QAM on the uplink with less than or equal to 27RB. QPSK and 16QAM LTE powers for RB size of 15 ("50%RB") and 27 ("100% RB") were additionally measured to support comparison and SAR test exclusion per KDB 941225 D05v02r04 Section 5.2.4 and 5.3.

WLAN Notes:

- Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02 for 2.4 GHz WIFI single transmission chain operations, the highest measured maximum output power channel for DSSS was selected for SAR measurement. SAR for OFDM modes (2.4 GHz 802.11g/n/ax) was not required due to the maximum allowed powers and the highest reported DSSS SAR. See Section 7.6.4 for more information.
- Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02 for 5 GHz WIFI single transmission chain operations, the initial test configuration was selected according to the transmission mode with the highest maximum allowed powers. Other transmission modes were not investigated since the highest reported SAR for initial test configuration adjusted by the ratio of maximum output powers is less than 1.2 W/kg for 1g evaluations. See Section 0 for more information.
- When the maximum reported 1g averaged SAR is ≤ 0.8 W/kg, SAR testing on additional channels was not required. Otherwise, SAR for the next highest output power channel was required until the reported SAR result was ≤ 1.20 W/kg for 1g evaluations or all test channels were measured. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.
- The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools. The reported SAR was scaled to the 100% transmission duty factor to determine compliance. The maximum achievable duty cycles for all modes were determined based on measurements performed on a spectrum analyzer in zero-span mode with RBW = 8 MHz, VBW = 50 MHz, and detector = peak per guidance of Section 6.0 b) of ANSI C63. 10-2013 and KDB 558074 D01 v04. The RBW and VBW were both greater than 50/T, where T is the minimum transmission duration, and the number of sweep points across T was greater than 100.

Bluetooth Notes

- To determine compliance, Bluetooth SAR was measured with the maximum power condition. Bluetooth was evaluated with a test mode with 100% transmission duty factor.

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11 FCC MULTI-TX AND ANTENNA SAR CONSIDERATIONS

11.1 Introduction

The following procedures adopted from FCC KDB Publication 447498 D01v06 are applicable to devices with built-in unlicensed transmitters such as 802.11 and Bluetooth devices which may simultaneously transmit with the licensed transmitter.

11.2 Simultaneous Transmission Procedures

This device contains transmitters that may operate simultaneously. Therefore, simultaneous transmission analysis is required. Per FCC KDB Publication 447498 D01v06 4.3.2, simultaneous transmission SAR test exclusion may be applied when the sum of the 1g SAR for all the simultaneous transmitting antennas in a specific physical test configuration is ≤ 1.6 W/kg. The different test positions in an exposure condition may be considered collectively to determine SAR test exclusion according to the sum of 1g or 10g SAR.

11.3 Head SAR Simultaneous Transmission Analysis

For Sar summation, the highest reported SAR across all housing and wristband types were used as a conservative evaluation for the simultaneous transmission analysis.

Table 11-1
Cellular Band Simultaneous Transmission Scenario with 2.4 GHz WLAN (Head at 1.0 cm)

Exposure Condition	Mode	3G/4G SAR (W/kg)	2.4 GHz WLAN SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Head SAR	UMTS 850	0.000	0.335	0.335
	UMTS 1750	0.278	0.335	0.613
	UMTS 1900	0.445	0.335	0.780
	LTE Band 26 (Cell)	0.001	0.335	0.336
	LTE Band 5 (Cell)	0.004	0.335	0.339
	LTE Band 66 (AWS)	0.323	0.335	0.658
	LTE Band 25 (PCS)	0.471	0.335	0.806
	LTE Band 7	1.084	0.335	1.419
	LTE Band 41	0.460	0.335	0.795

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Table 11-2

Cellular Band Simultaneous Transmission Scenario with Bluetooth and 5 GHz WLAN (Head at 1.0 cm)

Exposure Condition	Mode	3G/4G SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Head SAR	UMTS 850	0.000	0.090	0.074	0.090	0.074	0.164
	UMTS 1750	0.278	0.090	0.074	0.368	0.352	0.442
	UMTS 1900	0.445	0.090	0.074	0.535	0.519	0.609
	LTE Band 26 (Cell)	0.001	0.090	0.074	0.091	0.075	0.165
	LTE Band 5 (Cell)	0.004	0.090	0.074	0.094	0.078	0.168
	LTE Band 66 (AWS)	0.323	0.090	0.074	0.413	0.397	0.487
	LTE Band 25 (PCS)	0.471	0.090	0.074	0.561	0.545	0.635
	LTE Band 7	1.084	0.090	0.074	1.174	1.158	1.248
	LTE Band 41	0.460	0.090	0.074	0.550	0.534	0.624

Table 11-3

Bluetooth Simultaneous Transmission Scenario with 5 GHz WLAN (Head at 1.0 cm)

Exposure Condition	Bluetooth SAR (W/kg)	5 GHz WLAN SAR (W/kg)	Σ SAR (W/kg)
	1	2	1+2
Head SAR	0.090	0.074	0.164

11.4 Extremity SAR Simultaneous Transmission Analysis

Table 11-4

Cellular Band Simultaneous Transmission Scenario with 2.4 WLAN (Extremity at 0.0 cm)

Exposure Condition	Mode	3G/4G SAR (W/kg)	2.4 GHz WLAN SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Extremity SAR	UMTS 850	0.196	0.396	0.592
	UMTS 1750	0.155	0.396	0.551
	UMTS 1900	0.258	0.396	0.654
	LTE Band 26 (Cell)	0.116	0.396	0.512
	LTE Band 5 (Cell)	0.230	0.396	0.626
	LTE Band 66 (AWS)	0.212	0.396	0.608
	LTE Band 25 (PCS)	0.312	0.396	0.708
	LTE Band 7	1.511	0.396	1.907
	LTE Band 41	1.149	0.396	1.545

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Table 11-5

Cellular Band Simultaneous Transmission Scenario with Bluetooth and 5 GHz WLAN (Extremity at 0.0 cm)

Exposure Condition	Mode	3G/4G SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Extremity SAR	UMTS 850	0.196	0.138	0.016	0.334	0.212	0.350
	UMTS 1750	0.155	0.138	0.016	0.293	0.171	0.309
	UMTS 1900	0.258	0.138	0.016	0.396	0.274	0.412
	LTE Band 26 (Cell)	0.116	0.138	0.016	0.254	0.132	0.270
	LTE Band 5 (Cell)	0.230	0.138	0.016	0.368	0.246	0.384
	LTE Band 66 (AWS)	0.212	0.138	0.016	0.350	0.228	0.366
	LTE Band 25 (PCS)	0.312	0.138	0.016	0.450	0.328	0.466
	LTE Band 7	1.511	0.138	0.016	1.649	1.527	1.665
	LTE Band 41	1.149	0.138	0.016	1.287	1.165	1.303

Table 11-6

Bluetooth Simultaneous Transmission Scenario with 5 GHz WLAN (Extremity at 0.0 cm)

Exposure Condition	Bluetooth SAR (W/kg)	5 GHz WLAN SAR (W/kg)	Σ SAR (W/kg)
	1	2	1+2
Extremity SAR	0.138	0.016	0.154

11.5 Simultaneous Transmission Conclusion

The above numerical summed SAR results for all the worst-case simultaneous transmission conditions were below the SAR limit. Therefore, the above analysis is sufficient to determine that simultaneous transmission cases will not exceed the SAR limit and therefore no measured volumetric simultaneous SAR summation is required per FCC KDB Publication 447498 D01v06.

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12 SAR MEASUREMENT VARIABILITY

12.1 Measurement Variability

Per FCC KDB Publication 865664 D01v01r04, SAR measurement variability was assessed for each frequency band, which was determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media were required for SAR measurements in a frequency band, the variability measurement procedures were applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. These additional measurements were repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device was returned to ambient conditions (normal room temperature) with the battery fully charged before it was re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement Variability was assessed using the following procedures for each frequency band:

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

Table 12-1
Head SAR Measurement Variability Results

HEAD VARIABILITY RESULTS															
Band	FREQUENCY		Mode	Service	Side	Test Position	Housing type	Wristband type	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	Ratio	3rd Repeated SAR (1g)	Ratio
	MHz	Ch.							(W/kg)	(W/kg)		(W/kg)		(W/kg)	
2600	2560.00	21350	LTE Band 7, 20 MHz Bandwidth	QPSK, 1 RB, 99 RB Offset	Front	10 mm	Aluminum	Sport	0.832	0.820	1.01	N/A	N/A	N/A	N/A
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Head 1.6 W/kg (mW/g) averaged over 1 gram							

12.2 Measurement Uncertainty

The measured SAR was <1.5 W/kg for 1g and <3.75 W/kg for 10g for all frequency bands. Therefore, per KDB Publication 865664 D01v01r04, the extended measurement uncertainty analysis was not required.

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13 EQUIPMENT LIST

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	8753ES	S-Parameter Network Analyzer	4/14/2021	Annual	4/14/2022	US39170118
Agilent	E4438C	ESG Vector Signal Generator	9/29/2020	Annual	9/29/2021	MY45093852
Agilent	E4438C	ESG Vector Signal Generator	12/2/2020	Annual	12/2/2021	MY42081752
Agilent	E4440A	PSA Series Spectrum Analyzer	1/29/2021	Annual	1/29/2022	MY46186272
Agilent	N5182A	MXG Vector Signal Generator	9/25/2020	Annual	9/25/2021	US46240505
Agilent	N5182A	MXG Vector Signal Generator	12/1/2020	Annual	12/1/2021	MY47420837
Agilent	N9020A	MXA Signal Analyzer	12/21/2020	Annual	12/21/2021	MY50200571
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	343972
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	343971
Anritsu	MA24106A	USB Power Sensor	9/15/2020	Annual	9/15/2021	1244515
Anritsu	MA24106A	USB Power Sensor	9/15/2020	Annual	9/15/2021	1248508
Anritsu	MA2411B	Pulse Power Sensor	3/8/2021	Annual	3/8/2022	1339007
Anritsu	ML2495A	Power Meter	11/3/2020	Annual	11/3/2021	1039008
Anritsu	ML2496A	Power Meter	2/19/2021	Annual	2/19/2022	1138001
Anritsu	MT8820C	Radio Communication Analyzer	9/30/2020	Annual	9/30/2021	6201240328
Anritsu	MT8821C	Radio Communication Analyzer	5/21/2021	Annual	5/21/2022	6201144419
Control Company	4353	Long Stem Thermometer	10/28/2020	Biennial	10/28/2022	200670623
Control Company	4353	Long Stem Thermometer	10/28/2020	Biennial	10/28/2022	200670633
Control Company	4353	Long Stem Thermometer	10/28/2020	Biennial	10/28/2022	200670635
Control Company	4040	Therm./ Clock/ Humidity Monitor	3/12/2021	Biennial	3/12/2023	210202151
Control Company	4040	Therm./ Clock/ Humidity Monitor	2/19/2021	Biennial	2/19/2023	210114805
HEWLETT PACKARD	8753E	Network Analyzer	12/10/2020	Annual	12/10/2021	US38161081
MCL	BW-N6W5+	6dB Attenuator	CBT	N/A	CBT	N/A
Mini-Circuits	ZHDC-16-63-S+	50-6000MHz Bidirectional Coupler	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-2950+	Low Pass Filter	CBT	N/A	CBT	N/A
Mini-Circuits	VLF-6000+	Low Pass Filter	CBT	N/A	CBT	N/A
Narda	4772-3	Attenuator (3dB)	CBT	N/A	CBT	N/A
Rohde & Schwarz	CMW500	Radio Communication Tester	10/16/2020	Annual	10/16/2021	101699
Rohde & Schwarz	CMW500	Radio Communication Tester	10/16/2020	Annual	10/16/2021	106578
Rohde & Schwarz	CMW500	Radio Communication Tester	10/27/2020	Annual	10/27/2021	108843
Rohde & Schwarz	CMW500	Radio Communication Tester	4/13/2021	Annual	4/13/2022	167284
Rohde & Schwarz	FSP-7	Spectrum Analyzer	1/9/2020	Biennial	1/9/2022	100990
Seekonk	NC-100	Torque Wrench	9/24/2020	Biennial	9/24/2022	22216
Seekonk	NC-100	Torque Wrench	7/30/2020	Biennial	7/30/2022	22217
SPEAG	D1750V2	1750 MHz SAR Dipole	6/19/2019	Triennial	6/19/2022	1083
SPEAG	D1900V2	1900 MHz SAR Dipole	9/10/2020	Annual	9/10/2021	5d181
SPEAG	D1900V2	1900 MHz SAR Dipole	6/19/2019	Triennial	6/19/2022	5d030
SPEAG	D2450V2	2450 MHz SAR Dipole	11/12/2018	Triennial	11/12/2021	921
SPEAG	D2450V2	2450 MHz SAR Dipole	6/14/2019	Triennial	6/14/2022	750
SPEAG	D2600V2	2600 MHz SAR Dipole	6/14/2019	Triennial	6/14/2022	1042
SPEAG	D5GHzV2	5 GHz SAR Dipole	3/10/2021	Annual	3/10/2022	1123
SPEAG	D835V2	835 MHz SAR Dipole	6/20/2019	Triennial	6/20/2022	4d040
SPEAG	D850V2	850 MHz SAR Dipole	9/8/2020	Annual	9/8/2021	1010
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/11/2021	Annual	1/11/2022	1644
SPEAG	DAE4	Dasy Data Acquisition Electronics	9/13/2020	Annual	9/13/2021	1408
SPEAG	DAE4	Dasy Data Acquisition Electronics	2/11/2021	Annual	2/11/2022	1403
SPEAG	DAE4	Dasy Data Acquisition Electronics	10/12/2020	Annual	10/12/2021	1213
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/13/2021	Annual	4/13/2022	501
SPEAG	DAE4	Dasy Data Acquisition Electronics	10/12/2020	Annual	10/12/2021	1364
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/11/2021	Annual	1/11/2022	1645
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/11/2021	Annual	1/11/2022	1646
SPEAG	DAK-3.5	Dielectric Assessment Kit	5/12/2021	Annual	5/12/2022	1070
SPEAG	EX3DV4	SAR Probe	8/19/2020	Annual	8/19/2021	3949
SPEAG	EX3DV4	SAR Probe	10/21/2020	Annual	10/21/2021	7420
SPEAG	EX3DV4	SAR Probe	2/17/2021	Annual	2/17/2022	7427
SPEAG	EX3DV4	SAR Probe	4/19/2021	Annual	4/19/2022	7532
SPEAG	EX3DV4	SAR Probe	3/3/2021	Annual	3/3/2022	7638
SPEAG	EX3DV4	SAR Probe	10/21/2020	Annual	10/21/2021	7558
SPEAG	EX3DV4	SAR Probe	3/3/2021	Annual	3/3/2022	7639
SPEAG	EX3DV4	SAR Probe	3/3/2021	Annual	3/3/2022	7640
SPEAG	MAIA	Modulation and Audio Interference Analyzer	CBT	N/A	CBT	1237

Note: Each equipment item was used solely within its respective calibration period

Note: CBT (Calibrated Before Testing). Prior to testing, the measurement paths containing a cable, amplifier, attenuator, coupler or filter were connected to a calibrated source (i.e. a signal generator) to determine the losses of the measurement path. The power meter offset was then adjusted to compensate for the measurement system losses. This level offset is stored within the power meter before measurements are made. This calibration verification procedure applies to the system verification and output power measurements. The calibrated reading is then taken directly from the power meter after compensation of the losses for all final power measurements.

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14 MEASUREMENT UNCERTAINTIES

a	b	c	d	e= f(d,k)	f	g	h = c x f/e	i = c x g/e	k
Uncertainty Component	IEEE 1528 Sec.	Tol. (± %)	Prob. Dist.	Div.	c _i 1gm	c _i 10 gms	1gm u _i (± %)	10gms u _i (± %)	v _i
Measurement System									
Probe Calibration	E.2.1	7	N	1	1	1	7.0	7.0	∞
Axial Isotropy	E.2.2	0.25	N	1	0.7	0.7	0.2	0.2	∞
Hemishperical Isotropy	E.2.2	1.3	N	1	0.7	0.7	0.9	0.9	∞
Boundary Effect	E.2.3	2	R	1.732	1	1	1.2	1.2	∞
Linearity	E.2.4	0.3	N	1	1	1	0.3	0.3	∞
System Detection Limits	E.2.4	0.25	R	1.732	1	1	0.1	0.1	∞
Modulation Response	E.2.5	4.8	R	1.732	1	1	2.8	2.8	∞
Readout Electronics	E.2.6	0.3	N	1	1	1	0.3	0.3	∞
Response Time	E.2.7	0.8	R	1.732	1	1	0.5	0.5	∞
Integration Time	E.2.8	2.6	R	1.732	1	1	1.5	1.5	∞
RF Ambient Conditions - Noise	E.6.1	3	R	1.732	1	1	1.7	1.7	∞
RF Ambient Conditions - Reflections	E.6.1	3	R	1.732	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	E.6.2	0.8	R	1.732	1	1	0.5	0.5	∞
Probe Positioning w/ respect to Phantom	E.6.3	6.7	R	1.732	1	1	3.9	3.9	∞
Extrapolation, Interpolation & Integration algorithms for Max. SAR Evaluation	E.5	4	R	1.732	1	1	2.3	2.3	∞
Test Sample Related									
Test Sample Positioning	E.4.2	3.12	N	1	1	1	3.1	3.1	35
Device Holder Uncertainty	E.4.1	1.67	N	1	1	1	1.7	1.7	5
Output Power Variation - SAR drift measurement	E.2.9	5	R	1.732	1	1	2.9	2.9	∞
SAR Scaling	E.6.5	0	R	1.732	1	1	0.0	0.0	∞
Phantom & Tissue Parameters									
Phantom Uncertainty (Shape & Thickness tolerances)	E.3.1	7.6	R	1.73	1.0	1.0	4.4	4.4	∞
Liquid Conductivity - measurement uncertainty	E.3.3	4.3	N	1	0.78	0.71	3.3	3.0	76
Liquid Permittivity - measurement uncertainty	E.3.3	4.2	N	1	0.23	0.26	1.0	1.1	75
Liquid Conductivity - Temperature Uncertainty	E.3.4	3.4	R	1.732	0.78	0.71	1.5	1.4	∞
Liquid Permittivity - Temperature Uncertainty	E.3.4	0.6	R	1.732	0.23	0.26	0.1	0.1	∞
Liquid Conductivity - deviation from target values	E.3.2	5.0	R	1.73	0.64	0.43	1.8	1.2	∞
Liquid Permittivity - deviation from target values	E.3.2	5.0	R	1.73	0.60	0.49	1.7	1.4	∞
Combined Standard Uncertainty (k=1)	RSS						12.2	12.0	191
Expanded Uncertainty (95% CONFIDENCE LEVEL)	k=2						24.4	24.0	

The above measurement uncertainties are according to IEEE Std. 1528-2013

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15 CONCLUSION

15.1 Measurement Conclusion

The SAR evaluation indicates that the EUT complies with the RF radiation exposure limits of the FCC and Innovation, Science, and Economic Development Canada, with respect to all parameters subject to this test. These measurements were taken to simulate the RF effects of RF exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The results and statements relate only to the item(s) tested.

Please note that the absorption and distribution of electromagnetic energy in the body are very complex phenomena that depend on the mass, shape, and size of the body, the orientation of the body with respect to the field vectors, and the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because various factors may interact with one another to vary the specific biological outcome of an exposure to electromagnetic fields, any protection guide should consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables. [3]

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16 REFERENCES

- [1] Federal Communications Commission, ET Docket 93-62, Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation, Aug. 1996.
- [2] ANSI/IEEE C95.1-2005, American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 3kHz to 300GHz, New York: IEEE, 2006.
- [3] ANSI/IEEE C95.1-1992, American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 3kHz to 300GHz, New York: IEEE, Sept. 1992.
- [4] ANSI/IEEE C95.3-2002, IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave, New York: IEEE, December 2002.
- [5] IEEE Standards Coordinating Committee 39 –Standards Coordinating Committee 34 – IEEE Std. 1528-2013, IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques.
- [6] NCRP, National Council on Radiation Protection and Measurements, Biological Effects and Exposure Criteria for RadioFrequency Electromagnetic Fields, NCRP Report No. 86, 1986. Reprinted Feb. 1995.
- [7] T. Schmid, O. Egger, N. Kuster, Automated E-field scanning system for dosimetric assessments, IEEE Transaction on Microwave Theory and Techniques, vol. 44, Jan. 1996, pp. 105-113.
- [8] K. Pokovic, T. Schmid, N. Kuster, Robust setup for precise calibration of E-field probes in tissue simulating liquids at mobile communications frequencies, ICECOM97, Oct. 1997, pp. 1 -124.
- [9] K. Pokovic, T. Schmid, and N. Kuster, E-field Probe with improved isotropy in brain simulating liquids, Proceedings of the ELMAR, Zadar, Croatia, June 23-25, 1996, pp. 172-175.
- [10] Schmid & Partner Engineering AG, Application Note: Data Storage and Evaluation, June 1998, p2.
- [11] V. Hombach, K. Meier, M. Burkhardt, E. Kuhn, N. Kuster, The Dependence of EM Energy Absorption upon Human Modeling at 900 MHz, IEEE Transaction on Microwave Theory and Techniques, vol. 44 no. 10, Oct. 1996, pp. 1865-1873.
- [12] N. Kuster and Q. Balzano, Energy absorption mechanism by biological bodies in the near field of dipole antennas above 300MHz, IEEE Transaction on Vehicular Technology, vol. 41, no. 1, Feb. 1992, pp. 17-23.
- [13] G. Hartsgrrove, A. Kraszewski, A. Surowiec, Simulated Biological Materials for Electromagnetic Radiation Absorption Studies, University of Ottawa, Bioelectromagnetics, Canada: 1987, pp. 29-36.
- [14] Q. Balzano, O. Garay, T. Manning Jr., Electromagnetic Energy Exposure of Simulated Users of Portable Cellular Telephones, IEEE Transactions on Vehicular Technology, vol. 44, no.3, Aug. 1995.
- [15] W. Gander, Computermathematick, Birkhaeuser, Basel, 1992.
- [16] W.H. Press, S.A. Teukolsky, W.T. Vetterling, and B.P. Flannery, Numerical Recipes in C, The Art of Scientific Computing, Second edition, Cambridge University Press, 1992.
- [17] N. Kuster, R. Kastle, T. Schmid, Dosimetric evaluation of mobile communications equipment with known precision, IEEE Transaction on Communications, vol. E80-B, no. 5, May 1997, pp. 645-652.

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- [18] CENELEC CLC/SC111B, European Prestandard (prENV 50166-2), Human Exposure to Electromagnetic Fields High-frequency: 10kHz-300GHz, Jan. 1995.
- [19] Prof. Dr. Niels Kuster, ETH, Eidgenössische Technische Hochschule Zürich, Dosimetric Evaluation of the Cellular Phone.
- [20] IEC 62209-1, Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Part 1: Devices used next to the ear (Frequency range of 300 MHz to 6 GHz), July 2016.
- [21] Innovation, Science, Economic Development Canada RSS-102 Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands) Issue 5, March 2015.
- [22] Health Canada Safety Code 6 Limits of Human Exposure to Radio Frequency Electromagnetic Fields in the Frequency Range from 3 kHz – 300 GHz, 2015
- [23] FCC SAR Test Procedures for 2G-3G Devices, Mobile Hotspot and UMPC Devices KDB Publications 941225, D01-D07
- [24] SAR Measurement Guidance for IEEE 802.11 Transmitters, KDB Publication 248227 D01
- [25] FCC SAR Considerations for Handsets with Multiple Transmitters and Antennas, KDB Publications 648474 D03-D04
- [26] FCC SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers, FCC KDB Publication 616217 D04
- [27] FCC SAR Measurement and Reporting Requirements for 100MHz – 6 GHz, KDB Publications 865664 D01-D02
- [28] FCC General RF Exposure Guidance and SAR Procedures for Dongles, KDB Publication 447498, D01-D02
- [29] Anexo à Resolução No. 533, de 10 de Setembro de 2009.
- [30] IEC 62209-2, Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz), Mar. 2010.

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APPENDIX A: SAR TEST DATA

PCTEST

DUT: BCG-A2476; Type: Watch; Serial: VFMFV42DWC

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 836.6 MHz

Medium: 835 Head; Medium parameters used (interpolated):

$f = 836.6$ MHz; $\sigma = 0.939$ S/m; $\epsilon_r = 40.762$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 08/12/2021; Ambient Temp: 21.4°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN7420; ConvF(9.62, 9.62, 9.62) @ 836.6 MHz; Calibrated: 10/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1213; Calibrated: 10/12/2020

Phantom: Twin-SAM V4.0 SUB use; Type: QD 000 P40 CC; Serial: 81923

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 850, Head SAR, Front side, Mid.ch
Titanium, Metal Links Wrist Band

Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm

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

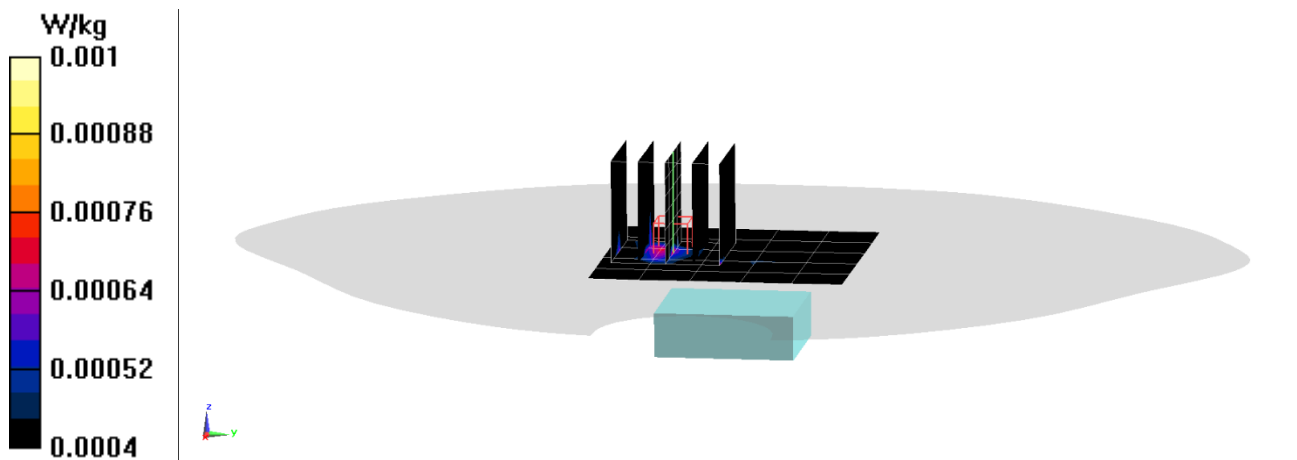
Reference Value = 0.6980 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.00140 W/kg

SAR(1 g) = 0.000301 W/kg

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1: N/A



PCTEST

DUT: BCG-A2476; Type: Watch; Serial: NPCGG762LQ

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA);

Frequency: 1712.4 MHz

Medium: 1750 Head; Medium parameters used (interpolated):

$f = 1712.4$ MHz; $\sigma = 1.352$ S/m; $\epsilon_r = 39.239$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07/20/2021; Ambient Temp: 23.3°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN7640; ConvF(9.49, 9.49, 9.49) @ 1712.4 MHz; Calibrated: 3/3/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1645; Calibrated: 1/11/2021

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 2034

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 1750, Head SAR, Front side, Low.ch
Stainless Steel, Metal Links Wrist Band

Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm

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

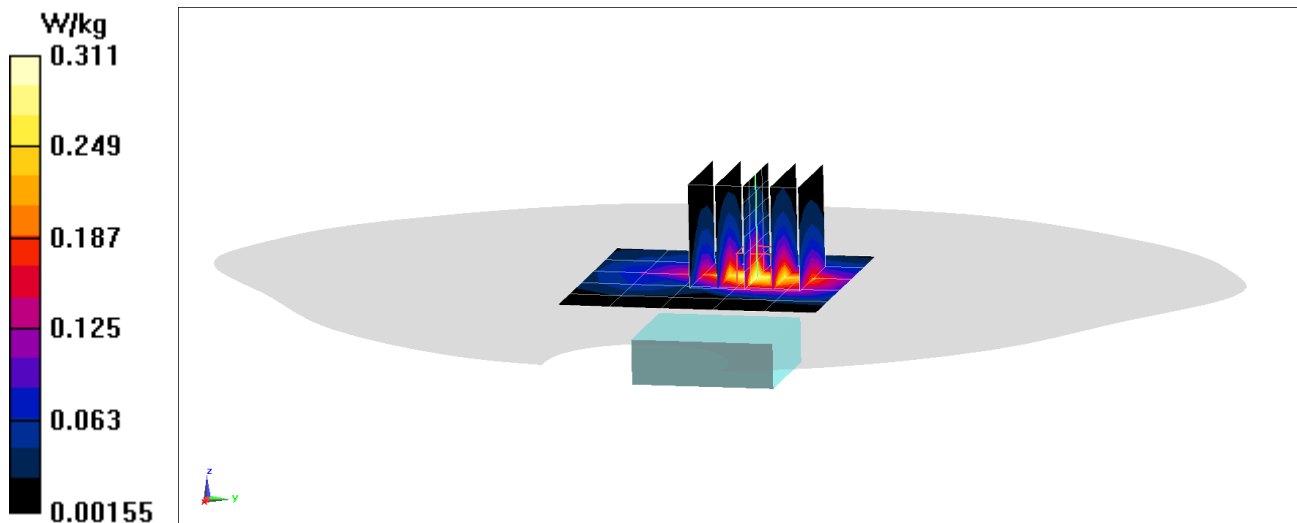
Reference Value = 13.34 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.371 W/kg

SAR(1 g) = 0.223 W/kg

Smallest distance from peaks to all points 3 dB below = 10.2 mm

Ratio of SAR at M2 to SAR at M1 = 63.2%



PCTEST

DUT: BCG-A2476; Type: Watch; Serial: KP2L0G7MGM

Communication System: UID:10011 - CAB, WCDMA; MAIA: Y; Frequency: 1880.0 MHz

Medium: 750 Head; Medium parameters used:

$f = 1880.0$ MHz; $\text{cond} = 1.45$ S/m; $\text{perm} = 39.2$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 1.0 cm

Test Date: 07/21/2021; Ambient Temp: 23.2°C; Tissue Temp: 22.9°C

Probe: EX3DV4 - SN7639; ConvF:(8.86,8.86,8.86); Calibrated: 2021-03-03

Sensor-Surface: 1.4mm (VMS + 6p)

Electronics: DAE4 Sn1646; Calibrated: 2021-01-11

Phantom: Twin-SAM V8.0; Serial: 2029

Measurement SW: cDASY6 Module SAR V6.14.0.959

Mode: UMTS 1900, Head SAR. Front side, Mid. Ch
Stainless Steel, Metal Loop Wrist Band

Area Scan (90.0 x 90.0): Measurement grid: $dx=15.0$ mm, $dy=15.0$ mm

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: $dx=6.0$ mm, $dy=6.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

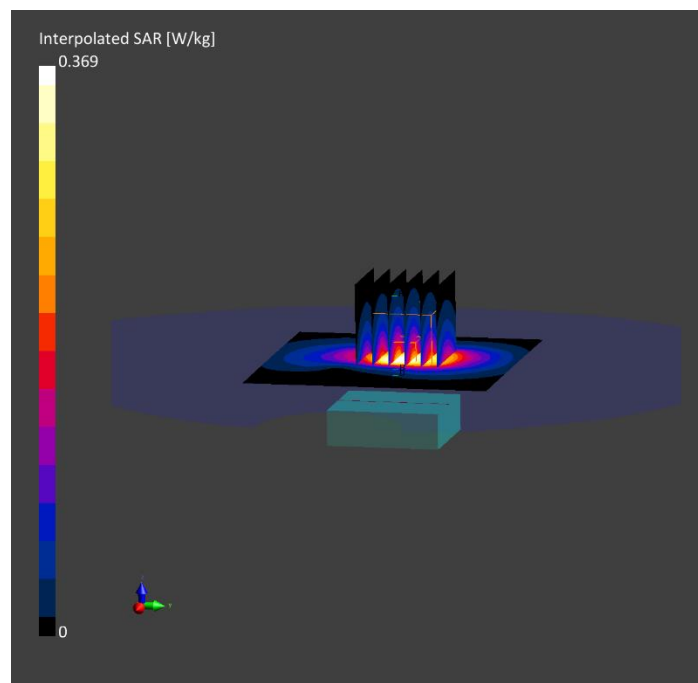
Reference Value = 0.42 W/kg; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.369 W/kg

SAR(1 g) = 0.358 W/kg

Smallest distance from peaks to all points 3 dB below is 10.8 mm

Ratio of SAR at M2 to SAR at M1 = 85.2 %



PCTEST

DUT: BCG-A2476; Type: Watch; Serial: LQYHX9Q3LX

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);

Frequency: 819 MHz

Medium: 835 Head; Medium parameters used (interpolated):

$f = 819 \text{ MHz}$; $\sigma = 0.939 \text{ S/m}$; $\epsilon_r = 41.203$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/27/2021; Ambient Temp: 22.2°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7427; ConvF(9.8, 9.8, 9.8) @ 819 MHz; Calibrated: 2/17/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1403; Calibrated: 2/11/2021

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 26 (Cell.), Head SAR, Front side, Low.ch,
10 MHz Bandwidth, QPSK, 1 RB, 25 RB Offset
Aluminum, Metal Links Wrist Band**

Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm

Zoom Scan (5x7x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

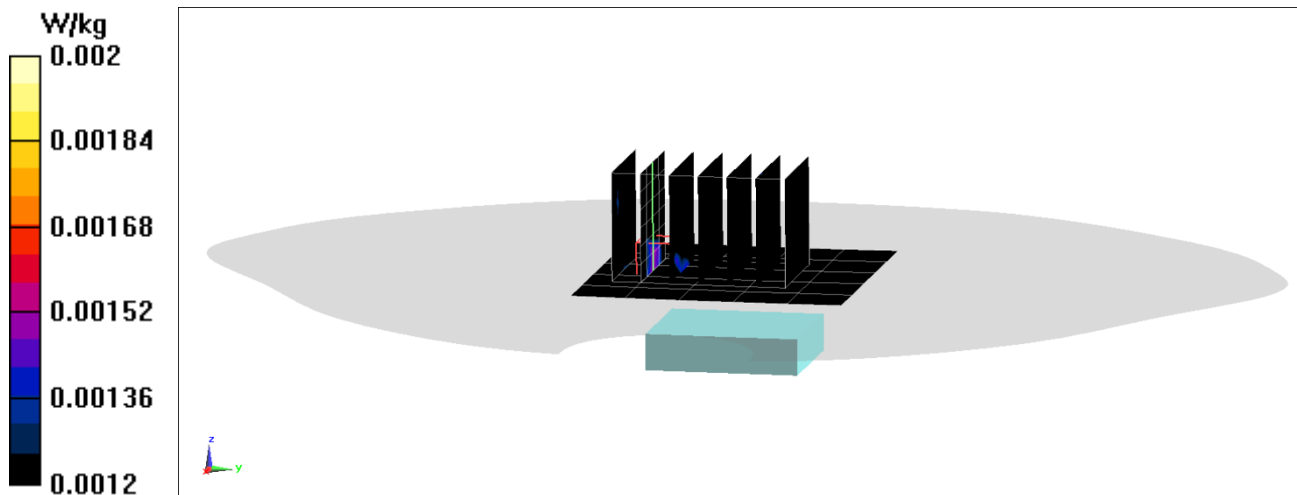
Reference Value = 1.030 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.00166 W/kg

SAR(1 g) = 0.00143 W/kg

Smallest distance from peaks to all points 3 dB below: N/A

Ratio of SAR at M2 to SAR at M1 = 99.8%



PCTEST

DUT: BCG-A2476; Type: Watch; Serial: QCDWW5LXNW

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);

Frequency: 836.5 MHz

Medium: 835 Head; Medium parameters used (interpolated):

$f = 836.5$ MHz; $\sigma = 0.945$ S/m; $\epsilon_r = 41.156$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/27/2021; Ambient Temp: 22.2°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7427; ConvF(9.8, 9.8, 9.8) @ 836.5 MHz; Calibrated: 2/17/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1403; Calibrated: 2/11/2021

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 5 (Cell.), Head SAR, Front side, Mid.ch,
10 MHz Bandwidth, QPSK, 1 RB, 25 RB Offset
Aluminum, Sport Wrist Band**

Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm

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

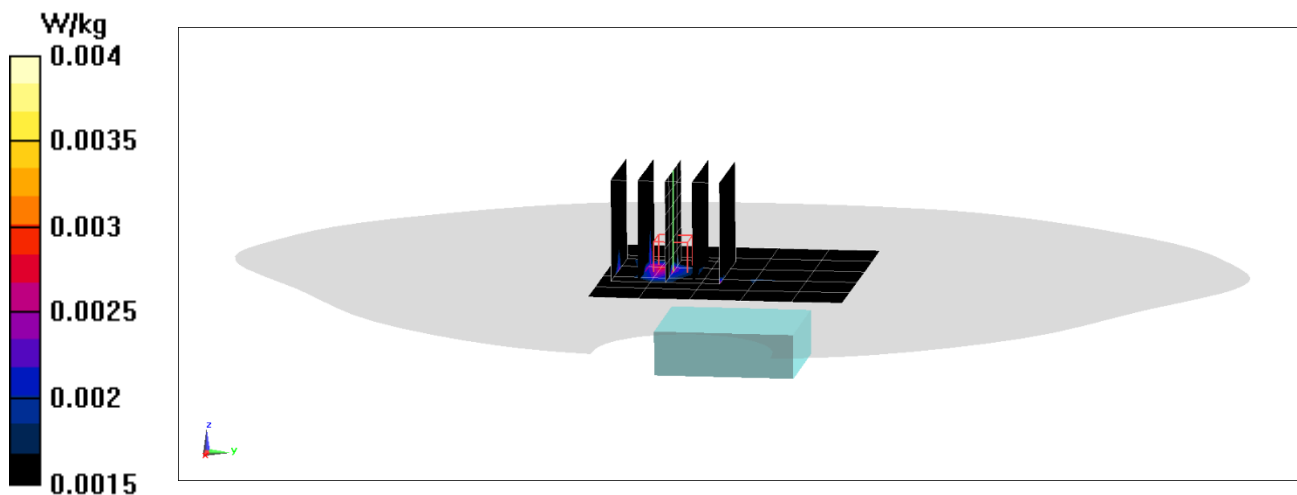
Reference Value = 1.852 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.00937 W/kg

SAR(1 g) = 0.0032 W/kg

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 51.9%



PCTEST

DUT: BCG-A2476; Type: Watch; Serial: R412440X64

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)

Frequency: 1745 MHz

Medium: 1750 Head; Medium parameters used:

$f = 1745$ MHz; $\sigma = 1.375$ S/m; $\epsilon_r = 39.656$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/22/2021; Ambient Temp: 22.5°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN3949; ConvF(8.83, 8.83, 8.83) @ 1745 MHz; Calibrated: 8/19/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1408; Calibrated: 8/13/2020

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 66 (AWS), Head SAR, Front side, Mid.ch,
20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset
Titanium, Metal Loop Wrist Band**

Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm

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

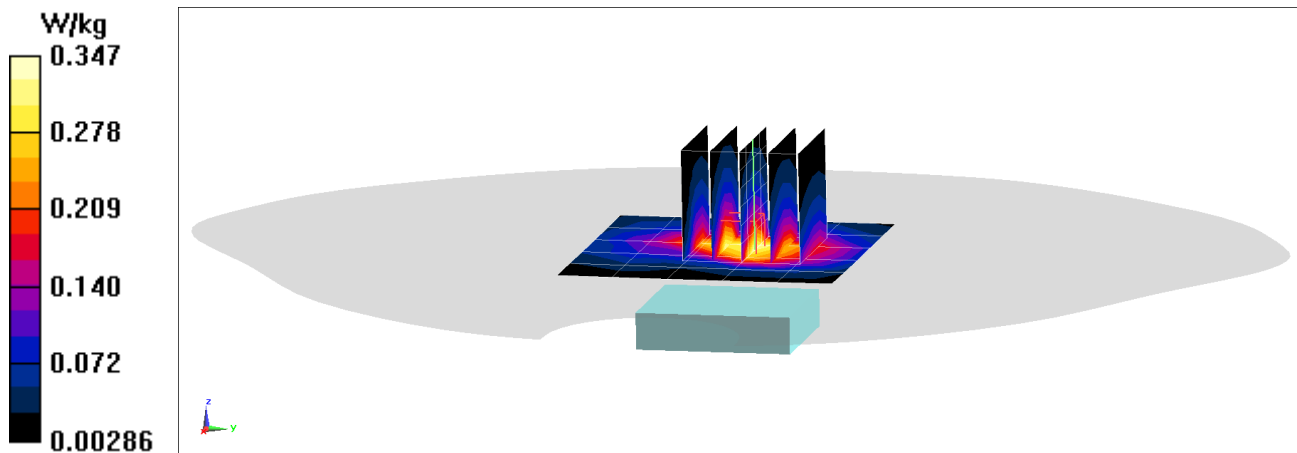
Reference Value = 14.45 V/m; Power Drift = -0.21 dB

Peak SAR (extrapolated) = 0.404 W/kg

SAR(1 g) = 0.260 W/kg

Smallest distance from peaks to all points 3 dB below = 10.2 mm

Ratio of SAR at M2 to SAR at M1 = 66%



PCTEST

DUT: BCG-A2476; Type: Watch; Serial: J5R4HK2CF0

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)

Frequency: 1860 MHz

Medium: 1900 Head; Medium parameters used:

$f = 1860$ MHz; $\sigma = 1.415$ S/m; $\epsilon_r = 38.471$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/20/2021; Ambient Temp: 22.9°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7427; ConvF(8.25, 8.25, 8.25) @ 1860 MHz; Calibrated: 2/17/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1403; Calibrated: 2/11/2021

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 25 (PCS), Head SAR, Front side, Low.ch,
20 MHz Bandwidth, QPSK, 1 RB, 99 RB Offset
Stainless Steel, Metal Loop Wrist Band**

Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm

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

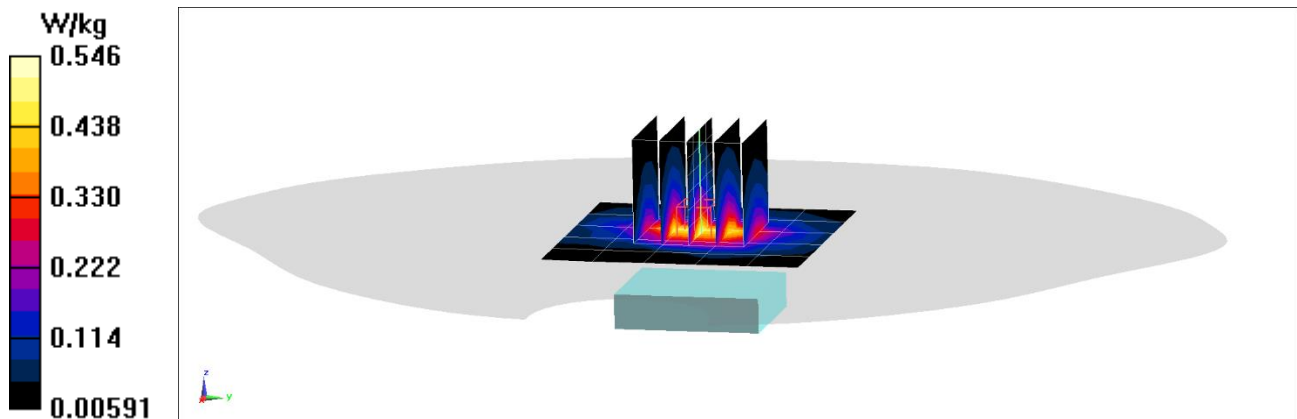
Reference Value = 17.21 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.636 W/kg

SAR(1 g) = 0.383 W/kg

Smallest distance from peaks to all points 3 dB below = 11.2 mm

Ratio of SAR at M2 to SAR at M1 = 63.3%



PCTEST

DUT: BCG-A2476; Type: Watch; Serial: W4CVH32F97

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)

Frequency: 2560 MHz

Medium: 2450 Head; Medium parameters used:

$f = 2560$ MHz; $\sigma = 1.87$ S/m; $\epsilon_r = 38.653$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 08/12/2021; Ambient Temp: 22.5°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7558; ConvF(7.43, 7.43, 7.43) @ 2560 MHz; Calibrated: 10/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1364; Calibrated: 10/12/2020

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1596

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 7, Head SAR, Front side, High.ch,
20 MHz Bandwidth, QPSK, 1 RB, 99 RB Offset
Aluminum, Sport Wrist Band**

Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm

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

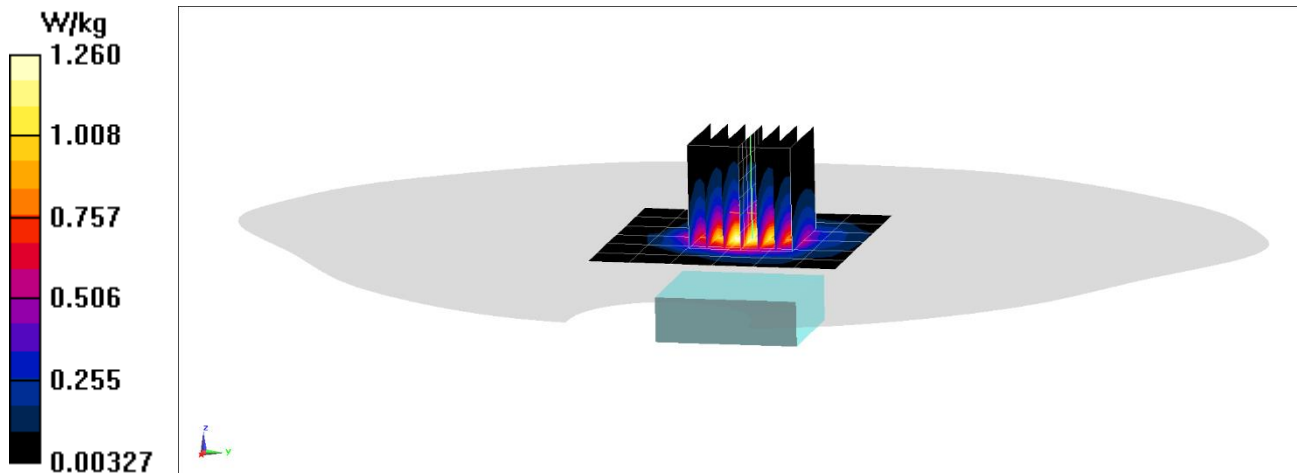
Reference Value = 22.51 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.51 W/kg

SAR(1 g) = 0.832 W/kg

Smallest distance from peaks to all points 3 dB below: 12.4 mm

Ratio of SAR at M2 to SAR at M1 = 55.4%



PCTEST

DUT: BCG-A2476; Type: Watch; Serial: TL4J3YJV4V

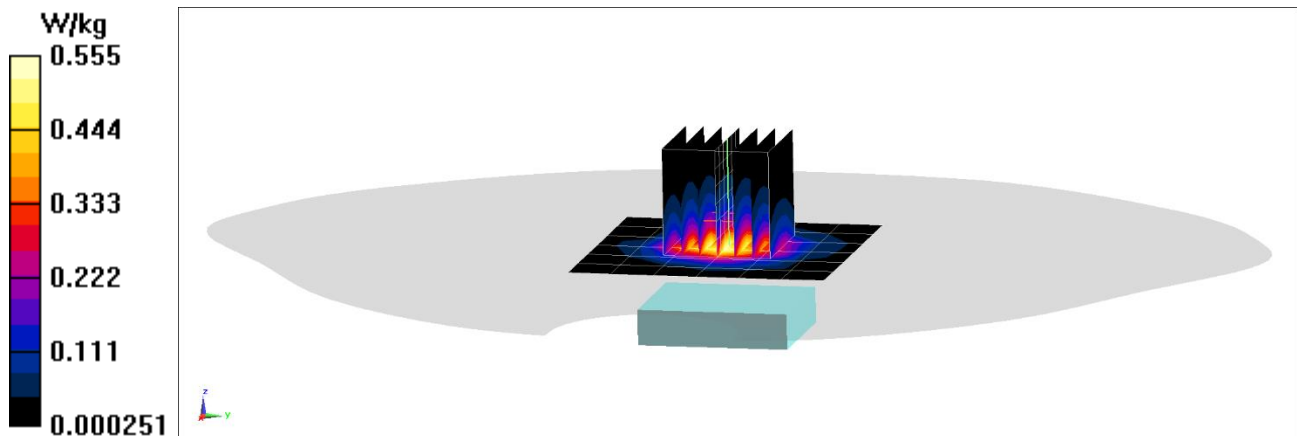
Communication System: UID 10435 - AAF, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL
Subframe=2,3,4,7,8,9); Frequency: 2680 MHz
Medium: 2450 Head; Medium parameters used:
 $f = 2680$ MHz; $\sigma = 2.038$ S/m; $\epsilon_r = 38.661$; $\rho = 1000$ kg/m³
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/16/2021; Ambient Temp: 22.3°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN3949; ConvF(7.59, 7.59, 7.59) @ 2680 MHz; Calibrated: 8/19/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1408; Calibrated: 8/13/2020
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 41, Head SAR, Front side, High.ch,
20 MHz Bandwidth, QPSK, 1 RB, 99 RB Offset
Stainless Steel, Sport Wrist Band**

Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.76 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.694 W/kg
SAR(1 g) = 0.353 W/kg
Smallest distance from peaks to all points 3 dB below = 11.2 mm
Ratio of SAR at M2 to SAR at M1 = 50.6%



PCTEST

DUT: BCG-A2476; Type: Watch; Serial: GXJFJWLPX2

Communication System: UID 10415 - AAA, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle);

Frequency: 2462 MHz

Medium: 2450 Head; Medium parameters used (interpolated):

$f = 2462$ MHz; $\sigma = 1.847$ S/m; $\epsilon_r = 37.45$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07/22/2021; Ambient Temp: 23.1°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7640; ConvF(8.76, 8.76, 8.76) @ 2462 MHz; Calibrated: 3/3/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1645; Calibrated: 1/11/2021

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 2034

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: IEEE 802.11b, 22 MHz Bandwidth, Head SAR, Ch 11,
1 Mbps, Front Side, Aluminum, Sport Wrist Band**

Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm

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

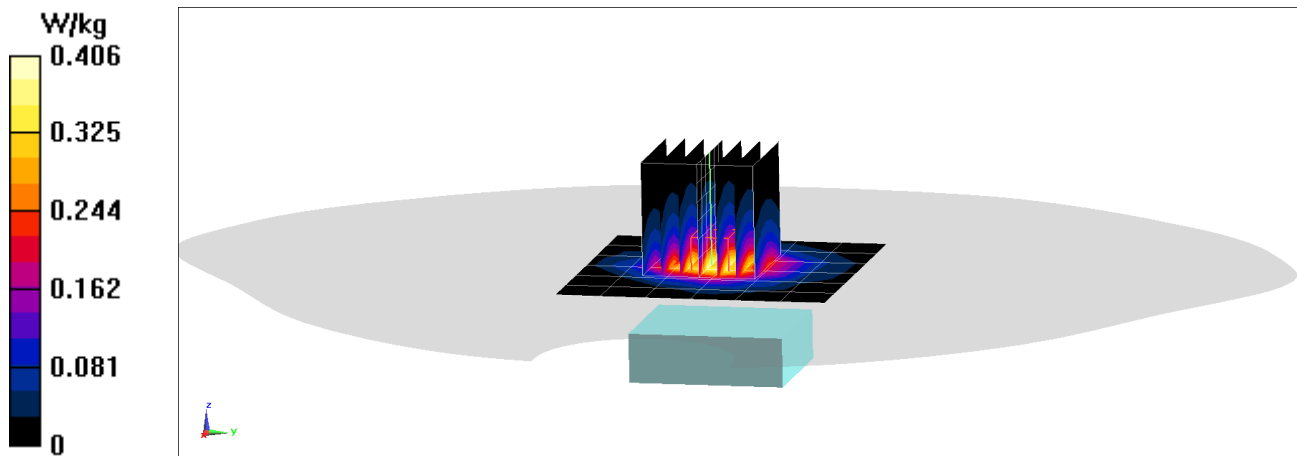
Reference Value = 12.62 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.490 W/kg

SAR(1 g) = 0.266 W/kg

Smallest distance from peaks to all points 3 dB below = 12 mm

Ratio of SAR at M2 to SAR at M1 = 54.8%



PCTEST

DUT: BCG-A2476; Type: Watch; Serial: G9M7R64FPP

Communication System: UID 10417 - AAC, IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle);

Frequency: 5745 MHz

Medium: 5200-5800 Head; Medium parameters used:

$f = 5745$ MHz; $\sigma = 5.16$ S/m; $\epsilon_r = 35.032$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07/23/2021; Ambient Temp: 21.1°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7558; ConvF(4.88, 4.88, 4.88) @ 5745 MHz; Calibrated: 10/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1364; Calibrated: 10/12/2020

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1596

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: IEEE 802.11a, UNII-3, 20 MHz Bandwidth, Head SAR, Ch 149
6 Mbps, Front Side, Stainless Steel, Metal Loop Wrist Band**

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

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

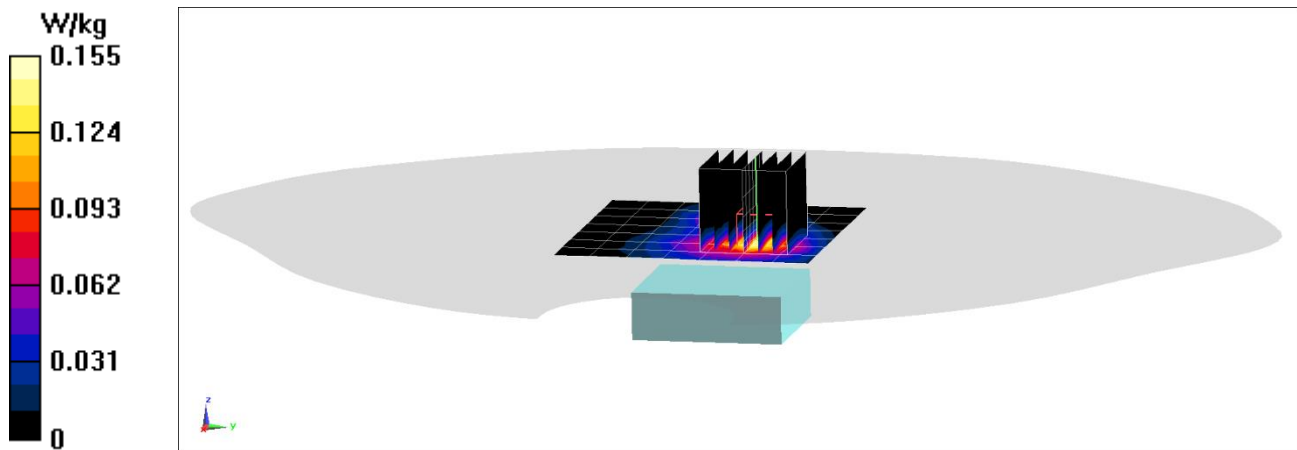
Reference Value = 3.412 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.256 W/kg

SAR(1 g) = 0.058 W/kg

Smallest distance from peaks to all points 3 dB below = 8.9 mm

Ratio of SAR at M2 to SAR at M1 = 56.5%



PCTEST

DUT:BCG-A2476; Type: Watch; Serial: JKV6G7NLW7

Communication System: UID 10032 - CAA, IEEE 802.15.1 Bluetooth (GFSK, DH5);

Frequency: 2441 MHz

Medium: 2450 Head; Medium parameters used (interpolated):

$f = 2441$ MHz; $\sigma = 1.818$ S/m; $\epsilon_r = 38.652$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07/26/2021; Ambient Temp: 22.9°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN7640; ConvF(8.76, 8.76, 8.76) @ 2441 MHz; Calibrated: 3/3/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1645; Calibrated: 1/11/2021

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 2034

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: Bluetooth, Head SAR, Ch 39, 1 Mbps, Front Side
Aluminum, Sport Wrist Band**

Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm

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

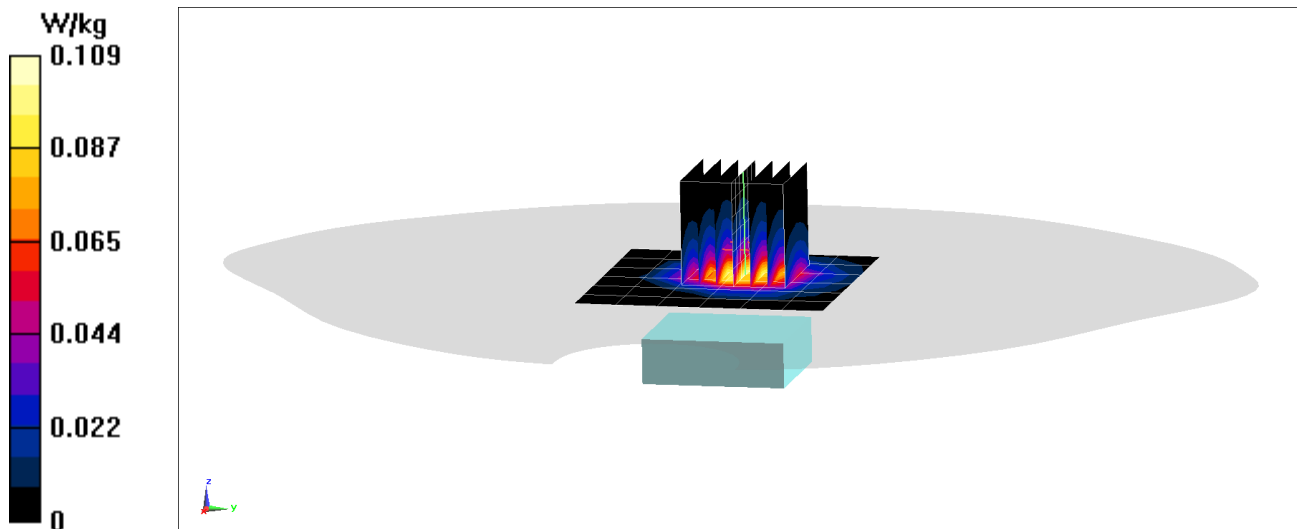
Reference Value = 6.619 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.131 W/kg

SAR(1 g) = 0.071 W/kg

Smallest distance from peaks to all points 3 dB below = 11.7 mm

Ratio of SAR at M2 to SAR at M1 = 55%



PCTEST

DUT:BCG-A2476; Type: Watch; Serial: G66LGQYVJT

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 836.6 MHz

Medium: 835 Body; Medium parameters used (interpolated):

$f = 836.6$ MHz; $\sigma = 0.974$ S/m; $\epsilon_r = 53.882$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 08/04/2021; Ambient Temp: 23.5°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7640; ConvF(10.71, 10.71, 10.71) @ 836.6 MHz; Calibrated: 3/3/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1645; Calibrated: 1/11/2021

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 2034

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 850, Extremity SAR, Back side, Mid.ch
Aluminum, Metal Links Wrist Band

Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm

Zoom Scan (13x13x8)/Cube 0: Measurement grid: dx=2.7mm, dy=2.7mm, dz=1.4mm; Graded Ratio: 1.4

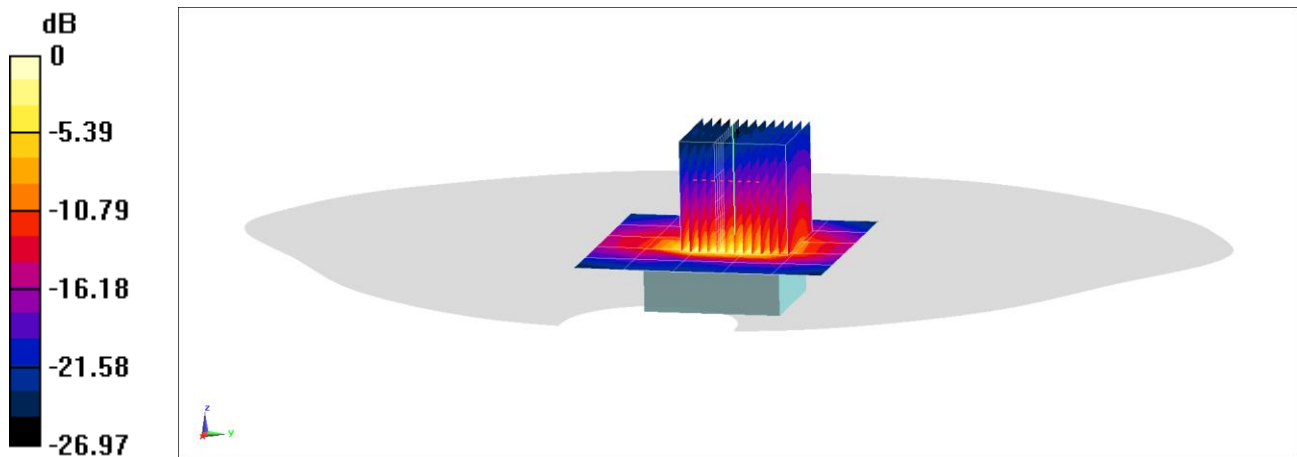
Reference Value = 20.47 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 5.21 W/kg

SAR(10 g) = 0.160 W/kg

Smallest distance from peaks to all points 3 dB below = 2.9 mm

Ratio of SAR at M2 to SAR at M1 = 42%



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

PCTEST

DUT: BCG-A2476; Type: Watch; Serial: NPCGG762LQ

Communication System: UID:10011 - CAB, WCDMA; MAIA: Y; Frequency: 1712.4 MHz

Medium: 1750 Body; Medium parameters used:

$f = 1712.4$ MHz; $\text{cond} = 1.44$ S/m; $\text{perm} = 51.9$; $\text{density} = 1000$ kg/ m³

Phantom Section: Flat; Space: 0.0 cm

Test Date: 08/03/2021; Ambient Temp: 20.5°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7639; ConvF:(9.3,9.3,9.3); Calibrated: 2021-03-03

Sensor-Surface: 1.4mm (VMS + 6p)

Electronics: DAE4 Sn1646; Calibrated: 2021-01-11

Phantom: Twin-SAM V8.0; Serial: 2029

Measurement SW: cDASY6 Module SAR V6.14.0.959

**Mode: UMTS 1750, Extremity SAR. Back side, Low. Ch
Stainless Steel, Metal Loop Wrist Band**

Area Scan (90.0 x 90.0): Measurement grid: $dx=15.0$ mm, $dy=15.0$ mm

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: $dx=6.0$ mm, $dy=6.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

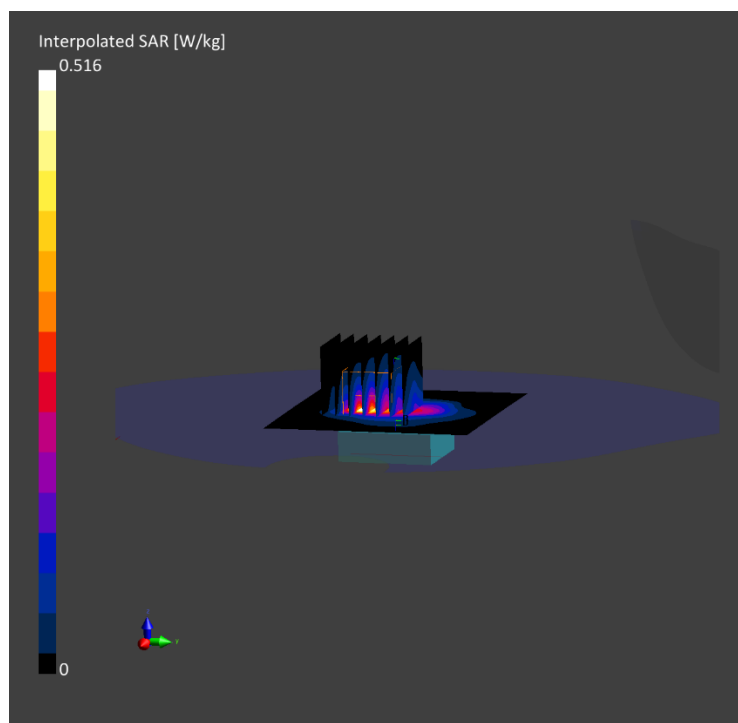
Reference Value = 0.36 W/kg; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.516 W/kg

SAR(10 g) = 0.124 W/kg

Smallest distance from peaks to all points 3 dB below is 7.0 mm

Ratio of SAR at M2 to SAR at M1 = 80.3 %



PCTEST

DUT: BCG-A2476; Type: Watch; Serial: NPCGG762LQ

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 1880 MHz

Medium: 1900 Body; Medium parameters used:

$f = 1880 \text{ MHz}$; $\sigma = 1.56 \text{ S/m}$; $\epsilon_r = 52.01$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 08/05/2021; Ambient Temp: 22.7°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7639; ConvF(8.91, 8.91, 8.91) @ 1880 MHz; Calibrated: 3/3/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1646; Calibrated: 1/11/2021

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 2129

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 1900, Extremity SAR, Back side, Mid.ch
Stainless Steel, Metal Loop Wrist Band

Area Scan (6x6x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (9x12x8)/Cube 0: Measurement grid: $dx=3.9\text{mm}$, $dy=3.9\text{mm}$, $dz=1.4\text{mm}$; Graded Ratio: 1.4

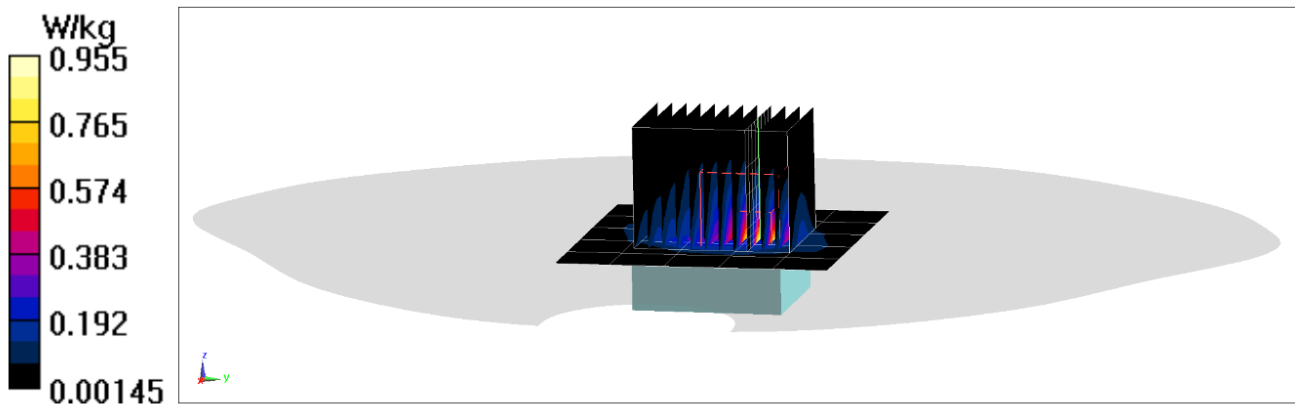
Reference Value = 15.04 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.23 W/kg

SAR(10 g) = 0.208 W/kg

Smallest distance from peaks to all points 3 dB below = 6.7 mm

Ratio of SAR at M2 to SAR at M1 = 80%



PCTEST

DUT: BCG-A2476; Type: Watch; Serial: P442RF7J2Y

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)

Frequency: 819 MHz

Medium: 835 Body; Medium parameters used (interpolated):

$f = 819 \text{ MHz}$; $\sigma = 0.985 \text{ S/m}$; $\epsilon_r = 54.961$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 06/27/2021; Ambient Temp: 21.0°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN3949; ConvF(10.26, 10.26, 10.26) @ 819 MHz; Calibrated: 8/19/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1408; Calibrated: 8/13/2020

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 26 (Cell.), Extremity SAR, Back side, Low.ch,
10 MHz Bandwidth, QPSK, 1 RB, 25 RB Offset
Aluminum, Metal Links Wrist Band**

Area Scan (6x6x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

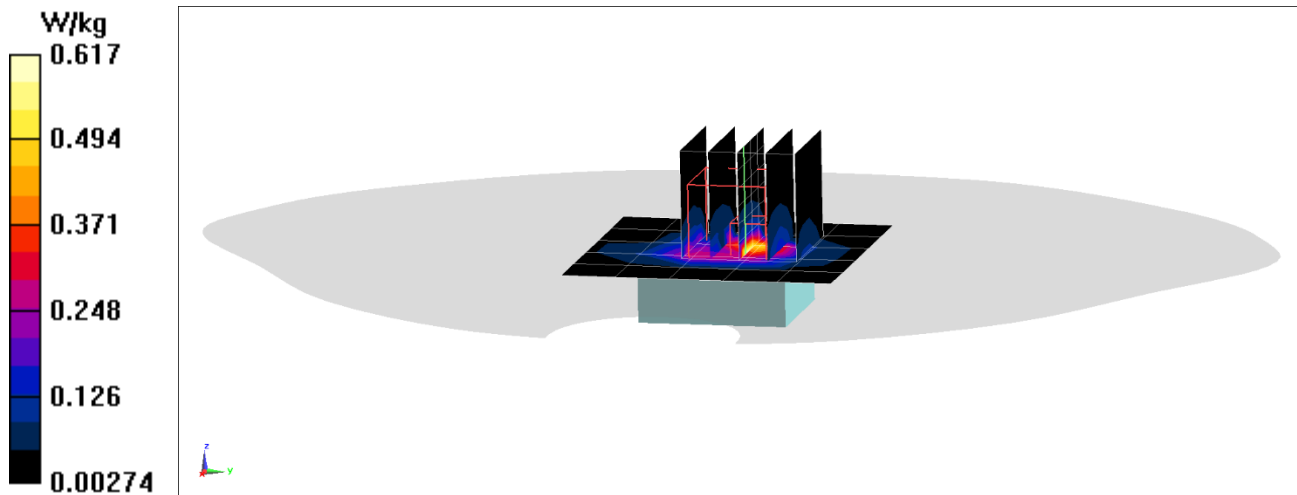
Reference Value = 14.73 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.847 W/kg

SAR(10 g) = 0.092 W/kg

Smallest distance from peaks to all points 3 dB below: N/A

Ratio of SAR at M2 to SAR at M1: N/A



PCTEST

DUT: BCG-A2476; Type: Watch; Serial: G06WQL944T

Communication System: UID:10175-CAG, LTE-FDD; MAIA: Y; Frequency: 836.5 MHz

Medium: 835 Body; Medium parameters used:

$f = 836.5$ MHz; $\text{cond} = 0.95$ S/m; $\text{perm} = 54.0$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 08/18/2021; Ambient Temp: 22.10°C; Tissue Temp: 21.90°C

Probe: EX3DV4 - SN7532; ConvF:(10.0,10.0,10.0); Calibrated: 2021-04-19

Sensor-Surface: 1.4mm (VMS + 6p)

Electronics: DAE4 Sn501; Calibrated: 2021-04-13

Phantom: Twin-SAM V4.0; Serial: 1275

Measurement SW: cDASY6 Module SAR V6.14.0.959

**Mode: LTE Band 5, Extremity SAR, Back Side, 10 MHz Bandwidth, Mid.ch,
QPSK, 1 RB, 25 RB Offset, Titanium, Metal Links Wrist Band**

Area Scan (90.0 x 90.0): Measurement grid: $dx=15.0$ mm, $dy=15.0$ mm

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: $dx=4.4$ mm, $dy=4.4$ mm, $dz=1.4$ mm; Graded Ratio: 1.4

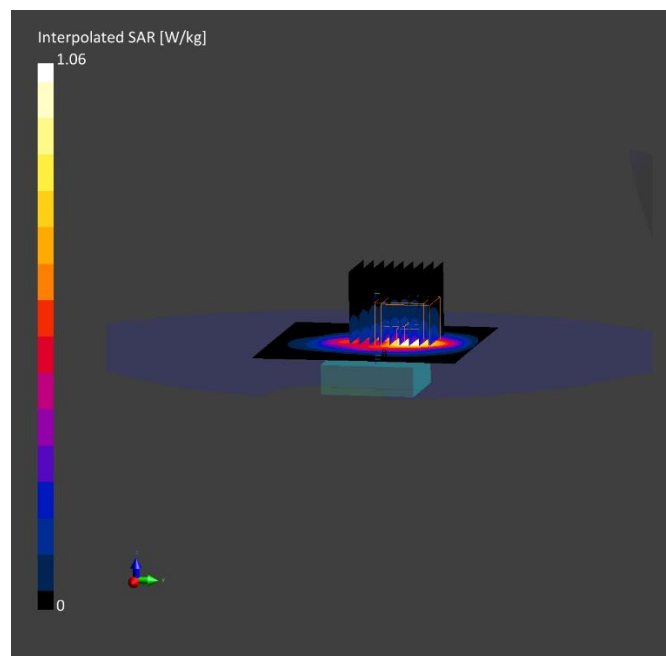
Reference Value = 0.33 W/kg; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 1.06 W/kg

SAR(10 g) = 0.183 W/kg

Smallest distance from peaks to all points 3 dB below is 5.6 mm

Ratio of SAR at M2 to SAR at M1 = 67.7 %



PCTEST

DUT: BCG-A2476; Type: Watch; Serial: JKV6G7NLW7

Communication System: UID:10169 - CAE, LTE-FDD; MAIA: Y; Frequency: 1745.0 MHz

Medium: 1750 Body; Medium parameters used:

$f = 1745.0$ MHz; $\text{cond} = 1.48$ S/m; $\text{perm} = 54.1$; $\text{density} = 1000$ kg/ m³

Phantom Section: Flat; Space: 0.0 cm

Test Date: 06/22/2021; Ambient Temp: 23.7°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7639; ConvF:(9.29,9.29,9.29); Calibrated: 2021-03-03

Sensor-Surface: 1.4mm (VMS + 6p)

Electronics: DAE4 Sn1646; Calibrated: 2021-01-11

Phantom: Twin-SAM V8.0; Serial: 2029

Measurement SW: cDASY6 Module SAR V6.14.0.959

**Mode: LTE Band 66, Extremity SAR, Back Side, 20 MHz Bandwidth, Mid.ch,
QPSK, 1 RB, 0 RB Offset, Aluminum, Metal Links Wrist Band**

Area Scan (90.0 x 90.0): Measurement grid: $dx=15.0$ mm, $dy=15.0$ mm

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: $dx=6.0$ mm, $dy=6.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

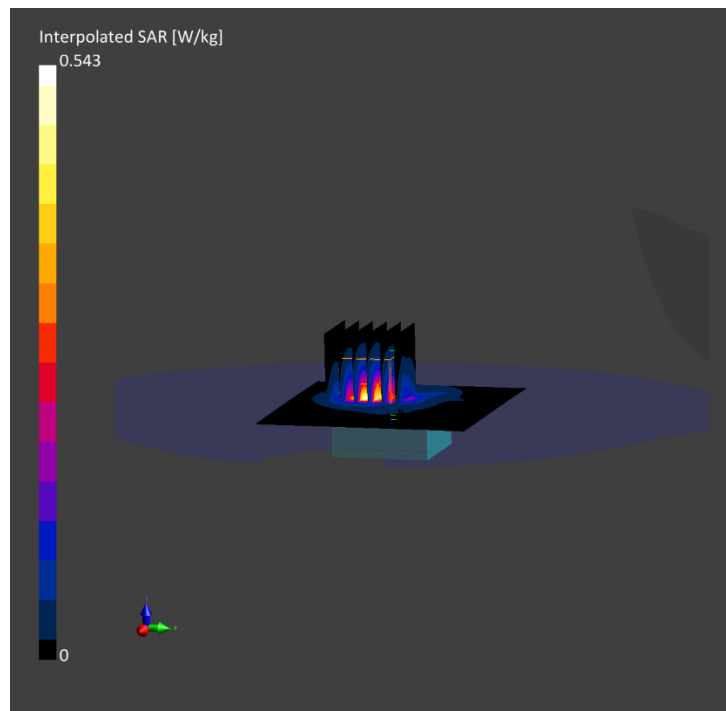
Reference Value = 0.58 W/kg; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.543 W/kg

SAR(10 g) = 0.171 W/kg

Smallest distance from peaks to all points 3 dB below is 7.0 mm

Ratio of SAR at M2 to SAR at M1 = 80.6 %



PCTEST

DUT: BCG-A2476; Type: Watch; Serial: JKV6G7NLW7

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)

Frequency: 1860 MHz

Medium: 1900 Body; Medium parameters used:

$f = 1860$ MHz; $\sigma = 1.508$ S/m; $\epsilon_r = 52.035$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 08/09/2021; Ambient Temp: 22.9°C; Tissue Temp: 21.2°C

Probe: EX3DV4 - SN7640; ConvF(9.06, 9.06, 9.06) @ 1860 MHz; Calibrated: 3/3/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1645; Calibrated: 1/11/2021

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 2034

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 25 (PCS), Extremity SAR, Back side, Low.ch, 20 MHz Bandwidth, QPSK, 1 RB, 99 RB Offset, Aluminum, Metal Loop Wrist Band

Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm

Zoom Scan (9x9x8)/Cube 0: Measurement grid: dx=3.9mm, dy=3.9mm, dz=1.4mm; Graded Ratio: 1.4

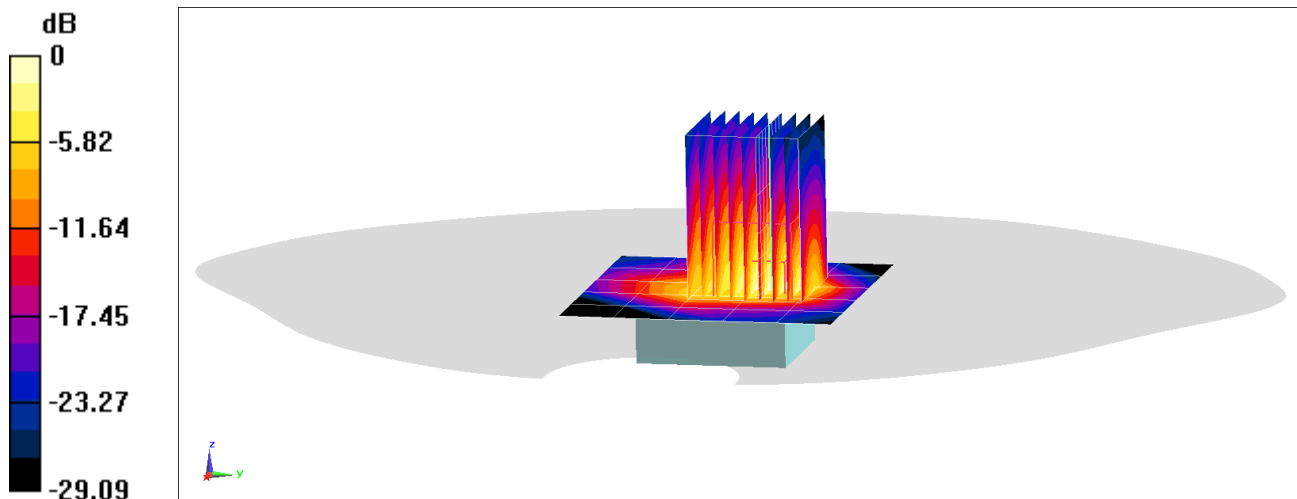
Reference Value = 19.01 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.26 W/kg

SAR(10 g) = 0.254 W/kg

Smallest distance from peaks to all points 3 dB below: 7 mm

Ratio of SAR at M2 to SAR at M1 = 81.9%



0 dB = 0.994 W/kg = -0.03 dBW/kg

PCTEST

DUT: BCG-A2476; Type: Watch; Serial: QCDWW5LXNW

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)

Frequency: 2560 MHz

Medium: 2450 Body; Medium parameters used:

$f = 2560$ MHz; $\sigma = 2.064$ S/m; $\epsilon_r = 50.072$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 06/18/2021; Ambient Temp: 21.8°C; Tissue Temp: 19.2°C

Probe: EX3DV4 - SN7532; ConvF(7.28, 7.28, 7.28) @ 2560 MHz; Calibrated: 4/19/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn501; Calibrated: 4/13/2021

Phantom: Twin-SAM V5.0 Left; Type: QD 000 P40 CD; Serial: 1793

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 7, Extremity SAR, Back side, High.ch,
20 MHz Bandwidth, QPSK, 1 RB, 99 RB Offset
Aluminum, Metal Loop Wrist Band**

Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm

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

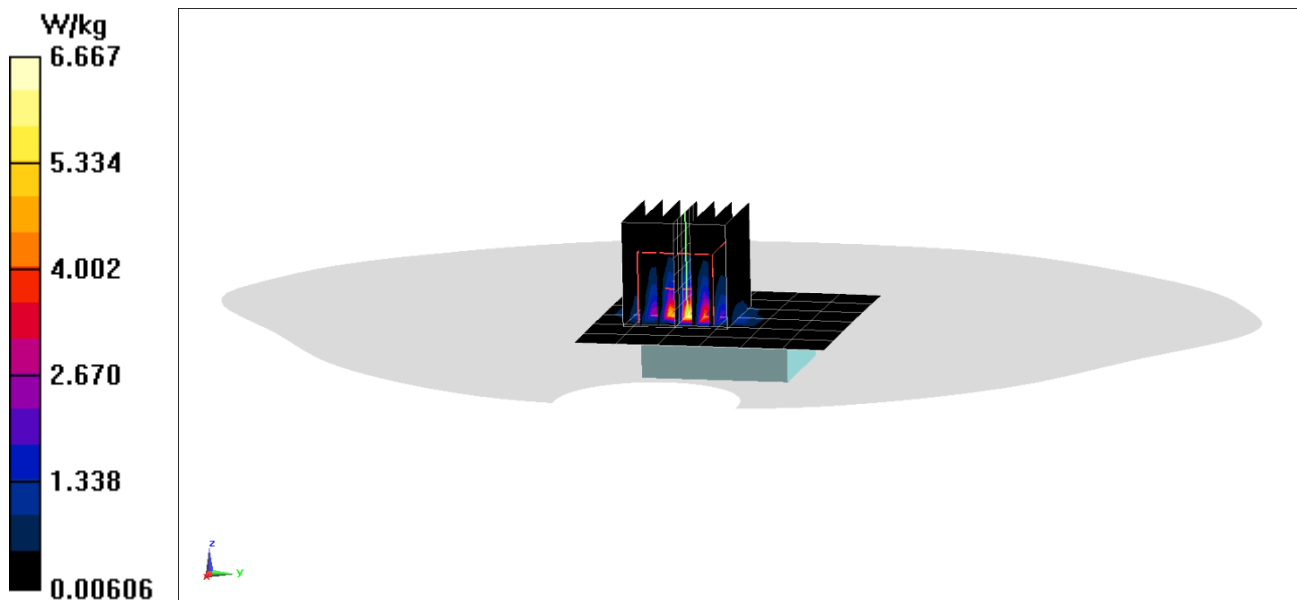
Reference Value = 48.17 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 8.68 W/kg

SAR(10 g) = 1.16 W/kg

Smallest distance from peaks to all points 3 dB below = 6 mm

Ratio of SAR at M2 to SAR at M1 = 48.5%



PCTEST

DUT: BCG-A2476; Type: Watch; Serial: LQYHX9Q3LX

Communication System: UID:10435 - AAF, LTE-TDD; MAIA: Y; Frequency: 2680.0 MHz

Medium: 2450 Body; Medium parameters used:

f = 2680.0 MHz; cond = 2.19 S/m; perm = 50.1; density = 1000 kg/m³

Phantom Section: Flat; Space: 0.0 mm

Test Date: 06/28/2021; Ambient Temp: 21.1°C; Tissue Temp: 20.7°C

Probe: EX3DV4 - SN7532; ConvF:(7.28,7.28,7.28); Calibrated: 2021-04-19

Sensor-Surface: 1.4mm (VMS + 6p)

Electronics: DAE4 Sn501; Calibrated: 2021-04-13

Phantom: Left; Serial: 1275

Measurement SW: cDASY6 Module SAR V6.14.0.959

**Mode: LTE Band 41, Extremity SAR, Back Side, High.ch,
20 MHz Bandwidth, QPSK, 1 RB, 99 RB Offset
Aluminum, Metal Loop Wrist Band**

Area Scan (80.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: dx=5.0 mm, dy=5.0 mm, dz=1.5 mm; Graded Ratio: 1.5

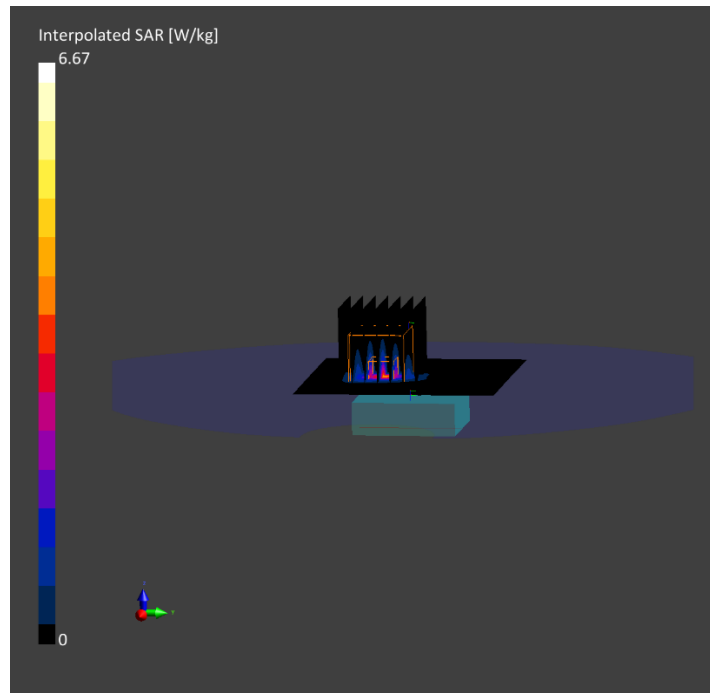
Reference Value = 4.12 W/kg; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 6.67 W/kg

SAR(10 g) = 0.882 W/kg

Smallest distance from peaks to all points 3 dB below is 6.0 mm

Ratio of SAR at M2 to SAR at M1 = 78.8 %



PCTEST

DUT: BCG-A2476; Type: Watch; Serial: WGNXN65J7W

Communication System: UID 10415 - AAA, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle);

Frequency: 2462 MHz

Medium: 2450 Body; Medium parameters used (interpolated):

$f = 2462 \text{ MHz}$; $\sigma = 2.037 \text{ S/m}$; $\epsilon_r = 52.505$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07/18/2021; Ambient Temp: 22.7°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN7558; ConvF(7.64, 7.64, 7.64) @ 2462 MHz; Calibrated: 10/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1364; Calibrated: 10/12/2020

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1596

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: IEEE 802.11b, 22 MHz Bandwidth, Extremity SAR, Ch 11,
1 Mbps, Back Side, Aluminum, Metal Links Wrist Band**

Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm

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

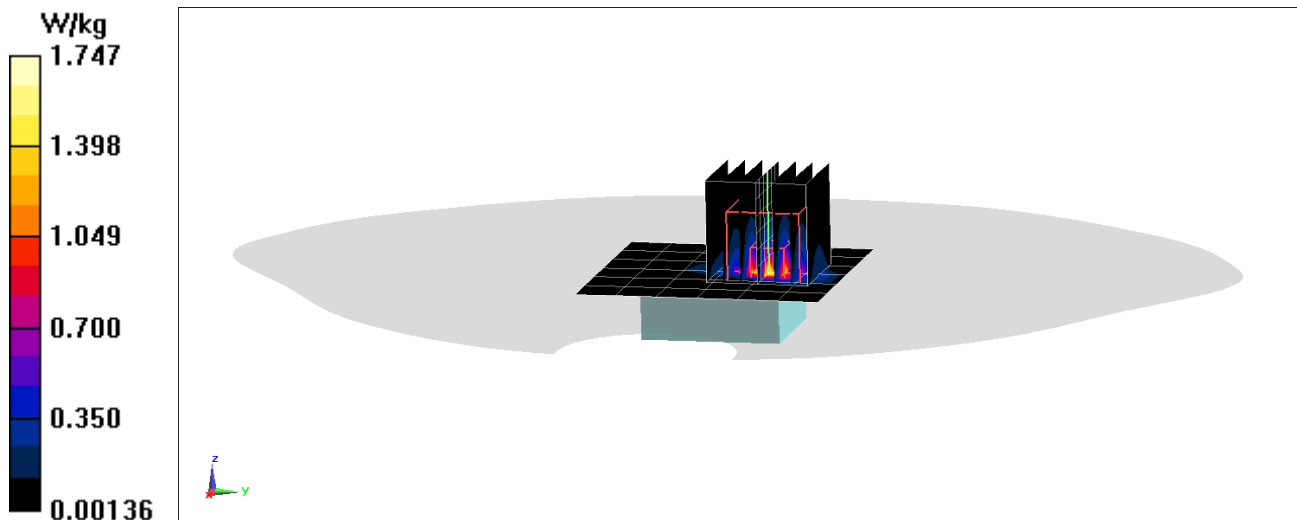
Reference Value = 24.58 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 2.19 W/kg

SAR(10 g) = 0.314 W/kg

Smallest distance from peaks to all points 3 dB below = 6 mm

Ratio of SAR at M2 to SAR at M1 = 50.2%



PCTEST

DUT: BCG-A2476; Type: Watch; Serial: G9M7R64FPP

Communication System: UID 10417 - AAC, IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle);

Frequency: 5745 MHz

Medium: 5200-5800 Body; Medium parameters used:

$f = 5745$ MHz; $\sigma = 6.131$ S/m; $\epsilon_r = 47.331$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07/23/2021; Ambient Temp: 21.5°C; Tissue Temp: 20.4°C

Probe: EX3DV4 - SN7638; ConvF(4.32, 4.32, 4.32) @ 5745 MHz; Calibrated: 3/3/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1644; Calibrated: 1/11/2021

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 2027

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: IEEE 802.11a, UNII-3, 20 MHz Bandwidth, Extremity SAR, Ch 149,
6 Mbps, Back Side, Stainless Steel, Metal Links Wrist Band**

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

Zoom Scan (12x10x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

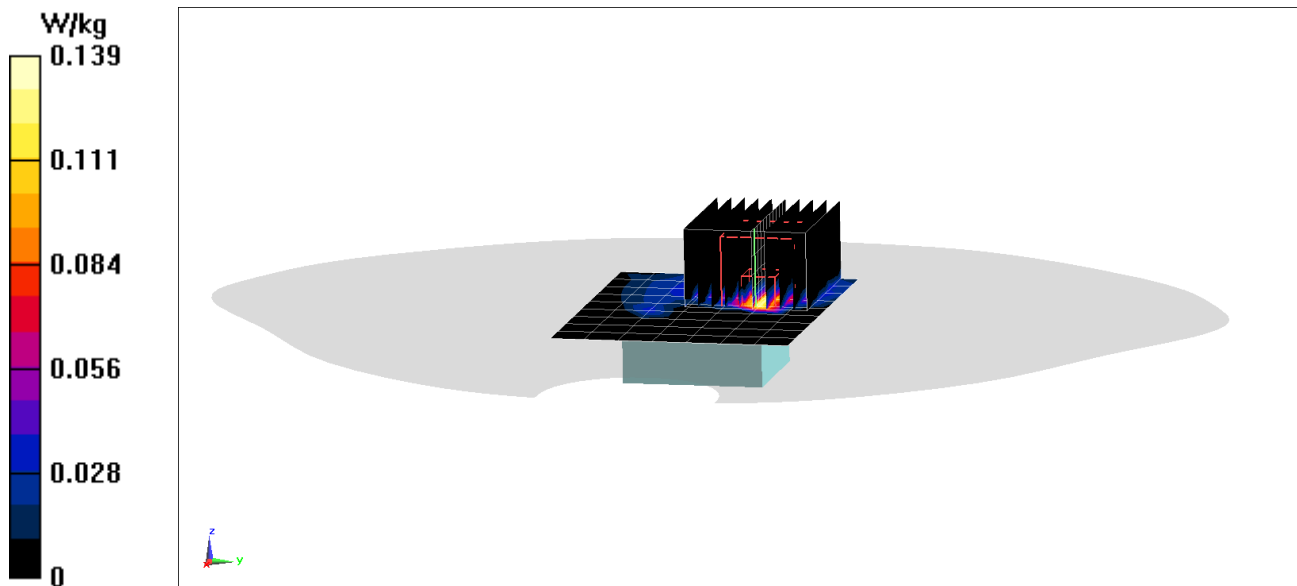
Reference Value = 2.091 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.385 W/kg

SAR(10 g) = 0.013 W/kg

Smallest distance from peaks to all points 3 dB below: N/A

Ratio of SAR at M2 to SAR at M1 = 56.5%



PCTEST

DUT: BCG-A2476; Type: Watch; Serial: P442RF7J2Y

Communication System: UID 10032 - CAA, IEEE 802.15.1 Bluetooth (GFSK, DH5);

Frequency: 2441 MHz

Medium: 2450 Body; Medium parameters used (interpolated):

$f = 2441$ MHz; $\sigma = 2.02$ S/m; $\epsilon_r = 51.061$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07/27/2021; Ambient Temp: 22.7°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN7640; ConvF(8.92, 8.92, 8.92) @ 2441 MHz; Calibrated: 3/3/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1645; Calibrated: 1/11/2021

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 2034

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: Bluetooth, Extremity SAR, Ch 39, 1 Mbps, Back Side
Aluminum, Metal Links Wrist Band**

Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm

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

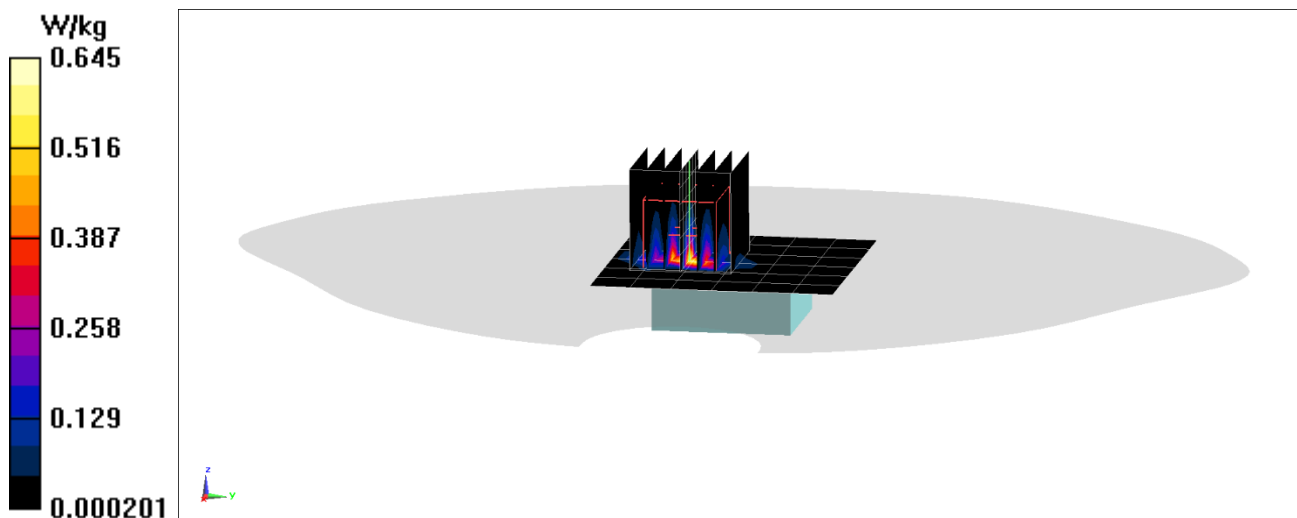
Reference Value = 14.69 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.828 W/kg

SAR(10 g) = 0.109 W/kg

Smallest distance from peaks to all points 3 dB below = 6 mm

Ratio of SAR at M2 to SAR at M1 = 47.8%



APPENDIX B: SYSTEM VERIFICATION

PCTEST

DUT: Dipole 850 MHz; Type: D850V2; Serial: 1010

Communication System: UID 0, CW; Frequency: 850 MHz; Duty Cycle: 1:1

Medium: 835 Head; Medium parameters used:

$f = 850 \text{ MHz}$; $\sigma = 0.95 \text{ S/m}$; $\epsilon_r = 41.124$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 06/27/2021; Ambient Temp: 22.2°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7427; ConvF(9.8, 9.8, 9.8) @ 850 MHz; Calibrated: 2/17/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1403; Calibrated: 2/11/2021

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

850 MHz System Verification at 23.0 dBm (200 mW)

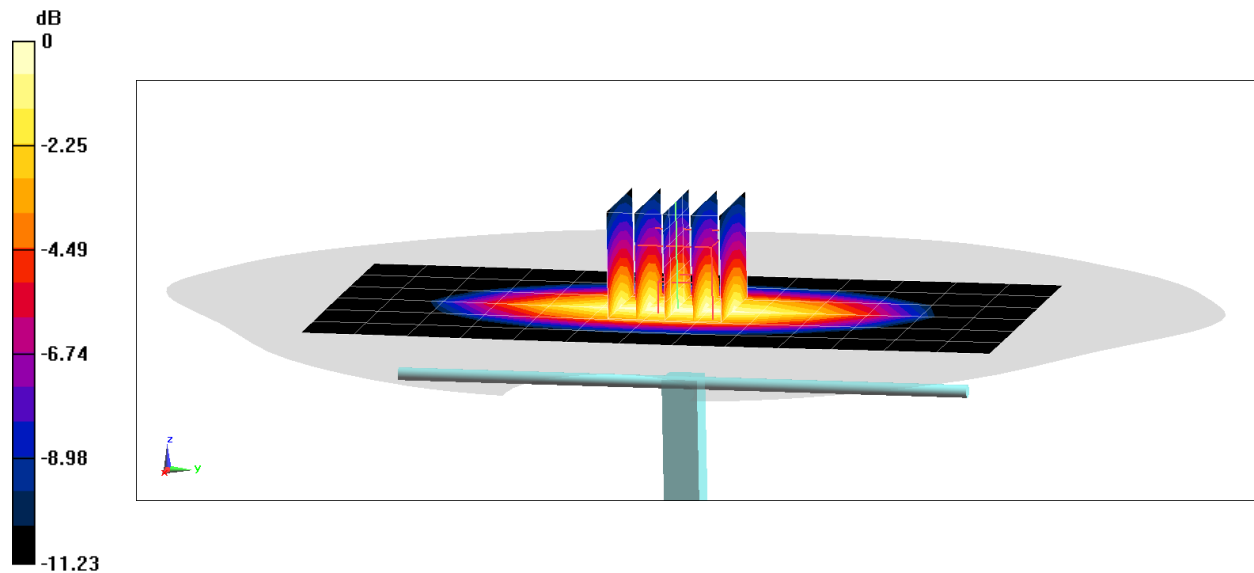
Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Peak SAR (extrapolated) = 3.04 W/kg

SAR(1 g) = 1.96 W/kg

Deviation(1 g) = -0.41%;



0 dB = 2.67 W/kg = 4.27 dBW/kg

PCTEST

DUT: Dipole 850 MHz; Type: D850V2; Serial: 1010

Communication System: UID 0, CW; Frequency: 850 MHz; Duty Cycle: 1:1

Medium: 835Head; Medium parameters used:

$f = 850 \text{ MHz}$; $\sigma = 0.944 \text{ S/m}$; $\epsilon_r = 40.746$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 08/12/2021; Ambient Temp: 21.4°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN7420; ConvF(9.62, 9.62, 9.62) @ 850 MHz; Calibrated: 10/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1213; Calibrated: 10/12/2020

Phantom: Twin-SAM V4.0 SUB use; Type: QD 000 P40 CC; Serial: 81923

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

850 MHz System Verification at 23.0 dBm (200 mW)

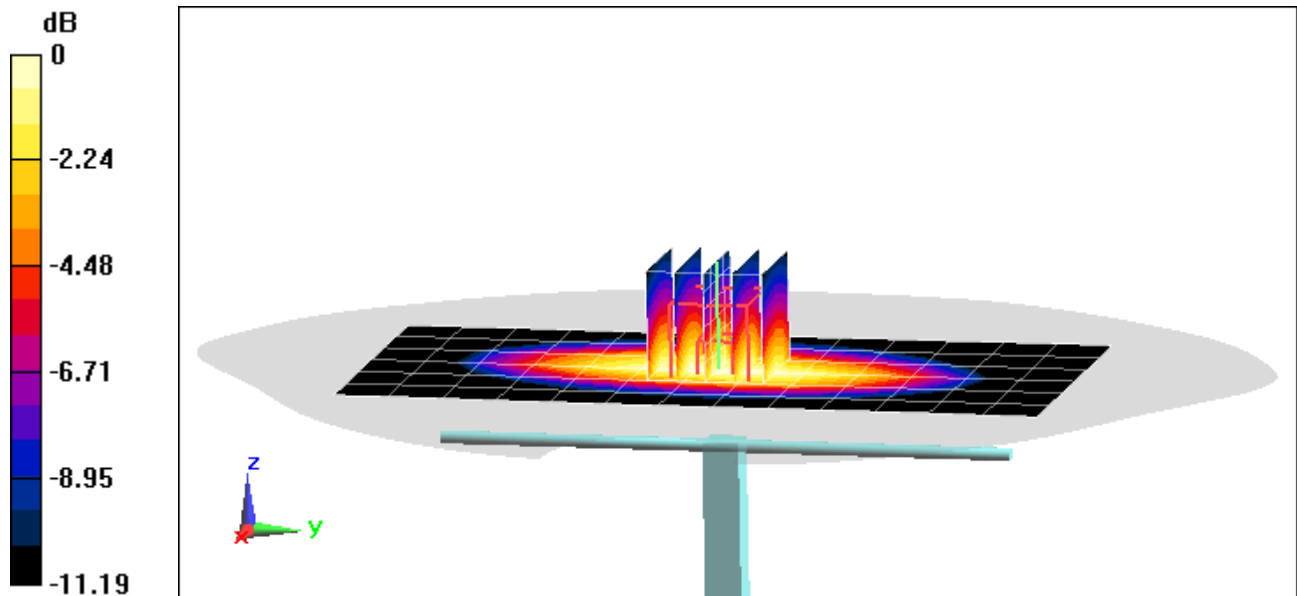
Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 3.17 W/kg

SAR(1 g) = 2.09 W/kg

Deviation(1 g) = 6.20%



0 dB = 2.81 W/kg = 4.49 dBW/kg

PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1083

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Head; Medium parameters used:

$f = 1750$ MHz; $\sigma = 1.378$ S/m; $\epsilon_r = 39.648$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/22/2021; Ambient Temp: 22.5°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN3949; ConvF(8.83, 8.83, 8.83) @ 1750 MHz; Calibrated: 8/19/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1408; Calibrated: 8/13/2020

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

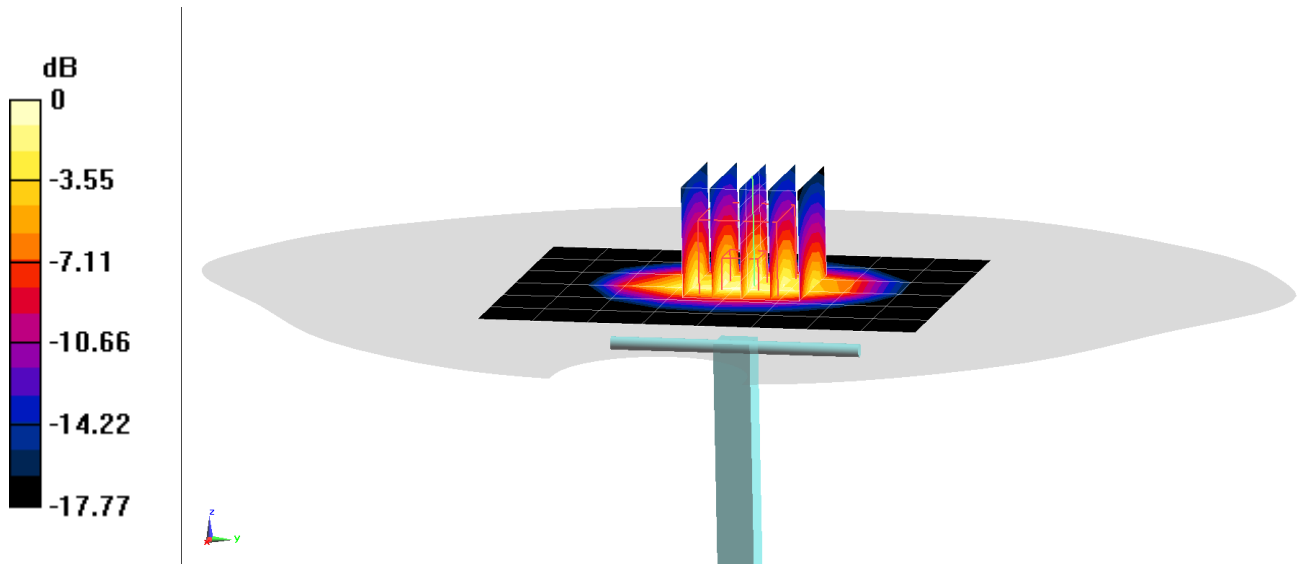
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.00 W/kg

SAR(1 g) = 3.82 W/kg

Deviation(1 g) = 5.82%



0 dB = 5.86 W/kg = 7.68 dBW/kg

PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1083

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Head; Medium parameters used:

$f = 1750$ MHz; $\sigma = 1.375$ S/m; $\epsilon_r = 39.194$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07/20/2021; Ambient Temp: 23.3°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN7640; ConvF(9.49, 9.49, 9.49) @ 1750 MHz; Calibrated: 3/3/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1645; Calibrated: 1/11/2021

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 2034

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

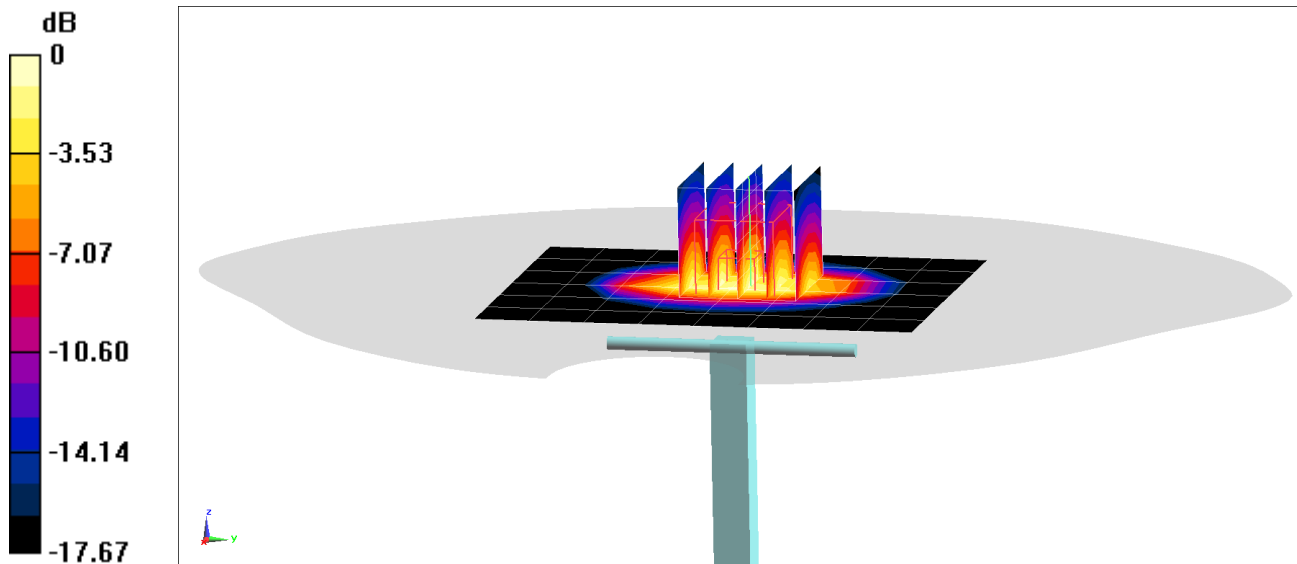
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.16 W/kg

SAR(1 g) = 3.8 W/kg

Deviation(1 g) = 5.26%



0 dB = 5.93 W/kg = 7.73 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d030

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Head; Medium parameters used:

$f = 1900 \text{ MHz}$; $\sigma = 1.438 \text{ S/m}$; $\epsilon_r = 38.415$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/20/2021; Ambient Temp: 22.9°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7427; ConvF(8.25, 8.25, 8.25) @ 1900 MHz; Calibrated: 2/17/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1403; Calibrated: 2/11/2021

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1900 MHz System Verification at 20.0 dBm (100 mW)

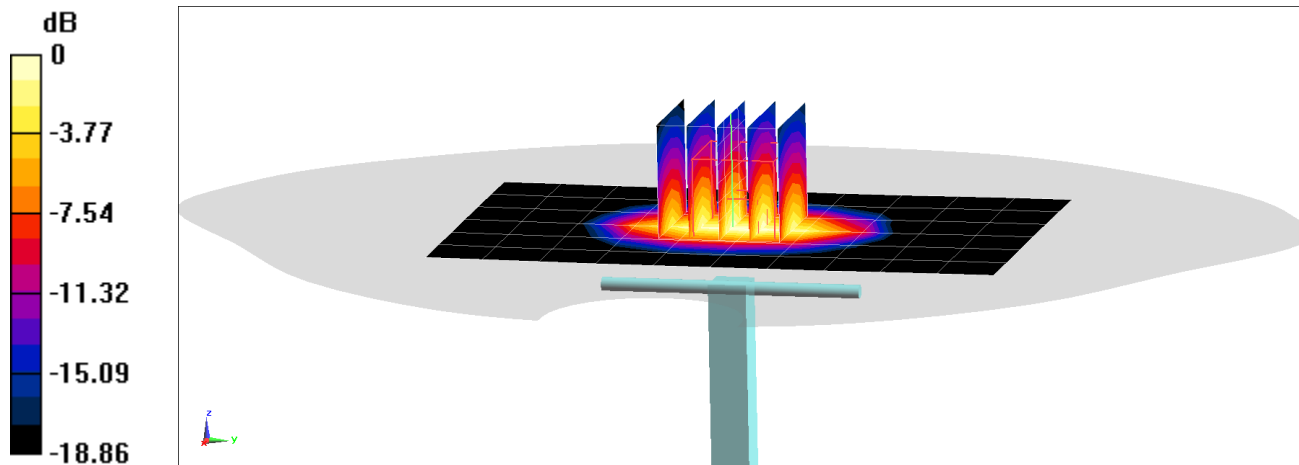
Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.56 W/kg

SAR(1 g) = 4 W/kg

Deviation(1 g) = 0.25%



0 dB = 6.24 W/kg = 7.95 dBW/kg

PCTEST

DUT: Dipole 1900.0 MHz; Type: D1900V2; Serial: 5d181

Communication System: UID: 0, CW; Frequency: 1900.0 MHz

Medium: 750 Head; Medium parameters used:

$f = 1900.0$ MHz; $\text{cond} = 1.46$ S/m; $\text{perm} = 39.1$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 1.0 cm

Test Date: 07/21/2021; Ambient Temp: 23.2°C; Tissue Temp: 22.9°C

Probe: EX3DV4 - SN7639; ConvF:(8.86,8.86,8.86); Calibrated: 2021-03-03

Sensor-Surface: 1.4mm (VMS + 6p)

Electronics: DAE4 Sn1646; Calibrated: 2021-01-11

Phantom: Twin-SAM V8.0; Serial: 2029

Measurement SW: cDASY6 Module SAR V6.14.0.959

1900.0 MHz System Verification at 20.0 dBm (100 mW)

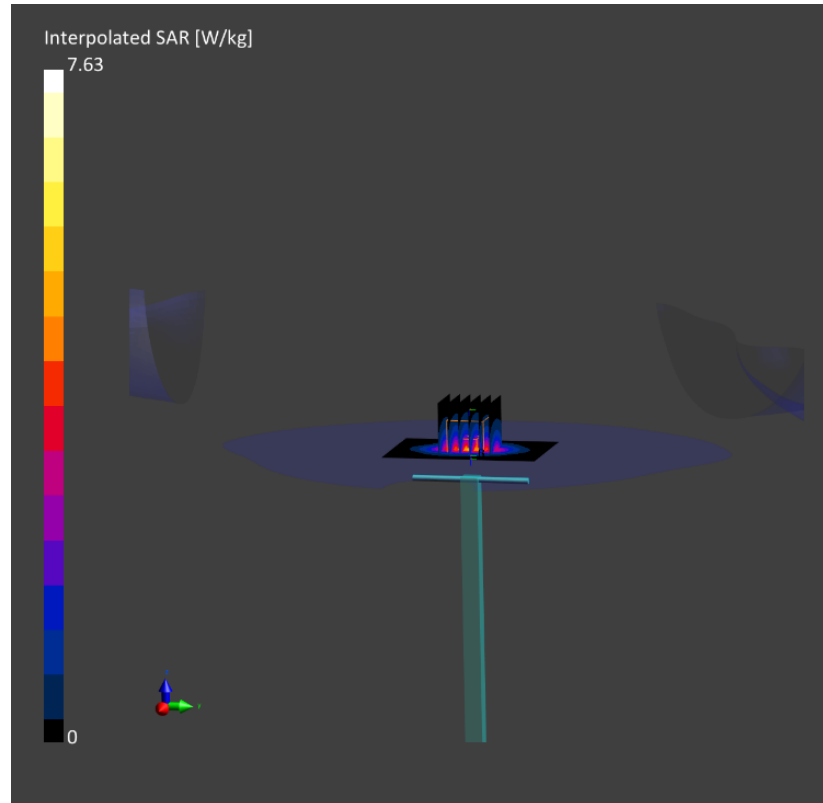
Area Scan (60.0 x 90.0): Measurement grid: $dx=15.0$ mm, $dy=15.0$ mm

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: $dx=6.0$ mm, $dy=6.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 7.63 W/kg

SAR(1 g) = 4.01 W/kg

Deviation (1 g) = 0.00%



PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 750

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Head; Medium parameters used:

$f = 2450$ MHz; $\sigma = 1.848$ S/m; $\epsilon_r = 39.092$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/16/2021; Ambient Temp: 22.3°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN3949; ConvF(7.8, 7.8, 7.8) @ 2450 MHz; Calibrated: 8/19/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1408; Calibrated: 8/13/2020

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

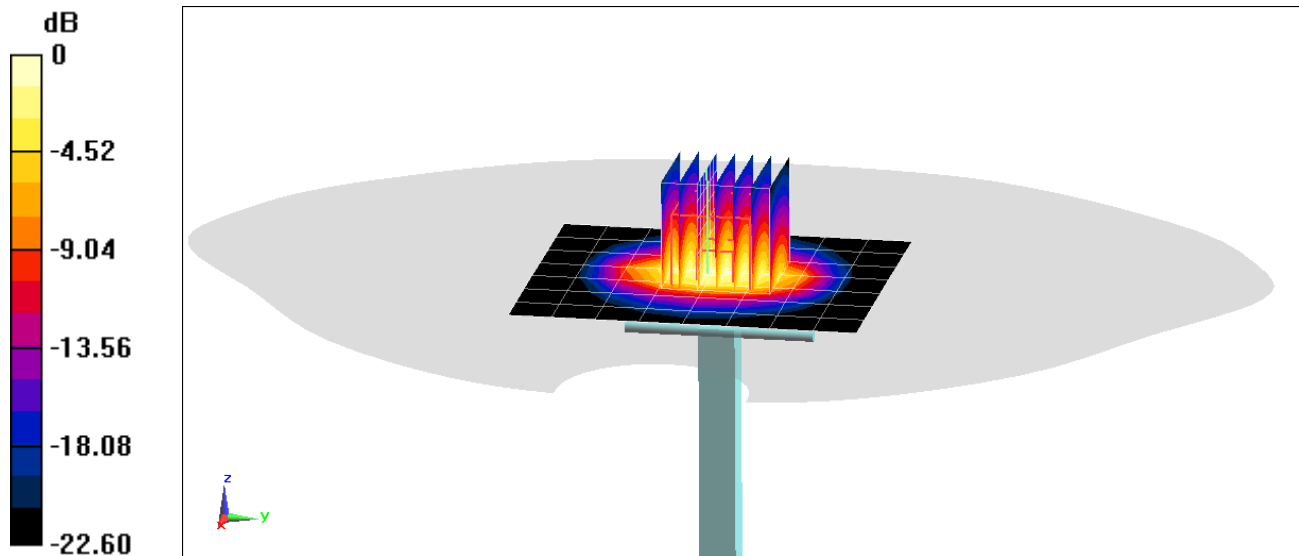
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 11.3 W/kg

SAR(1 g) = 5.39 W/kg

Deviation(1 g) = 1.51%



0 dB = 9.06 W/kg = 9.57 dBW/kg

PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial:750

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Head; Medium parameters used:

$f = 2450 \text{ MHz}$; $\sigma = 1.839 \text{ S/m}$; $\epsilon_r = 37.47$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07/22/2021; Ambient Temp: 23.1°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7640; ConvF(8.76, 8.76, 8.76) @ 2450 MHz; Calibrated: 3/3/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1645; Calibrated: 1/11/2021

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 2034

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

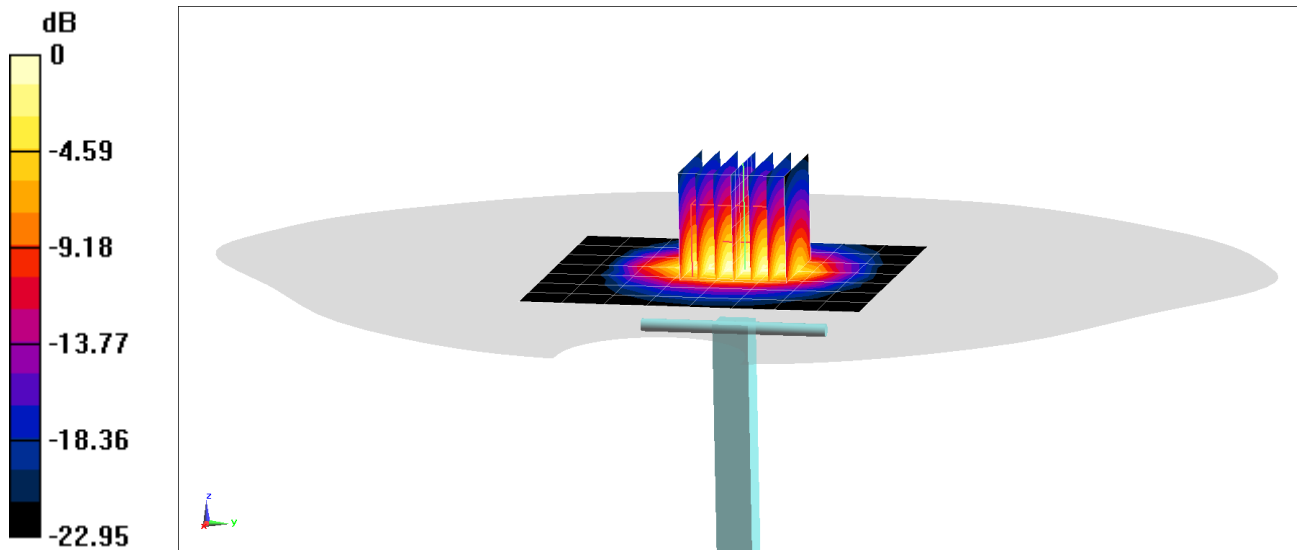
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 10.7 W/kg

SAR(1 g) = 5.03 W/kg

Deviation(1 g) = -5.27%



0 dB = 8.40 W/kg = 9.24 dBW/kg

PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial:750

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Head; Medium parameters used:

$f = 2450$ MHz; $\sigma = 1.825$ S/m; $\epsilon_r = 38.641$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07/26/2021; Ambient Temp: 22.9°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN7640; ConvF(8.76, 8.76, 8.76) @ 2450 MHz; Calibrated: 3/3/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1645; Calibrated: 1/11/2021

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 2034

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

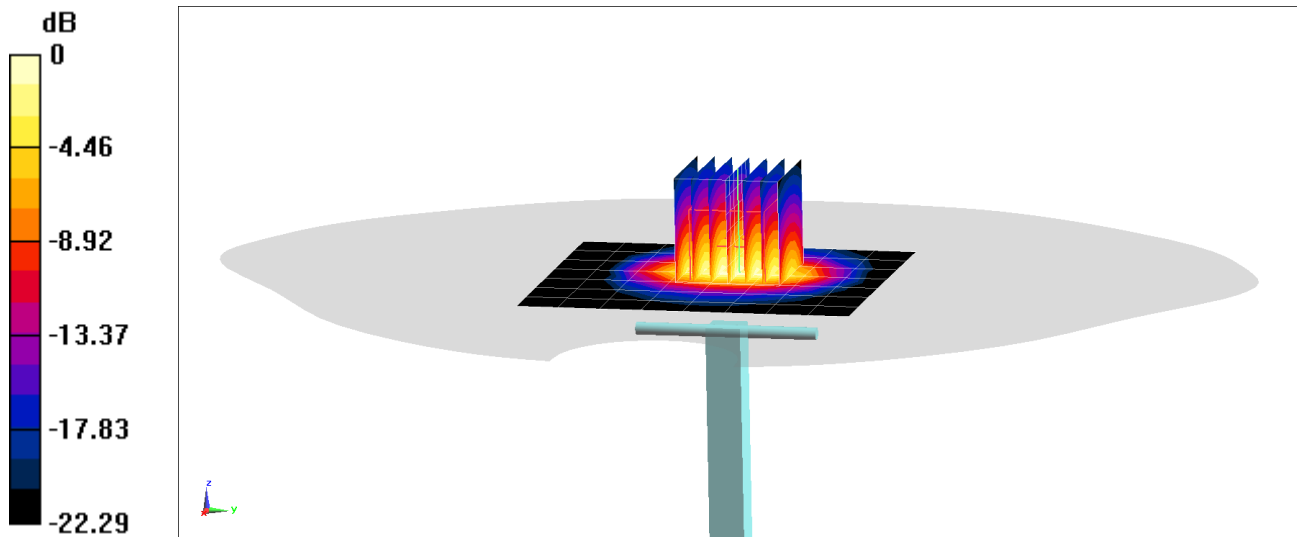
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 10.4 W/kg

SAR(1 g) = 4.99 W/kg

Deviation(1 g) = -6.03%



0 dB = 8.40 W/kg = 9.24 dBW/kg

PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 921

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Head; Medium parameters used

$f = 2450$ MHz; $\sigma = 1.786$ S/m; $\epsilon_r = 38.827$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 08/12/2021; Ambient Temp: 22.5°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7558; ConvF(7.62, 7.62, 7.62) @ 2450 MHz; Calibrated: 10/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1364; Calibrated: 10/12/2020

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1596

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

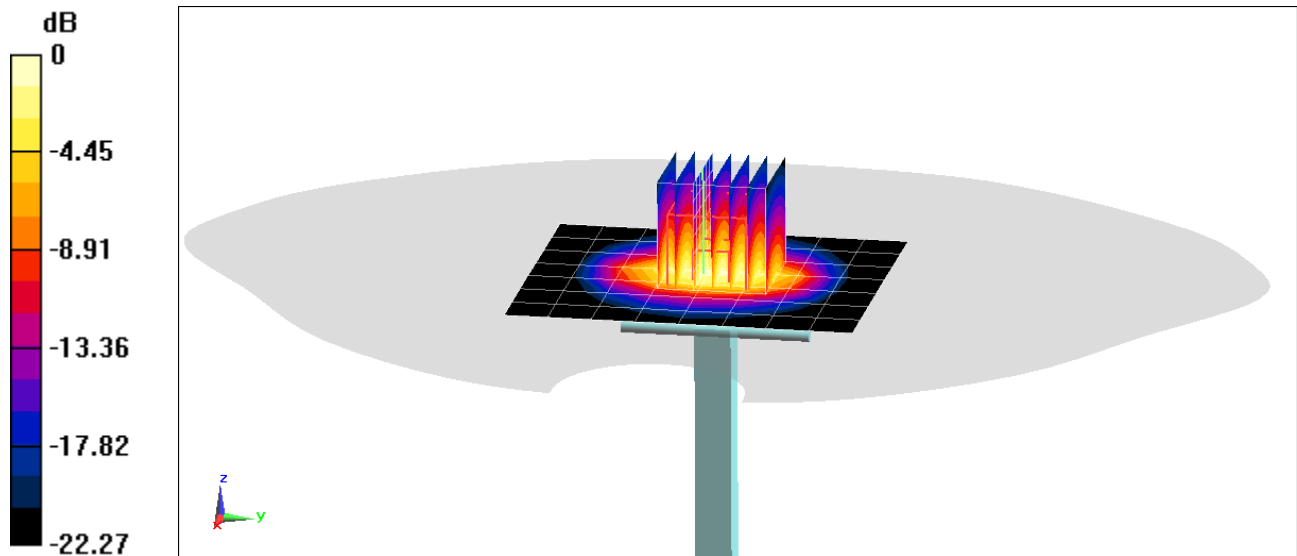
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 11.1 W/kg

SAR(1 g) = 5.38 W/kg

Deviation(1 g) = 1.32%



PCTEST

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1042

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Head; Medium parameters used:

$f = 2600$ MHz; $\sigma = 1.972$ S/m; $\epsilon_r = 38.819$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/16/2021; Ambient Temp: 22.3°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN3949; ConvF(7.59, 7.59, 7.59) @ 2600 MHz; Calibrated: 8/19/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1408; Calibrated: 8/13/2020

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2600 MHz System Verification at 20.0 dBm (100 mW)

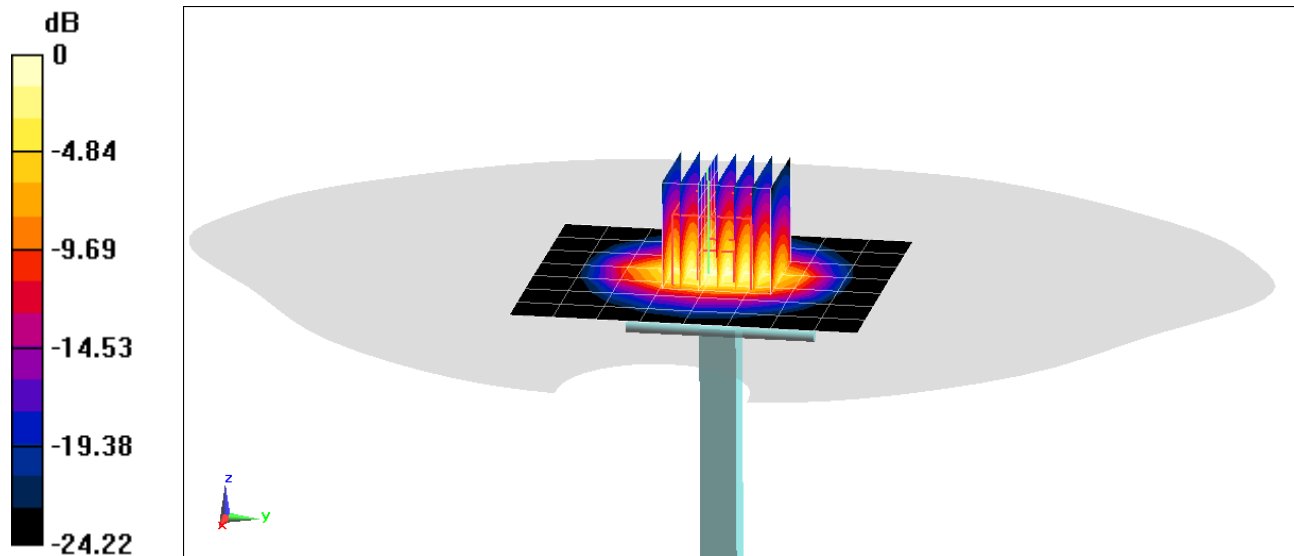
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 12.4 W/kg

SAR(1 g) = 5.72 W/kg

Deviation(1 g) = -0.87%



0 dB = 9.77 W/kg = 9.90 dBW/kg

PCTEST

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1042

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Head; Medium parameters used

$f = 2600$ MHz; $\sigma = 1.902$ S/m; $\epsilon_r = 38.578$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 08/12/2021; Ambient Temp: 22.5°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7558; ConvF(7.43, 7.43, 7.43) @ 2600 MHz; Calibrated: 10/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1364; Calibrated: 10/12/2020

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1596

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

2600 MHz System Verification at 20.0 dBm (100 mW)

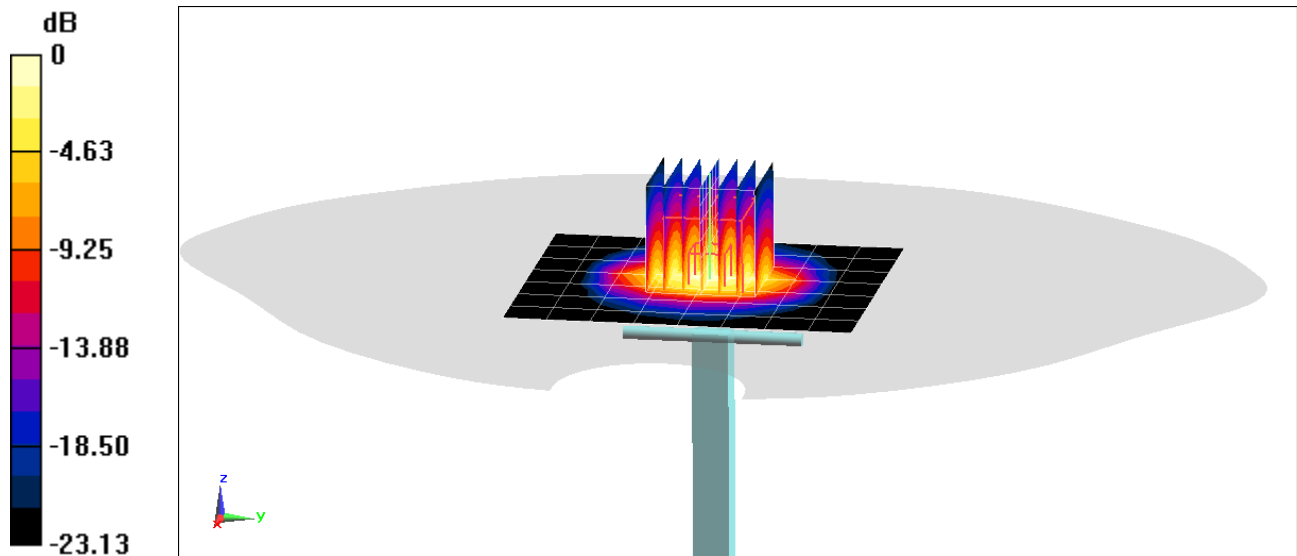
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 11.6 W/kg

SAR(1 g) = 5.57 W/kg

Deviation(1 g) = -3.47%



0 dB = 9.37 W/kg = 9.72 dBW/kg

PCTEST

DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1123

Communication System: UID 0, CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Head; Medium parameters used

$f = 5250 \text{ MHz}$; $\sigma = 4.587 \text{ S/m}$; $\epsilon_r = 35.891$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07/23/2021; Ambient Temp: 21.1°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7558; ConvF(5.33, 5.33, 5.33) @ 5250 MHz; Calibrated: 10/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1364; Calibrated: 10/12/2020

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1596

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

5250 MHz System Verification at 17.0 dBm (50 mW)

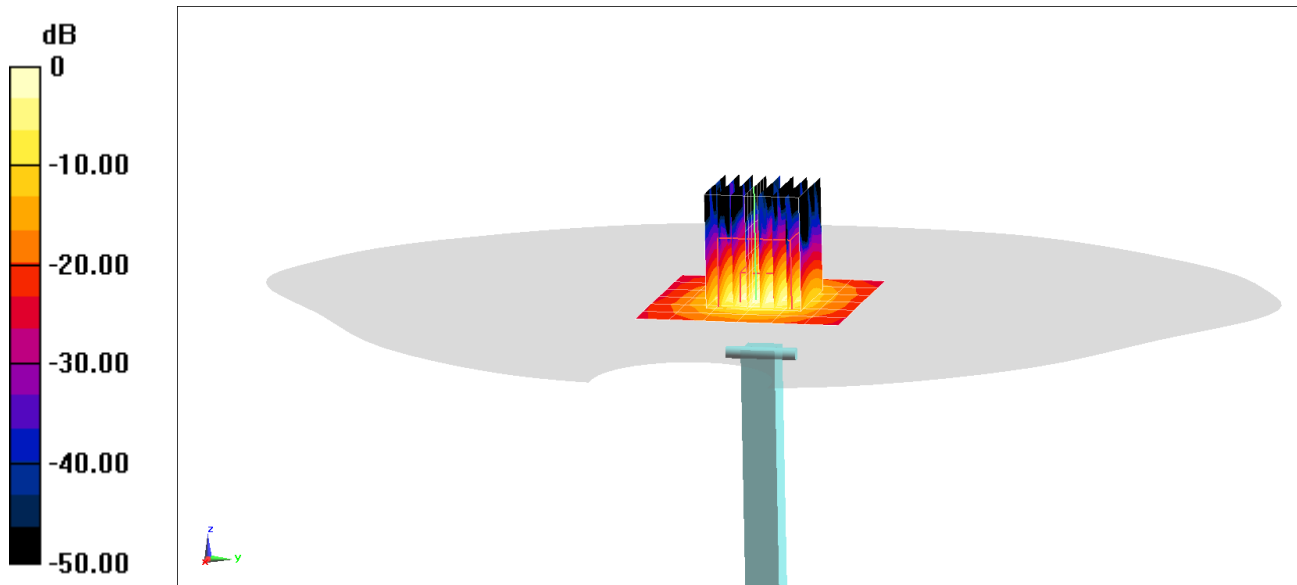
Area Scan (7x7x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Zoom Scan (8x8x8)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$; Graded Ratio: 1.4

Peak SAR (extrapolated) = 15.6 W/kg

SAR(1 g) = 3.91 W/kg

Deviation(1 g) = -4.87%



0 dB = 9.21 W/kg = 9.64 dBW/kg

PCTEST

DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1123

Communication System: UID 0, CW; Frequency: 5600 MHz, Duty Cycle: 1:1

Medium: 5200-5800 Head; Medium parameters used:

$f = 5600$ MHz; $\sigma = 4.979$ S/m; $\epsilon_r = 35.265$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07/23/2021; Ambient Temp: 21.1°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7558; ConvF(4.81, 4.81, 4.81) @ 5600 MHz; Calibrated: 10/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1364; Calibrated: 10/12/2020

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1596

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

5600 MHz System Verification at 17.0 dBm (50 mW)

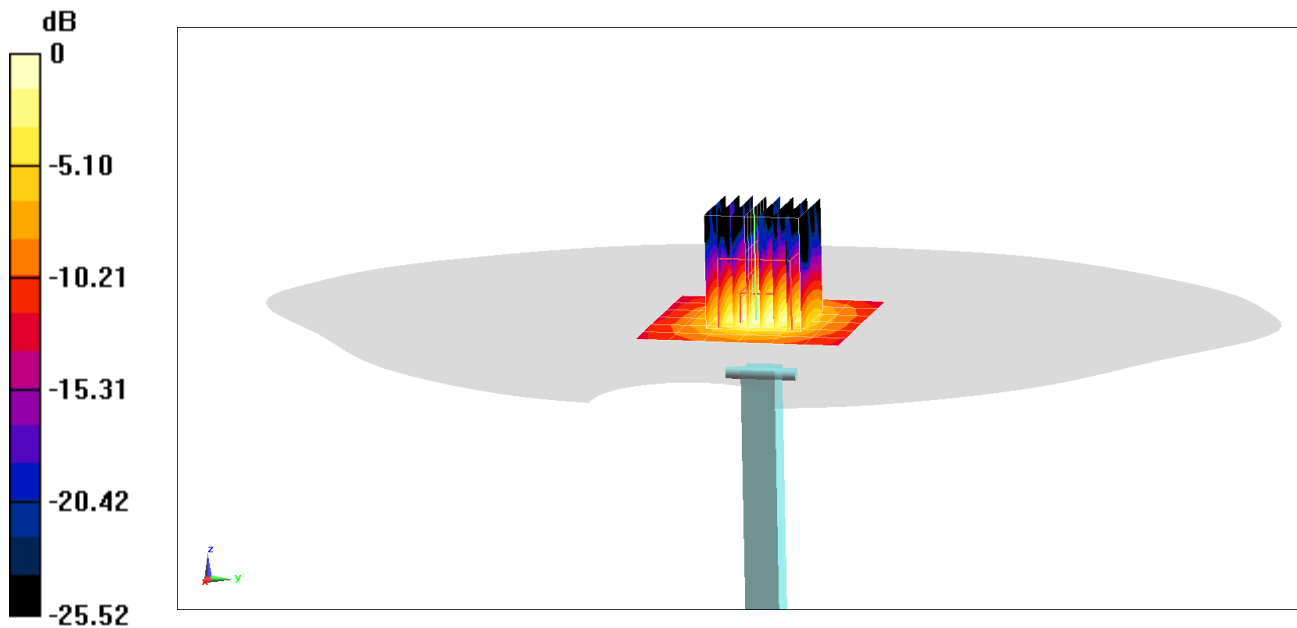
Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 17.6 W/kg

SAR(1 g) = 3.99 W/kg

Deviation(1 g) = -5.56%



0 dB = 9.07 W/kg = 9.58 dBW/kg

PCTEST

DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1123

Communication System: UID 0, CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Head; Medium parameters used:

$f = 5750 \text{ MHz}$; $\sigma = 5.165 \text{ S/m}$; $\epsilon_r = 35.021$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07/23/2021; Ambient Temp: 21.1°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7558; ConvF(4.88, 4.88, 4.88) @ 5750 MHz; Calibrated: 10/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1364; Calibrated: 10/12/2020

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1596

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

5750 MHz System Verification at 17.0 dBm (50 mW)

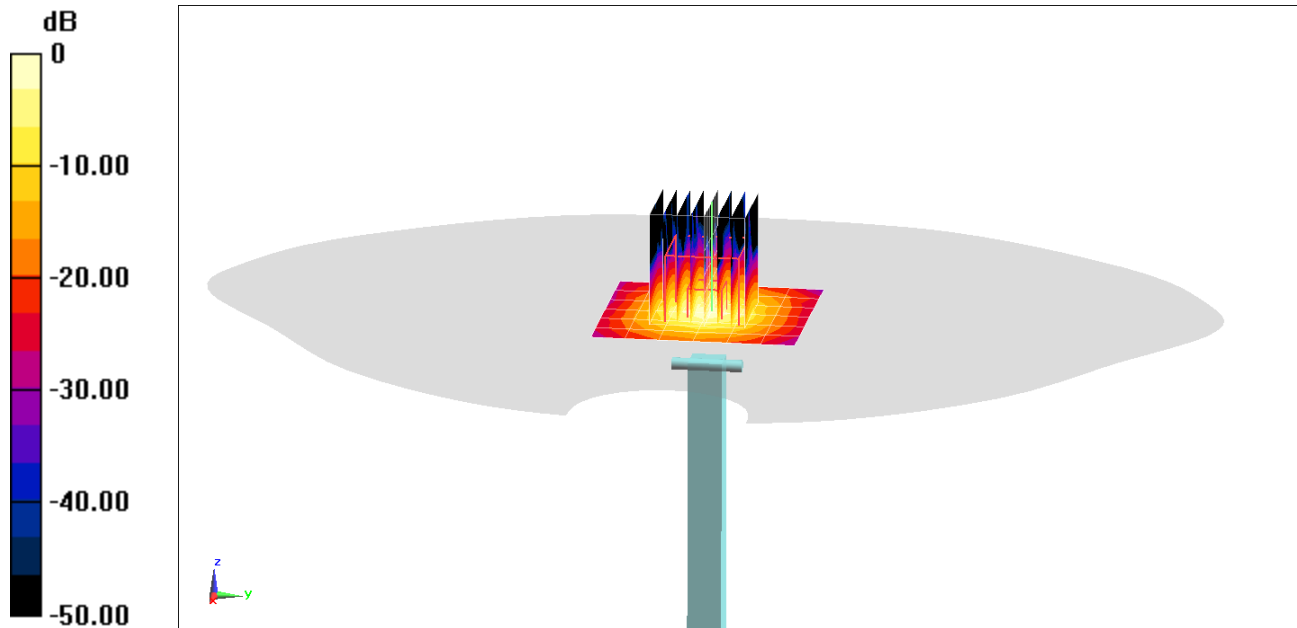
Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 17.3 W/kg

SAR(1 g) = 3.79 W/kg

Deviation(1 g) = -6.77%



0 dB = 9.41 W/kg = 9.74 dBW/kg

PCTEST

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d040

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body; Medium parameters used:

$f = 835 \text{ MHz}$; $\sigma = 1.002 \text{ S/m}$; $\epsilon_r = 54.798$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 06/27/2021; Ambient Temp: 21.0°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN3949; ConvF(10.26, 10.26, 10.26) @ 835 MHz; Calibrated: 8/19/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1408; Calibrated: 8/13/2020

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

835 MHz System Verification at 23.0 dBm (200 mW)

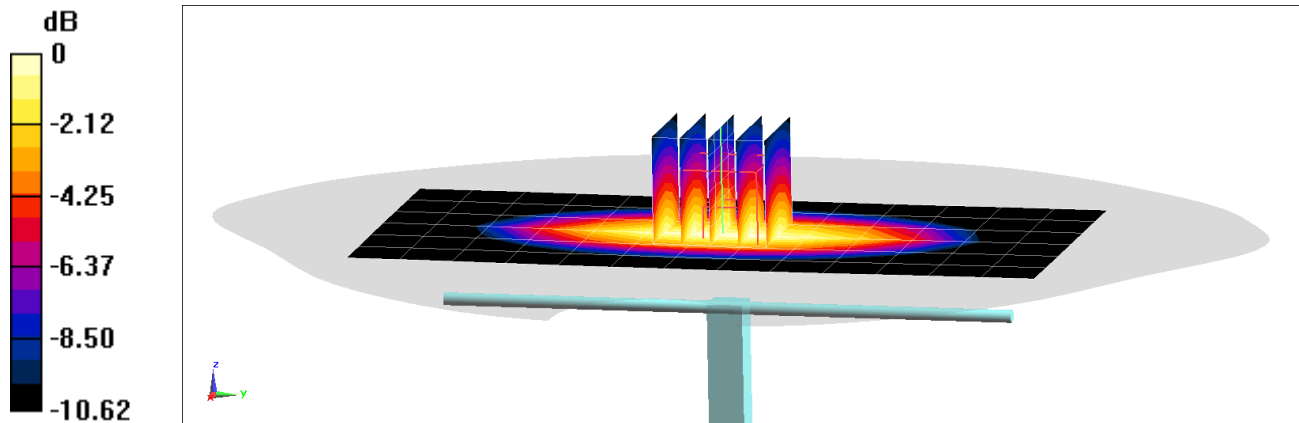
Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Peak SAR (extrapolated) = 2.99 W/kg

SAR(10 g) = 1.31 W/kg

Deviation(10 g) = 4.97%



0 dB = 2.66 W/kg = 4.25 dBW/kg

PCTEST

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d040

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body; Medium parameters used:

$f = 835 \text{ MHz}$; $\sigma = 0.972 \text{ S/m}$; $\epsilon_r = 53.898$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 08/04/2021; Ambient Temp: 23.5°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7640; ConvF(10.71, 10.71, 10.71) @ 835 MHz; Calibrated: 3/3/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1645; Calibrated: 1/11/2021

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 2034

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

835 MHz System Verification at 23.0 dBm (200 mW)

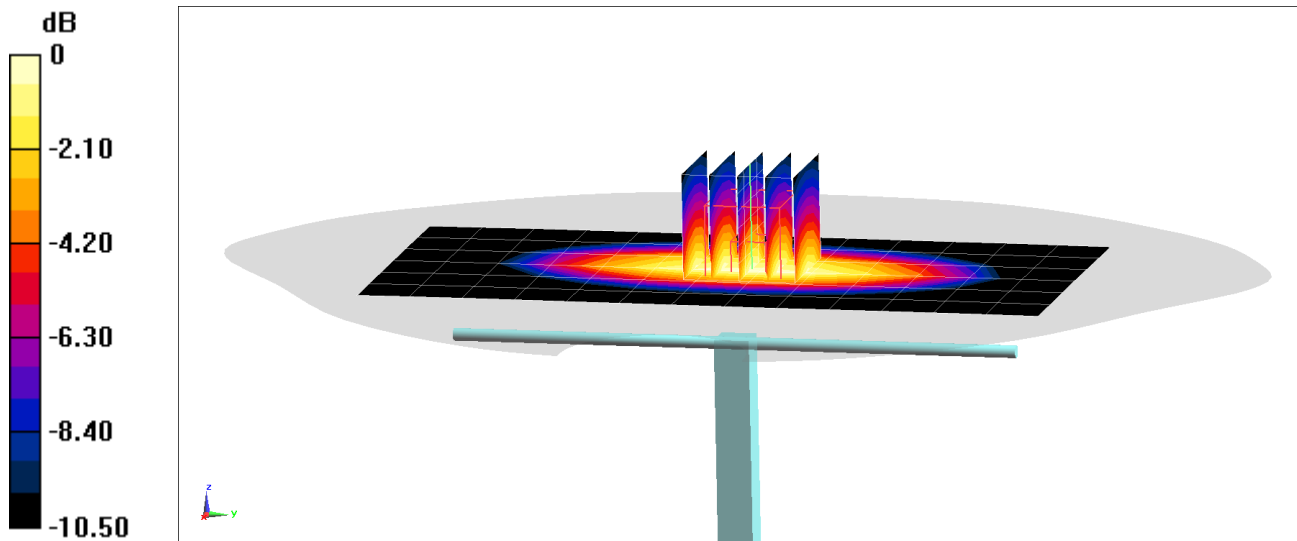
Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Peak SAR (extrapolated) = 3.06 W/kg

SAR(10 g) = 1.32 W/kg

Deviation(10 g) = 5.77%



0 dB = 2.71 W/kg = 4.33 dBW/kg

PCTEST

DUT: Dipole 835.0 MHz; Type: D835V2; Serial: 4d040

Communication System: UID: 0, CW; Frequency: 835.0 MHz
Medium: 835 Body; Medium parameters used:
 $f = 835.0$ MHz; $\text{cond} = 0.95$ S/m; $\text{perm} = 54.0$; $\text{density} = 1000$ kg/m³
Phantom Section: Flat; Space: 1.5 cm

Test Date: 08/18/2021; Ambient Temp: 22.1°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7532; ConvF:(10.0,10.0,10.0); Calibrated: 2021-04-19
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn501; Calibrated: 2021-04-13
Phantom: Twin-SAM V4.0; Serial: 1275
Measurement SW: cDASY6 Module SAR V6.14.0.959

835.0 MHz System Verification at 23.0 dBm (200 mW)

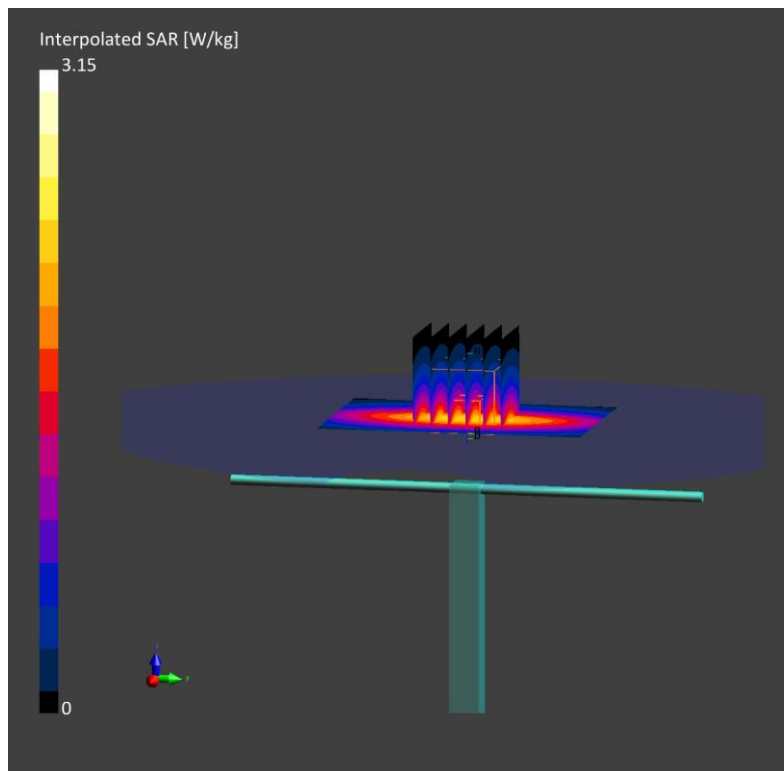
Area Scan (60.0 x 90.0): Measurement grid: $dx=15.0$ mm, $dy=15.0$ mm

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: $dx=6.0$ mm, $dy=6.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 3.15 W/kg

SAR(10 g) = 1.34 W/kg

Deviation (10 g) = 7.37%;



PCTEST

DUT: Dipole 1750.0 MHz; Type: D1750V2; Serial: 1083

Communication System: UID: 0, CW; Frequency: 1750.0 MHz

Medium: 1750 Body; Medium parameters used:

$f = 1750.0$ MHz; $\text{cond} = 1.48$ S/m; $\text{perm} = 54.1$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 1.0 cm

Test Date: 06/22/2021; Ambient Temp: 23.7°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7639; ConvF:(9.29,9.29,9.29); Calibrated: 2021-03-03

Sensor-Surface: 1.4mm (VMS + 6p)

Electronics: DAE4 Sn1646; Calibrated: 2021-01-11

Phantom: Twin-SAM V8.0; Serial: 2029

Measurement SW: cDASY6 Module SAR V6.14.0.959

1750.0 MHz System Verification at 20.0 dBm (100 mW)

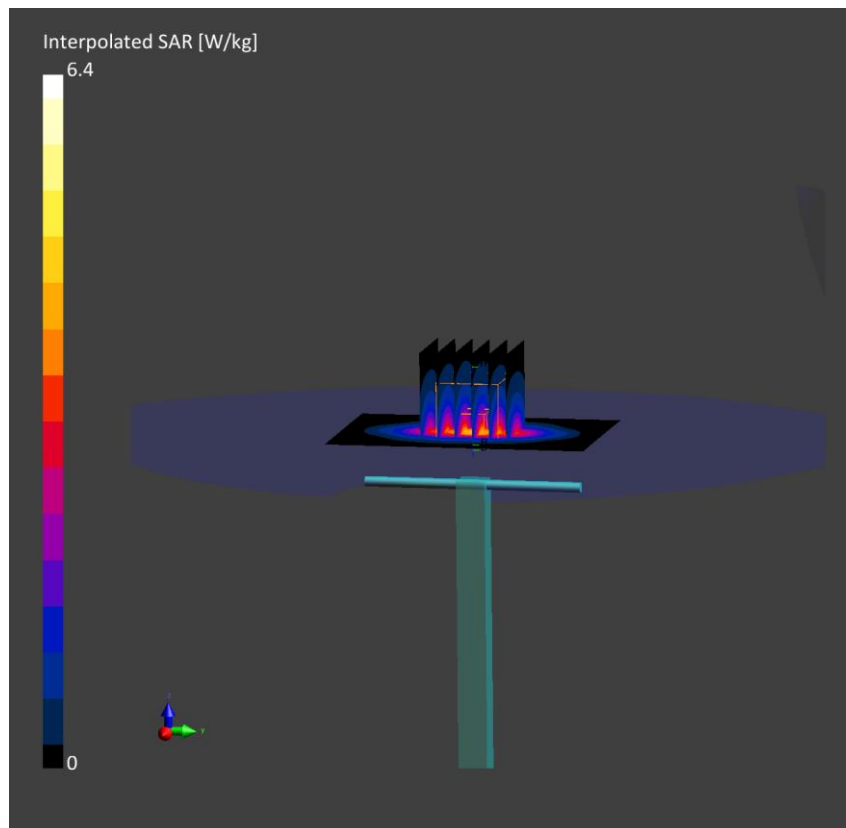
Area Scan (60.0 x 90.0): Measurement grid: $dx=15.0$ mm, $dy=15.0$ mm

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: $dx=6.0$ mm, $dy=6.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 6.4 W/kg

SAR(10 g) = 1.88 W/kg

Deviation (10 g) = -4.57%;



PCTEST

DUT: Dipole 1750.0 MHz; Type: D1750V2; Serial: 1083

Communication System: UID: 0, CW; Frequency: 1750.0 MHz
Medium: 1750 Body; Medium parameters used:
 $f = 1750.0$ MHz; $\text{cond} = 1.48$ S/m; $\text{perm} = 51.8$; $\text{density} = 1000$ kg/m³
Phantom Section: Flat; Space: 1.0 cm

Test Date: 08/03/2021; Ambient Temp: 20.5°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7639; ConvF:(9.3,9.3,9.3); Calibrated: 2021-03-03
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1646; Calibrated: 2021-01-11
Phantom: Twin-SAM V8.0; Serial: 2029
Measurement SW: cDASY6 Module SAR V6.14.0.959

1750.0 MHz System Verification at 20.0 dBm (100 mW)

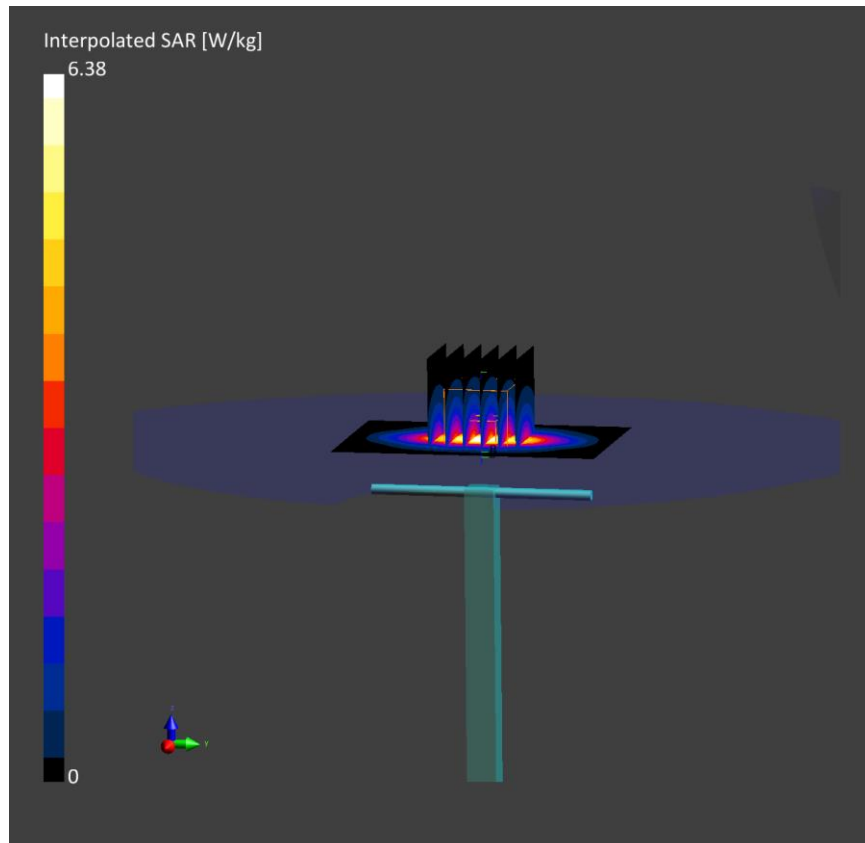
Area Scan (60.0 x 90.0): Measurement grid: $dx=15.0$ mm, $dy=15.0$ mm

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: $dx=6.0$ mm, $dy=6.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 6.38 W/kg

SAR(10 g) = 1.84 W/kg

Deviation (10 g) = -6.60%;



PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d030

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used:

$f = 1900 \text{ MHz}$; $\sigma = 1.579 \text{ S/m}$; $\epsilon_r = 51.955$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 08/05/2021; Ambient Temp: 22.7°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7639; ConvF(8.91, 8.91, 8.91) @ 1900 MHz; Calibrated: 3/3/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1646; Calibrated: 1/11/2021

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 2129

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

1900 MHz System Verification at 20.0 dBm (100 mW)

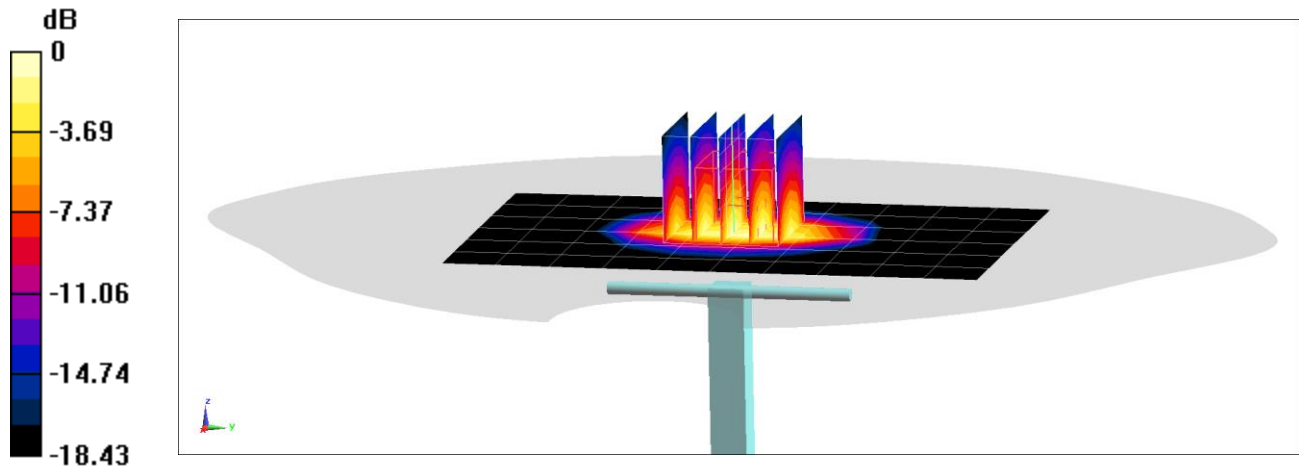
Area Scan (7x11x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Peak SAR (extrapolated) = 7.03 W/kg

SAR(10 g) = 1.99 W/kg

Deviation(10 g) = -5.69%



0 dB = 5.95 W/kg = 7.75 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d030

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used:

$f = 1900 \text{ MHz}$; $\sigma = 1.553 \text{ S/m}$; $\epsilon_r = 51.893$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 08/09/2021; Ambient Temp: 22.9°C; Tissue Temp: 21.2°C

Probe: EX3DV4 - SN7640; ConvF(9.06, 9.06, 9.06) @ 1900 MHz; Calibrated: 3/3/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1645; Calibrated: 1/11/2021

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 2034

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1900 MHz System Verification at 20.0 dBm (100 mW)

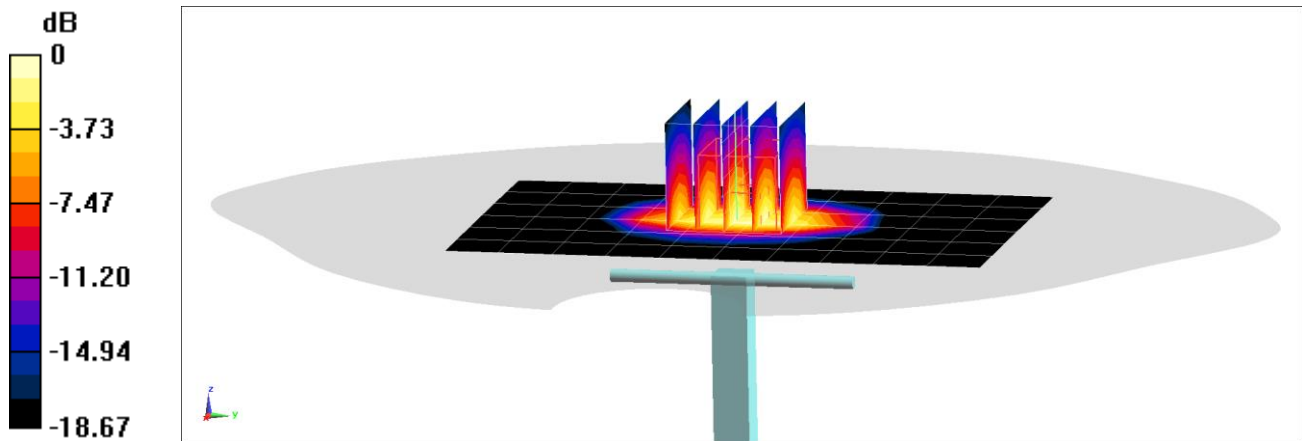
Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.46 W/kg

SAR(10 g) = 2.04 W/kg

Deviation(10 g) = -3.32%



0 dB = 6.19 W/kg = 7.92 dBW/kg

PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 750

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2450$ MHz; $\sigma = 1.966$ S/m; $\epsilon_r = 50.254$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/18/2021; Ambient Temp: 21.8°C; Tissue Temp: 19.2°C

Probe: EX3DV4 - SN7532; ConvF(7.64, 7.64, 7.64) @ 2450 MHz; Calibrated: 4/19/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn501; Calibrated: 4/13/2021

Phantom: Twin-SAM V5.0 Left; Type: QD 000 P40 CD; Serial: 1793

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

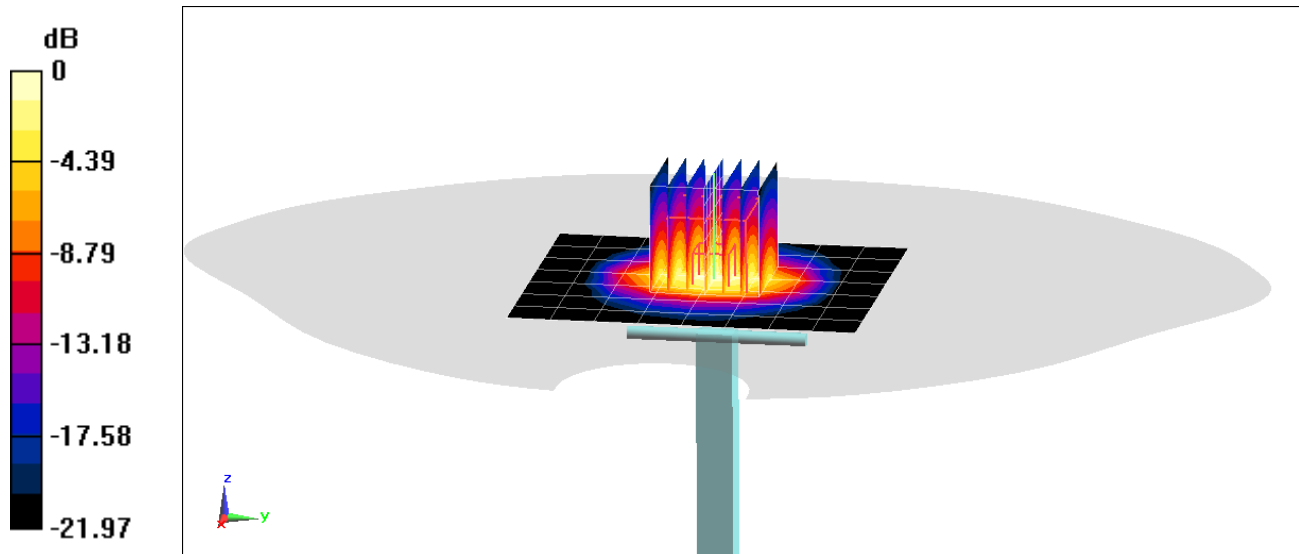
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 10.5 W/kg

SAR(10 g) = 2.34 W/kg

Deviation(10 g) = -2.90%



0 dB = 8.49 W/kg = 9.29 dBW/kg

PCTEST

DUT: Dipole 2450.0 MHz; Type: D2450V2; Serial: 750

Communication System: UID: 0--, CW; Frequency: 2450.0 MHz
Medium: 2450 Body; Medium parameters used:
 $f = 2450.0$ MHz; $\text{cond} = 1.98$ S/m; $\text{perm} = 50.5$; $\text{density} = 1000$ kg/m³
Phantom Section: Flat; Space: 1.0 cm

Test Date: 06/28/2021; Ambient Temp: 21.1°C; Tissue Temp: 20.7°C

Probe: EX3DV4 - SN7532; ConvF:(7.64,7.64,7.64); Calibrated: 2021-04-19
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn501; Calibrated: 2021-04-13
Phantom: Left; Serial: 1275
Measurement SW: cDASY6 Module SAR V6.14.0.959

2450.0 MHz System Verification at 20.0 dBm (100 mW)

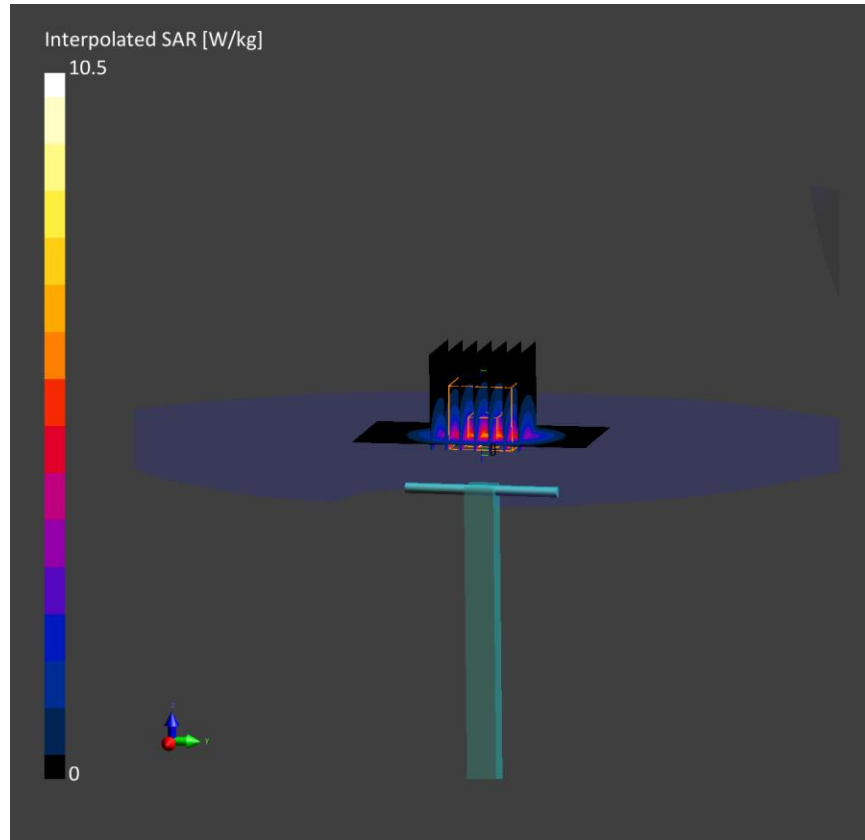
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 10.5 W/kg

SAR(10 g) = 2.33 W/kg

Deviation (10 g) = -3.32%;



PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 750

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2450$ MHz; $\sigma = 2.025$ S/m; $\epsilon_r = 52.517$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07/18/2021; Ambient Temp: 22.7°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN7558; ConvF(7.64, 7.64, 7.64) @ 2450 MHz; Calibrated: 10/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1364; Calibrated: 10/12/2020

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1596

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

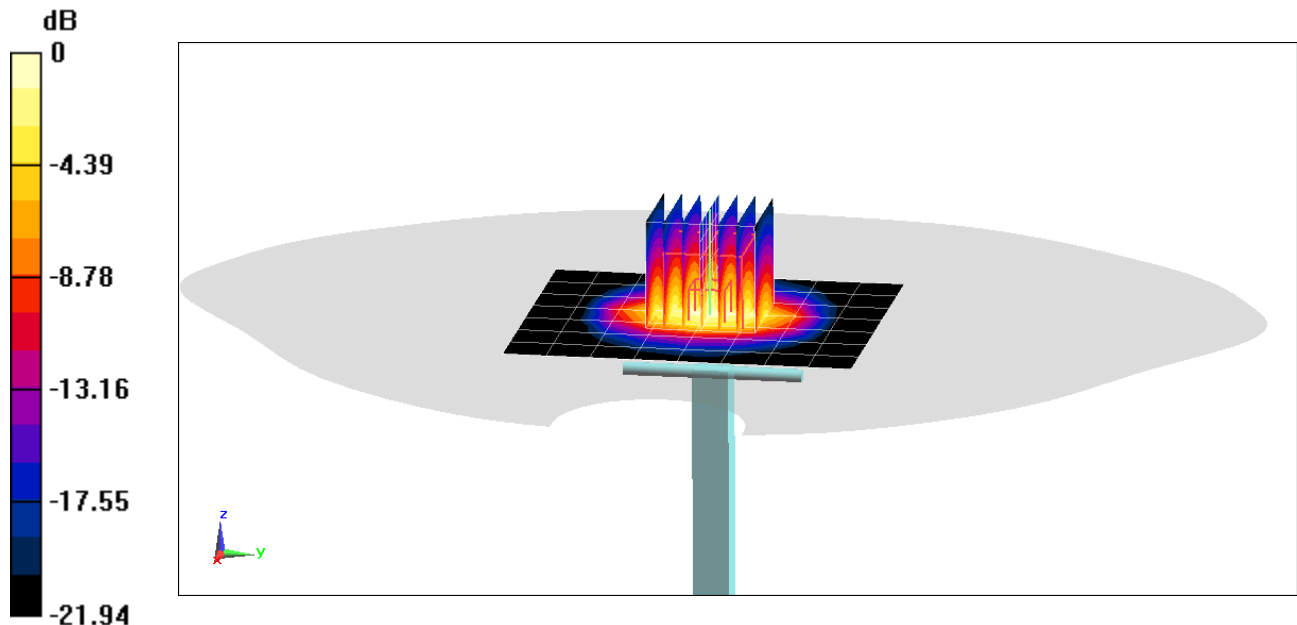
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 10.3 W/kg

SAR(10 g) = 2.36 W/kg

Deviation(10 g) = -2.07%



0 dB = 8.37 W/kg = 9.23 dBW/kg

PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 750

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2450$ MHz; $\sigma = 2.03$ S/m; $\epsilon_r = 51.033$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07/27/2021; Ambient Temp: 22.70°C; Tissue Temp: 22.50°C

Probe: EX3DV4 - SN7640; ConvF(8.92, 8.92, 8.92) @ 2450 MHz; Calibrated: 3/3/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1645; Calibrated: 1/11/2021

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 2034

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

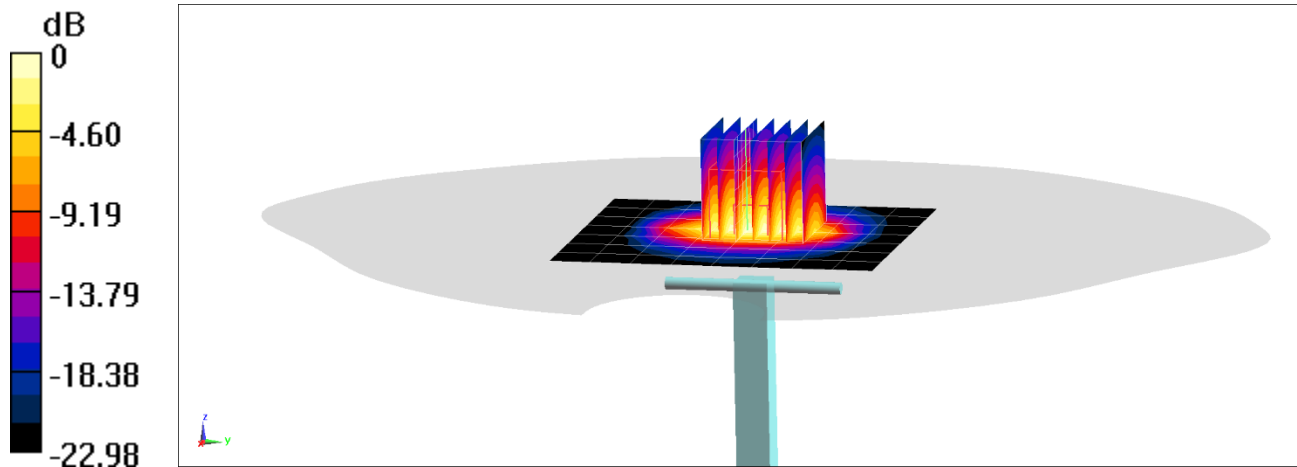
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 10.7 W/kg

SAR(10 g) = 2.35 W/kg

Deviation(10 g) = -2.49%



0 dB = 8.53 W/kg = 9.31 dBW/kg

PCTEST

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1042

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2600$ MHz; $\sigma = 2.104$ S/m; $\epsilon_r = 49.993$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/18/2021; Ambient Temp: 21.8°C; Tissue Temp: 19.2°C

Probe: EX3DV4 - SN7532; ConvF(7.28, 7.28, 7.28) @ 2600 MHz; Calibrated: 4/19/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn501; Calibrated: 4/13/2021

Phantom: Twin-SAM V5.0 Left; Type: QD 000 P40 CD; Serial: 1793

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2600 MHz System Verification at 20.0 dBm (100 mW)

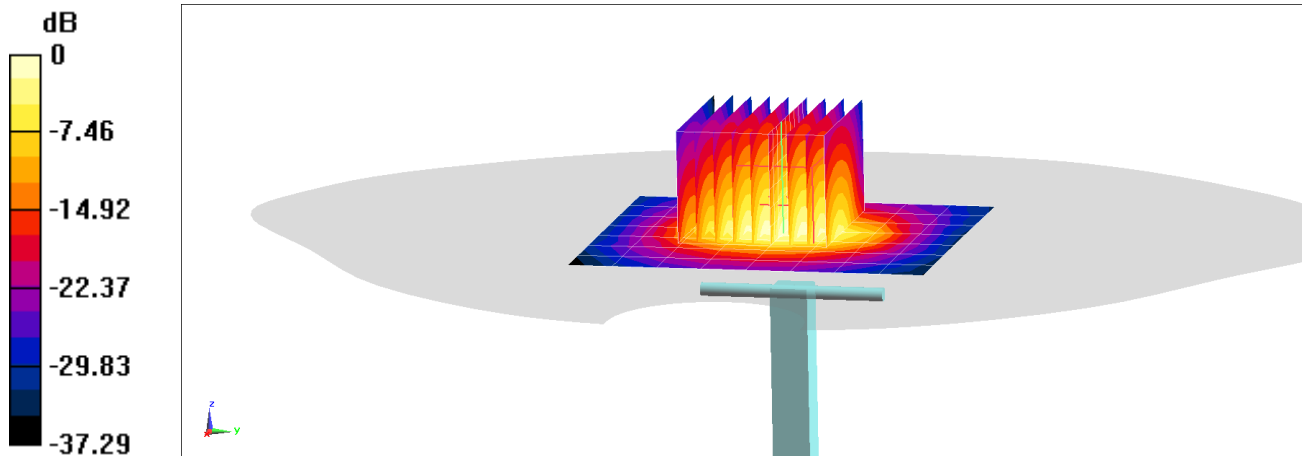
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

Zoom Scan (10x9x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 12.3 W/kg

SAR(10 g) = 2.56 W/kg

Deviation(10 g) = 2.81%



0 dB = 9.84 W/kg = 9.93 dBW/kg

PCTEST

DUT: Dipole 2600.0 MHz; Type: D2600V2; Serial: 1042

Communication System: UID: 0, CW; Frequency: 2600.0 MHz
Medium: 2450 Body; Medium parameters used:
 $f = 2600.0$ MHz; $\text{cond} = 2.12$ S/m; $\text{perm} = 50.3$; $\text{density} = 1000$ kg/m³
Phantom Section: Flat; Space: 1.0 cm

Test Date: 06/28/2021; Ambient Temp: 21.1°C; Tissue Temp: 20.7°C

Probe: EX3DV4 - SN7532; ConvF:(7.28,7.28,7.28); Calibrated: 2021-04-19
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn501; Calibrated: 2021-04-13
Phantom: Left; Serial: 1275
Measurement SW: cDASY6 Module SAR V6.14.0.959

2600.0 MHz System Verification at 20.0 dBm (100 mW)

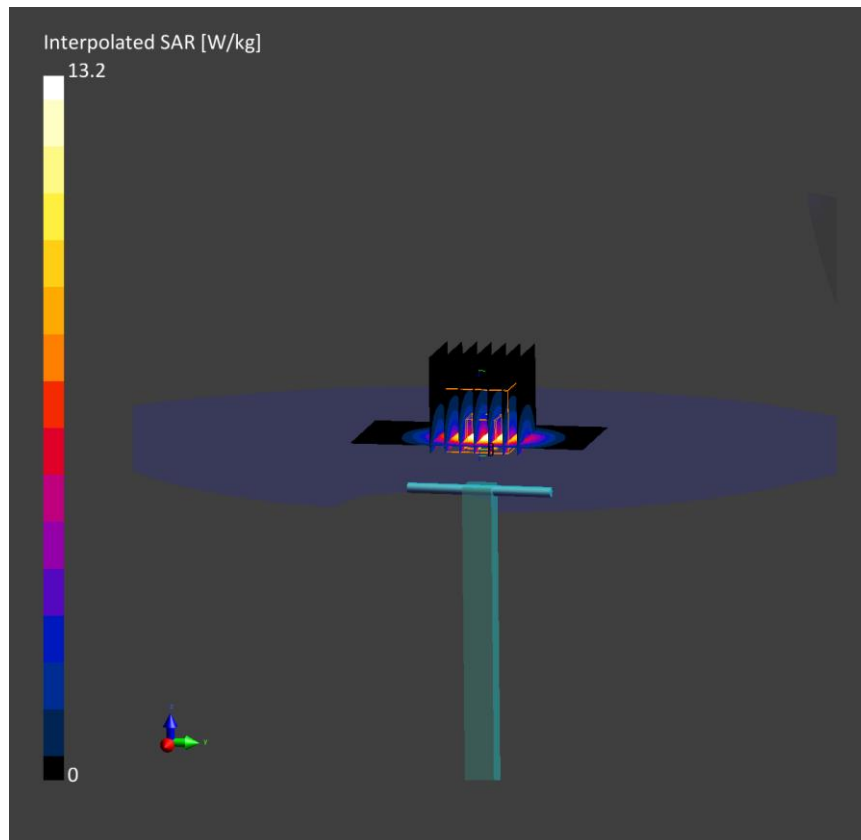
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 13.2 W/kg

SAR(10 g) = 2.68 W/kg

Deviation (10 g) = 7.63%;



PCTEST

DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1123

Communication System: UID 0, CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Body; Medium parameters used:

$f = 5250 \text{ MHz}$; $\sigma = 5.41 \text{ S/m}$; $\epsilon_r = 48.246$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07/23/2021; Ambient Temp: 21.5°C; Tissue Temp: 20.4°C

Probe: EX3DV4 - SN7638; ConvF(4.76, 4.76, 4.76) @ 5250 MHz; Calibrated: 3/3/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1644; Calibrated: 1/11/2021

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 2027

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

5250 MHz System Verification at 17.0 dBm (50 mW)

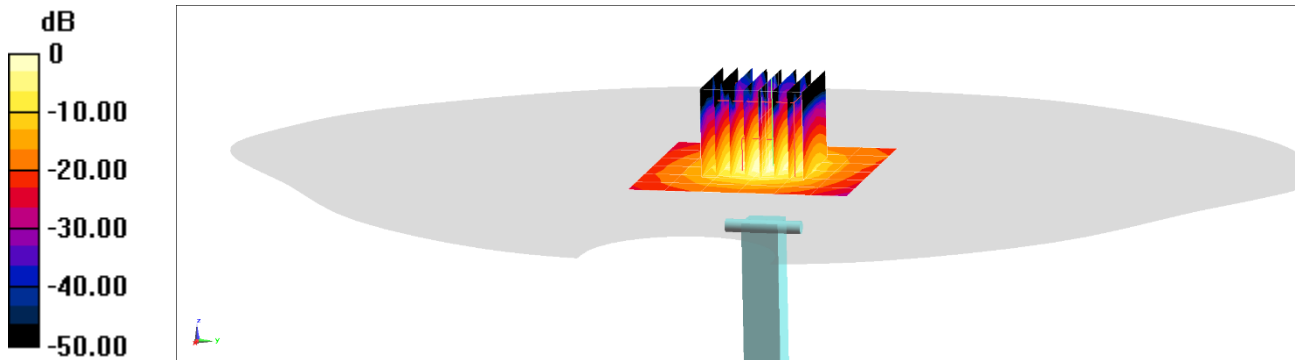
Area Scan (7x7x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$; Graded Ratio: 1.4

Peak SAR (extrapolated) = 15.8 W/kg

SAR(10 g) = 1.07 W/kg

Deviation(10 g) = 5.42%



0 dB = 9.16 W/kg = 9.62 dBW/kg

PCTEST

DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1123

Communication System: UID 0, CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Body; Medium parameters used:

$f = 5600$ MHz; $\sigma = 5.917$ S/m; $\epsilon_r = 47.582$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07/23/2021; Ambient Temp: 21.5°C; Tissue Temp: 20.4°C

Probe: EX3DV4 - SN7638; ConvF(4.24, 4.24, 4.24) @ 5600 MHz; Calibrated: 3/3/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1644; Calibrated: 1/11/2021

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 2027

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

5600 MHz System Verification at 17.0 dBm (50 mW)

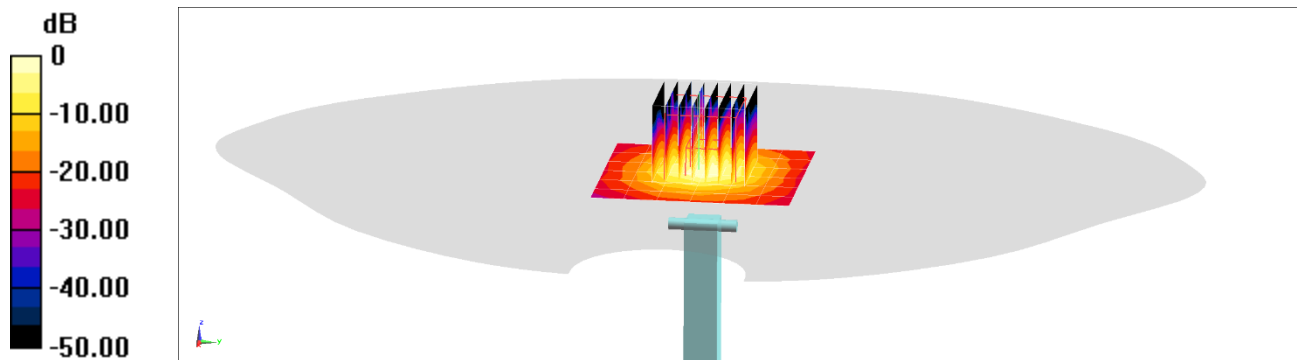
Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 19.0 W/kg

SAR(10 g) = 1.13 W/kg

Deviation(10 g) = 6.60%



0 dB = 10.0 W/kg = 10.00 dBW/kg

PCTEST

DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1123

Communication System: UID 0, CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Body; Medium parameters used:

$f = 5750 \text{ MHz}$; $\sigma = 6.14 \text{ S/m}$; $\epsilon_r = 47.325$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07/23/2021; Ambient Temp: 21.5°C; Tissue Temp: 20.4°C

Probe: EX3DV4 - SN7638; ConvF(4.32, 4.32, 4.32) @ 5750 MHz; Calibrated: 3/3/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1644; Calibrated: 1/11/2021

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 2027

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

5750 MHz System Verification at 17.0 dBm (50 mW)

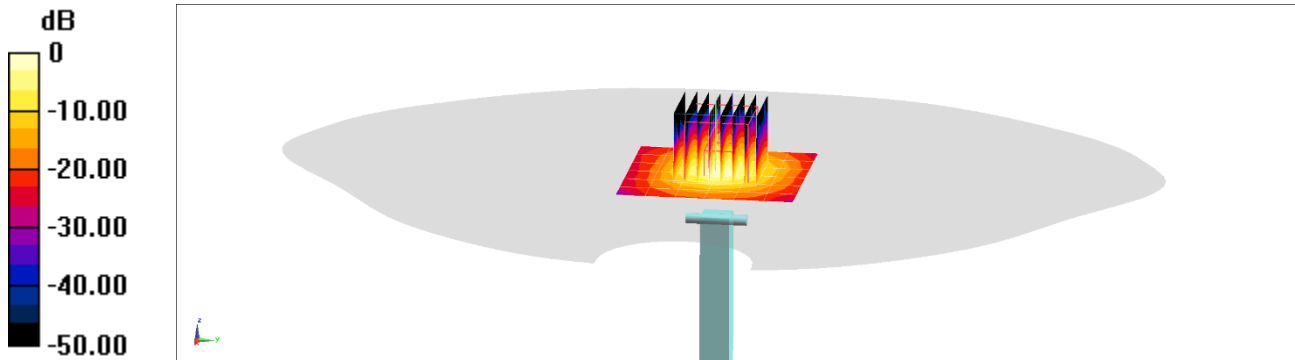
Area Scan (7x7x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$; Graded Ratio: 1.4

Peak SAR (extrapolated) = 18.7 W/kg

SAR(10 g) = 1.08 W/kg

Deviation(10 g) = 7.46%



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

APPENDIX C: SAR TISSUE SPECIFICATIONS

FCC ID: BCG-A2476	 PCTEST Proud to be part of element	SAR EVALUATION REPORT	Approved by: Quality Manager
Test Dates: 06/16/2021 – 08/18/2021	DUT Type: Watch		APPENDIX C: Page 1 of 4

Measurement Procedure for Tissue verification:

- 1) The network analyzer and probe system was configured and calibrated.
- 2) The probe was immersed in the tissue. The tissue was placed in a nonmetallic container. Trapped air bubbles beneath the flange were minimized by placing the probe at a slight angle.
- 3) The complex admittance with respect to the probe aperture was measured
- 4) The complex relative permittivity ϵ' can be calculated from the below equation (Pournaropoulos and Misra):

$$Y = \frac{j2\omega\epsilon_r\epsilon_0}{[\ln(b/a)]^2} \int_a^b \int_a^b \int_0^\pi \cos\phi' \frac{\exp[-j\omega r(\mu_0\epsilon_r\epsilon_0)^{1/2}]}{r} d\phi' d\rho' d\rho$$

where Y is the admittance of the probe in contact with the sample, the primed and unprimed coordinates refer to source and observation points, respectively, $r^2 = \rho^2 + \rho'^2 - 2\rho\rho' \cos\phi'$, ω is the angular frequency, and $j = \sqrt{-1}$.

3 Composition / Information on ingredients

3.2 Mixtures

Description: Aqueous solution with surfactants and inhibitors

Declarable, or hazardous components:

CAS: 107-21-1 EINECS: 203-473-3 Reg.nr.: 01-2119456816-28-0000	Ethanedial STOT RE 2, H373; Acute Tox. 4, H302	>1.0-4.9%
CAS: 68608-26-4 EINECS: 271-781-5 Reg.nr.: 01-2119527859-22-0000	Sodium petroleum sulfonate Eye Irrit. 2, H319	< 2.9%
CAS: 107-41-5 EINECS: 203-489-0 Reg.nr.: 01-2119539582-35-0000	Hexylene Glycol / 2-Methyl-pentane-2,4-diol Skin Irrit. 2, H315; Eye Irrit. 2, H319	< 2.9%
CAS: 68920-66-1 NLP: 500-236-9 Reg.nr.: 01-2119489407-26-0000	Alkoxyated alcohol, > C₁₆ Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319	< 2.0%

Additional information:

For the wording of the listed risk phrases refer to section 16.

Not mentioned CAS-, EINECS- or registration numbers are to be regarded as Proprietary/Confidential.

The specific chemical identity and/or exact percentage concentration of proprietary components is withheld as a trade secret.

Figure C-1

Note: Liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

FCC ID: BCG-A2476	 PCTEST Proud to be part of element	SAR EVALUATION REPORT	Approved by: Quality Manager
Test Dates: 06/16/2021 – 08/18/2021	DUT Type: Watch		APPENDIX C: Page 2 of 4

Measurement Certificate / Material Test

Item Name **Body Tissue Simulating Liquid (MBBL600-6000V6)**
Product No. **SL AAM U16 BC (Batch: 181029-1)**
Manufacturer **SPEAG**

Measurement Method

TSL dielectric parameters measured using calibrated DAK probe.

Target Parameters

Target parameters as defined in the KDB 865664 compliance standard.

Test Condition

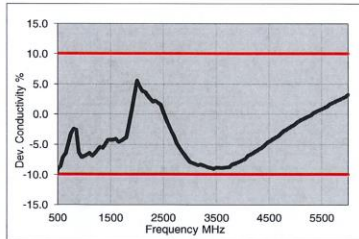
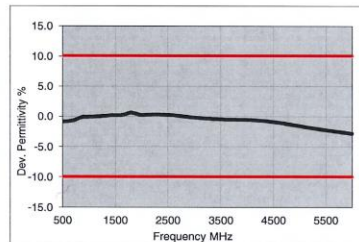
Ambient Condition **22°C ; 30% humidity**
TSL Temperature **22°C**
Test Date **30-Oct-18**
Operator **CL**

Additional Information

TSL Density
TSL Heat-capacity

Results

f [MHz]	Measured			Target		Diff. to Target [%]	
	e'	e''	sigma	eps	sigma	Δ-eps	Δ-sigma
800	55.1	21.3	0.95	55.3	0.97	-0.4	-2.1
825	55.1	20.8	0.96	55.2	0.98	-0.3	-2.0
835	55.1	20.6	0.96	55.1	0.99	0.0	-2.5
850	55.1	20.4	0.96	55.2	0.99	-0.1	-3.0
900	55.0	19.7	0.98	55.0	1.05	0.0	-5.7
1400	54.2	15.6	1.22	54.1	1.28	0.2	-4.7
1450	54.1	15.4	1.24	54.0	1.30	0.2	-4.6
1500	54.1	15.3	1.27	53.9	1.33	0.3	-4.5
1550	54.0	15.1	1.30	53.9	1.36	0.2	-4.4
1600	53.9	15.0	1.33	53.8	1.39	0.2	-4.3
1625	53.9	14.9	1.35	53.8	1.41	0.3	-4.3
1640	53.9	14.9	1.36	53.7	1.42	0.3	-4.2
1650	53.8	14.9	1.36	53.7	1.43	0.2	-4.9
1700	53.8	14.8	1.40	53.6	1.46	0.4	-4.1
1750	53.7	14.7	1.43	53.4	1.49	0.5	-4.0
1800	53.7	14.6	1.46	53.3	1.52	0.8	-3.9
1810	53.7	14.6	1.47	53.3	1.52	0.8	-3.3
1825	53.7	14.6	1.48	53.3	1.52	0.8	-2.6
1850	53.6	14.5	1.50	53.3	1.52	0.6	-1.3
1900	53.5	14.5	1.53	53.3	1.52	0.4	0.7
1950	53.5	14.5	1.57	53.3	1.52	0.4	3.3
2000	53.4	14.4	1.60	53.3	1.52	0.2	5.3
2050	53.4	14.4	1.64	53.2	1.57	0.3	4.5
2100	53.3	14.4	1.68	53.2	1.62	0.2	3.7
2150	53.3	14.4	1.72	53.1	1.66	0.4	3.6
2200	53.2	14.4	1.76	53.0	1.71	0.3	2.9
2250	53.1	14.4	1.81	53.0	1.76	0.2	2.8
2300	53.1	14.4	1.85	52.9	1.81	0.4	2.2
2350	53.0	14.5	1.89	52.8	1.85	0.3	2.2
2400	52.9	14.5	1.94	52.8	1.90	0.2	2.1
2450	52.9	14.5	1.98	52.7	1.95	0.4	1.5
2500	52.8	14.6	2.03	52.6	2.02	0.3	0.5
2550	52.7	14.6	2.07	52.6	2.09	0.2	-1.0
2600	52.6	14.7	2.12	52.5	2.16	0.2	-1.9



3500	51.1	15.5	3.02	51.3	3.31	-0.4	-8.8
3700	50.8	15.7	3.24	51.1	3.55	-0.5	-8.8
5200	48.1	18.2	5.27	49.0	5.30	-1.8	-0.6
5250	48.0	18.3	5.34	49.0	5.36	-1.9	-0.4
5300	47.9	18.4	5.41	48.9	5.42	-2.0	-0.2
5500	47.5	18.6	5.70	48.6	5.65	-2.2	0.8
5600	47.3	18.8	5.84	48.5	5.77	-2.3	1.3
5700	47.1	18.9	5.99	48.3	5.88	-2.5	1.8
5800	47.0	19.0	6.14	48.2	6.00	-2.6	2.3

TSL Dielectric Parameters

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Figure C-2
600 – 5800 MHz Body Tissue Equivalent Matter

FCC ID: BCG-A2476		SAR EVALUATION REPORT	Approved by: Quality Manager
Test Dates: 06/16/2021 – 08/18/2021	DUT Type: Watch		APPENDIX C: Page 3 of 4

Measurement Certificate / Material Test

Item Name	Head Tissue Simulating Liquid (HBBL600-10000V6)
Product No.	SL AAH U16 BC (Batch: 181031-2)
Manufacturer	SPEAG

Measurement Method

TSL dielectric parameters measured using calibrated DAK probe.

Target Parameters

Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

Test Condition

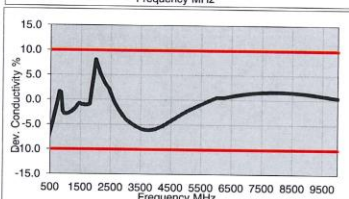
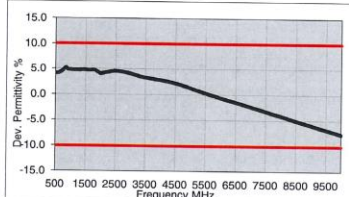
Ambient Condition 22°C ; 30% humidity
TSL Temperature 22°C
Test Date 31-Oct-18
Operator CL

Additional Information

TSL Density
TSL Heat-capacity

Results

f [MHz]	Measured			Target		Diff.to Target [%]	
	e'	e''	sigma	eps	sigma	Δ-eps	Δ-sigma
800	43.8	20.5	0.91	41.7	0.90	5.1	1.4
825	43.8	20.1	0.92	41.6	0.91	5.3	1.5
835	43.8	19.9	0.93	41.5	0.91	5.4	2.0
850	43.7	19.7	0.93	41.5	0.92	5.3	1.5
900	43.5	18.9	0.95	41.5	0.97	4.8	-2.1
1400	42.5	15.0	1.17	40.6	1.18	4.7	-0.8
1450	42.5	14.8	1.19	40.5	1.20	4.9	-0.8
1600	42.2	14.3	1.27	40.3	1.28	4.7	-1.1
1625	42.2	14.2	1.29	40.3	1.30	4.8	-0.7
1640	42.2	14.2	1.30	40.3	1.31	4.8	-0.5
1650	42.1	14.2	1.30	40.2	1.31	4.6	-1.0
1700	42.1	14.0	1.33	40.2	1.34	4.8	-0.9
1750	42.0	13.9	1.36	40.1	1.37	4.8	-0.8
1800	41.9	13.9	1.39	40.0	1.40	4.7	-0.7
1810	41.9	13.8	1.40	40.0	1.40	4.7	0.0
1825	41.9	13.8	1.41	40.0	1.40	4.7	0.7
1850	41.8	13.8	1.42	40.0	1.40	4.5	1.4
1900	41.8	13.7	1.45	40.0	1.40	4.5	3.6
1950	41.7	13.7	1.48	40.0	1.40	4.3	5.7
2000	41.6	13.6	1.51	40.0	1.40	4.0	7.9
2050	41.6	13.6	1.55	39.9	1.44	4.2	7.3
2100	41.5	13.5	1.58	39.8	1.49	4.2	6.1
2150	41.4	13.5	1.62	39.7	1.53	4.2	5.7
2200	41.4	13.5	1.65	39.6	1.58	4.4	4.6
2250	41.3	13.5	1.69	39.6	1.62	4.4	4.2
2300	41.2	13.5	1.72	39.5	1.67	4.4	3.2
2350	41.1	13.5	1.76	39.4	1.71	4.4	2.9
2400	41.1	13.5	1.80	39.3	1.76	4.6	2.5
2450	41.0	13.5	1.84	39.2	1.80	4.6	2.2
2500	40.9	13.5	1.88	39.1	1.85	4.5	1.4
2550	40.8	13.5	1.92	39.1	1.91	4.4	0.6
2600	40.8	13.6	1.96	39.0	1.96	4.6	-0.2
3500	39.2	14.1	2.74	37.9	2.91	3.3	-5.8
3700	38.9	14.2	2.93	37.7	3.12	3.1	-6.1



5200	36.3	15.8	4.57	36.0	4.66	0.9	-1.7
5250	36.2	15.9	4.63	35.9	4.71	0.8	-1.6
5300	36.1	15.9	4.69	35.9	4.76	0.7	-1.4
5500	35.8	16.1	4.92	35.6	4.96	0.3	-0.9
5600	35.6	16.2	5.04	35.5	5.07	0.1	-0.6
5700	35.4	16.2	5.15	35.4	5.17	0.0	-0.3
5800	35.2	16.3	5.27	35.3	5.27	-0.2	0.0
6000	34.9	16.5	5.50	35.1	5.48	-0.6	0.5
6500	34.0	16.9	6.12	34.5	6.07	-1.4	0.9
7000	33.1	17.3	6.74	33.9	6.65	-2.3	1.3
7500	32.2	17.6	7.36	33.3	7.24	-3.2	1.6
8000	31.4	17.9	7.97	32.7	7.84	-4.1	1.7
8500	30.5	18.2	8.59	32.1	8.45	-5.0	1.6
9000	29.7	18.4	9.20	31.5	9.08	-5.9	1.3
9500	28.9	18.5	9.80	31.0	9.71	-6.8	0.9
10000	28.1	18.7	10.40	30.4	10.36	-7.6	0.4

TSL Dielectric Parameters

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Figure C-3
600 – 5800 MHz Head Tissue Equivalent Matter

FCC ID: BCG-A2476	 PCTEST Proud to be part of element	SAR EVALUATION REPORT	Approved by: Quality Manager
Test Dates: 06/16/2021 – 08/18/2021	DUT Type: Watch		APPENDIX C: Page 4 of 4

APPENDIX D: SAR SYSTEM VALIDATION

FCC ID: BCG-A2476	 PCTEST Proud to be part of element	SAR EVALUATION REPORT	Approved by: Quality Manager
Test Dates: 06/16/2021 – 08/18/2021	DUT Type: Watch		Appendix D Page 1 of 2

Per FCC KDB Publication 865664 D02v01r02, SAR system validation status should be documented to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles were used with the required tissue- equivalent media for system validation, according to the procedures outlined in FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013. Since SAR probe calibrations are frequency dependent, each probe calibration point was validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue- equivalent media.

A tabulated summary of the system validation status including the validation date(s), measurement frequencies, SAR probes and tissue dielectric parameters has been included.

Table D-1
SAR System Validation Summary – 1g

SAR System	DASY Versions	Freq. (MHz)	Date	Probe SN	Probe Cal Point		Cond. (σ)	Perm. (ε _r)	CW VALIDATION			MOD. VALIDATION		
									SENSITIVITY	PROBE LINEARITY	PROBE ISOTROPY	MOD. TYPE	DUTY FACTOR	PAR
AM4A	Dasy52	835	3/30/2021	7427	835	Head	0.92	41.47	PASS	PASS	PASS	GMSK	PASS	N/A
AM7	Dasy52	835	11/17/2020	7420	835	Head	0.9	41.5	PASS	PASS	PASS	GMSK	PASS	N/A
AM5	Dasy52	1750	10/15/2020	3949	1750	Head	1.328	40.91	PASS	PASS	PASS	N/A	N/A	N/A
AM4B	Dasy52	1750	5/12/2021	7640	1750	Head	1.358	39.19	PASS	PASS	PASS	N/A	N/A	N/A
AM4A	Dasy52	1900	3/30/2021	7427	1900	Head	1.434	39.556	PASS	PASS	PASS	GMSK	PASS	N/A
AM10	cDasy6	1900	5/24/2021	7639	1900	Head	1.43	38.1	PASS	PASS	PASS	GMSK	PASS	N/A
AM5	Dasy52	2450	10/16/2020	3949	2450	Head	1.797	39.95	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
AM4B	Dasy52	2450	7/22/2021	7640	2450	Head	1.839	37.47	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
AM8	Dasy52	2450	12/3/2020	7558	2450	Head	1.819	38.6	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
AM5	Dasy52	2600	10/16/2020	3949	2600	Head	1.922	39.73	PASS	PASS	PASS	TDD	PASS	N/A
AM8	Dasy52	2600	12/3/2020	7558	2600	Head	1.941	38.38	PASS	PASS	PASS	TDD	PASS	N/A
AM8	Dasy52	5250	12/7/2020	7558	5250	Head	4.476	34.87	PASS	PASS	PASS	OFDM	N/A	PASS
AM8	Dasy52	5600	12/7/2020	7558	5600	Head	4.855	34.3	PASS	PASS	PASS	OFDM	N/A	PASS
AM8	Dasy52	5750	12/7/2020	7558	5750	Head	5.036	34.018	PASS	PASS	PASS	OFDM	N/A	PASS

Table D-2
SAR System Validation Summary – 10g

SAR System	DASY Versions	Freq. (MHz)	Date	Probe SN	Probe Cal Point		Cond. (σ)	Perm. (ε _r)	CW VALIDATION			MOD. VALIDATION		
									SENSITIVITY	PROBE LINEARITY	PROBE ISOTROPY	MOD. TYPE	DUTY FACTOR	PAR
AM5	Dasy52	835	10/14/2020	3949	835	Body	1.003	52.97	PASS	PASS	PASS	GMSK	PASS	N/A
AM4B	Dasy52	835	5/10/2021	7640	835	Body	0.95	53.933	PASS	PASS	PASS	GMSK	PASS	N/A
AM2	cDasy6	835	5/17/2021	7532	835	Body	1.02	54.3	PASS	PASS	PASS	GMSK	PASS	N/A
AM10	cDasy6	1750	5/17/2021	7639	1750	Body	1.48	52.2	PASS	PASS	PASS	N/A	N/A	N/A
AM10	Dasy52	1900	4/28/2021	7639	1900	Body	1.588	51.75	PASS	PASS	PASS	GMSK	PASS	N/A
AM4B	Dasy52	1900	5/10/2021	7640	1900	Body	1.584	52.31	PASS	PASS	PASS	GMSK	PASS	N/A
AM2	Dasy52	2450	5/10/2021	7532	2450	Body	2.023	52.1	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
AM2	cDasy6	2450	5/17/2021	7532	2450	Body	2.031	51.888	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
AM8	Dasy52	2450	12/3/2020	7558	2450	Body	2.029	51.96	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
AM4B	Dasy52	2450	5/10/2021	7640	2450	Body	2.026	51.61	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
AM2	Dasy52	2600	5/10/2021	7532	2600	Body	2.16	52.509	PASS	PASS	PASS	TDD	PASS	N/A
AM2	cDasy6	2600	5/17/2021	7532	2600	Body	2.165	51.687	PASS	PASS	PASS	TDD	PASS	N/A
AM9	Dasy52	5250	5/11/2021	7638	5250	Body	5.412	47.566	PASS	PASS	PASS	OFDM	N/A	PASS
AM9	Dasy52	5600	5/11/2021	7638	5600	Body	5.925	46.935	PASS	PASS	PASS	OFDM	N/A	PASS
AM9	Dasy52	5750	5/11/2021	7638	5750	Body	6.129	46.6	PASS	PASS	PASS	OFDM	N/A	PASS

NOTE: While the probes have been calibrated for both CW and modulated signals. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664 D01v01r04 for scenarios when CW probe calibrations are used with other signal types. SAR systems were validated for modulated signals with a periodic duty cycle, such as GMSK, or with a high peak to average ratio (>5 dB), such as OFDM according to FCC KDB Publication 865664 D01v01r04.

FCC ID: BCG-A2476	 PCTEST Proud to be part of element	SAR EVALUATION REPORT	Approved by: Quality Manager
Test Dates: 06/16/2021 – 08/18/2021	DUT Type: Watch		Appendix D Page 2 of 2