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SAR EVALUATION REPORT

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

Date of Testing:
06/24/20 – 07/31/20
Test Site/Location:
PCTEST Lab, Morgan Hill, CA, USA
Document Serial No.:
1C2004270020-01-R1.BCG

FCC ID: **BCG-A2376**

APPLICANT: **APPLE, INC.**

DUT Type: Watch
Application Type: Certification
FCC Rule Part(s): CFR §2.1093
Model: A2376

Equipment Class	Band & Mode	Tx Frequency	SAR	
			1g Head (W/kg)	1g Extremity (W/kg)
PCT	UMTS 850	826.40 - 846.60 MHz	< 0.1	0.19
PCT	UMTS 1750	1712.4 - 1752.6 MHz	0.23	< 0.1
PCT	UMTS 1900	1852.4 - 1907.6 MHz	0.28	< 0.1
PCT	LTE Band 26 (Cell)	814.7 - 848.3 MHz	< 0.1	0.17
PCT	LTE Band 5 (Cell)	824.7 - 848.3 MHz	< 0.1	0.20
PCT	LTE Band 66 (AWS)	1710.7 - 1779.3 MHz	0.22	< 0.1
PCT	LTE Band 4 (AWS)	1710.7 - 1754.3 MHz	N/A	N/A
PCT	LTE Band 25 (PCS)	1850.7 - 1914.3 MHz	0.33	< 0.1
PCT	LTE Band 2 (PCS)	1850.7 - 1909.3 MHz	N/A	N/A
PCT	LTE Band 7	2502.5 - 2567.5 MHz	1.17	0.27
PCT	LTE Band 41	2498.5 - 2687.5 MHz	1.19	0.13
DTS	2.4 GHz WLAN	2412 - 2472 MHz	0.68	< 0.1
NII	U-NII-1	5180 - 5240 MHz	N/A	N/A
NII	U-NII-2A	5260 - 5320 MHz	0.29	< 0.1
NII	U-NII-2C	5500 - 5720 MHz	0.21	< 0.1
NII	U-NII-3	5745 - 5825 MHz	0.20	< 0.1
DSS/DTS	Bluetooth	2402 - 2480 MHz	0.18	< 0.1
Simultaneous SAR per KDB 690783 D01v01r03:			1.43	0.34

Note: This revised Test Report (S/N: 1C2004270020-01-R1.BCG) 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 watch 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

1.2 Power Reduction for SAR

This device uses an independent fixed level power reduction mechanism for LTE Band 7 ad Band 41 operations during next to mouth scenarios. When the speaker is on, the output power of licensed power is reduced. Detailed descriptions of the power reduction mechanisms are included in the operational description. The power reduction mechanisms were confirmed during the SAR evaluation.

This device additionally uses an independent duty cycle reduction mechanism for WLAN operations while licensed band operations are active. When the licensed band is transmitting, the duty cycle of WLAN operation reduces to a maximum of 30%. A detailed description of the mechanism is included in the operational description. The reduction mechanism was confirmed during the SAR evaluation.

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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 Maximum Output Power – UMTS Mode

Mode / Band		Modulated Average (dBm)		
		3GPP WCDMA	*3GPP HSDPA*	*3GPP HSUPA*
UMTS Band 5 (850 MHz)	Maximum	**25.0**	**25.0**	**24.0**
	Nominal	**24.0**	**24.0**	**23.0**
UMTS Band 4 (1750 MHz)	Maximum	**24.0**	**24.0**	**23.0**
	Nominal	**23.0**	**23.0**	**22.0**
UMTS Band 2 (1900 MHz)	Maximum	**24.0**	**24.0**	**23.0**
	Nominal	**23.0**	**23.0**	**22.0**

1.3.2 Maximum Output Power – LTE Mode

Mode / Band		Modulated Average (dBm)
LTE Band 26 (Cell)	Maximum	**25.0**
	Nominal	**24.0**
LTE Band 5 (Cell)	Maximum	**25.0**
	Nominal	**24.0**
LTE Band 66 (AWS)	Maximum	**24.0**
	Nominal	**23.0**
LTE Band 4 (AWS)	Maximum	**24.0**
	Nominal	**23.0**
LTE Band 25 (PCS)	Maximum	**24.0**
	Nominal	**23.0**
LTE Band 2 (PCS)	Maximum	**24.0**
	Nominal	**23.0**
LTE Band 7	Maximum	**23.5**
	Nominal	**22.5**
LTE Band 41	Maximum	**23.5**
	Nominal	**22.5**

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1.3.3 Maximum Output Power – 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	17.50	16.50	17.50	16.50
		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	13.50	12.50	13.50	12.50
		12	17.00	16.00	12.50	11.50	12.50	11.50
		13	18.00	17.00	1.50	0.50	1.50	0.50

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	16.00	15.00	16.00	15.00
		40	16.00	15.00	16.00	15.00
		44	16.00	15.00	16.00	15.00
		48	16.00	15.00	16.00	15.00
		52	16.00	15.00	16.00	15.00
		56	16.00	15.00	16.00	15.00
		60	16.00	15.00	16.00	15.00
		64	16.00	15.00	16.00	15.00
		100	16.00	15.00	16.00	15.00
		104	16.00	15.00	16.00	15.00
		108	16.00	15.00	16.00	15.00
		112	16.00	15.00	16.00	15.00
		116	16.00	15.00	16.00	15.00
		120	16.00	15.00	16.00	15.00
		124	16.00	15.00	16.00	15.00
		128	16.00	15.00	16.00	15.00
		132	16.00	15.00	16.00	15.00
		136	16.00	15.00	16.00	15.00
		140	12.50	11.50	12.50	11.50
		144	16.00	15.00	16.00	15.00
		149	16.00	15.00	16.00	15.00
		153	16.00	15.00	16.00	15.00
		157	16.00	15.00	16.00	15.00
		161	16.00	15.00	16.00	15.00
		165	16.00	15.00	16.00	15.00

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1.3.4 Maximum Output Power – Bluetooth Mode

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**

1.3.5 Reduced Output Power – LTE Mode

Mode / Band		Modulated Average (dBm)
LTE Band 7	Maximum	**20.5**
	Nominal	**19.5**
LTE Band 41	Maximum	**22.5**
	Nominal	**21.5**

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.

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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

1. 2.4 GHz WLAN, and 2.4 GHz Bluetooth share the same antenna path and cannot transmit simultaneously.
2. 2.4 GHz WLAN, and 5 GHz WLAN share the same antenna path and cannot transmit simultaneously.
3. Licensed modes cannot transmit simultaneously.
4. 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 [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, due to the reduced output power for channels 12 and 13, 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.

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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)

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.

1.10 Device Housing Types and Wrist Band 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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2 LTE INFORMATION

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)				
	LTE Band 41 (2498.5 - 2687.5 MHz)				
Channel Bandwidths	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				
	LTE Band 7: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 41: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
Channel Numbers and Frequencies (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, eICIC, 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/m^3)
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:

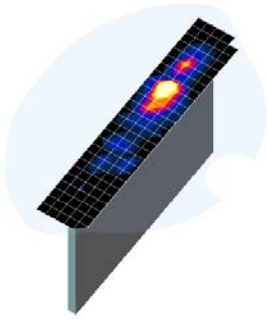

Figure 4-1
Sample SAR Area Scan

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).
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). 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.

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

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

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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 ε = 3 and loss tangent δ = 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 *General Population* (W/kg) or (mW/g)	CONTROLLED ENVIRONMENT *Occupational* (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 head exposure configurations is measured using the 12.2 kbps RMC with TPC bits configured to all “1s”. SAR in AMR configurations is not required when the maximum average output of each RF channel for 12.2 kbps AMR is less than 0.25 dB higher than that measured in 12.2 kbps RMC. Otherwise, SAR is measured on the maximum output channel in 12.2 AMR with a 3.4 kbps SRB (signaling radio bearer) using the exposure configuration that resulted in the highest SAR for that RF channel in the 12.2 kbps RMC mode.

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.

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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.

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.
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 ½ dB higher than the equivalent configuration using QPSK modulation and when the QPSK SAR for those configurations is <1.45 W/kg.
e. This device can only operate with 16QAM on the uplink with less than or equal to 27 RB. For 16QAM configurations with 10 MHz, 15 MHz and 20 MHz bandwidths, LTE powers for RB size of 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 16QAM 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

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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 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 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, and 802.11n 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 or 802.11g then 802.11n, is used for SAR measurement. When the maximum output power are 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 7.6.5).

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.

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8 RF CONDUCTED POWERS

8.1 UMTS Conducted Powers

Table 8-1
Maximum Conducted Powers

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	
12.2 kbps RMC	23.54	23.39	23.51	23.00	22.98	22.87	22.91	22.97	22.99	-
12.2 kbps AMR	23.52	23.32	23.50	22.81	22.81	22.87	22.92	22.97	23.00	-
Subtest 1	24.43	24.32	24.27	23.51	23.27	23.05	23.25	23.30	23.27	0
Subtest 2	23.48	23.36	23.29	22.65	22.48	22.76	22.22	22.35	22.08	0
Subtest 3	22.93	22.84	22.73	21.57	21.80	21.61	21.72	21.66	21.70	0.5
Subtest 4	22.68	22.55	22.51	21.57	21.53	21.53	21.56	21.58	21.50	0.5
Subtest 1	22.36	22.38	22.37	22.01	22.02	22.00	22.02	22.08	22.06	0
Subtest 2	21.61	21.72	21.49	20.34	20.41	20.23	20.26	20.42	20.37	2
Subtest 3	22.51	22.52	22.36	21.07	21.13	21.00	21.12	21.20	21.14	1
Subtest 4	21.89	21.97	21.81	20.63	20.71	20.56	20.56	20.71	20.67	2
Subtest 5	23.41	23.13	23.28	22.57	22.61	22.42	22.51	22.62	22.55	0

This device does not support DC-HSDPA.

Figure 8-1
Power Measurement Setup

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8.2 LTE Conducted Powers

8.2.1 LTE Band 26

Table 8-2
LTE Band 26 (Cell) Conducted Powers - 10 MHz Bandwidth

LTE Band 26 (Cell) 10 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 26740 (819.0 MHz)	Mid Channel 26865 (831.5 MHz)	High Channel 26990 (844.0 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	**24.00**	23.86	23.65	0
	1	25	23.65	23.98	23.88	0
	1	49	23.61	23.82	23.79	0
	25	0	**22.89**	22.87	22.77	1
	25	12	22.75	22.88	22.83	1
	25	25	22.71	22.84	22.83	1
	50	0	22.87	22.87	22.86	1
	15	0	23.00	22.97	22.82	1
	15	17	22.78	23.00	22.94	1
	15	35	22.80	22.88	22.88	1
	27	0	22.86	23.00	22.89	1
	27	12	22.73	23.00	22.95	1
	27	23	22.72	22.94	22.97	1
16QAM	1	0	22.93	22.64	22.46	1
	1	25	22.62	22.70	22.67	1
	1	49	22.60	22.53	22.59	1
	25	0	21.40	21.35	21.21	2
	25	12	21.26	21.37	21.32	2
	25	25	21.21	21.40	21.41	2
	15	0	21.46	21.42	21.23	2
	15	17	21.25	21.44	21.34	2
	15	35	21.24	21.36	21.37	2
	27	0	21.37	21.41	21.25	2
	27	12	21.23	21.43	21.33	2
	27	23	21.19	21.37	21.41	2

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Table 8-3
LTE Band 26 (Cell) Conducted Powers - 5 MHz Bandwidth

LTE Band 26 (Cell) 5 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 26715 (816.5 MHz)	Mid Channel 26865 (831.5 MHz)	High Channel 27015 (846.5 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	23.97	23.86	23.66	0
	1	12	23.82	23.91	23.65	0
	1	24	23.62	23.90	23.46	0
	12	0	22.74	22.73	22.71	1
	12	6	22.65	22.71	22.67	1
	12	13	22.57	22.71	22.56	1
	25	0	22.66	22.72	22.68	1
16QAM	1	0	23.00	22.81	22.55	1
	1	12	22.59	22.84	22.60	1
	1	24	22.58	22.81	22.45	1
	12	0	21.38	21.31	21.34	2
	12	6	21.29	21.34	21.33	2
	12	13	21.26	21.37	21.27	2
	25	0	21.31	21.30	21.32	2

Table 8-4
LTE Band 26 (Cell) Conducted Powers - 3 MHz Bandwidth

LTE Band 26 (Cell) 3 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 26705 (815.5 MHz)	Mid Channel 26865 (831.5 MHz)	High Channel 27025 (847.5 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	23.87	23.70	23.63	0
	1	7	23.80	23.75	23.59	0
	1	14	23.65	23.72	23.41	0
	8	0	22.82	22.74	22.67	1
	8	4	22.75	22.72	22.59	1
	8	7	22.66	22.73	22.52	1
	15	0	22.76	22.74	22.61	1
16QAM	1	0	22.57	22.81	22.82	1
	1	7	22.60	22.70	22.64	1
	1	14	22.40	22.80	22.54	1
	8	0	21.48	21.47	21.38	2
	8	4	21.45	21.46	21.35	2
	8	7	21.40	21.43	21.27	2
	15	0	21.39	21.36	21.23	2

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Table 8-5
LTE Band 26 (Cell) Conducted Powers – 1.4 MHz Bandwidth

LTE Band 26 (Cell) 1.4 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 26697 (814.7 MHz)	Mid Channel 26865 (831.5 MHz)	High Channel 27033 (848.3 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	23.95	23.80	23.68	0
	1	2	23.96	23.79	23.67	0
	1	5	23.89	23.82	23.63	0
	3	0	23.93	23.84	23.60	0
	3	2	23.91	23.84	23.58	0
	3	3	23.93	23.85	23.56	0
	6	0	22.91	22.83	22.58	1
16QAM	1	0	22.77	22.81	22.82	1
	1	2	22.64	22.70	22.64	1
	1	5	22.60	22.80	22.54	1
	3	0	22.60	22.59	22.36	1
	3	2	22.65	22.53	22.30	1
	3	3	22.58	22.52	22.28	1
	6	0	21.39	21.36	21.23	2

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8.2.2 LTE Band 5

Table 8-6
LTE Band 5 (Cell) Conducted Powers - 10 MHz Bandwidth

LTE Band 5 (Cell) 10 MHz Bandwidth				
Modulation	**RB Size**	**RB Offset**	**Mid Channel 20525 (836.5 MHz) Conducted Power [dBm]**	**Design MPR [dB]**
QPSK	1	0	23.65	0
	1	25	23.60	0
	1	49	**23.67**	0
	25	0	**22.55**	1
	25	12	22.53	1
	25	25	22.54	1
	50	0	22.54	1
	15	0	22.56	1
	15	17	22.54	1
	15	35	22.51	1
	27	0	22.55	1
	27	12	22.54	1
	27	23	22.53	1
16QAM	1	0	23.00	1
	1	25	22.92	1
	1	49	22.93	1
	25	0	21.81	2
	25	12	21.72	2
	25	25	21.62	2
	15	0	21.89	2
	15	17	21.71	2
	15	35	21.56	2
	27	0	21.78	2
	27	12	21.71	2
	27	23	21.63	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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Table 8-7
LTE Band 5 (Cell) Conducted Powers - 5 MHz Bandwidth

LTE Band 5 (Cell) 5 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 20425 (826.5 MHz)	Mid Channel 20525 (836.5 MHz)	High Channel 20625 (846.5 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	23.72	24.00	23.84	0
	1	12	23.88	23.88	23.88	0
	1	24	24.00	23.73	23.71	0
	12	0	22.79	22.76	22.94	1
	12	6	22.82	22.72	22.91	1
	12	13	22.87	22.68	22.81	1
	25	0	22.85	22.75	22.92	1
16QAM	1	0	23.00	23.00	23.00	1
	1	12	23.00	23.00	23.00	1
	1	24	23.00	22.91	22.91	1
	12	0	21.63	21.76	21.81	2
	12	6	21.71	21.70	21.86	2
	12	13	21.74	21.66	21.81	2
	25	0	21.74	21.67	21.79	2

Table 8-8
LTE Band 5 (Cell) Conducted Powers - 3 MHz Bandwidth

LTE Band 5 (Cell) 3 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 20415 (825.5 MHz)	Mid Channel 20525 (836.5 MHz)	High Channel 20635 (847.5 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	23.68	23.78	23.89	0
	1	7	23.86	23.81	23.87	0
	1	14	23.89	23.63	23.72	0
	8	0	22.80	22.85	22.87	1
	8	4	22.88	22.82	22.80	1
	8	7	22.91	22.81	22.73	1
	15	0	22.90	22.77	22.83	1
16QAM	1	0	22.88	23.00	23.00	1
	1	7	22.92	23.00	23.00	1
	1	14	23.00	23.00	23.00	1
	8	0	21.64	21.81	21.88	2
	8	4	21.73	21.79	21.84	2
	8	7	21.78	21.77	21.77	2
	15	0	21.73	21.71	21.78	2

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Table 8-9
LTE Band 5 (Cell) Conducted Powers – 1.4 MHz Bandwidth

LTE Band 5 (Cell) 1.4 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 20407 (824.7 MHz)	Mid Channel 20525 (836.5 MHz)	High Channel 20643 (848.3 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	23.70	23.82	23.92	0
	1	2	23.69	23.82	23.90	0
	1	5	23.83	23.82	23.87	0
	3	0	23.79	23.86	23.82	0
	3	2	23.79	23.84	23.81	0
	3	3	23.80	23.84	23.79	0
	6	0	22.80	22.83	22.82	1
16QAM	1	0	22.80	23.00	22.96	1
	1	2	22.83	23.00	22.74	1
	1	5	22.71	22.94	22.78	1
	3	0	22.69	22.93	22.85	1
	3	2	22.71	22.91	22.81	1
	3	3	22.73	22.91	22.85	1
	6	0	21.77	21.71	21.72	2

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8.2.3 LTE Band 66

Table 8-10
LTE Band 66 (AWS) Conducted Powers - 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 132072 (1720.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132572 (1770.0 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	22.18	22.36	22.13	0
	1	50	22.23	**22.38**	22.03	0
	1	99	22.18	22.37	22.04	0
	50	0	21.41	21.45	21.01	1
	50	25	21.49	21.46	21.02	1
	50	50	21.46	**21.67**	21.02	1
	100	0	21.56	21.60	21.38	1
	15	0	22.21	22.36	22.06	0
	15	42	22.41	22.30	22.09	0
	15	85	22.33	22.37	22.04	0
	27	0	21.29	21.35	21.08	1
	27	37	21.45	21.38	21.10	1
	27	73	21.43	21.36	21.10	1
16QAM	1	0	21.58	21.70	21.31	1
	1	50	21.68	21.45	21.35	1
	1	99	21.74	21.43	21.30	1
	15	0	21.29	21.32	21.01	1
	15	42	21.35	21.21	21.00	1
	15	85	21.37	21.16	21.04	1
	27	0	20.31	20.28	20.00	2
	27	37	20.35	20.16	20.05	2
	27	73	20.30	20.08	20.02	2

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Table 8-11
LTE Band 66 (AWS) Conducted Powers - 15 MHz Bandwidth

LTE Band 66 (AWS) 15 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 132047 (1717.5 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132597 (1772.5 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	22.45	22.28	22.10	0
	1	36	22.67	22.25	22.02	0
	1	74	22.56	22.07	22.15	0
	36	0	21.52	21.49	21.15	1
	36	18	21.62	21.46	21.22	1
	36	37	21.62	21.40	21.20	1
	75	0	21.76	21.49	21.42	1
	15	0	22.38	22.35	22.05	0
	15	30	22.57	22.35	22.20	0
	15	60	22.45	22.23	22.09	0
	27	0	21.49	21.43	21.15	1
	27	24	21.63	21.38	21.24	1
	27	48	21.53	21.37	21.18	1
16QAM	1	0	21.43	21.28	21.24	1
	1	36	21.53	21.27	21.24	1
	1	74	21.63	21.35	21.37	1
	15	0	21.15	21.01	21.01	1
	15	30	21.36	21.21	21.02	1
	15	60	21.25	21.16	21.16	1
	27	0	20.37	20.32	20.08	2
	27	24	20.57	20.39	20.22	2
	27	48	20.54	20.34	20.27	2

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Table 8-12
LTE Band 66 (AWS) Conducted Powers - 10 MHz Bandwidth

LTE Band 66 (AWS) 10 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 132022 (1715.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132622 (1775.0 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	22.54	22.60	22.24	0
	1	25	22.64	22.49	22.23	0
	1	49	22.67	22.50	22.23	0
	25	0	21.73	21.71	21.45	1
	25	12	21.78	21.61	21.42	1
	25	25	21.83	21.60	21.42	1
	50	0	21.84	21.64	21.49	1
	15	0	21.71	21.71	21.43	1
	15	17	21.78	21.61	21.41	1
	15	35	21.77	21.58	21.40	1
	27	0	21.73	21.69	21.42	1
	27	12	21.77	21.60	21.40	1
	27	23	21.83	21.59	21.41	1
16QAM	1	0	21.51	21.34	21.28	1
	1	25	21.33	21.27	21.39	1
	1	49	21.68	21.37	21.43	1
	25	0	20.45	20.29	20.19	2
	25	12	20.46	20.37	20.24	2
	25	25	20.50	20.38	20.30	2
	15	0	20.35	20.38	20.20	2
	15	17	20.45	20.37	20.27	2
	15	35	20.56	20.38	20.32	2
	27	0	20.40	20.31	20.23	2
	27	12	20.49	20.39	20.28	2
	27	23	20.54	20.33	20.33	2

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Table 8-13
LTE Band 66 (AWS) Conducted Powers - 5 MHz Bandwidth

LTE Band 66 (AWS) 5 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 131997 (1712.5 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132647 (1777.5 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	22.55	22.64	22.17	0
	1	12	22.57	22.55	22.18	0
	1	24	22.66	22.58	22.18	0
	12	0	21.66	21.56	21.38	1
	12	6	21.69	21.54	21.38	1
	12	13	21.71	21.56	21.34	1
	25	0	21.69	21.56	21.40	1
16QAM	1	0	21.49	21.24	21.21	1
	1	12	21.62	21.48	21.31	1
	1	24	21.66	21.51	21.16	1
	12	0	20.43	20.45	20.31	2
	12	6	20.52	20.39	20.37	2
	12	13	20.48	20.44	20.30	2
	25	0	20.40	20.43	20.31	2

Table 8-14
LTE Band 66 (AWS) Conducted Powers - 3 MHz Bandwidth

LTE Band 66 (AWS) 3 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 131987 (1711.5 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132657 (1778.5 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	22.46	22.41	22.19	0
	1	7	22.52	22.46	22.23	0
	1	14	22.52	22.41	22.17	0
	8	0	21.65	21.57	21.38	1
	8	4	21.64	21.57	21.36	1
	8	7	21.67	21.55	21.35	1
	15	0	21.68	21.57	21.37	1
16QAM	1	0	21.28	21.38	21.39	1
	1	7	21.43	21.31	21.41	1
	1	14	21.54	21.33	21.39	1
	8	0	20.43	20.51	20.43	2
	8	4	20.48	20.39	20.37	2
	8	7	20.51	20.54	20.39	2
	15	0	20.40	20.40	20.36	2

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Table 8-15
LTE Band 66 (AWS) Conducted Powers – 1.4 MHz Bandwidth

LTE Band 66 (AWS) 1.4 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 131979 (1710.7 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132665 (1779.3 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	22.54	22.45	22.35	0
	1	2	22.49	22.43	22.33	0
	1	5	22.54	22.44	22.36	0
	3	0	22.57	22.53	22.28	0
	3	2	22.56	22.52	22.27	0
	3	3	22.58	22.53	22.29	0
	6	0	21.65	21.55	21.33	1
16QAM	1	0	21.46	21.41	21.23	1
	1	2	21.51	21.20	21.32	1
	1	5	21.67	21.43	21.34	1
	3	0	21.39	21.37	21.18	1
	3	2	21.38	21.43	21.22	1
	3	3	21.34	21.34	21.15	1
	6	0	20.45	20.52	20.39	2

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8.2.4 LTE Band 25

Table 8-16
LTE Band 25 (PCS) Conducted Powers - 20 MHz Bandwidth

LTE Band 25 (PCS) 20 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 26140 (1860.0 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26590 (1905.0 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	22.25	22.29	22.29	0
	1	50	22.32	22.47	**22.51**	0
	1	99	22.22	22.49	22.21	0
	50	0	21.37	21.57	21.49	1
	50	25	21.41	21.63	21.64	1
	50	50	21.34	21.68	**21.78**	1
	100	0	21.57	21.65	21.73	1
	15	0	22.31	22.48	22.42	0
	15	42	22.43	22.70	22.64	0
	15	85	22.27	22.62	22.36	0
	27	0	21.30	21.46	21.39	1
	27	37	21.38	21.60	21.59	1
	27	73	21.21	21.61	21.41	1
16QAM	1	0	21.43	21.51	21.50	1
	1	50	21.42	21.56	21.55	1
	1	99	21.46	21.72	21.46	1
	15	0	21.13	21.30	21.35	1
	15	42	21.19	21.38	21.35	1
	15	85	21.16	21.39	21.20	1
	27	0	20.10	20.28	20.23	2
	27	37	20.16	20.38	20.43	2
	27	73	20.07	20.36	20.23	2

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Table 8-17
LTE Band 25 (PCS) Conducted Powers - 15 MHz Bandwidth

LTE Band 25 (PCS) 15 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 26115 (1857.5 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26615 (1907.5 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	22.45	22.47	22.48	0
	1	36	22.51	22.50	22.51	0
	1	74	22.48	22.48	22.43	0
	36	0	21.46	21.65	21.56	1
	36	18	21.46	21.61	21.62	1
	36	37	21.45	21.62	21.47	1
	75	0	21.59	21.72	21.83	1
	15	0	22.44	22.63	22.51	0
	15	30	22.48	22.64	22.54	0
	15	60	22.37	22.60	22.37	0
	27	0	21.47	21.63	21.53	1
	27	24	21.47	21.63	21.53	1
	27	48	21.45	21.60	21.38	1
16QAM	1	0	21.81	21.88	21.57	1
	1	36	21.85	21.87	21.65	1
	1	74	21.73	21.86	21.66	1
	15	0	21.43	21.61	21.51	1
	15	30	21.50	21.63	21.58	1
	15	60	21.37	21.61	21.34	1
	27	0	20.44	20.59	20.54	2
	27	24	20.46	20.59	20.54	2
	27	48	20.42	20.53	20.34	2

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Table 8-18
LTE Band 25 (PCS) Conducted Powers - 10 MHz Bandwidth

LTE Band 25 (PCS) 10 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 26090 (1855.0 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26640 (1910.0 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	22.29	22.50	22.49	0
	1	25	22.38	22.47	22.31	0
	1	49	22.40	22.51	22.42	0
	25	0	21.46	21.59	21.58	1
	25	12	21.47	21.61	21.48	1
	25	25	21.47	21.62	21.44	1
	50	0	21.50	21.64	21.61	1
	15	0	21.39	21.64	21.59	1
	15	17	21.48	21.60	21.46	1
	15	35	21.47	21.61	21.51	1
	27	0	21.47	21.58	21.59	1
	27	12	21.47	21.59	21.45	1
	27	23	21.47	21.61	21.44	1
16QAM	1	0	21.47	21.58	21.74	1
	1	25	21.28	21.60	21.61	1
	1	49	21.26	21.71	21.51	1
	25	0	20.19	20.26	20.18	2
	25	12	20.14	20.25	20.15	2
	25	25	20.15	20.22	20.17	2
	15	0	20.09	20.17	20.14	2
	15	17	20.20	20.20	20.17	2
	15	35	20.14	20.25	20.12	2
	27	0	20.18	20.23	20.10	2
	27	12	20.14	20.18	20.14	2
	27	23	20.17	20.14	20.13	2

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Table 8-19
LTE Band 25 (PCS) Conducted Powers - 5 MHz Bandwidth

LTE Band 25 (PCS) 5 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 26065 (1852.5 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26665 (1912.5 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	22.41	22.53	22.25	0
	1	12	22.48	22.55	22.26	0
	1	24	22.51	22.57	22.38	0
	12	0	21.34	21.53	21.38	1
	12	6	21.41	21.53	21.39	1
	12	13	21.43	21.56	21.47	1
	25	0	21.43	21.55	21.41	1
16QAM	1	0	21.44	21.58	21.12	1
	1	12	21.53	21.55	21.28	1
	1	24	21.29	21.49	21.39	1
	12	0	20.03	20.16	20.08	2
	12	6	20.12	20.15	20.05	2
	12	13	20.11	20.17	20.07	2
	25	0	20.05	20.11	20.05	2

Table 8-20
LTE Band 25 (PCS) Conducted Powers - 3 MHz Bandwidth

LTE Band 25 (PCS) 3 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 26055 (1851.5 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26675 (1913.5 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	22.22	22.37	22.24	0
	1	7	22.29	22.45	22.39	0
	1	14	22.33	22.41	22.35	0
	8	0	21.33	21.52	21.38	1
	8	4	21.31	21.51	21.46	1
	8	7	21.37	21.54	21.48	1
	15	0	21.32	21.55	21.48	1
16QAM	1	0	21.25	21.49	21.34	1
	1	7	21.22	21.55	21.49	1
	1	14	21.29	21.33	21.29	1
	8	0	20.00	20.06	20.08	2
	8	4	20.04	20.08	20.10	2
	8	7	20.02	20.08	20.11	2
	15	0	20.03	20.11	20.05	2

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Table 8-21
LTE Band 25 (PCS) Conducted Powers – 1.4 MHz Bandwidth

LTE Band 25 (PCS) 1.4 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 26047 (1850.7 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26683 (1914.3 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	22.17	22.42	22.42	0
	1	2	22.16	22.41	22.38	0
	1	5	22.22	22.46	22.41	0
	3	0	22.28	22.52	22.31	0
	3	2	22.28	22.49	22.33	0
	3	3	22.30	22.50	22.35	0
	6	0	21.28	21.48	21.34	1
16QAM	1	0	21.58	21.73	21.68	1
	1	2	21.57	21.72	21.69	1
	1	5	21.57	21.74	21.73	1
	3	0	21.42	21.69	21.52	1
	3	2	21.44	21.68	21.53	1
	3	3	21.43	21.67	21.54	1
	6	0	20.41	20.65	20.42	2

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8.2.5 LTE Band 7

Table 8-22
LTE Band 7 Maximum Conducted Powers - 20 MHz Bandwidth

LTE Band 7 20 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 20850 (2510.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21350 (2560.0 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	22.18	22.33	22.17	0
	1	50	22.36	22.16	22.14	0
	1	99	22.42	22.23	**22.48**	0
	50	0	21.23	21.13	21.28	1
	50	25	21.34	21.12	21.36	1
	50	50	21.38	21.06	**21.49**	1
	100	0	21.42	21.32	21.45	1
	15	0	22.16	22.16	21.71	0
	15	42	22.37	22.05	22.20	0
	15	85	22.38	22.01	22.32	0
	27	0	21.15	21.07	21.21	1
	27	37	21.35	21.08	21.32	1
	27	73	21.37	21.01	21.46	1
16QAM	1	0	21.16	21.50	21.28	1
	1	50	21.50	21.33	21.20	1
	1	99	21.50	21.34	21.50	1
	15	0	20.78	21.06	20.79	1
	15	42	21.13	20.91	20.74	1
	15	85	21.19	20.84	21.19	1
	27	0	19.79	19.98	19.70	2
	27	37	20.10	19.86	19.74	2
	27	73	20.15	19.76	20.12	2

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Table 8-23
LTE Band 7 Maximum Conducted Powers - 15 MHz Bandwidth

LTE Band 7 15 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 20825 (2507.5 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21375 (2562.5 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	21.74	21.67	21.88	0
	1	36	21.80	21.61	21.90	0
	1	74	21.98	21.69	22.27	0
	36	0	20.67	20.60	20.96	1
	36	18	20.70	20.66	21.05	1
	36	37	20.71	20.67	21.23	1
	75	0	20.85	20.79	21.23	1
	15	0	21.63	21.63	21.93	0
	15	30	21.71	21.69	22.00	0
	15	60	21.77	21.71	22.27	0
	27	0	20.65	20.61	20.92	1
	27	24	20.73	20.69	20.97	1
	27	48	20.76	20.69	21.19	1
16QAM	1	0	21.04	20.98	21.22	1
	1	36	20.92	20.88	21.27	1
	1	74	21.30	21.18	21.59	1
	15	0	20.70	20.69	20.98	1
	15	30	20.75	20.70	21.09	1
	15	60	20.78	20.72	21.25	1
	27	0	19.66	19.62	19.98	2
	27	24	19.72	19.68	20.04	2
	27	48	19.78	19.70	20.23	2

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Table 8-24
LTE Band 7 Maximum Conducted Powers – 10 MHz Bandwidth

LTE Band 7 10 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 20800 (2505.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21400 (2565.0 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	21.54	21.59	21.90	0
	1	25	21.50	21.61	22.02	0
	1	49	21.70	21.70	22.29	0
	25	0	20.62	20.69	21.01	1
	25	12	20.60	20.66	21.13	1
	25	25	20.70	20.67	21.25	1
	50	0	20.67	20.70	21.22	1
	15	0	20.63	20.62	20.98	1
	15	17	20.60	20.66	21.13	1
	15	35	20.70	20.69	21.30	1
	27	0	20.61	20.65	21.00	1
	27	12	20.58	20.65	21.14	1
	27	23	20.68	20.67	21.26	1
16QAM	1	0	21.06	21.00	21.37	1
	1	25	20.85	21.03	21.47	1
	1	49	21.23	20.97	21.67	1
	25	0	19.64	19.70	20.03	2
	25	12	19.63	19.72	20.12	2
	25	25	19.70	19.68	20.29	2
	15	0	19.67	19.69	20.07	2
	15	17	19.65	19.74	20.24	2
	15	35	19.74	19.74	20.32	2
	27	0	19.62	19.72	20.04	2
	27	12	19.63	19.70	20.20	2
	27	23	19.72	19.71	20.24	2

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Table 8-25
LTE Band 7 Maximum Conducted Powers – 5 MHz Bandwidth

LTE Band 7 5 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 20775 (2502.5 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21425 (2567.5 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	21.65	21.79	22.05	0
	1	12	21.61	21.70	22.17	0
	1	24	21.62	21.74	22.33	0
	12	0	20.57	20.65	21.18	1
	12	6	20.54	20.64	21.22	1
	12	13	20.55	20.65	21.28	1
	25	0	20.56	20.67	21.24	1
16QAM	1	0	21.06	21.07	21.58	1
	1	12	21.09	21.06	21.65	1
	1	24	21.04	21.16	21.65	1
	12	0	19.73	19.65	20.31	2
	12	6	19.75	19.67	20.26	2
	12	13	19.65	19.64	20.25	2
	25	0	19.62	19.62	20.29	2

Table 8-26
LTE Band 7 Reduced Conducted Powers - 20 MHz Bandwidth

LTE Band 7 20 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 20850 (2510.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21350 (2560.0 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	19.29	19.24	19.41	0
	1	50	19.50	19.16	19.49	0
	1	99	19.70	19.10	**19.88**	0
	50	0	18.32	18.35	18.31	1
	50	25	18.44	18.30	18.46	1
	50	50	18.50	18.22	**18.66**	1
	100	0	18.50	18.53	18.65	1
	15	0	19.21	19.34	19.25	0
	15	42	19.48	19.32	19.42	0
	15	85	19.49	19.23	19.66	0
	27	0	18.19	18.35	18.22	1
	27	37	18.46	18.40	18.40	1
	27	73	18.50	18.27	18.67	1
16QAM	1	0	18.46	18.96	19.01	1
	1	50	18.92	18.83	19.22	1
	1	99	19.09	18.95	19.20	1
	15	0	18.31	18.45	18.61	1
	15	42	18.71	18.39	18.76	1
	15	85	18.81	18.42	19.07	1
	27	0	17.30	17.38	17.59	2
	27	37	17.65	17.42	17.74	2
	27	73	17.73	17.39	18.01	2

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Table 8-27
LTE Band 7 Reduced Conducted Powers - 15 MHz Bandwidth

LTE Band 7 15 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 20825 (2507.5 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21375 (2562.5 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	19.46	19.59	19.60	0
	1	36	19.70	19.57	19.69	0
	1	74	19.86	19.42	19.93	0
	36	0	18.47	18.62	18.66	1
	36	18	18.59	18.61	18.78	1
	36	37	18.67	18.48	18.94	1
	75	0	18.72	18.67	18.88	1
	15	0	19.70	19.61	19.54	0
	15	30	19.61	19.61	19.75	0
	15	60	19.68	19.44	19.89	0
	27	0	18.43	18.60	18.58	1
	27	24	18.60	18.59	18.72	1
	27	48	18.68	18.45	18.90	1
16QAM	1	0	18.84	18.98	18.95	1
	1	36	19.12	18.95	19.03	1
	1	74	19.41	18.90	19.50	1
	15	0	18.45	18.78	18.53	1
	15	30	18.83	18.80	18.77	1
	15	60	18.99	18.72	19.01	1
	27	0	17.55	17.76	17.54	2
	27	24	17.82	17.79	17.71	2
	27	48	17.95	17.68	17.90	2

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Table 8-28
LTE Band 7 Reduced Conducted Powers – 10 MHz Bandwidth

LTE Band 7 10 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 20800 (2505.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21400 (2565.0 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	19.38	19.62	19.60	0
	1	25	19.42	19.51	19.82	0
	1	49	19.61	19.44	20.00	0
	25	0	18.44	18.59	18.77	1
	25	12	18.49	18.54	18.90	1
	25	25	18.56	18.52	18.93	1
	50	0	18.55	18.57	18.95	1
	15	0	18.41	18.59	18.71	1
	15	17	18.49	18.54	18.90	1
	15	35	18.59	18.45	18.98	1
	27	0	18.45	18.58	18.75	1
	27	12	18.49	18.54	18.88	1
	27	23	18.56	18.51	18.92	1
16QAM	1	0	18.47	19.18	19.04	1
	1	25	18.89	19.13	19.39	1
	1	49	19.18	19.08	19.50	1
	25	0	17.50	17.80	17.70	2
	25	12	17.58	17.71	17.87	2
	25	25	17.76	17.73	17.94	2
	15	0	17.51	17.73	17.73	2
	15	17	17.61	17.78	17.90	2
	15	35	17.79	17.67	18.06	2
	27	0	17.50	17.75	17.69	2
	27	12	17.62	17.68	17.90	2
	27	23	17.77	17.75	17.98	2

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Table 8-29
LTE Band 7 Reduced Conducted Powers – 5 MHz Bandwidth

LTE Band 7 5 MHz Bandwidth						
Modulation	RB Size	RB Offset	Low Channel 20775 (2502.5 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21425 (2567.5 MHz)	Design MPR [dB]
			Conducted Power [dBm]			
QPSK	1	0	19.47	19.68	19.80	0
	1	12	19.49	19.63	19.84	0
	1	24	19.54	19.62	20.00	0
	12	0	18.39	18.54	18.90	1
	12	6	18.42	18.52	18.87	1
	12	13	18.45	18.49	18.95	1
	25	0	18.43	18.52	18.89	1
16QAM	1	0	18.55	19.20	19.15	1
	1	12	18.83	19.01	19.29	1
	1	24	18.80	19.15	19.50	1
	12	0	17.44	17.70	17.95	2
	12	6	17.47	17.72	17.97	2
	12	13	17.54	17.71	18.04	2
	25	0	17.46	17.72	17.93	2

8.2.6 LTE Band 41

Table 8-30
LTE Band 41 Maximum Conducted Powers – 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	Design MPR [dB]
			Conducted Power [dBm]					
QPSK	1	0	22.61	22.98	**23.00**	22.94	22.78	0
	1	50	22.45	22.98	22.98	22.92	22.74	0
	1	99	22.50	22.96	22.99	22.91	22.76	0
	50	0	21.57	21.90	**22.02**	22.01	21.61	1
	50	25	21.49	21.84	21.97	21.97	21.59	1
	50	50	21.49	21.81	21.94	21.95	21.58	1
	100	0	21.68	21.90	22.00	21.99	21.67	1
	15	0	22.65	22.97	23.04	22.90	22.66	0
	15	42	22.51	22.92	22.99	22.75	22.62	0
	15	85	22.56	22.91	22.99	22.73	22.66	0
	27	0	21.60	21.98	22.02	21.79	21.64	1
	27	37	21.46	21.95	21.97	21.72	21.60	1
	27	73	21.55	21.92	21.95	21.70	21.60	1
16QAM	1	0	21.78	21.86	22.21	22.22	22.12	1
	1	50	21.62	21.83	22.18	22.14	21.95	1
	1	99	21.82	22.00	22.28	22.05	21.88	1
	15	0	21.64	21.71	22.14	22.13	21.84	1
	15	42	21.57	21.69	22.16	21.97	21.77	1
	15	85	21.66	21.86	22.13	21.96	21.72	1
	27	0	20.62	20.67	21.11	21.07	20.81	2
	27	37	20.56	20.64	21.15	21.00	20.75	2
	27	73	20.64	20.76	21.15	20.95	20.68	2

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Table 8-31
LTE Band 41 Maximum Conducted Powers – 15 MHz Bandwidth

LTE Band 41 15 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	Design MPR [dB]
			Conducted Power [dBm]					
QPSK	1	0	22.61	22.68	23.15	23.05	22.77	0
	1	36	22.58	22.71	23.18	22.95	22.70	0
	1	74	22.66	22.83	23.14	22.92	22.65	0
	36	0	21.55	21.61	22.06	21.93	21.70	1
	36	18	21.55	21.60	22.08	21.87	21.70	1
	36	37	21.61	21.66	22.08	21.85	21.63	1
	75	0	21.59	21.64	22.10	21.89	21.76	1
	15	0	22.58	22.60	23.07	22.95	22.72	0
	15	30	22.52	22.59	23.13	22.90	22.71	0
	15	60	22.56	22.64	23.06	22.85	22.65	0
	27	0	21.56	21.53	22.05	21.94	21.71	1
	27	24	21.51	21.55	22.09	21.87	21.70	1
	27	48	21.57	21.61	22.01	21.83	21.61	1
16QAM	1	0	21.70	21.85	22.00	22.34	22.05	1
	1	36	21.38	21.79	22.18	22.18	21.79	1
	1	74	21.63	22.09	22.04	22.02	21.71	1
	15	0	21.84	21.78	22.26	22.14	21.94	1
	15	30	21.75	21.80	22.32	22.07	21.97	1
	15	60	21.75	21.83	22.24	22.03	21.85	1
	27	0	20.78	20.73	21.23	21.13	20.89	2
	27	24	20.69	20.74	21.24	21.07	20.92	2
	27	48	20.76	20.81	21.18	21.02	20.82	2

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Table 8-32
LTE Band 41 Maximum Conducted Powers – 10 MHz Bandwidth

LTE Band 41 10 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	Design MPR [dB]
			Conducted Power [dBm]					
QPSK	1	0	22.63	22.72	23.22	23.06	22.94	0
	1	25	22.55	22.73	23.23	22.99	22.86	0
	1	49	22.68	22.83	23.21	22.98	22.80	0
	25	0	21.53	21.62	22.13	21.97	21.72	1
	25	12	21.51	21.58	22.12	21.88	21.70	1
	25	25	21.60	21.64	22.14	21.89	21.64	1
	50	0	21.54	21.62	22.15	21.92	21.74	1
	15	0	21.53	21.64	22.13	21.99	21.74	1
	15	17	21.52	21.62	22.13	21.90	21.71	1
	15	35	21.60	21.69	22.16	21.89	21.66	1
	27	0	21.50	21.63	22.11	21.96	21.70	1
	27	12	21.49	21.59	22.11	21.87	21.69	1
	27	23	21.57	21.65	22.12	21.88	21.64	1
16QAM	1	0	21.71	21.74	22.38	22.20	22.21	1
	1	25	21.91	21.93	22.40	22.25	22.15	1
	1	49	21.81	21.83	22.33	22.27	22.12	1
	25	0	20.75	20.84	21.36	21.17	20.94	2
	25	12	20.77	20.86	21.33	21.20	20.96	2
	25	25	20.79	20.86	21.34	21.18	20.95	2
	15	0	20.78	20.97	21.35	21.24	20.97	2
	15	17	20.77	20.93	21.34	21.23	21.02	2
	15	35	20.77	20.91	21.37	21.25	20.94	2
	27	0	20.71	20.94	21.37	21.23	20.91	2
	27	12	20.74	20.98	21.34	21.25	21.01	2
	27	23	20.72	20.94	21.39	21.25	20.97	2

Table 8-33
LTE Band 41 Maximum Conducted Powers - 5 MHz Bandwidth

LTE Band 41 5 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	Design MPR [dB]
			Conducted Power [dBm]					
QPSK	1	0	22.67	22.73	23.22	22.98	22.90	0
	1	12	22.58	22.67	23.20	22.89	22.83	0
	1	24	22.69	22.75	23.25	22.91	22.81	0
	12	0	21.54	21.69	22.14	21.99	21.76	1
	12	6	21.52	21.63	22.13	21.92	21.74	1
	12	13	21.57	21.65	22.15	21.98	21.67	1
	25	0	21.56	21.63	22.15	21.99	21.75	1
16QAM	1	0	21.80	21.73	22.23	22.24	21.85	1
	1	12	21.63	21.78	22.22	22.26	21.98	1
	1	24	21.76	21.93	22.34	22.25	21.93	1
	12	0	20.78	20.87	21.32	21.17	20.98	2
	12	6	20.82	20.85	21.36	21.14	21.00	2
	12	13	20.78	20.85	21.35	21.18	20.98	2
	25	0	20.74	20.83	21.33	21.15	20.97	2

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Table 8-34
LTE Band 41 Reduced Conducted Powers – 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	Design MPR [dB]
			Conducted Power [dBm]					
QPSK	1	0	21.75	22.05	22.31	22.06	21.88	0
	1	50	21.91	21.84	**22.33**	21.99	21.82	0
	1	99	22.24	21.91	22.30	22.00	21.85	0
	50	0	20.85	20.98	**21.37**	21.03	20.85	1
	50	25	20.90	20.89	21.35	20.98	20.84	1
	50	50	21.05	20.93	21.33	21.00	20.86	1
	100	0	21.12	20.96	21.36	21.03	20.95	1
	15	0	21.80	21.95	22.42	22.15	21.85	0
	15	42	21.89	21.85	22.36	21.96	21.79	0
	15	85	22.21	21.92	22.32	21.99	21.83	0
	27	0	20.78	20.91	21.39	21.00	20.82	1
	27	37	20.91	20.82	21.36	21.00	20.78	1
	27	73	21.12	20.86	21.34	20.97	20.81	1
16QAM	1	0	20.98	21.12	21.50	21.23	21.02	1
	1	50	21.07	20.85	21.41	21.20	21.03	1
	1	99	21.30	20.94	21.35	21.19	20.89	1
	15	0	20.88	20.94	21.36	21.19	21.00	1
	15	42	20.98	20.80	21.31	21.03	20.93	1
	15	85	21.18	20.82	21.28	21.02	20.93	1
	27	0	19.87	19.92	20.33	20.07	19.95	2
	27	37	19.96	19.80	20.28	20.02	19.88	2
	27	73	20.12	19.77	20.23	20.01	19.87	2

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Table 8-35
LTE Band 41 Reduced Conducted Powers – 15 MHz Bandwidth

LTE Band 41 15 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	Design MPR [dB]
			Conducted Power [dBm]					
QPSK	1	0	22.26	22.09	22.50	22.34	22.37	0
	1	36	22.42	22.15	22.50	22.37	22.39	0
	1	74	22.39	22.11	22.49	22.31	22.29	0
	36	0	21.20	21.08	21.50	21.24	21.28	1
	36	18	21.28	21.10	21.49	21.23	21.28	1
	36	37	21.29	21.09	21.45	21.20	21.24	1
	75	0	21.35	21.09	21.49	21.25	21.31	1
	15	0	22.15	22.02	22.50	22.23	22.28	0
	15	30	22.32	22.08	22.50	22.26	22.32	0
	15	60	22.29	22.03	22.42	22.20	22.22	0
	27	0	21.18	21.01	21.50	21.24	21.28	1
	27	24	21.30	21.05	21.50	21.25	21.31	1
	27	48	21.28	21.01	21.43	21.18	21.22	1
16QAM	1	0	21.31	20.95	21.50	21.50	21.43	1
	1	36	21.35	20.97	21.50	21.50	21.50	1
	1	74	21.46	21.07	21.44	21.44	21.30	1
	15	0	21.07	21.09	21.50	21.23	21.23	1
	15	30	21.25	21.13	21.50	21.30	21.28	1
	15	60	21.22	21.08	21.39	21.17	21.17	1
	27	0	20.14	20.09	20.49	20.23	20.23	2
	27	24	20.23	20.14	20.47	20.27	20.25	2
	27	48	20.23	20.07	20.42	20.24	20.16	2

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Table 8-36
LTE Band 41 Reduced Conducted Powers – 10 MHz Bandwidth

LTE Band 41 10 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	Design MPR [dB]
			Conducted Power [dBm]					
QPSK	1	0	22.27	22.18	22.50	22.40	22.48	0
	1	25	22.35	22.19	22.50	22.34	22.45	0
	1	49	22.40	22.22	22.50	22.34	22.43	0
	25	0	21.22	21.02	21.50	21.31	21.29	1
	25	12	21.24	21.04	21.49	21.23	21.27	1
	25	25	21.27	21.04	21.47	21.23	21.26	1
	50	0	21.27	21.07	21.50	21.24	21.29	1
	15	0	21.20	21.08	21.50	21.29	21.32	1
	15	17	21.25	21.07	21.50	21.25	21.29	1
	15	35	21.29	21.10	21.48	21.23	21.26	1
	27	0	21.21	21.05	21.50	21.29	21.27	1
	27	12	21.23	21.04	21.47	21.21	21.25	1
	27	23	21.26	21.05	21.47	21.22	21.26	1
16QAM	1	0	21.17	21.27	21.50	21.43	21.47	1
	1	25	21.28	21.17	21.50	21.37	21.39	1
	1	49	21.38	21.25	21.50	21.39	21.33	1
	25	0	20.16	20.03	20.50	20.32	20.23	2
	25	12	20.17	20.03	20.49	20.25	20.20	2
	25	25	20.15	20.04	20.47	20.25	20.15	2
	15	0	20.17	20.07	20.50	20.30	20.26	2
	15	17	20.19	20.05	20.49	20.25	20.27	2
	15	35	20.24	20.07	20.46	20.25	20.25	2
	27	0	20.15	20.02	20.50	20.31	20.25	2
	27	12	20.20	20.00	20.49	20.21	20.18	2
	27	23	20.16	20.01	20.47	20.22	20.16	2

Table 8-37
LTE Band 41 Reduced Conducted Powers - 5 MHz Bandwidth

LTE Band 41 5 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	Design MPR [dB]
			Conducted Power [dBm]					
QPSK	1	0	22.33	22.14	22.50	22.29	22.43	0
	1	12	22.34	22.12	22.50	22.19	22.38	0
	1	24	22.39	22.15	22.50	22.23	22.39	0
	12	0	21.25	21.08	21.50	21.31	21.30	1
	12	6	21.27	21.07	21.49	21.23	21.27	1
	12	13	21.28	21.10	21.49	21.23	21.28	1
	25	0	21.27	21.08	21.50	21.25	21.28	1
16QAM	1	0	21.36	21.12	21.50	21.41	21.42	1
	1	12	21.21	20.94	21.50	21.33	21.21	1
	1	24	21.21	21.03	21.50	21.28	21.42	1
	12	0	20.25	20.12	20.49	20.37	20.31	2
	12	6	20.23	20.07	20.48	20.39	20.24	2
	12	13	20.23	20.12	20.49	20.31	20.30	2
	25	0	20.24	20.08	20.50	20.33	20.27	2

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8.3 WLAN Conducted Powers

Table 8-38
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	18.02	16.03	16.04
2422	3		17.45	17.46
2437	6	18.10	17.45	17.44
2452	9		17.60	17.60
2462	11	17.95	12.36	12.56

Table 8-39
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	15.05	15.07
5200	40	15.02	15.10
5220	44	15.08	15.09
5240	48	14.91	14.91
5260	52	15.09	15.00
5280	56	15.04	14.97
5300	60	15.04	15.04
5320	64	15.07	14.94
5500	100	14.97	14.86
5600	120	14.92	15.02
5620	124	14.90	14.87
5720	144	15.08	14.95
5745	149	14.94	15.10
5785	157	15.13	15.13
5825	165	14.96	14.90

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.

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- 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.

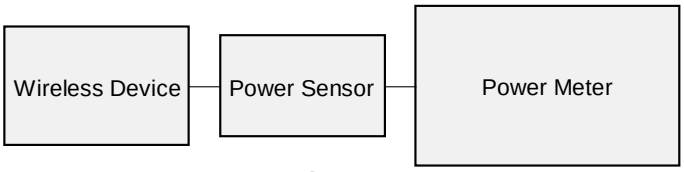

Figure 8-2
Power Measurement Setup

8.4 Bluetooth Conducted Powers

Table 8-40
Bluetooth Average RF Power

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	12.04	15.996
2441	GFSK	1.0	39	**12.29**	16.943
2480	GFSK	1.0	78	11.94	15.631

Note: The bolded data rates and channel above were tested for SAR.
Note 2: Bluetooth was evaluated with a test mode with 100% transmission duty factor.

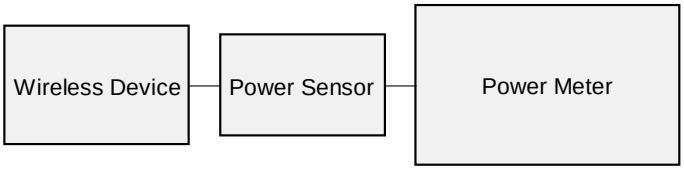

Figure 8-3
Power Measurement Setup

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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
6/24/2020	835H	22.2	815	0.872	40.546	0.899	41.604	-3.00%	-2.54%
			820	0.876	40.479	0.899	41.578	-2.56%	-2.64%
			835	0.890	40.286	0.900	41.500	-1.11%	-2.93%
			850	0.904	40.108	0.916	41.500	-1.31%	-3.35%
6/29/2020	835H	21.6	820	0.868	40.483	0.899	41.578	-3.45%	-2.63%
			835	0.873	40.453	0.900	41.500	-3.00%	-2.52%
			850	0.878	40.425	0.916	41.500	-4.15%	-2.59%
7/1/2020	835H	21.8	820	0.884	40.923	0.899	41.578	-1.67%	-1.58%
			835	0.890	40.887	0.900	41.500	-1.11%	-1.48%
			850	0.895	40.860	0.916	41.500	-2.29%	-1.54%
7/1/2020	1750H	21.1	1710	1.335	39.277	1.348	40.142	-0.96%	-2.15%
			1750	1.359	39.227	1.371	40.079	-0.88%	-2.13%
			1790	1.384	39.164	1.394	40.016	-0.72%	-2.13%
7/7/2020	1750H	22.0	1710	1.334	40.526	1.348	40.142	-1.04%	0.96%
			1750	1.360	40.469	1.371	40.079	-0.80%	0.97%
			1790	1.383	40.413	1.394	40.016	-0.79%	0.99%
6/29/2020	1900H	21.1	1850	1.399	38.966	1.400	40.000	-0.07%	-2.59%
			1880	1.431	38.823	1.400	40.000	2.21%	-2.94%
			1910	1.461	38.698	1.400	40.000	4.36%	-3.26%
7/22/2020	1900H	21.9	1850	1.417	39.199	1.400	40.000	1.21%	-2.00%
			1880	1.436	39.150	1.400	40.000	2.57%	-2.13%
			1910	1.454	39.117	1.400	40.000	3.86%	-2.21%
7/1/2020	2450H	22.5	2400	1.835	39.703	1.756	39.289	4.50%	1.05%
			2450	1.880	39.494	1.800	39.200	4.44%	0.75%
			2500	1.941	39.360	1.855	39.136	4.64%	0.57%
			2550	1.990	39.130	1.909	39.073	4.24%	0.15%
			2600	2.052	39.023	1.964	39.009	4.48%	0.04%
			2650	2.105	38.769	2.018	38.945	4.31%	-0.45%
			2700	2.165	38.641	2.073	38.882	4.44%	-0.62%
7/8/2020	2450H	22.1	2400	1.742	37.787	1.756	39.289	-0.80%	-3.82%
			2450	1.776	37.711	1.800	39.200	-1.33%	-3.80%
			2500	1.818	37.644	1.855	39.136	-1.99%	-3.81%
			2550	1.854	37.552	1.909	39.073	-2.88%	-3.89%
			2600	1.895	37.484	1.964	39.009	-3.51%	-3.91%
			2650	1.932	37.386	2.018	38.945	-4.26%	-4.00%
			2700	1.973	37.316	2.073	38.882	-4.82%	-4.03%
7/22/2020	2450H	22.0	2400	1.827	38.770	1.756	39.289	4.04%	-1.32%
			2450	1.877	38.603	1.800	39.200	4.28%	-1.52%
			2500	1.938	38.416	1.855	39.136	4.47%	-1.84%
7/26/2020	2450H	21.8	2400	1.791	38.542	1.756	39.289	1.99%	-1.90%
			2450	1.845	38.397	1.800	39.200	2.50%	-2.05%
			2500	1.900	38.206	1.855	39.136	2.43%	-2.38%
7/31/2020	2450H	21.9	2400	1.790	38.983	1.756	39.289	1.94%	-0.78%
			2450	1.843	38.836	1.800	39.200	2.39%	-0.93%
			2500	1.900	38.657	1.855	39.136	2.43%	-1.22%
			2550	1.954	38.474	1.909	39.073	2.36%	-1.53%
			2600	2.012	38.303	1.964	39.009	2.44%	-1.81%
			2650	2.067	38.113	2.018	38.945	2.43%	-2.14%
			2700	2.123	37.925	2.073	38.882	2.41%	-2.46%
07/24/2020	5200H-5800H	23.2	5180	4.432	35.856	4.635	36.009	-4.38%	-0.42%
			5200	4.454	35.823	4.655	35.986	-4.32%	-0.45%
			5220	4.475	35.802	4.676	35.963	-4.30%	-0.45%
			5240	4.495	35.769	4.696	35.940	-4.28%	-0.48%
			5260	4.509	35.721	4.717	35.917	-4.41%	-0.55%
			5280	4.532	35.663	4.737	35.894	-4.33%	-0.64%
			5300	4.549	35.641	4.758	35.871	-4.39%	-0.64%
			5320	4.577	35.626	4.778	35.849	-4.21%	-0.62%
			5500	4.762	35.415	4.963	35.643	-4.05%	-0.64%
			5520	4.781	35.407	4.983	35.620	-4.05%	-0.60%
			5540	4.799	35.386	5.004	35.597	-4.10%	-0.59%
			5560	4.818	35.350	5.024	35.574	-4.10%	-0.63%
			5580	4.844	35.331	5.045	35.551	-3.98%	-0.62%
			5600	4.864	35.326	5.065	35.529	-3.97%	-0.57%
			5620	4.875	35.311	5.086	35.506	-4.15%	-0.55%
			5640	4.895	35.260	5.106	35.483	-4.13%	-0.63%
			5660	4.914	35.238	5.127	35.460	-4.15%	-0.63%
			5680	4.936	35.204	5.147	35.437	-4.10%	-0.66%
			5700	4.956	35.178	5.168	35.414	-4.10%	-0.67%
			5745	4.999	35.088	5.214	35.363	-4.12%	-0.78%
			5765	5.025	35.044	5.234	35.340	-3.99%	-0.84%
			5785	5.041	35.029	5.255	35.317	-4.07%	-0.82%
			5800	5.056	35.002	5.270	35.300	-4.06%	-0.84%
			5805	5.061	34.983	5.275	35.294	-4.06%	-0.88%
			5825	5.082	34.944	5.296	35.271	-4.04%	-0.93%

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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 Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
7/12/2020	835B	21.6	815	0.955	53.430	0.967	55.278	-1.25%	-3.34%
			820	0.960	53.380	0.969	55.258	-0.93%	-3.40%
			835	0.975	53.231	0.970	55.200	0.52%	-3.57%
			850	0.990	53.085	0.988	55.154	0.20%	-3.75%
6/30/2020	1750B	21.0	1710	1.450	51.565	1.463	53.537	-0.89%	-3.68%
			1750	1.475	51.528	1.488	53.432	-0.87%	-3.56%
			1790	1.502	51.475	1.514	53.326	-0.79%	-3.47%
7/2/2020	1750B	20.8	1710	1.452	52.184	1.463	53.537	-0.75%	-2.53%
			1750	1.479	52.125	1.488	53.432	-0.60%	-2.45%
			1790	1.507	52.052	1.514	53.326	-0.46%	-2.39%
7/8/2020	1900B	21.3	1850	1.538	52.340	1.520	53.300	1.18%	-1.80%
			1880	1.559	52.292	1.520	53.300	2.57%	-1.89%
			1910	1.581	52.252	1.520	53.300	4.01%	-1.97%
7/23/2020	1900B	22.7	1850	1.527	51.289	1.520	53.300	0.46%	-3.77%
			1880	1.560	51.176	1.520	53.300	2.63%	-3.98%
			1910	1.594	51.068	1.520	53.300	4.87%	-4.19%
7/13/2020	2450B	21.8	2400	1.971	51.925	1.902	52.767	3.63%	-1.60%
			2450	2.031	51.758	1.950	52.700	4.15%	-1.79%
			2500	2.109	51.589	2.021	52.636	4.35%	-1.99%
			2550	2.171	51.386	2.092	52.573	3.78%	-2.26%
			2600	2.250	51.214	2.163	52.509	4.02%	-2.47%
			2650	2.315	50.986	2.234	52.445	3.63%	-2.78%
			2700	2.391	50.828	2.305	52.382	3.73%	-2.97%
7/20/2020	2450B	22.6	2400	1.935	51.473	1.902	52.767	1.74%	-2.45%
			2450	1.997	51.287	1.950	52.700	2.41%	-2.68%
			2500	2.066	51.101	2.021	52.636	2.23%	-2.92%
			2550	2.131	50.915	2.092	52.573	1.86%	-3.15%
			2600	2.204	50.742	2.163	52.509	1.90%	-3.37%
			2650	2.273	50.541	2.234	52.445	1.75%	-3.63%
			2700	2.345	50.355	2.305	52.382	1.74%	-3.87%
7/22/2020	2450B	22.7	2400	1.934	51.657	1.902	52.767	1.68%	-2.10%
			2450	1.999	51.483	1.950	52.700	2.51%	-2.31%
			2500	2.073	51.289	2.021	52.636	2.57%	-2.56%
7/27/2020	2450B	22.2	2400	1.945	51.426	1.902	52.767	2.26%	-2.54%
			2450	2.011	51.251	1.950	52.700	3.13%	-2.75%
			2500	2.085	51.062	2.021	52.636	3.17%	-2.99%
07/29/2020	5200B-5800B	23.4	5180	5.450	48.021	5.276	49.041	3.30%	-2.08%
			5200	5.473	47.987	5.299	49.014	3.28%	-2.10%
			5220	5.501	47.940	5.323	48.987	3.34%	-2.14%
			5240	5.522	47.897	5.346	48.960	3.29%	-2.17%
			5260	5.557	47.874	5.369	48.933	3.50%	-2.16%
			5280	5.585	47.864	5.393	48.906	3.56%	-2.13%
			5300	5.603	47.807	5.416	48.879	3.45%	-2.19%
			5320	5.634	47.775	5.439	48.851	3.59%	-2.20%
			5500	5.870	47.469	5.650	48.607	3.89%	-2.34%
			5520	5.893	47.428	5.673	48.580	3.88%	-2.37%
			5540	5.920	47.383	5.696	48.553	3.93%	-2.41%
			5560	5.953	47.351	5.720	48.526	4.07%	-2.42%
			5580	5.982	47.322	5.743	48.499	4.16%	-2.43%
			5600	6.007	47.297	5.766	48.471	4.18%	-2.42%
			5620	6.029	47.257	5.790	48.444	4.13%	-2.45%
			5640	6.062	47.227	5.813	48.417	4.28%	-2.46%
			5660	6.094	47.188	5.837	48.390	4.40%	-2.48%
			5680	6.122	47.153	5.860	48.363	4.47%	-2.50%
			5700	6.149	47.142	5.883	48.336	4.52%	-2.47%
			5745	6.215	47.041	5.936	48.275	4.70%	-2.56%
			5765	6.245	47.002	5.959	48.248	4.80%	-2.58%
			5785	6.274	46.981	5.982	48.220	4.88%	-2.57%
			5800	6.288	46.965	6.000	48.200	4.80%	-2.56%
			5805	6.294	46.965	6.006	48.193	4.80%	-2.55%
			5825	6.321	46.916	6.029	48.166	4.84%	-2.60%

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). 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 ±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
System Verification Results – 1g

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)	$Deviation_{1g}$ (%)
AM1	835	HEAD	06/24/2020	23.5	22.1	0.200	4d040	7427	1.850	9.500	9.250	-2.63%
AM1	850	HEAD	06/29/2020	23.1	21.4	0.200	1009	7427	1.920	10.000	9.600	-4.00%
AM1	850	HEAD	07/01/2020	23.5	21.7	0.200	1010	7427	1.930	9.930	9.650	-2.82%
AM8	1750	HEAD	07/01/2020	23.5	21.1	0.100	1104	7532	3.760	36.400	37.600	3.30%
AM2	1750	HEAD	07/07/2020	22.6	22.0	0.100	1092	7420	3.400	36.100	34.000	-5.82%
AM7	1900	HEAD	06/29/2020	20.1	20.2	0.100	5d181	7490	3.810	39.500	38.100	-3.54%
AM6	1900	HEAD	07/22/2020	22.5	20.5	0.100	5d181	3837	4.010	39.500	40.100	1.52%
AM7	2450	HEAD	07/01/2020	23.1	21.1	0.100	921	7490	5.190	53.100	51.900	-2.26%
AM1	2450	HEAD	07/08/2020	22.5	21.9	0.100	945	7427	5.450	51.000	54.500	6.86%
AM7	2450	HEAD	07/22/2020	21.9	20.3	0.100	921	7490	5.170	53.100	51.700	-2.64%
AM7	2450	HEAD	07/26/2020	21.1	21.4	0.100	945	7490	5.030	51.000	50.300	-1.37%
AM4	2450	HEAD	07/31/2020	22.4	22.0	0.100	921	7421	5.670	53.100	56.700	6.78%
AM7	2600	HEAD	07/01/2020	23.1	21.1	0.100	1069	7490	5.870	56.900	58.700	3.16%
AM1	2600	HEAD	07/08/2020	22.5	21.9	0.100	1009	7427	5.800	55.800	58.000	3.94%
AM4	2600	HEAD	07/31/2020	22.4	22.0	0.100	1069	7421	5.810	56.900	58.100	2.11%
AM2	5250	HEAD	07/24/2020	22.8	22.2	0.050	1123	7420	3.950	81.600	79.000	-3.19%
AM2	5600	HEAD	07/24/2020	22.8	22.2	0.050	1123	7420	4.220	85.100	84.400	-0.82%
AM2	5750	HEAD	07/24/2020	22.8	22.2	0.050	1123	7420	3.960	80.600	79.200	-1.74%

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Table 9-4
System Verification Results – 10g

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)	$Deviation_{10g}$ (%)
AM4	850	BODY	07/12/2020	20.1	19.8	0.200	1010	7421	1.410	6.680	7.050	5.54%
AM6	1750	BODY	06/30/2020	23.8	20.3	0.100	1104	3837	2.070	19.600	20.700	5.61%
AM6	1750	BODY	07/02/2020	21.4	20.3	0.100	1092	3837	2.000	19.400	20.000	3.09%
AM8	1900	BODY	07/08/2020	22.0	20.9	0.100	5d180	7532	2.140	20.900	21.400	2.39%
AM4	1900	BODY	07/23/2020	23.0	21.9	0.100	5d181	7421	2.160	20.900	21.600	3.35%
AM3	2450	BODY	07/13/2020	23.3	21.9	0.100	921	3949	2.550	23.800	25.500	7.14%
AM3	2450	BODY	07/20/2020	23.1	22.7	0.100	921	3949	2.480	23.800	24.800	4.20%
AM3	2450	BODY	07/22/2020	23.1	22.8	0.100	750	3949	2.530	24.100	25.300	4.98%
AM3	2450	BODY	07/27/2020	23.3	22.9	0.100	750	3949	2.250	24.100	22.500	-6.64%
AM3	2600	BODY	07/13/2020	23.3	21.9	0.100	1009	3949	2.460	25.000	24.600	-1.60%
AM3	2600	BODY	07/20/2020	23.1	22.7	0.100	1069	3949	2.530	24.800	25.300	2.02%
AM2	5250	BODY	07/29/2020	21.6	21.6	0.050	1123	7420	0.949	20.600	18.980	-7.86%
AM2	5600	BODY	07/29/2020	21.6	21.6	0.050	1123	7420	1.090	21.700	21.800	0.46%
AM2	5750	BODY	07/29/2020	21.6	21.6	0.050	1123	7420	0.997	20.800	19.940	-4.13%

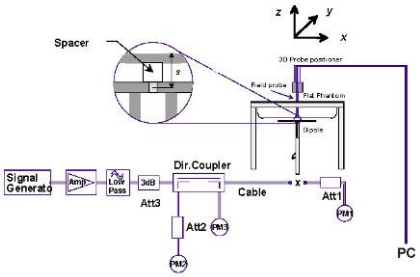

Figure 9-1
System Verification Setup Diagram

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]	Spacing	Housing Type	Wristband Type	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
836.60	4183	UMTS 850	RMC	25.0	23.39	0.13	10 mm	Aluminum	Sport	GY6CQ029Q618	1:1	front	0.001	1.449	0.001	
836.60	4183	UMTS 850	RMC	25.0	23.39	0.17	10 mm	Aluminum	Metal Links	GY6CQ03VQ618	1:1	front	0.000	1.449	0.000	
836.60	4183	UMTS 850	RMC	25.0	23.39	-0.11	10 mm	Aluminum	Metal Loop	GY6CQ03VQ618	1:1	front	0.001	1.449	0.001	A1
836.60	4183	UMTS 850	RMC	25.0	23.39	0.19	10 mm	Stainless Steel	Sport	GY6CR00SQ61M	1:1	front	0.000	1.449	0.000	
836.60	4183	UMTS 850	RMC	25.0	23.39	-0.02	10 mm	Stainless Steel	Metal Links	GY6CR00UQ61M	1:1	front	0.000	1.449	0.000	
836.60	4183	UMTS 850	RMC	25.0	23.39	0.13	10 mm	Stainless Steel	Metal Loop	GY6CR00UQ61M	1:1	front	0.000	1.449	0.000	
836.60	4183	UMTS 850	RMC	25.0	23.39	-0.14	10 mm	Titanium	Sport	GY6CR00EQ620	1:1	front	0.000	1.449	0.000	
836.60	4183	UMTS 850	RMC	25.0	23.39	0.10	10 mm	Titanium	Metal Links	GY6CR01GQ620	1:1	front	0.000	1.449	0.000	
836.60	4183	UMTS 850	RMC	25.0	23.39	-0.12	10 mm	Titanium	Metal Loop	GY6CR01GQ620	1:1	front	0.000	1.449	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]	Spacing	Housing Type	Wristband Type	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
1732.40	1412	UMTS 1750	RMC	24.0	22.98	0.13	10 mm	Aluminum	Sport	GY6CQ029Q618	1:1	front	0.094	1.265	0.119	
1732.40	1412	UMTS 1750	RMC	24.0	22.98	0.09	10 mm	Aluminum	Metal Links	GY6CQ029Q618	1:1	front	0.125	1.265	0.158	
1732.40	1412	UMTS 1750	RMC	24.0	22.98	-0.05	10 mm	Aluminum	Metal Loop	GY6CQ021Q618	1:1	front	0.133	1.265	0.168	
1732.40	1412	UMTS 1750	RMC	24.0	22.98	-0.01	10 mm	Stainless Steel	Sport	GY6CR00UQ61M	1:1	front	0.085	1.265	0.108	
1732.40	1412	UMTS 1750	RMC	24.0	22.98	-0.03	10 mm	Stainless Steel	Metal Links	GY6CR00UQ61M	1:1	front	0.105	1.265	0.133	
1732.40	1412	UMTS 1750	RMC	24.0	22.98	0.00	10 mm	Stainless Steel	Metal Loop	GY6CR00QQ61M	1:1	front	0.116	1.265	0.147	
1732.40	1412	UMTS 1750	RMC	24.0	22.98	0.03	10 mm	Titanium	Sport	GY6CR01GQ620	1:1	front	0.131	1.265	0.166	
1732.40	1412	UMTS 1750	RMC	24.0	22.98	0.00	10 mm	Titanium	Metal Links	GY6CR01GQ620	1:1	front	0.181	1.265	0.229	A2
1732.40	1412	UMTS 1750	RMC	24.0	22.98	0.02	10 mm	Titanium	Metal Loop	GY6CR01GQ620	1:1	front	0.180	1.265	0.228	
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]	Spacing	Housing Type	Wristband Type	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
1880.00	9400	UMTS 1900	RMC	24.0	22.97	0.11	10 mm	Aluminum	Sport	GY6CQ024Q618	1:1	front	0.159	1.268	0.202	
1880.00	9400	UMTS 1900	RMC	24.0	22.97	-0.06	10 mm	Aluminum	Metal Links	GY6CQ024Q618	1:1	front	0.165	1.268	0.209	
1880.00	9400	UMTS 1900	RMC	24.0	22.97	0.02	10 mm	Aluminum	Metal Loop	GY6CQ024Q618	1:1	front	0.207	1.268	0.262	
1880.00	9400	UMTS 1900	RMC	24.0	22.97	-0.02	10 mm	Stainless Steel	Sport	GY6CR00AQ61M	1:1	front	0.178	1.268	0.226	
1880.00	9400	UMTS 1900	RMC	24.0	22.97	-0.11	10 mm	Stainless Steel	Metal Links	GY6CR01JQ61M	1:1	front	0.174	1.268	0.221	
1880.00	9400	UMTS 1900	RMC	24.0	22.97	-0.08	10 mm	Stainless Steel	Metal Loop	GY6CR01DQ61M	1:1	front	0.221	1.268	0.280	A3
1880.00	9400	UMTS 1900	RMC	24.0	22.97	0.02	10 mm	Titanium	Sport	GY6CR004Q620	1:1	front	0.164	1.268	0.208	
1880.00	9400	UMTS 1900	RMC	24.0	22.97	0.07	10 mm	Titanium	Metal Links	GY6CR004Q620	1:1	front	0.178	1.268	0.226	
1880.00	9400	UMTS 1900	RMC	24.0	22.97	0.00	10 mm	Titanium	Metal Loop	GY6CR00EQ620	1:1	front	0.184	1.268	0.233	
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]	Housing Type	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	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	25.0	24.00	0.11	0	Aluminum	GY6CQ029Q618	QPSK	1	0	10 mm	front	1:1	0.001	1.259	0.001	
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	24.0	22.89	0.11	1	Aluminum	GY6CQ029Q618	QPSK	25	0	10 mm	front	1:1	0.001	1.291	0.001	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	25.0	24.00	-0.15	0	Aluminum	GY6CQ024Q618	QPSK	1	0	10 mm	front	1:1	0.000	1.259	0.000	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	24.0	22.89	0.18	1	Aluminum	GY6CQ024Q618	QPSK	25	0	10 mm	front	1:1	0.000	1.291	0.000	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	25.0	24.00	-0.15	0	Aluminum	GY6CQ021Q618	QPSK	1	0	10 mm	front	1:1	0.001	1.259	0.001	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	24.0	22.89	-0.01	1	Aluminum	GY6CQ021Q618	QPSK	25	0	10 mm	front	1:1	0.000	1.291	0.000	
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	25.0	24.00	0.13	0	Stainless Steel	GY6CR01JQ61M	QPSK	1	0	10 mm	front	1:1	0.001	1.259	0.001	A4
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	24.0	22.89	0.19	1	Stainless Steel	GY6CR01JQ61M	QPSK	25	0	10 mm	front	1:1	0.000	1.291	0.000	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	25.0	24.00	-0.18	0	Stainless Steel	GY6CR01YQ61M	QPSK	1	0	10 mm	front	1:1	0.000	1.259	0.000	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	24.0	22.89	0.10	1	Stainless Steel	GY6CR01YQ61M	QPSK	25	0	10 mm	front	1:1	0.000	1.291	0.000	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	25.0	24.00	0.13	0	Stainless Steel	GY6CR01WQ61M	QPSK	1	0	10 mm	front	1:1	0.000	1.259	0.000	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	24.0	22.89	0.14	1	Stainless Steel	GY6CR01WQ61M	QPSK	25	0	10 mm	front	1:1	0.000	1.291	0.000	
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	25.0	24.00	0.11	0	Titanium	GY6CR00EQ620	QPSK	1	0	10 mm	front	1:1	0.001	1.259	0.001	
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	24.0	22.89	-0.18	1	Titanium	GY6CR00EQ620	QPSK	25	0	10 mm	front	1:1	0.001	1.291	0.001	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	25.0	24.00	0.10	0	Titanium	GY6CR01GQ620	QPSK	1	0	10 mm	front	1:1	0.000	1.259	0.000	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	24.0	22.89	-0.15	1	Titanium	GY6CR01GQ620	QPSK	25	0	10 mm	front	1:1	0.000	1.291	0.000	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	25.0	24.00	0.17	0	Titanium	GY6CR007Q620	QPSK	1	0	10 mm	front	1:1	0.001	1.259	0.001	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	24.0	22.89	0.15	1	Titanium	GY6CR007Q620	QPSK	25	0	10 mm	front	1:1	0.001	1.291	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]	Housing Type	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	25.0	23.67	-0.12	0	Aluminum	GY6CQ029Q618	QPSK	1	49	10 mm	front	1:1	0.001	1.358	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	24.0	22.55	0.10	1	Aluminum	GY6CQ029Q618	QPSK	25	0	10 mm	front	1:1	0.000	1.396	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	25.0	23.67	-0.14	0	Aluminum	GY6CQ01YQ618	QPSK	1	49	10 mm	front	1:1	0.000	1.358	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	24.0	22.55	0.14	1	Aluminum	GY6CQ01YQ618	QPSK	25	0	10 mm	front	1:1	0.000	1.396	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	25.0	23.67	0.00	0	Aluminum	GY6CQ021Q618	QPSK	1	49	10 mm	front	1:1	0.001	1.358	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	24.0	22.55	-0.18	1	Aluminum	GY6CQ021Q618	QPSK	25	0	10 mm	front	1:1	0.001	1.396	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	25.0	23.67	-0.18	0	Stainless Steel	GY6CR00AQ61M	QPSK	1	49	10 mm	front	1:1	0.001	1.358	0.001	A5
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	24.0	22.55	0.17	1	Stainless Steel	GY6CR00AQ61M	QPSK	25	0	10 mm	front	1:1	0.001	1.396	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	25.0	23.67	0.14	0	Stainless Steel	GY6CR01WQ61M	QPSK	1	49	10 mm	front	1:1	0.000	1.358	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	24.0	22.55	-0.11	1	Stainless Steel	GY6CR01WQ61M	QPSK	25	0	10 mm	front	1:1	0.000	1.396	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	25.0	23.67	-0.13	0	Stainless Steel	GY6CR01DQ61M	QPSK	1	49	10 mm	front	1:1	0.001	1.358	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	24.0	22.55	-0.16	1	Stainless Steel	GY6CR01DQ61M	QPSK	25	0	10 mm	front	1:1	0.001	1.396	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	25.0	23.67	0.15	0	Titanium	GY6CR00NQ620	QPSK	1	49	10 mm	front	1:1	0.001	1.358	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	24.0	22.55	-0.10	1	Titanium	GY6CR00NQ620	QPSK	25	0	10 mm	front	1:1	0.001	1.396	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	25.0	23.67	0.14	0	Titanium	GY6CR01CQ620	QPSK	1	49	10 mm	front	1:1	0.000	1.358	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	24.0	22.55	-0.11	1	Titanium	GY6CR01CQ620	QPSK	25	0	10 mm	front	1:1	0.000	1.396	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	25.0	23.67	-0.16	0	Titanium	GY6CR005Q620	QPSK	1	49	10 mm	front	1:1	0.001	1.358	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	24.0	22.55	-0.16	1	Titanium	GY6CR005Q620	QPSK	25	0	10 mm	front	1:1	0.001	1.396	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]	Housing Type	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	24.0	22.38	0.16	0	Aluminum	GY6CQ029Q618	QPSK	1	50	10 mm	front	1:1	0.125	1.452	0.182	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	23.0	21.67	0.19	1	Aluminum	GY6CQ029Q618	QPSK	50	50	10 mm	front	1:1	0.106	1.358	0.144	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	24.0	22.38	0.12	0	Aluminum	GY6CQ01YQ618	QPSK	1	50	10 mm	front	1:1	0.154	1.452	0.224	A6
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	23.0	21.67	0.17	1	Aluminum	GY6CQ01YQ618	QPSK	50	50	10 mm	front	1:1	0.128	1.358	0.174	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	24.0	22.38	-0.07	0	Aluminum	GY6CQ029Q618	QPSK	1	50	10 mm	front	1:1	0.133	1.452	0.193	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	23.0	21.67	0.17	1	Aluminum	GY6CQ029Q618	QPSK	50	50	10 mm	front	1:1	0.109	1.358	0.148	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	24.0	22.38	-0.04	0	Stainless Steel	GY6CR00UQ61M	QPSK	1	50	10 mm	front	1:1	0.097	1.452	0.141	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	23.0	21.67	-0.06	1	Stainless Steel	GY6CR00UQ61M	QPSK	50	50	10 mm	front	1:1	0.082	1.358	0.111	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	24.0	22.38	-0.12	0	Stainless Steel	GY6CR00UQ61M	QPSK	1	50	10 mm	front	1:1	0.108	1.452	0.157	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	23.0	21.67	-0.03	1	Stainless Steel	GY6CR00UQ61M	QPSK	50	50	10 mm	front	1:1	0.105	1.358	0.143	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	24.0	22.38	0.09	0	Stainless Steel	GY6CR00QQ61M	QPSK	1	50	10 mm	front	1:1	0.130	1.452	0.189	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	23.0	21.67	0.14	1	Stainless Steel	GY6CR00QQ61M	QPSK	50	50	10 mm	front	1:1	0.109	1.358	0.148	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	24.0	22.38	0.16	0	Titanium	GY6CR005Q620	QPSK	1	50	10 mm	front	1:1	0.076	1.452	0.110	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	23.0	21.67	0.09	1	Titanium	GY6CR005Q620	QPSK	50	50	10 mm	front	1:1	0.064	1.358	0.087	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	24.0	22.38	-0.03	0	Titanium	GY6CR00EQ620	QPSK	1	50	10 mm	front	1:1	0.089	1.452	0.129	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	23.0	21.67	-0.11	1	Titanium	GY6CR00EQ620	QPSK	50	50	10 mm	front	1:1	0.076	1.358	0.103	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	24.0	22.38	0.02	0	Titanium	GY6CR007Q620	QPSK	1	50	10 mm	front	1:1	0.102	1.452	0.148	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	23.0	21.67	-0.07	1	Titanium	GY6CR007Q620	QPSK	50	50	10 mm	front	1:1	0.086	1.358	0.117	
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]	Housing Type	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	24.0	22.51	0.04	0	Aluminum	GY6CQ01NQ618	QPSK	1	50	10 mm	front	1:1	0.151	1.409	0.213	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	23.0	21.78	0.01	1	Aluminum	GY6CQ01NQ618	QPSK	50	50	10 mm	front	1:1	0.129	1.324	0.171	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	24.0	22.51	-0.03	0	Aluminum	GY6CQ01NQ618	QPSK	1	50	10 mm	front	1:1	0.189	1.409	0.266	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	23.0	21.78	0.02	1	Aluminum	GY6CQ01NQ618	QPSK	50	50	10 mm	front	1:1	0.155	1.324	0.205	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	24.0	22.51	0.01	0	Aluminum	GY6CQ01NQ618	QPSK	1	50	10 mm	front	1:1	0.180	1.409	0.254	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	23.0	21.78	0.06	1	Aluminum	GY6CQ01NQ618	QPSK	50	50	10 mm	front	1:1	0.151	1.324	0.200	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	24.0	22.51	0.04	0	Stainless Steel	GY6CR01WQ61M	QPSK	1	50	10 mm	front	1:1	0.173	1.409	0.244	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	23.0	21.78	0.01	1	Stainless Steel	GY6CR01WQ61M	QPSK	50	50	10 mm	front	1:1	0.147	1.324	0.195	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	24.0	22.51	0.09	0	Stainless Steel	GY6CR01WQ61M	QPSK	1	50	10 mm	front	1:1	0.200	1.409	0.282	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	23.0	21.78	-0.01	1	Stainless Steel	GY6CR01WQ61M	QPSK	50	50	10 mm	front	1:1	0.159	1.324	0.211	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	24.0	22.51	-0.01	0	Stainless Steel	GY6CR01WQ61M	QPSK	1	50	10 mm	front	1:1	0.199	1.409	0.280	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	23.0	21.78	0.07	1	Stainless Steel	GY6CR01WQ61M	QPSK	50	50	10 mm	front	1:1	0.161	1.324	0.213	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	24.0	22.51	0.03	0	Titanium	GY6CR004Q620	QPSK	1	50	10 mm	front	1:1	0.213	1.409	0.300	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	23.0	21.78	-0.04	1	Titanium	GY6CR004Q620	QPSK	50	50	10 mm	front	1:1	0.174	1.324	0.230	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	24.0	22.51	0.03	0	Titanium	GY6CR004Q620	QPSK	1	50	10 mm	front	1:1	0.186	1.409	0.262	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	23.0	21.78	-0.02	1	Titanium	GY6CR004Q620	QPSK	50	50	10 mm	front	1:1	0.153	1.324	0.203	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	24.0	22.51	0.04	0	Titanium	GY6CR004Q620	QPSK	1	50	10 mm	front	1:1	0.231	1.409	0.325	A7
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	23.0	21.78	-0.02	1	Titanium	GY6CR004Q620	QPSK	50	50	10 mm	front	1:1	0.189	1.324	0.250	
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 10-8
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]	Housing Type	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2510.00	20850	Low	LTE Band 7	20	Sport	20.5	19.70	-0.05	0	Aluminum	GY6CQ021Q618	QPSK	1	99	10 mm	front	1:1	0.711	1.202	0.855	
2535.00	21100	Mid	LTE Band 7	20	Sport	20.5	19.24	0.00	0	Aluminum	GY6CQ021Q618	QPSK	1	0	10 mm	front	1:1	0.871	1.337	1.165	
2560.00	21350	High	LTE Band 7	20	Sport	20.5	19.88	0.03	0	Aluminum	GY6CQ021Q618	QPSK	1	99	10 mm	front	1:1	0.791	1.153	0.912	
2560.00	21350	High	LTE Band 7	20	Sport	19.5	18.66	0.08	1	Aluminum	GY6CQ021Q618	QPSK	50	50	10 mm	front	1:1	0.613	1.213	0.744	
2560.00	21350	High	LTE Band 7	20	Sport	19.5	18.65	0.02	1	Aluminum	GY6CQ021Q618	QPSK	100	0	10 mm	front	1:1	0.676	1.216	0.822	
2560.00	21350	High	LTE Band 7	20	Metal Links	20.5	19.88	-0.05	0	Aluminum	GY6CQ029Q618	QPSK	1	99	10 mm	front	1:1	0.633	1.153	0.730	
2560.00	21350	High	LTE Band 7	20	Metal Links	19.5	18.66	0.11	1	Aluminum	GY6CQ029Q618	QPSK	50	50	10 mm	front	1:1	0.485	1.213	0.588	
2560.00	21350	High	LTE Band 7	20	Metal Loop	20.5	19.88	-0.04	0	Aluminum	GY6CQ021Q618	QPSK	1	99	10 mm	front	1:1	0.634	1.153	0.731	
2560.00	21350	High	LTE Band 7	20	Metal Loop	19.5	18.66	0.05	1	Aluminum	GY6CQ021Q618	QPSK	50	50	10 mm	front	1:1	0.508	1.213	0.616	
2510.00	20850	Low	LTE Band 7	20	Sport	20.5	19.70	0.00	0	Stainless Steel	GY6CR00QQ61M	QPSK	1	99	10 mm	front	1:1	0.907	1.202	1.090	
2535.00	21100	Mid	LTE Band 7	20	Sport	20.5	19.24	-0.03	0	Stainless Steel	GY6CR00QQ61M	QPSK	1	0	10 mm	front	1:1	0.847	1.337	1.132	
2560.00	21350	High	LTE Band 7	20	Sport	20.5	19.88	-0.02	0	Stainless Steel	GY6CR00QQ61M	QPSK	1	99	10 mm	front	1:1	1.000	1.153	1.153	A8
2510.00	20850	Low	LTE Band 7	20	Sport	19.5	18.50	0.03	1	Stainless Steel	GY6CR00QQ61M	QPSK	50	50	10 mm	front	1:1	0.723	1.259	0.910	
2535.00	21100	Mid	LTE Band 7	20	Sport	19.5	18.35	-0.05	1	Stainless Steel	GY6CR00QQ61M	QPSK	50	0	10 mm	front	1:1	0.728	1.303	0.949	
2560.00	21350	High	LTE Band 7	20	Sport	19.5	18.66	0.04	1	Stainless Steel	GY6CR00QQ61M	QPSK	50	50	10 mm	front	1:1	0.607	1.213	0.736	
2560.00	21350	High	LTE Band 7	20	Sport	19.5	18.65	0.01	1	Stainless Steel	GY6CR00QQ61M	QPSK	100	0	10 mm	front	1:1	0.800	1.216	0.973	
2510.00	20850	Low	LTE Band 7	20	Metal Links	20.5	19.70	-0.15	0	Stainless Steel	GY6CR00SQ61M	QPSK	1	99	10 mm	front	1:1	0.632	1.202	0.760	
2535.00	21100	Mid	LTE Band 7	20	Metal Links	20.5	19.24	0.13	0	Stainless Steel	GY6CR00SQ61M	QPSK	1	0	10 mm	front	1:1	0.583	1.337	0.779	
2560.00	21350	High	LTE Band 7	20	Metal Links	20.5	19.88	0.04	0	Stainless Steel	GY6CR00SQ61M	QPSK	1	99	10 mm	front	1:1	0.798	1.153	0.920	
2560.00	21350	High	LTE Band 7	20	Metal Links	19.5	18.66	0.00	1	Stainless Steel	GY6CR00SQ61M	QPSK	50	50	10 mm	front	1:1	0.522	1.213	0.633	
2560.00	21350	High	LTE Band 7	20	Metal Links	19.5	18.65	-0.07	1	Stainless Steel	GY6CR00SQ61M	QPSK	100	0	10 mm	front	1:1	0.597	1.216	0.726	
2510.00	20850	Low	LTE Band 7	20	Metal Loop	20.5	19.70	0.12	0	Stainless Steel	GY6CR00SQ61M	QPSK	1	99	10 mm	front	1:1	0.811	1.202	0.975	
2535.00	21100	Mid	LTE Band 7	20	Metal Loop	20.5	19.24	-0.01	0	Stainless Steel	GY6CR00SQ61M	QPSK	1	0	10 mm	front	1:1	0.706	1.337	0.944	
2560.00	21350	High	LTE Band 7	20	Metal Loop	20.5	19.88	-0.05	0	Stainless Steel	GY6CR00SQ61M	QPSK	1	99	10 mm	front	1:1	0.724	1.153	0.835	
2560.00	21350	High	LTE Band 7	20	Metal Loop	19.5	18.66	0.02	1	Stainless Steel	GY6CR00SQ61M	QPSK	50	50	10 mm	front	1:1	0.463	1.213	0.562	
2560.00	21350	High	LTE Band 7	20	Metal Loop	19.5	18.65	-0.02	1	Stainless Steel	GY6CR00SQ61M	QPSK	100	0	10 mm	front	1:1	0.566	1.216	0.688	
2510.00	20850	Low	LTE Band 7	20	Sport	20.5	19.70	-0.02	0	Titanium	GY6CR007Q620	QPSK	1	99	10 mm	front	1:1	0.916	1.202	1.101	
2535.00	21100	Mid	LTE Band 7	20	Sport	20.5	19.24	-0.04	0	Titanium	GY6CR007Q620	QPSK	1	0	10 mm	front	1:1	0.869	1.337	1.162	
2560.00	21350	High	LTE Band 7	20	Sport	20.5	19.88	0.02	0	Titanium	GY6CR007Q620	QPSK	1	99	10 mm	front	1:1	0.904	1.153	1.042	
2510.00	20850	Low	LTE Band 7	20	Sport	19.5	18.50	0.01	1	Titanium	GY6CR007Q620	QPSK	50	50	10 mm	front	1:1	0.655	1.259	0.825	
2535.00	21100	Mid	LTE Band 7	20	Sport	19.5	18.35	0.02	1	Titanium	GY6CR007Q620	QPSK	50	0	10 mm	front	1:1	0.645	1.303	0.840	
2560.00	21350	High	LTE Band 7	20	Sport	19.5	18.66	-0.03	1	Titanium	GY6CR007Q620	QPSK	50	50	10 mm	front	1:1	0.679	1.213	0.824	
2560.00	21350	High	LTE Band 7	20	Sport	19.5	18.65	0.03	1	Titanium	GY6CR007Q620	QPSK	100	0	10 mm	front	1:1	0.787	1.216	0.957	
2560.00	21350	High	LTE Band 7	20	Metal Links	20.5	19.88	0.02	0	Titanium	GY6CR00NQ620	QPSK	1	99	10 mm	front	1:1	0.602	1.153	0.694	
2560.00	21350	High	LTE Band 7	20	Metal Links	19.5	18.66	-0.01	1	Titanium	GY6CR00NQ620	QPSK	50	50	10 mm	front	1:1	0.514	1.213	0.623	
2510.00	20850	Low	LTE Band 7	20	Metal Loop	20.5	19.70	0.07	0	Titanium	GY6CR00EQ620	QPSK	1	99	10 mm	front	1:1	0.647	1.202	0.778	
2535.00	21100	Mid	LTE Band 7	20	Metal Loop	20.5	19.24	0.00	0	Titanium	GY6CR00EQ620	QPSK	1	0	10 mm	front	1:1	0.695	1.337	0.929	
2560.00	21350	High	LTE Band 7	20	Metal Loop	20.5	19.88	-0.03	0	Titanium	GY6CR00EQ620	QPSK	1	99	10 mm	front	1:1	0.717	1.153	0.827	
2510.00	20850	Low	LTE Band 7	20	Metal Loop	19.5	18.50	0.06	1	Titanium	GY6CR00EQ620	QPSK	50	50	10 mm	front	1:1	0.445	1.259	0.560	
2535.00	21100	Mid	LTE Band 7	20	Metal Loop	19.5	18.35	-0.02	1	Titanium	GY6CR00EQ620	QPSK	50	0	10 mm	front	1:1	0.517	1.303	0.674	
2560.00	21350	High	LTE Band 7	20	Metal Loop	19.5	18.66	-0.05	1	Titanium	GY6CR00EQ620	QPSK	50	50	10 mm	front	1:1	0.414	1.213	0.502	
2560.00	21350	High	LTE Band 7	20	Metal Loop	19.5	18.65	0.05	1	Titanium	GY6CR00EQ620	QPSK	100	0	10 mm	front	1:1	0.565	1.216	0.687	
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 10-9
LTE Band 41 Head SAR

MEASUREMENT RESULTS																						
FREQUENCY MHz	Ch.	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	SAR (1g) [W/kg]	Scaling Factor	Reported SAR (1g) [W/kg]	Plot #
2506.00	39750	LTE Band 41	20	Sport	22.5	22.24	-0.02	0	Aluminum	GH5CQ010NQE618	QPSK	1	99	10 mm	front	1:1.58	1.110	1.062	1.179	A9
2549.50	40185	Low-Mid	LTE Band 41	20	Sport	22.5	22.05	-0.10	0	Aluminum	GH5CQ010NQE618	QPSK	1	0	10 mm	front	1:1.58	0.991	1.109	1.099	
2593.00	40620	Mid	LTE Band 41	20	Sport	22.5	22.33	0.13	0	Aluminum	GH5CQ010NQE618	QPSK	1	50	10 mm	front	1:1.58	0.972	1.040	1.011	
2636.50	41055	Mid-High	LTE Band 41	20	Sport	22.5	22.06	-0.04	0	Aluminum	GH5CQ010NQE618	QPSK	1	0	10 mm	front	1:1.58	0.878	1.107	0.972	
2680.00	41490	High	LTE Band 41	20	Sport	22.5	21.88	-0.02	0	Aluminum	GH5CQ010NQE618	QPSK	1	0	10 mm	front	1:1.58	0.790	1.153	0.899	
2506.00	39750	Low	LTE Band 41	20	Sport	21.5	21.05	-0.04	1	Aluminum	GH5CQ010NQE618	QPSK	50	50	10 mm	front	1:1.58	0.737	1.109	0.817	
2549.50	40185	Low-Mid	LTE Band 41	20	Sport	21.5	20.98	-0.04	1	Aluminum	GH5CQ010NQE618	QPSK	50	0	10 mm	front	1:1.58	0.786	1.127	0.886	
2593.00	40620	Mid	LTE Band 41	20	Sport	21.5	21.37	-0.13	1	Aluminum	GH5CQ010NQE618	QPSK	50	0	10 mm	front	1:1.58	0.651	1.030	0.671	
2636.50	41055	Mid-High	LTE Band 41	20	Sport	21.5	21.03	0.00	1	Aluminum	GH5CQ010NQE618	QPSK	50	0	10 mm	front	1:1.58	0.617	1.114	0.687	
2680.00	41490	High	LTE Band 41	20	Sport	21.5	20.86	-0.03	1	Aluminum	GH5CQ010NQE618	QPSK	50	50	10 mm	front	1:1.58	0.525	1.159	0.608	
2593.00	40620	Mid	LTE Band 41	20	Sport	21.5	21.36	0.02	1	Aluminum	GH5CQ010NQE618	QPSK	100	0	10 mm	front	1:1.58	0.768	1.033	0.793	
2506.00	39750	Low	LTE Band 41	20	Metal Links	22.5	22.24	0.08	0	Aluminum	GH5CQ010NQE618	QPSK	1	99	10 mm	front	1:1.58	0.562	1.062	0.597	
2549.50	40185	Low-Mid	LTE Band 41	20	Metal Links	22.5	22.05	0.01	0	Aluminum	GH5CQ010NQE618	QPSK	1	0	10 mm	front	1:1.58	0.692	1.109	0.767	
2593.00	40620	Mid	LTE Band 41	20	Metal Links	22.5	22.33	0.07	0	Aluminum	GH5CQ010NQE618	QPSK	1	50	10 mm	front	1:1.58	0.631	1.040	0.656	
2636.50	41055	Mid-High	LTE Band 41	20	Metal Links	22.5	22.06	0.12	0	Aluminum	GH5CQ010NQE618	QPSK	1	0	10 mm	front	1:1.58	0.743	1.107	0.823	
2680.00	41490	High	LTE Band 41	20	Metal Links	22.5	21.88	0.02	0	Aluminum	GH5CQ010NQE618	QPSK	1	0	10 mm	front	1:1.58	0.764	1.153	0.881	
2593.00	40620	Mid	LTE Band 41	20	Metal Links	21.5	21.37	0.03	1	Aluminum	GH5CQ010NQE618	QPSK	50	0	10 mm	front	1:1.58	0.523	1.030	0.539	
2593.00	40620	Mid	LTE Band 41	20	Metal Links	21.5	21.36	0.03	1	Aluminum	GH5CQ010NQE618	QPSK	100	0	10 mm	front	1:1.58	0.617	1.033	0.637	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	22.5	22.24	-0.05	0	Aluminum	GH5CQ010NQE618	QPSK	1	99	10 mm	front	1:1.58	0.479	1.062	0.509	
2549.50	40185	Low-Mid	LTE Band 41	20	Metal Loop	22.5	22.05	0.08	0	Aluminum	GH5CQ010NQE618	QPSK	1	0	10 mm	front	1:1.58	0.669	1.109	0.742	
2593.00	40620	Mid	LTE Band 41	20	Metal Loop	22.5	22.33	-0.04	0	Aluminum	GH5CQ010NQE618	QPSK	1	50	10 mm	front	1:1.58	0.806	1.040	0.838	
2636.50	41055	Mid-High	LTE Band 41	20	Metal Loop	22.5	22.06	0.06	0	Aluminum	GH5CQ010NQE618	QPSK	1	0	10 mm	front	1:1.58	0.683	1.107	0.756	
2680.00	41490	High	LTE Band 41	20	Metal Loop	22.5	21.88	0.08	0	Aluminum	GH5CQ010NQE618	QPSK	1	0	10 mm	front	1:1.58	0.623	1.153	0.718	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	21.5	21.05	-0.03	1	Aluminum	GH5CQ010NQE618	QPSK	50	50	10 mm	front	1:1.58	0.366	1.109	0.406	
2549.50	40185	Low-Mid	LTE Band 41	20	Metal Loop	21.5	20.98	0.02	1	Aluminum	GH5CQ010NQE618	QPSK	50	0	10 mm	front	1:1.58	0.568	1.127	0.640	
2593.00	40620	Mid	LTE Band 41	20	Metal Loop	21.5	21.37	-0.04	1	Aluminum	GH5CQ010NQE618	QPSK	50	0	10 mm	front	1:1.58	0.660	1.030	0.680	
2636.50	41055	Mid-High	LTE Band 41	20	Metal Loop	21.5	21.03	0.08	1	Aluminum	GH5CQ010NQE618	QPSK	50	0	10 mm	front	1:1.58	0.514	1.114	0.573	
2680.00	41490	High	LTE Band 41	20	Metal Loop	21.5	20.86	0.09	1	Aluminum	GH5CQ010NQE618	QPSK	50	50	10 mm	front	1:1.58	0.463	1.159	0.537	
2593.00	40620	Mid	LTE Band 41	20	Metal Loop	21.5	21.36	-0.08	1	Aluminum	GH5CQ010NQE618	QPSK	100	0	10 mm	front	1:1.58	0.534	1.033	0.552	
2506.00	39750	Low	LTE Band 41	20	Sport	22.5	22.24	0.01	0	Stainless Steel	GH8CR000AQ61M	QPSK	1	99	10 mm	front	1:1.58	0.933	1.062	0.991	
2549.50	40185	Low-Mid	LTE Band 41	20	Sport	22.5	22.05	-0.07	0	Stainless Steel	GH8CR000AQ61M	QPSK	1	0	10 mm	front	1:1.58	1.070	1.109	1.187	
2593.00	40620	Mid	LTE Band 41	20	Sport	22.5	22.33	-0.04	0	Stainless Steel	GH8CR000AQ61M	QPSK	1	50	10 mm	front	1:1.58	0.966	1.040	1.036	
2636.50	41055	Mid-High	LTE Band 41	20	Sport	22.5	22.06	0.03	0	Stainless Steel	GH8CR000AQ61M	QPSK	1	0	10 mm	front	1:1.58	0.880	1.107	0.974	
2680.00	41490	High	LTE Band 41	20	Sport	22.5	21.88	0.07	0	Stainless Steel	GH8CR000AQ61M	QPSK	1	0	10 mm	front	1:1.58	0.920	1.153	1.061	
2506.00	39750	Low	LTE Band 41	20	Sport	21.5	21.05	0.07	1	Stainless Steel	GH8CR000AQ61M	QPSK	50	50	10 mm	front	1:1.58	0.688	1.109	0.763	
2549.50	40185	Low-Mid	LTE Band 41	20	Sport	21.5	20.98	0.01	1	Stainless Steel	GH8CR000AQ61M	QPSK	50	0	10 mm	front	1:1.58	0.834	1.127	0.940	
2593.00	40620	Mid	LTE Band 41	20	Sport	21.5	21.37	-0.01	1	Stainless Steel	GH8CR000AQ61M	QPSK	50	0	10 mm	front	1:1.58	0.794	1.030	0.818	
2636.50	41055	Mid-High	LTE Band 41	20	Sport	21.5	21.03	0.03	1	Stainless Steel	GH8CR000AQ61M	QPSK	50	0	10 mm	front	1:1.58	0.697	1.114	0.776	
2680.00	41490	High	LTE Band 41	20	Sport	21.5	20.86	0.04	1	Stainless Steel	GH8CR000AQ61M	QPSK	50	50	10 mm	front	1:1.58	0.683	1.159	0.792	
2593.00	40620	Mid	LTE Band 41	20	Sport	21.5	21.36	0.11	1	Stainless Steel	GH8CR000AQ61M	QPSK	100	0	10 mm	front	1:1.58	0.809	1.033	0.836	
2506.00	39750	Low	LTE Band 41	20	Metal Links	22.5	22.24	-0.01	0	Stainless Steel	GH8CR000AQ61M	QPSK	1	99	10 mm	front	1:1.58	0.596	1.062	0.633	
2549.50	40185	Low-Mid	LTE Band 41	20	Metal Links	22.5	22.05	0.07	0	Stainless Steel	GH8CR000AQ61M	QPSK	1	0	10 mm	front	1:1.58	0.697	1.109	0.773	
2593.00	40620	Mid	LTE Band 41	20	Metal Links	22.5	22.33	0.03	0	Stainless Steel	GH8CR000AQ61M	QPSK	1	50	10 mm	front	1:1.58	0.717	1.040	0.746	
2636.50	41055	Mid-High	LTE Band 41	20	Metal Links	22.5	22.06	0.05	0	Stainless Steel	GH8CR000AQ61M	QPSK	1	0	10 mm	front	1:1.58	0.619	1.107	0.685	
2680.00	41490	High	LTE Band 41	20	Metal Links	22.5	21.88	0.07	0	Stainless Steel	GH8CR000AQ61M	QPSK	1	0	10 mm	front	1:1.58	0.627	1.153	0.723	
2506.00	39750	Low	LTE Band 41	20	Metal Links	21.5	21.05	-0.01	1	Stainless Steel	GH8CR000AQ61M	QPSK	50	50	10 mm	front	1:1.58	0.416	1.109	0.461	
2549.50	40185	Low-Mid	LTE Band 41	20	Metal Links	21.5	20.98	-0.01	1	Stainless Steel	GH8CR000AQ61M	QPSK	50	0	10 mm	front	1:1.58	0.564	1.127	0.624	
2593.00	40620	Mid	LTE Band 41	20	Metal Links	21.5	21.37	0.00	1	Stainless Steel	GH8CR000AQ61M	QPSK	50	0	10 mm	front	1:1.58	0.574	1.030	0.591	
2636.50	41055	Mid-High	LTE Band 41	20	Metal Links	21.5	21.03	0.04	1	Stainless Steel	GH8CR000AQ61M	QPSK	50	0	10 mm	front	1:1.58	0.488	1.114	0.544	
2680.00	41490	High	LTE Band 41	20	Metal Links	21.5	20.86	0.06	1	Stainless Steel	GH8CR000AQ61M	QPSK	50	50	10 mm	front	1:1.58	0.492	1.159	0.570	
2593.00	40620	Mid	LTE Band 41	20	Metal Links	21.5	21.36	0.04	1	Stainless Steel	GH8CR000AQ61M	QPSK	100	0	10 mm	front	1:1.58	0.564	1.033	0.583	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	22.5	22.24	0.09	0	Stainless Steel	GH8CR000SQ61M	QPSK	1	99	10 mm	front	1:1.58	0.703	1.062	0.747	
2549.50	40185	Low-Mid	LTE Band 41	20	Metal Loop	22.5	22.05	-0.15	0	Stainless Steel	GH8CR000SQ61M	QPSK	1	0	10 mm	front	1:1.58	0.789	1.109	0.875	
2593.00	40620	Mid	LTE Band 41	20	Metal Loop	22.5	22.33	0.04	0	Stainless Steel	GH8CR000SQ61M	QPSK	1	50	10 mm	front	1:1.58	0.836	1.040	0.869	
2636.50	41055	Mid-High	LTE Band 41	20	Metal Loop	22.5	22.06	0.01	0	Stainless Steel	GH8CR000SQ61M	QPSK	1	0	10 mm	front	1:1.58	0.857	1.107	0.949	
2680.00	41490	High	LTE Band 41	20	Metal Loop	22.5	21.88	0.04	0	Stainless Steel	GH8CR000SQ61M	QPSK	1	0	10 mm	front	1:1.58	0.828	1.153	0.955	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	21.5	21.05	0.03	1	Stainless Steel	GH8CR000SQ61M	QPSK	50	50	10 mm	front	1:1.58	0.568	1.109	0.630	
2549.50	40185	Low-Mid	LTE Band 41	20	Metal Loop	21.5	20.98	0.09	1	Stainless Steel	GH8CR000SQ61M	QPSK	50	0	10 mm	front	1:1.58	0.634	1.127	0.715	
2593.00	40620	Mid	LTE Band 41	20	Metal Loop	21.5	21.37	-0.07	1	Stainless Steel	GH8CR000SQ61M	QPSK	50	0	10 mm	front	1:1.58	0.672	1.030	0.692	
2636.50	41055	Mid-High	LTE Band 41	20	Metal Loop	21.5	21.03	-0.05	1	Stainless Steel	GH8CR000SQ61M	QPSK	50	0	10 mm	front	1:1.58	0.490	1.114	0.546	
2680.00	41490	High	LTE Band 41	20	Metal Loop	21.5	20.86	-0.02	1	Stainless Steel	GH8CR000SQ61M	QPSK	50	50	10 mm	front	1:1.58	0.403	1.159	0.467	
2593.00	40620	Mid	LTE Band 41	20	Metal Loop	21.5	21.36	0.11	1	Stainless Steel	GH8CR000SQ61M	QPSK	100	0	10 mm	front	1:1.58	0.612	1.033	0.632	
2506.00	39750	Low	LTE Band 41	20	Sport	22.5	22.24	0.02	0	Titanium	GH5CR000SQ620	QPSK	1	99	10 mm	front	1:1.58	0.866	1.062	0.920	
2549.50	40185	Low-Mid	LTE Band 41	20	Sport	22.5	22.05	0.00	0	Titanium	GH5CR000SQ620	QPSK	1	0	10 mm	front	1:1.58	0.880	1.109	0.976	
2593.00	40620	Mid	LTE Band 41	20	Sport	22.5	22.33	0.04	0	Titanium	GH5CR000SQ620	QPSK	1	50	10 mm	front	1:1.58	0.942	1.040	0.980	
2636.50	41055	Mid-High	LTE Band 41	20	Sport	22.5	22.06	0.03	0	Titanium	GH5CR000SQ620	QPSK	1	0	10 mm	front	1:1.58	0.860	1.107	0.952	
2680.00	41490	High	LTE Band 41	20	Sport	22.5	21.88	-0.01	0	Titanium	GH5CR000SQ620	QPSK	1	0	10 mm	front	1:1.58	0.720	1.153	0.830	
2506.00	39750	Low	LTE Band 41	20	Sport	21.5	21.05	0.01	1	Titanium	GH5CR000SQ620	QPSK	50	50	10 mm	front	1:1.58	0.621	1.109	0.689	
2549.50	40185	Low-Mid	LTE Band 41	20	Sport	21.5	20.98	-0.01	1	Titanium	GH5CR000SQ620	QPSK	50	0	10 mm	front	1:1.58	0.685	1.127	0.772	
2593.00	40620	Mid	LTE Band 41	20	Sport	21.5	21.37	0.03	1	Titanium	GH5CR000SQ620	QPSK	50	0	10 mm	front	1:1.58	0.739	1.030	0.761	
2636.50	41055	Mid-High	LTE Band 41	20	Sport	21.5	21.03	0.02	1	Titanium	GH5CR000SQ620	QPSK	50	0	10 mm	front	1:1.58	0.664	1.114	0.740	
2680.00	41490	High	LTE Band 41	20	Sport	21.5	20.86	0.03	1	Titanium	GH5CR000SQ620	QPSK	50	50	10 mm	front	1:1.58	0.518	1.159	0.600	
2593.00	40620	Mid	LTE Band 41	20	Sport	21.5	21.36	0.05	1	Titanium	GH5CR000SQ620	QPSK	100	0	10 mm	front	1:1.58	0.710	1.033	0.733	
2506.00	39750	Low	LTE Band 41	20	Metal Links	22.5	22.24	0.00	0	Titanium	GH5CR000EQ620	QPSK	1	99	10 mm	front	1:1.58	0.695	1.062	0.738	
2549.50	40185	Low-Mid	LTE Band 41	20	Metal Links	22.5	22.05	-0.08	0	Titanium	GH5CR000EQ620	QPSK	1	0	10 mm	front	1:1.58	0.792	1.109	0.867	
2593.00	40620	Mid	LTE Band 41	20	Metal Links	22.5	22.33	-0.02	0	Titanium	GH5CR000EQ620	QPSK	1	50	10 mm	front	1:1.58	0.776	1.040	0.807	
2636.50	41055	Mid-High	LTE Band 41	20	Metal Links	22.5	22.06	0.00	0	Titanium	GH5CR000EQ620	QPSK	1	0	10 mm	front	1:1.58	0.576	1.107	0.638	
2680.00	41490	High	LTE Band 41	20	Metal Links	22.5	21.88	0.00	0	Titanium	GH5CR000EQ620	QPSK	1	0	10 mm	front	1:1.58	0.510	1.153	0.588	
2506.00	39750	Low	LTE Band 41	20	Metal Links	21.5	21.05	0.00	1	Titanium	GH5CR000EQ620	QPSK	50	50	10 mm	front	1:1.58	0.570	1.109	0.632	
2549.50	40185	Low-Mid	LTE Band 41	20	Metal Links	21.5	20.98	0.04	1	Titanium	GH5CR000EQ620	QPSK	50	0	10 mm	front	1:1.58	0.670	1.127	0.755	
2593.00	40620	Mid	LTE Band 41	20	Metal Links	21.5	21.37	0.03	1	Titanium	GH5CR000EQ620	QPSK	50	0	10 mm	front	1:1.58	0.609	1.030	0.627	
2636.50	41055	Mid-High	LTE Band 41	20	Metal Links	21.5	21.03	0.02	1	Titanium	GH5CR000EQ620	QPSK	50	0	10 mm	front	1:1.58	0.511	1.114	0.569	
2680.00	41490	High	LTE Band 41	20	Metal Links	21.5	20.86	0.01	1	Titanium	GH5CR000EQ620	QPSK	50	50	10 mm	front	1:1.58	0.448	1.159	0.519	
2593.00	40620	Mid	LTE Band 41	20	Metal Links	21.5	21.36	0.01	1	Titanium	GH5CR000EQ620	QPSK	100	0	10 mm	front	1:1.58	0.531	1.033	0.549	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	22.5	22.24	-0.09	0	Titanium	GH5CR000SQ620	QPSK	1	99	10 mm	front	1:1.58	0.769	1.062	0.817	
2549.50	40185	Low-Mid	LTE Band 41	20	Metal Loop	22.5	22.05	0.01	0	Titanium	GH5CR000SQ620	QPSK	1	0	10 mm	front	1:1.58	0.821	1.109	0.910	
2593.00	40620	Mid	LTE Band 41	20	Metal Loop	22.5	22.33	0.00	0	Titanium	GH5CR000SQ620	QPSK	1	50	10 mm	front	1:1.58	0.688	1.040	0.716	
2636.50	41055	Mid-High	LTE Band 41	20	Metal Loop	22.5	22.06	-0.09	0	Titanium	GH5CR000SQ620	QPSK	1	0	10 mm	front	1:1.58	0.710	1.107	0.786	
2680.00	41490	High	LTE Band 41	20	Metal Loop	22.5	21.88	-0.03	0	Titanium	GH5CR000SQ620	QPSK	1	0	10 mm	front	1:1.58	0.622	1.153	0.717	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	21.5	21.05	0.09	1	Titanium	GH5CR000SQ620	QPSK	50	50	10 mm	front	1:1.58	0.504	1.109	0.559	
2549.50	40185	Low-Mid	LTE Band 41	20	Metal Loop	21.5	20.98	0.10	1	Titanium	GH5CR000SQ620	QPSK	50	0	10 mm	front	1:1.58	0.614	1.127	0.692	
2593.00	40620	Mid	LTE Band 41	20	Metal Loop	21.5	21.37	-0.09	1	Titanium	GH5CR000SQ620	QPSK	50	0	10 mm	front	1:1.58	0.482	1.030	0.496	
2636.50	41055	Mid-High	LTE Band 41	20	Metal Loop	21.5	21.03	-0.03	1	Titanium	GH5CR000SQ620	QPSK	50	0	10 mm	front	1:1.58	0.402	1.114	0.448	
2680.00	41490	High	LTE Band 41	20	Metal Loop	21.5	20.86	0.05	1	Titanium	GH5CR000SQ620	QPSK	50	50	10 mm	front	1:1.58	0.416	1.159	0.482	
2593.00	40620	Mid	LTE Band 41	20	Metal Loop	21.5	21.36	0.07	1	Titanium	GH5CR000SQ620	QPSK	100	0	10 mm	front	1:1.58	0.567	1.033	0.586	
2506.00	39750	Low	LTE Band 41	20	Sport	22.5	22.24	0.01	0	Aluminum	GH5CQ010NQE618	QPSK	1	99	10 mm	front	1:1.58	1.020	1.062	1.083	
2549.50	40185	Low-Mid	LTE Band 41	20	Sport	22.5	22.05	0.02	0	Stainless Steel	GH8CR000AQ61M	QPSK	1	0	10 mm	front	1:1.58	1.060	1.109	1.176	
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 Test

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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]	Spacing	Housing Type	Wristband Type	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.														(W/kg)			(W/kg)	
2437	6	802.11b	DSSS	22	19.0	18.10	0.19	10 mm	Aluminum	Sport	GY6CQ029Q618	1	front	100.0	0.376	1.230	1.000	0.462	
2437	6	802.11b	DSSS	22	19.0	18.10	-0.11	10 mm	Aluminum	Metal Links	GY6CQ029Q618	1	front	100.0	0.241	1.230	1.000	0.296	
2437	6	802.11b	DSSS	22	19.0	18.10	0.10	10 mm	Aluminum	Metal Loop	GY6CQ029Q618	1	front	100.0	0.266	1.230	1.000	0.327	
2412	1	802.11b	DSSS	22	19.0	18.02	-0.20	10 mm	Stainless Steel	Sport	GY6CR01WQ61M	1	front	100.0	0.356	1.253	1.000	0.446	
2437	6	802.11b	DSSS	22	19.0	18.10	-0.05	10 mm	Stainless Steel	Sport	GY6CR00SQ61M	1	front	100.0	0.555	1.230	1.000	**0.683**	A10
2462	11	802.11b	DSSS	22	19.0	17.95	-0.05	10 mm	Stainless Steel	Sport	GY6CR01WQ61M	1	front	100.0	0.481	1.274	1.000	0.613	
2437	6	802.11b	DSSS	22	19.0	18.10	0.00	10 mm	Stainless Steel	Metal Links	GY6CR00SQ61M	1	front	100.0	0.370	1.230	1.000	0.455	
2437	6	802.11b	DSSS	22	19.0	18.10	0.01	10 mm	Stainless Steel	Metal Loop	GY6CR00SQ61M	1	front	100.0	0.418	1.230	1.000	0.514	
2437	6	802.11b	DSSS	22	19.0	18.10	-0.02	10 mm	Titanium	Sport	GY6CR01GQ620	1	front	100.0	0.495	1.230	1.000	0.609	
2437	6	802.11b	DSSS	22	19.0	18.10	0.07	10 mm	Titanium	Metal Links	GY6CR01GQ620	1	front	100.0	0.314	1.230	1.000	0.386	
2437	6	802.11b	DSSS	22	19.0	18.10	-0.01	10 mm	Titanium	Metal Loop	GY6CR01GQ620	1	front	100.0	0.340	1.230	1.000	0.418	
2437	6	802.11b	DSSS	22	19.0	18.10	0.04	10 mm	Aluminum	Sport	GY6CQ03VQ618	1	front	18.7	0.066	1.230	1.604	0.130	
2437	6	802.11b	DSSS	22	19.0	18.10	0.13	10 mm	Aluminum	Metal Links	GY6CQ03VQ618	1	front	18.7	0.046	1.230	1.604	0.091	
2437	6	802.11b	DSSS	22	19.0	18.10	-0.03	10 mm	Aluminum	Metal Loop	GY6CQ03VQ618	1	front	18.7	0.051	1.230	1.604	0.101	
2437	6	802.11b	DSSS	22	19.0	18.10	0.08	10 mm	Stainless Steel	Sport	GY6CR01YQ61M	1	front	18.7	0.101	1.230	1.604	0.199	
2437	6	802.11b	DSSS	22	19.0	18.10	-0.07	10 mm	Stainless Steel	Metal Links	GY6CR01YQ61M	1	front	18.7	0.065	1.230	1.604	0.128	
2437	6	802.11b	DSSS	22	19.0	18.10	0.17	10 mm	Stainless Steel	Metal Loop	GY6CR01YQ61M	1	front	18.7	0.072	1.230	1.604	0.142	
2437	6	802.11b	DSSS	22	19.0	18.10	-0.03	10 mm	Titanium	Sport	GY6CR00NQ620	1	front	18.7	0.102	1.230	1.604	0.201	
2437	6	802.11b	DSSS	22	19.0	18.10	-0.02	10 mm	Titanium	Metal Links	GY6CR00NQ620	1	front	18.7	0.078	1.230	1.604	0.154	
2437	6	802.11b	DSSS	22	19.0	18.10	0.09	10 mm	Titanium	Metal Loop	GY6CR00NQ620	1	front	18.7	0.070	1.230	1.604	0.138	
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: The reported SAR for WLAN scenarios with the licensed antenna active was scaled to the 30.0% transmission duty factor since the duty factor of the device is permanently limited to 30.0% when the cellular radio is active, per the manufacturer.

Note 2: The 18.7% duty cycle was used for duty cycle reduction test due to software limitation.

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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]	Spacing	Housing Type	Wristband Type	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.														(W/kg)			(W/kg)	
5260	52	802.11a	OFDM	20	16.0	15.09	0.12	10 mm	Aluminum	Sport	GY6CQ024Q618	6	front	97.3	0.118	1.233	1.028	0.150	
5260	52	802.11a	OFDM	20	16.0	15.09	-0.13	10 mm	Aluminum	Metal Links	GY6CQ024Q618	6	front	97.3	0.116	1.233	1.028	0.147	
5260	52	802.11a	OFDM	20	16.0	15.09	0.02	10 mm	Aluminum	Metal Loop	GY6CQ024Q618	6	front	97.3	0.115	1.233	1.028	0.146	
5260	52	802.11a	OFDM	20	16.0	15.09	0.01	10 mm	Stainless Steel	Sport	GY6CR01YQ61M	6	front	97.3	0.169	1.233	1.028	0.214	
5260	52	802.11a	OFDM	20	16.0	15.09	-0.01	10 mm	Stainless Steel	Metal Links	GY6CR01YQ61M	6	front	97.3	0.169	1.233	1.028	0.214	
5260	52	802.11a	OFDM	20	16.0	15.09	-0.04	10 mm	Stainless Steel	Metal Loop	GY6CR01YQ61M	6	front	97.3	0.165	1.233	1.028	0.209	
5260	52	802.11a	OFDM	20	16.0	15.09	-0.13	10 mm	Titanium	Sport	GY6CR004Q620	6	front	97.3	0.176	1.233	1.028	0.223	
5260	52	802.11a	OFDM	20	16.0	15.09	-0.08	10 mm	Titanium	Metal Links	GY6CR004Q620	6	front	97.3	0.198	1.233	1.028	0.251	
5260	52	802.11a	OFDM	20	16.0	15.09	-0.04	10 mm	Titanium	Metal Loop	GY6CR004Q620	6	front	97.3	0.227	1.233	1.028	**0.288**	A11
5260	52	802.11a	OFDM	20	16.0	15.09	0.14	10 mm	Aluminum	Sport	GY6CQ01YQ618	6	front	19.6	0.020	1.233	1.531	0.038	
5260	52	802.11a	OFDM	20	16.0	15.09	-0.19	10 mm	Aluminum	Metal Links	GY6CQ01YQ618	6	front	19.6	0.023	1.233	1.531	0.043	
5260	52	802.11a	OFDM	20	16.0	15.09	0.15	10 mm	Aluminum	Metal Loop	GY6CQ01YQ618	6	front	19.6	0.025	1.233	1.531	0.047	
5260	52	802.11a	OFDM	20	16.0	15.09	-0.21	10 mm	Stainless Steel	Sport	GY6CR01YQ61M	6	front	19.6	0.033	1.233	1.531	0.062	
5260	52	802.11a	OFDM	20	16.0	15.09	-0.10	10 mm	Stainless Steel	Metal Links	GY6CR01YQ61M	6	front	19.6	0.034	1.233	1.531	0.064	
5260	52	802.11a	OFDM	20	16.0	15.09	-0.13	10 mm	Stainless Steel	Metal Loop	GY6CR01YQ61M	6	front	19.6	0.035	1.233	1.531	0.066	
5260	52	802.11a	OFDM	20	16.0	15.09	0.19	10 mm	Titanium	Sport	GY6CR01CQ620	6	front	19.6	0.032	1.233	1.531	0.060	
5260	52	802.11a	OFDM	20	16.0	15.09	0.15	10 mm	Titanium	Metal Links	GY6CR01CQ620	6	front	19.6	0.033	1.233	1.531	0.062	
5260	52	802.11a	OFDM	20	16.0	15.09	-0.10	10 mm	Titanium	Metal Loop	GY6CR01CQ620	6	front	19.6	0.033	1.233	1.531	0.062	
5720	144	802.11a	OFDM	20	16.0	15.08	0.01	10 mm	Aluminum	Sport	GY6CQ01YQ618	6	front	97.3	0.148	1.236	1.028	0.188	
5720	144	802.11a	OFDM	20	16.0	15.08	0.03	10 mm	Aluminum	Metal Links	GY6CQ01YQ618	6	front	97.3	0.161	1.236	1.028	0.205	
5720	144	802.11a	OFDM	20	16.0	15.08	-0.19	10 mm	Aluminum	Metal Loop	GY6CQ01YQ618	6	front	97.3	0.167	1.236	1.028	0.212	
5720	144	802.11a	OFDM	20	16.0	15.08	0.16	10 mm	Stainless Steel	Sport	GY6CR01WQ61M	6	front	97.3	0.096	1.236	1.028	0.122	
5720	144	802.11a	OFDM	20	16.0	15.08	-0.17	10 mm	Stainless Steel	Metal Links	GY6CR01WQ61M	6	front	97.3	0.102	1.236	1.028	0.130	
5720	144	802.11a	OFDM	20	16.0	15.08	-0.16	10 mm	Stainless Steel	Metal Loop	GY6CR01YQ61M	6	front	97.3	0.104	1.236	1.028	0.132	
5720	144	802.11a	OFDM	20	16.0	15.08	-0.20	10 mm	Titanium	Sport	GY6CR01GQ620	6	front	97.3	0.117	1.236	1.028	0.149	
5720	144	802.11a	OFDM	20	16.0	15.08	-0.14	10 mm	Titanium	Metal Links	GY6CR01GQ620	6	front	97.3	0.109	1.236	1.028	0.138	
5720	144	802.11a	OFDM	20	16.0	15.08	-0.10	10 mm	Titanium	Metal Loop	GY6CR01GQ620	6	front	97.3	0.113	1.236	1.028	0.144	
5720	144	802.11a	OFDM	20	16.0	15.08	0.15	10 mm	Aluminum	Sport	GY6CQ024Q618	6	front	19.6	0.034	1.236	1.531	0.064	
5720	144	802.11a	OFDM	20	16.0	15.08	0.13	10 mm	Aluminum	Metal Links	GY6CQ024Q618	6	front	19.6	0.027	1.236	1.531	0.051	
5720	144	802.11a	OFDM	20	16.0	15.08	-0.13	10 mm	Aluminum	Metal Loop	GY6CQ024Q618	6	front	19.6	0.034	1.236	1.531	0.064	
5720	144	802.11a	OFDM	20	16.0	15.08	-0.11	10 mm	Stainless Steel	Sport	GY6CR01DQ61M	6	front	19.6	0.019	1.236	1.531	0.036	
5720	144	802.11a	OFDM	20	16.0	15.08	-0.10	10 mm	Stainless Steel	Metal Links	GY6CR01DQ61M	6	front	19.6	0.023	1.236	1.531	0.044	
5720	144	802.11a	OFDM	20	16.0	15.08	-0.12	10 mm	Stainless Steel	Metal Loop	GY6CR01DQ61M	6	front	19.6	0.018	1.236	1.531	0.034	
5720	144	802.11a	OFDM	20	16.0	15.08	-0.11	10 mm	Titanium	Sport	GY6CR005Q620	6	front	19.6	0.024	1.236	1.531	0.045	
5720	144	802.11a	OFDM	20	16.0	15.08	-0.10	10 mm	Titanium	Metal Links	GY6CR005Q620	6	front	19.6	0.022	1.236	1.531	0.042	
5720	144	802.11a	OFDM	20	16.0	15.08	0.18	10 mm	Titanium	Metal Loop	GY6CR005Q620	6	front	19.6	0.024	1.236	1.531	0.045	
5785	157	802.11a	OFDM	20	16.0	15.13	-0.15	10 mm	Aluminum	Sport	GY6CQ01YQ618	6	front	97.3	0.147	1.222	1.028	0.185	
5785	157	802.11a	OFDM	20	16.0	15.13	-0.18	10 mm	Aluminum	Metal Links	GY6CQ01YQ618	6	front	97.3	0.158	1.222	1.028	0.198	
5785	157	802.11a	OFDM	20	16.0	15.13	-0.03	10 mm	Aluminum	Metal Loop	GY6CQ01YQ618	6	front	97.3	0.152	1.222	1.028	0.191	
5785	157	802.11a	OFDM	20	16.0	15.13	-0.13	10 mm	Stainless Steel	Sport	GY6CR00AQ61M	6	front	97.3	0.104	1.222	1.028	0.131	
5785	157	802.11a	OFDM	20	16.0	15.13	-0.17	10 mm	Stainless Steel	Metal Links	GY6CR00AQ61M	6	front	97.3	0.107	1.222	1.028	0.134	
5785	157	802.11a	OFDM	20	16.0	15.13	0.16	10 mm	Stainless Steel	Metal Loop	GY6CR00AQ61M	6	front	97.3	0.107	1.222	1.028	0.134	
5785	157	802.11a	OFDM	20	16.0	15.13	0.17	10 mm	Titanium	Sport	GY6CR00SQ620	6	front	97.3	0.104	1.222	1.028	0.131	
5785	157	802.11a	OFDM	20	16.0	15.13	-0.12	10 mm	Titanium	Metal Links	GY6CR00SQ620	6	front	97.3	0.105	1.222	1.028	0.132	
5785	157	802.11a	OFDM	20	16.0	15.13	-0.12	10 mm	Titanium	Metal Loop	GY6CR00SQ620	6	front	97.3	0.110	1.222	1.028	0.138	
5785	157	802.11a	OFDM	20	16.0	15.13	-0.16	10 mm	Aluminum	Sport	GY6CQ03MQ618	6	front	19.6	0.030	1.222	1.531	0.056	
5785	157	802.11a	OFDM	20	16.0	15.13	-0.11	10 mm	Aluminum	Metal Links	GY6CQ03MQ618	6	front	19.6	0.029	1.222	1.531	0.054	
5785	157	802.11a	OFDM	20	16.0	15.13	0.16	10 mm	Aluminum	Metal Loop	GY6CQ03MQ618	6	front	19.6	0.025	1.222	1.531	0.047	
5785	157	802.11a	OFDM	20	16.0	15.13	-0.18	10 mm	Stainless Steel	Sport	GY6CR01JQ61M	6	front	19.6	0.015	1.222	1.531	0.028	
5785	157	802.11a	OFDM	20	16.0	15.13	0.12	10 mm	Stainless Steel	Metal Links	GY6CR01JQ61M	6	front	19.6	0.017	1.222	1.531	0.032	
5785	157	802.11a	OFDM	20	16.0	15.13	-0.11	10 mm	Stainless Steel	Metal Loop	GY6CR01JQ61M	6	front	19.6	0.016	1.222	1.531	0.030	
5785	157	802.11a	OFDM	20	16.0	15.13	0.17	10 mm	Titanium	Sport	GY6CR00NQ620	6	front	19.6	0.023	1.222	1.531	0.043	
5785	157	802.11a	OFDM	20	16.0	15.13	-0.16	10 mm	Titanium	Metal Links	GY6CR00NQ620	6	front	19.6	0.024	1.222	1.531	0.045	
5785	157	802.11a	OFDM	20	16.0	15.13	0.16	10 mm	Titanium	Metal Loop	GY6CR00NQ620	6	front	19.6	0.025	1.222	1.531	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										

Note: The reported SAR for WLAN scenarios with the licensed antenna active was scaled to the 30.0% transmission duty factor since the duty factor of the device is permanently limited to 30.0% when the cellular radio is active, per the manufacturer.

Note 2: The 19.6% duty cycle was used for duty cycle reduction test due to software limitation.

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Table 10-12
Bluetooth Head 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 (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.													(W/kg)			(W/kg)	
2441	39	Bluetooth	FHSS	13.0	12.29	0.01	10 mm	Aluminum	Sport	GY6CQ01YQ618	1	front	100	0.140	1.178	1.000	0.165	
2441	39	Bluetooth	FHSS	13.0	12.29	0.06	10 mm	Aluminum	Metal Links	GY6CQ01YQ618	1	front	100	0.088	1.178	1.000	0.104	
2441	39	Bluetooth	FHSS	13.0	12.29	0.02	10 mm	Aluminum	Metal Loop	GY6CQ01YQ618	1	front	100	0.096	1.178	1.000	0.113	
2441	39	Bluetooth	FHSS	13.0	12.29	0.02	10 mm	Stainless Steel	Sport	GY6CR01WQ61M	1	front	100	0.146	1.178	1.000	0.172	
2441	39	Bluetooth	FHSS	13.0	12.29	0.04	10 mm	Stainless Steel	Metal Links	GY6CR01WQ61M	1	front	100	0.092	1.178	1.000	0.108	
2441	39	Bluetooth	FHSS	13.0	12.29	0.05	10 mm	Stainless Steel	Metal Loop	GY6CR01WQ61M	1	front	100	0.103	1.178	1.000	0.121	
2441	39	Bluetooth	FHSS	13.0	12.29	0.06	10 mm	Titanium	Sport	GY6CR004Q620	1	front	100	0.150	1.178	1.000	**0.177**	A12
2441	39	Bluetooth	FHSS	13.0	12.29	0.10	10 mm	Titanium	Metal Links	GY6CR004Q620	1	front	100	0.105	1.178	1.000	0.124	
2441	39	Bluetooth	FHSS	13.0	12.29	0.05	10 mm	Titanium	Metal Loop	GY6CR004Q620	1	front	100	0.112	1.178	1.000	0.132	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population					**Head 1.6 W/kg (mW/g) averaged over 1 gram**													

10.2 Standalone Extremity SAR Data

Table 10-13
UMTS 850 Extremity SAR Data

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	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
836.60	4183	UMTS 850	RMC	25.0	23.39	0.16	0 mm	Aluminum	Sport	GY6CQ01YQ618	1:1	back	0.058	1.449	0.084	
836.60	4183	UMTS 850	RMC	25.0	23.39	0.19	0 mm	Aluminum	Metal Links	GY6CQ01YQ618	1:1	back	0.104	1.449	0.151	
836.60	4183	UMTS 850	RMC	25.0	23.39	0.11	0 mm	Aluminum	Metal Loop	GY6CQ01YQ618	1:1	back	0.074	1.449	0.107	
836.60	4183	UMTS 850	RMC	25.0	23.39	-0.19	0 mm	Stainless Steel	Sport	GY6CR00QQ61M	1:1	back	0.066	1.449	0.096	
836.60	4183	UMTS 850	RMC	25.0	23.39	0.13	0 mm	Stainless Steel	Metal Links	GY6CR00QQ61M	1:1	back	0.122	1.449	0.177	
836.60	4183	UMTS 850	RMC	25.0	23.39	0.18	0 mm	Stainless Steel	Metal Loop	GY6CR00QQ61M	1:1	back	0.092	1.449	0.133	
836.60	4183	UMTS 850	RMC	25.0	23.39	-0.13	0 mm	Titanium	Sport	GY6CR007Q620	1:1	back	0.072	1.449	0.104	
836.60	4183	UMTS 850	RMC	25.0	23.39	0.01	0 mm	Titanium	Metal Links	GY6CR007Q620	1:1	back	0.130	1.449	0.188	A13
836.60	4183	UMTS 850	RMC	25.0	23.39	0.17	0 mm	Titanium	Metal Loop	GY6CR007Q620	1:1	back	0.098	1.449	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**											

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Table 10-14
UMTS 1750 Extremity SAR Data

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	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
1732.40	1412	UMTS 1750	RMC	24.0	22.98	0.00	0 mm	Aluminum	Sport	GY6CQ03MQ618	1:1	back	0.031	1.265	0.039	
1732.40	1412	UMTS 1750	RMC	24.0	22.98	0.07	0 mm	Aluminum	Metal Links	GY6CQ03MQ618	1:1	back	0.036	1.265	0.046	
1732.40	1412	UMTS 1750	RMC	24.0	22.98	0.13	0 mm	Aluminum	Metal Loop	GY6CQ029Q618	1:1	back	0.012	1.265	0.015	
1732.40	1412	UMTS 1750	RMC	24.0	22.98	0.01	0 mm	Stainless Steel	Sport	GY6CR00UQ61M	1:1	back	0.037	1.265	0.047	
1732.40	1412	UMTS 1750	RMC	24.0	22.98	0.15	0 mm	Stainless Steel	Metal Links	GY6CR00AQ61M	1:1	back	0.040	1.265	0.051	A14
1732.40	1412	UMTS 1750	RMC	24.0	22.98	-0.03	0 mm	Stainless Steel	Metal Loop	GY6CR00AQ61M	1:1	back	0.019	1.265	0.024	
1732.40	1412	UMTS 1750	RMC	24.0	22.98	0.12	0 mm	Titanium	Sport	GY6CR01CQ620	1:1	back	0.023	1.265	0.029	
1732.40	1412	UMTS 1750	RMC	24.0	22.98	0.10	0 mm	Titanium	Metal Links	GY6CR01CQ620	1:1	back	0.036	1.265	0.046	
1732.40	1412	UMTS 1750	RMC	24.0	22.98	0.15	0 mm	Titanium	Metal Loop	GY6CR00SQ620	1:1	back	0.009	1.265	0.011	
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 10-15
UMTS 1900 Extremity SAR Data

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	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
1880.00	9400	UMTS 1900	RMC	24.0	22.97	0.19	0 mm	Aluminum	Sport	GY6CQ03MQ618	1:1	back	0.035	1.268	0.044	
1880.00	9400	UMTS 1900	RMC	24.0	22.97	0.19	0 mm	Aluminum	Metal Links	GY6CQ03MQ618	1:1	back	0.019	1.268	0.024	
1880.00	9400	UMTS 1900	RMC	24.0	22.97	0.18	0 mm	Aluminum	Metal Loop	GY6CQ03VQ618	1:1	back	0.008	1.268	0.010	
1880.00	9400	UMTS 1900	RMC	24.0	22.97	0.18	0 mm	Stainless Steel	Sport	GY6CR01DQ61M	1:1	back	0.035	1.268	0.044	
1880.00	9400	UMTS 1900	RMC	24.0	22.97	0.05	0 mm	Stainless Steel	Metal Links	GY6CR01DQ61M	1:1	back	0.045	1.268	0.057	A15
1880.00	9400	UMTS 1900	RMC	24.0	22.97	0.05	0 mm	Stainless Steel	Metal Loop	GY6CR00AQ61M	1:1	back	0.016	1.268	0.020	
1880.00	9400	UMTS 1900	RMC	24.0	22.97	0.18	0 mm	Titanium	Sport	GY6CR00SQ620	1:1	back	0.035	1.268	0.044	
1880.00	9400	UMTS 1900	RMC	24.0	22.97	0.08	0 mm	Titanium	Metal Links	GY6CR00SQ620	1:1	back	0.038	1.268	0.048	
1880.00	9400	UMTS 1900	RMC	24.0	22.97	0.15	0 mm	Titanium	Metal Loop	GY6CR01CQ620	1:1	back	0.010	1.268	0.013	
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 10-16
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	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	25.0	24.00	0.16	0	Aluminum	GY6CQ01YQ618	QPSK	1	0	0 mm	back	1:1	0.060	1.259	0.076	
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	24.0	22.89	0.10	1	Aluminum	GY6CQ01YQ618	QPSK	25	0	0 mm	back	1:1	0.047	1.291	0.061	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	25.0	24.00	0.12	0	Aluminum	GY6CQ03MQ618	QPSK	1	0	0 mm	back	1:1	0.118	1.259	0.149	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	24.0	22.89	0.11	1	Aluminum	GY6CQ03MQ618	QPSK	25	0	0 mm	back	1:1	0.108	1.291	0.139	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	25.0	24.00	0.16	0	Aluminum	GY6CQ03MQ618	QPSK	1	0	0 mm	back	1:1	0.091	1.259	0.115	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	24.0	22.89	0.11	1	Aluminum	GY6CQ03MQ618	QPSK	25	0	0 mm	back	1:1	0.076	1.291	0.098	
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	25.0	24.00	0.03	0	Stainless Steel	GY6CR01WQ61M	QPSK	1	0	0 mm	back	1:1	0.062	1.259	0.078	
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	24.0	22.89	0.07	1	Stainless Steel	GY6CR01WQ61M	QPSK	25	0	0 mm	back	1:1	0.048	1.291	0.062	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	25.0	24.00	0.11	0	Stainless Steel	GY6CR00AQ61M	QPSK	1	0	0 mm	back	1:1	0.115	1.259	0.145	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	24.0	22.89	0.19	1	Stainless Steel	GY6CR00AQ61M	QPSK	25	0	0 mm	back	1:1	0.095	1.291	0.123	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	25.0	24.00	0.11	0	Stainless Steel	GY6CR01DQ61M	QPSK	1	0	0 mm	back	1:1	0.079	1.259	0.099	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	24.0	22.89	0.19	1	Stainless Steel	GY6CR01DQ61M	QPSK	25	0	0 mm	back	1:1	0.065	1.291	0.084	
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	25.0	24.00	0.09	0	Titanium	GY6CR00NQ620	QPSK	1	0	0 mm	back	1:1	0.073	1.259	0.092	
819.00	26740	Low	LTE Band 26 (Cell)	10	Sport	24.0	22.89	0.15	1	Titanium	GY6CR00NQ620	QPSK	25	0	0 mm	back	1:1	0.055	1.291	0.071	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	25.0	24.00	0.12	0	Titanium	GY6CR00EQ620	QPSK	1	0	0 mm	back	1:1	0.134	1.259	0.169	A16
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Links	24.0	22.89	0.14	1	Titanium	GY6CR00EQ620	QPSK	25	0	0 mm	back	1:1	0.095	1.291	0.123	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	25.0	24.00	0.13	0	Titanium	GY6CR00EQ620	QPSK	1	0	0 mm	back	1:1	0.089	1.259	0.112	
819.00	26740	Low	LTE Band 26 (Cell)	10	Metal Loop	24.0	22.89	0.17	1	Titanium	GY6CR00EQ620	QPSK	25	0	0 mm	back	1:1	0.070	1.291	0.090	
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 10-17
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	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	25.0	23.67	0.16	0	Aluminum	GY6CQ03MQ618	QPSK	1	49	0 mm	back	1:1	0.086	1.358	0.117	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	24.0	22.55	0.18	1	Aluminum	GY6CQ03MQ618	QPSK	25	0	0 mm	back	1:1	0.068	1.396	0.095	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	25.0	23.67	0.13	0	Aluminum	GY6CQ01YQ618	QPSK	1	49	0 mm	back	1:1	0.108	1.358	0.147	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	24.0	22.55	0.17	1	Aluminum	GY6CQ01YQ618	QPSK	25	0	0 mm	back	1:1	0.082	1.396	0.114	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	25.0	23.67	0.19	0	Aluminum	GY6CQ01YQ618	QPSK	1	49	0 mm	back	1:1	0.089	1.358	0.121	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	24.0	22.55	0.17	1	Aluminum	GY6CQ01YQ618	QPSK	25	0	0 mm	back	1:1	0.067	1.396	0.094	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	25.0	23.67	-0.18	0	Stainless Steel	GY6CR01DQ61M	QPSK	1	49	0 mm	back	1:1	0.079	1.358	0.107	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	24.0	22.55	-0.10	1	Stainless Steel	GY6CR01DQ61M	QPSK	25	0	0 mm	back	1:1	0.062	1.396	0.087	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	25.0	23.67	-0.08	0	Stainless Steel	GY6CR00AQ61M	QPSK	1	49	0 mm	back	1:1	0.148	1.358	0.201	A17
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	24.0	22.55	0.16	1	Stainless Steel	GY6CR00AQ61M	QPSK	25	0	0 mm	back	1:1	0.106	1.396	0.148	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	25.0	23.67	0.17	0	Stainless Steel	GY6CR00AQ61M	QPSK	1	49	0 mm	back	1:1	0.108	1.358	0.147	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	24.0	22.55	0.19	1	Stainless Steel	GY6CR00AQ61M	QPSK	25	0	0 mm	back	1:1	0.081	1.396	0.113	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	25.0	23.67	-0.14	0	Titanium	GY6CR00SQ620	QPSK	1	49	0 mm	back	1:1	0.070	1.358	0.095	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	24.0	22.55	0.14	1	Titanium	GY6CR00SQ620	QPSK	25	0	0 mm	back	1:1	0.054	1.396	0.075	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	25.0	23.67	0.19	0	Titanium	GY6CR00NQ620	QPSK	1	49	0 mm	back	1:1	0.117	1.358	0.159	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	24.0	22.55	0.15	1	Titanium	GY6CR00NQ620	QPSK	25	0	0 mm	back	1:1	0.086	1.396	0.120	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	25.0	23.67	0.16	0	Titanium	GY6CR00NQ620	QPSK	1	49	0 mm	back	1:1	0.093	1.358	0.126	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	24.0	22.55	0.10	1	Titanium	GY6CR00NQ620	QPSK	25	0	0 mm	back	1:1	0.071	1.396	0.099	
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 10-18
LTE Band 66 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	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	24.0	22.38	0.12	0	Aluminum	GY6CQ024Q618	QPSK	1	50	0 mm	back	1:1	0.036	1.452	0.052	A18
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	23.0	21.67	0.11	1	Aluminum	GY6CQ024Q618	QPSK	50	50	0 mm	back	1:1	0.030	1.358	0.041	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	24.0	22.38	0.17	0	Aluminum	GY6CQ029Q618	QPSK	1	50	0 mm	back	1:1	0.032	1.452	0.046	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	23.0	21.67	0.12	1	Aluminum	GY6CQ029Q618	QPSK	50	50	0 mm	back	1:1	0.026	1.358	0.035	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	24.0	22.38	0.20	0	Aluminum	GY6CQ03RQ618	QPSK	1	50	0 mm	back	1:1	0.014	1.452	0.020	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	23.0	21.67	0.12	1	Aluminum	GY6CQ03RQ618	QPSK	50	50	0 mm	back	1:1	0.010	1.358	0.014	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	24.0	22.38	0.16	0	Stainless Steel	GY6CR01DQ61M	QPSK	1	50	0 mm	back	1:1	0.029	1.452	0.042	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	23.0	21.67	0.08	1	Stainless Steel	GY6CR01DQ61M	QPSK	50	50	0 mm	back	1:1	0.023	1.358	0.031	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	24.0	22.38	-0.06	0	Stainless Steel	GY6CR00QQ61M	QPSK	1	50	0 mm	back	1:1	0.034	1.452	0.049	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	23.0	21.67	0.14	1	Stainless Steel	GY6CR00QQ61M	QPSK	50	50	0 mm	back	1:1	0.029	1.358	0.039	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	24.0	22.38	-0.13	0	Stainless Steel	GY6CR00SQ61M	QPSK	1	50	0 mm	back	1:1	0.008	1.452	0.012	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	23.0	21.67	-0.07	1	Stainless Steel	GY6CR00SQ61M	QPSK	50	50	0 mm	back	1:1	0.004	1.358	0.005	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	24.0	22.38	0.13	0	Titanium	GY6CR01CQ620	QPSK	1	50	0 mm	back	1:1	0.023	1.452	0.033	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Sport	23.0	21.67	0.11	1	Titanium	GY6CR01CQ620	QPSK	50	50	0 mm	back	1:1	0.019	1.358	0.026	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	24.0	22.38	0.11	0	Titanium	GY6CR007Q620	QPSK	1	50	0 mm	back	1:1	0.030	1.452	0.044	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Links	23.0	21.67	0.12	1	Titanium	GY6CR007Q620	QPSK	50	50	0 mm	back	1:1	0.025	1.358	0.034	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	24.0	22.38	0.03	0	Titanium	GY6CR01GQ620	QPSK	1	50	0 mm	back	1:1	0.025	1.452	0.036	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	Metal Loop	23.0	21.67	-0.12	1	Titanium	GY6CR01GQ620	QPSK	50	50	0 mm	back	1:1	0.019	1.358	0.026	
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 10-19
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	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	24.0	22.51	0.12	0	Aluminum	GY6CQ021Q618	QPSK	1	50	0 mm	back	1:1	0.035	1.409	0.049	A19
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	23.0	21.78	0.14	1	Aluminum	GY6CQ021Q618	QPSK	50	50	0 mm	back	1:1	0.027	1.324	0.036	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	24.0	22.51	-0.19	0	Aluminum	GY6CQ021Q618	QPSK	1	50	0 mm	back	1:1	0.016	1.409	0.023	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	23.0	21.78	-0.18	1	Aluminum	GY6CQ021Q618	QPSK	50	50	0 mm	back	1:1	0.013	1.324	0.017	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	24.0	22.51	0.18	0	Aluminum	GY6CQ021Q618	QPSK	1	50	0 mm	back	1:1	0.014	1.409	0.020	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	23.0	21.78	0.00	1	Aluminum	GY6CQ021Q618	QPSK	50	50	0 mm	back	1:1	0.013	1.324	0.017	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	24.0	22.51	0.17	0	Stainless Steel	GY6CR01JQ61M	QPSK	1	50	0 mm	back	1:1	0.035	1.409	0.049	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	23.0	21.78	0.19	1	Stainless Steel	GY6CR01JQ61M	QPSK	50	50	0 mm	back	1:1	0.029	1.324	0.038	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	24.0	22.51	-0.01	0	Stainless Steel	GY6CR01JQ61M	QPSK	1	50	0 mm	back	1:1	0.019	1.409	0.027	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	23.0	21.78	-0.07	1	Stainless Steel	GY6CR01JQ61M	QPSK	50	50	0 mm	back	1:1	0.016	1.324	0.021	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	24.0	22.51	0.17	0	Stainless Steel	GY6CR01JQ61M	QPSK	1	50	0 mm	back	1:1	0.014	1.409	0.020	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	23.0	21.78	-0.13	1	Stainless Steel	GY6CR01JQ61M	QPSK	50	50	0 mm	back	1:1	0.011	1.324	0.015	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	24.0	22.51	0.10	0	Titanium	GY6CR007Q620	QPSK	1	50	0 mm	back	1:1	0.032	1.409	0.045	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	23.0	21.78	0.18	1	Titanium	GY6CR007Q620	QPSK	50	50	0 mm	back	1:1	0.027	1.324	0.036	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	24.0	22.51	-0.02	0	Titanium	GY6CR007Q620	QPSK	1	50	0 mm	back	1:1	0.018	1.409	0.025	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	23.0	21.78	0.08	1	Titanium	GY6CR007Q620	QPSK	50	50	0 mm	back	1:1	0.014	1.324	0.019	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	24.0	22.51	0.15	0	Titanium	GY6CR007Q620	QPSK	1	50	0 mm	back	1:1	0.013	1.409	0.018	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	23.0	21.78	0.12	1	Titanium	GY6CR007Q620	QPSK	50	50	0 mm	back	1:1	0.011	1.324	0.015	
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 10-20
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	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2560.00	21350	High	LTE Band 7	20	Sport	23.5	22.48	-0.05	0	Aluminum	GY6CQ01NQ618	QPSK	1	99	0 mm	back	1:1	0.205	1.265	0.259	
2560.00	21350	High	LTE Band 7	20	Sport	22.5	21.49	0.04	1	Aluminum	GY6CQ01NQ618	QPSK	50	50	0 mm	back	1:1	0.115	1.262	0.145	
2560.00	21350	High	LTE Band 7	20	Metal Links	23.5	22.48	0.19	0	Aluminum	GY6CQ029Q618	QPSK	1	99	0 mm	back	1:1	0.096	1.265	0.121	
2560.00	21350	High	LTE Band 7	20	Metal Links	22.5	21.49	0.13	1	Aluminum	GY6CQ029Q618	QPSK	50	50	0 mm	back	1:1	0.075	1.262	0.095	
2560.00	21350	High	LTE Band 7	20	Metal Loop	23.5	22.48	-0.05	0	Aluminum	GY6CQ03VQ618	QPSK	1	99	0 mm	back	1:1	0.138	1.265	0.175	
2560.00	21350	High	LTE Band 7	20	Metal Loop	22.5	21.49	0.18	1	Aluminum	GY6CQ03VQ618	QPSK	50	50	0 mm	back	1:1	0.085	1.262	0.107	
2560.00	21350	High	LTE Band 7	20	Sport	23.5	22.48	0.04	0	Stainless Steel	GY6CR00AQ61M	QPSK	1	99	0 mm	back	1:1	0.207	1.265	0.262	
2560.00	21350	High	LTE Band 7	20	Sport	22.5	21.49	0.15	1	Stainless Steel	GY6CR00AQ61M	QPSK	50	50	0 mm	back	1:1	0.160	1.262	0.202	
2560.00	21350	High	LTE Band 7	20	Metal Links	23.5	22.48	0.20	0	Stainless Steel	GY6CR00UQ61M	QPSK	1	99	0 mm	back	1:1	0.162	1.265	0.205	
2560.00	21350	High	LTE Band 7	20	Metal Links	22.5	21.49	0.12	1	Stainless Steel	GY6CR00UQ61M	QPSK	50	50	0 mm	back	1:1	0.084	1.262	0.106	
2560.00	21350	High	LTE Band 7	20	Metal Loop	23.5	22.48	-0.03	0	Stainless Steel	GY6CR01YQ61M	QPSK	1	99	0 mm	back	1:1	0.150	1.265	0.190	
2560.00	21350	High	LTE Band 7	20	Metal Loop	22.5	21.49	0.06	1	Stainless Steel	GY6CR01YQ61M	QPSK	50	50	0 mm	back	1:1	0.083	1.262	0.105	
2560.00	21350	High	LTE Band 7	20	Sport	23.5	22.48	0.20	0	Titanium	GY6CR004Q620	QPSK	1	99	0 mm	back	1:1	0.186	1.265	0.235	
2560.00	21350	High	LTE Band 7	20	Sport	22.5	21.49	-0.18	1	Titanium	GY6CR004Q620	QPSK	50	50	0 mm	back	1:1	0.139	1.262	0.175	
2560.00	21350	High	LTE Band 7	20	Metal Links	23.5	22.48	-0.09	0	Titanium	GY6CR00NQ620	QPSK	1	99	0 mm	back	1:1	0.159	1.265	0.201	
2560.00	21350	High	LTE Band 7	20	Metal Links	22.5	21.49	-0.09	1	Titanium	GY6CR00NQ620	QPSK	50	50	0 mm	back	1:1	0.115	1.262	0.145	
2560.00	21350	High	LTE Band 7	20	Metal Loop	23.5	22.48	0.06	0	Titanium	GY6CR007Q620	QPSK	1	99	0 mm	back	1:1	0.212	1.265	**0.268**	A20
2560.00	21350	High	LTE Band 7	20	Metal Loop	22.5	21.49	0.00	1	Titanium	GY6CR007Q620	QPSK	50	50	0 mm	back	1:1	0.164	1.262	0.207	
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 10-21
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	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2593.00	40620	Mid	LTE Band 41	20	Sport	23.5	23.00	-0.02	0	Aluminum	GY6CQ01YQ618	QPSK	1	0	0 mm	back	1:1.58	0.074	1.122	0.083	
2593.00	40620	Mid	LTE Band 41	20	Sport	22.5	22.02	0.05	1	Aluminum	GY6CQ01YQ618	QPSK	50	0	0 mm	back	1:1.58	0.056	1.117	0.063	
2593.00	40620	Mid	LTE Band 41	20	Metal Links	23.5	23.00	0.09	0	Aluminum	GY6CQ03MQ618	QPSK	1	0	0 mm	back	1:1.58	0.031	1.122	0.035	
2593.00	40620	Mid	LTE Band 41	20	Metal Links	22.5	22.02	0.09	1	Aluminum	GY6CQ03MQ618	QPSK	50	0	0 mm	back	1:1.58	0.023	1.117	0.026	
2593.00	40620	Mid	LTE Band 41	20	Metal Loop	23.5	23.00	-0.06	0	Aluminum	GY6CQ03VQ618	QPSK	1	0	0 mm	back	1:1.58	0.077	1.122	0.086	
2593.00	40620	Mid	LTE Band 41	20	Metal Loop	22.5	22.02	0.05	1	Aluminum	GY6CQ03VQ618	QPSK	50	0	0 mm	back	1:1.58	0.058	1.117	0.065	
2593.00	40620	Mid	LTE Band 41	20	Sport	23.5	23.00	0.09	0	Stainless Steel	GY6CR00UQ61M	QPSK	1	0	0 mm	back	1:1.58	0.064	1.122	0.072	
2593.00	40620	Mid	LTE Band 41	20	Sport	22.5	22.02	-0.03	1	Stainless Steel	GY6CR00UQ61M	QPSK	50	0	0 mm	back	1:1.58	0.049	1.117	0.055	
2593.00	40620	Mid	LTE Band 41	20	Metal Links	23.5	23.00	0.14	0	Stainless Steel	GY6CR00QQ61M	QPSK	1	0	0 mm	back	1:1.58	0.086	1.122	0.096	
2593.00	40620	Mid	LTE Band 41	20	Metal Links	22.5	22.02	0.19	1	Stainless Steel	GY6CR00QQ61M	QPSK	50	0	0 mm	back	1:1.58	0.069	1.117	0.077	
2593.00	40620	Mid	LTE Band 41	20	Metal Loop	23.5	23.00	-0.17	0	Stainless Steel	GY6CR00AQ61M	QPSK	1	0	0 mm	back	1:1.58	0.118	1.122	0.132	A21
2593.00	40620	Mid	LTE Band 41	20	Metal Loop	22.5	22.02	0.06	1	Stainless Steel	GY6CR00AQ61M	QPSK	50	0	0 mm	back	1:1.58	0.093	1.117	0.104	
2593.00	40620	Mid	LTE Band 41	20	Sport	23.5	23.00	0.02	0	Titanium	GY6CR01CQ620	QPSK	1	0	0 mm	back	1:1.58	0.061	1.122	0.068	
2593.00	40620	Mid	LTE Band 41	20	Sport	22.5	22.02	0.04	1	Titanium	GY6CR01CQ620	QPSK	50	0	0 mm	back	1:1.58	0.048	1.117	0.054	
2593.00	40620	Mid	LTE Band 41	20	Metal Links	23.5	23.00	-0.02	0	Titanium	GY6CR004Q620	QPSK	1	0	0 mm	back	1:1.58	0.116	1.122	0.130	
2593.00	40620	Mid	LTE Band 41	20	Metal Links	22.5	22.02	-0.19	1	Titanium	GY6CR004Q620	QPSK	50	0	0 mm	back	1:1.58	0.091	1.117	0.102	
2593.00	40620	Mid	LTE Band 41	20	Metal Loop	23.5	23.00	-0.12	0	Titanium	GY6CR005Q620	QPSK	1	0	0 mm	back	1:1.58	0.088	1.122	0.099	
2593.00	40620	Mid	LTE Band 41	20	Metal Loop	22.5	22.02	0.07	1	Titanium	GY6CR005Q620	QPSK	50	0	0 mm	back	1:1.58	0.070	1.117	0.078	
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 10-22
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 (%)	SAR (10g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (10g)	Plot #
MHz	Ch.														(W/kg)			(W/kg)	
2437	6	802.11b	DSSS	22	19.0	18.10	0.14	0 mm	Aluminum	Sport	GY6CQ029Q618	1	back	100.0	0.030	1.230	1.000	0.037	
2437	6	802.11b	DSSS	22	19.0	18.10	-0.08	0 mm	Aluminum	Metal Links	GY6CQ029Q618	1	back	100.0	0.017	1.230	1.000	0.021	
2437	6	802.11b	DSSS	22	19.0	18.10	-0.19	0 mm	Aluminum	Metal Loop	GY6CQ029Q618	1	back	100.0	0.012	1.230	1.000	0.015	
2437	6	802.11b	DSSS	22	19.0	18.10	0.19	0 mm	Stainless Steel	Sport	GY6CR00AQ61M	1	back	100.0	0.043	1.230	1.000	0.053	
2437	6	802.11b	DSSS	22	19.0	18.10	0.05	0 mm	Stainless Steel	Metal Links	GY6CR01YQ61M	1	back	100.0	0.042	1.230	1.000	0.052	
2437	6	802.11b	DSSS	22	19.0	18.10	-0.17	0 mm	Stainless Steel	Metal Loop	GY6CR01YQ61M	1	back	100.0	0.031	1.230	1.000	0.038	
2437	6	802.11b	DSSS	22	19.0	18.10	0.18	0 mm	Titanium	Sport	GY6CR004Q620	1	back	100.0	0.041	1.230	1.000	0.050	
2437	6	802.11b	DSSS	22	19.0	18.10	0.05	0 mm	Titanium	Metal Links	GY6CR004Q620	1	back	100.0	0.033	1.230	1.000	0.041	
2437	6	802.11b	DSSS	22	19.0	18.10	-0.04	0 mm	Titanium	Metal Loop	GY6CR004Q620	1	back	100.0	0.057	1.230	1.000	**0.070**	A22
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 10-23
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 (%)	SAR (10g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (10g)	Plot #
MHz	Ch.														(W/kg)			(W/kg)	
5260	52	802.11a	OFDM	20	16.0	15.09	-0.15	0 mm	Aluminum	Sport	GY6CQ01NQ618	6	back	97.3	0.003	1.233	1.028	0.004	
5260	52	802.11a	OFDM	20	16.0	15.09	-0.10	0 mm	Aluminum	Metal Links	GY6CQ01YQ618	6	back	97.3	0.004	1.233	1.028	0.005	
5260	52	802.11a	OFDM	20	16.0	15.09	0.16	0 mm	Aluminum	Metal Loop	GY6CQ01YQ618	6	back	97.3	0.004	1.233	1.028	0.005	
5260	52	802.11a	OFDM	20	16.0	15.09	0.17	0 mm	Stainless Steel	Sport	GY6CR00SQ61M	6	back	97.3	0.014	1.233	1.028	0.018	
5260	52	802.11a	OFDM	20	16.0	15.09	-0.15	0 mm	Stainless Steel	Metal Links	GY6CR00SQ61M	6	back	97.3	0.012	1.233	1.028	0.015	
5260	52	802.11a	OFDM	20	16.0	15.09	-0.18	0 mm	Stainless Steel	Metal Loop	GY6CR00SQ61M	6	back	97.3	0.009	1.233	1.028	0.011	
5260	52	802.11a	OFDM	20	16.0	15.09	0.12	0 mm	Titanium	Sport	GY6CR01GQ620	6	back	97.3	0.003	1.233	1.028	0.004	
5260	52	802.11a	OFDM	20	16.0	15.09	0.12	0 mm	Titanium	Metal Links	GY6CR01GQ620	6	back	97.3	0.009	1.233	1.028	0.011	
5260	52	802.11a	OFDM	20	16.0	15.09	0.14	0 mm	Titanium	Metal Loop	GY6CR01GQ620	6	back	97.3	0.006	1.233	1.028	0.008	
5720	144	802.11a	OFDM	20	16.0	15.08	-0.19	0 mm	Aluminum	Sport	GY6CQ01NQ618	6	back	97.3	0.010	1.236	1.028	0.013	
5720	144	802.11a	OFDM	20	16.0	15.08	-0.10	0 mm	Aluminum	Metal Links	GY6CQ01NQ618	6	back	97.3	0.012	1.236	1.028	0.015	
5720	144	802.11a	OFDM	20	16.0	15.08	-0.10	0 mm	Aluminum	Metal Loop	GY6CQ03VQ618	6	back	97.3	0.011	1.236	1.028	0.014	
5720	144	802.11a	OFDM	20	16.0	15.08	0.18	0 mm	Stainless Steel	Sport	GY6CR00SQ61M	6	back	97.3	0.013	1.236	1.028	0.017	
5720	144	802.11a	OFDM	20	16.0	15.08	-0.20	0 mm	Stainless Steel	Metal Links	GY6CR00SQ61M	6	back	97.3	0.012	1.236	1.028	0.015	
5720	144	802.11a	OFDM	20	16.0	15.08	0.11	0 mm	Stainless Steel	Metal Loop	GY6CR00SQ61M	6	back	97.3	0.012	1.236	1.028	0.015	
5720	144	802.11a	OFDM	20	16.0	15.08	0.16	0 mm	Titanium	Sport	GY6CR004Q620	6	back	97.3	0.008	1.236	1.028	0.010	
5720	144	802.11a	OFDM	20	16.0	15.08	0.14	0 mm	Titanium	Metal Links	GY6CR004Q620	6	back	97.3	0.006	1.236	1.028	0.008	
5720	144	802.11a	OFDM	20	16.0	15.08	0.19	0 mm	Titanium	Metal Loop	GY6CR004Q620	6	back	97.3	0.007	1.236	1.028	0.009	
5785	157	802.11a	OFDM	20	16.0	15.13	-0.15	0 mm	Aluminum	Sport	GY6CQ01YQ618	6	back	97.3	0.016	1.222	1.028	**0.020**	A23
5785	157	802.11a	OFDM	20	16.0	15.13	-0.18	0 mm	Aluminum	Metal Links	GY6CQ01YQ618	6	back	97.3	0.011	1.222	1.028	0.014	
5785	157	802.11a	OFDM	20	16.0	15.13	-0.16	0 mm	Aluminum	Metal Loop	GY6CQ01NQ618	6	back	97.3	0.012	1.222	1.028	0.015	
5785	157	802.11a	OFDM	20	16.0	15.13	0.15	0 mm	Stainless Steel	Sport	GY6CR01WQ61M	6	back	97.3	0.010	1.222	1.028	0.013	
5785	157	802.11a	OFDM	20	16.0	15.13	-0.15	0 mm	Stainless Steel	Metal Links	GY6CR01WQ61M	6	back	97.3	0.010	1.222	1.028	0.013	
5785	157	802.11a	OFDM	20	16.0	15.13	-0.12	0 mm	Stainless Steel	Metal Loop	GY6CR00SQ61M	6	back	97.3	0.011	1.222	1.028	0.014	
5785	157	802.11a	OFDM	20	16.0	15.13	0.10	0 mm	Titanium	Sport	GY6CR01GQ620	6	back	97.3	0.010	1.222	1.028	0.013	
5785	157	802.11a	OFDM	20	16.0	15.13	0.01	0 mm	Titanium	Metal Links	GY6CR01GQ620	6	back	97.3	0.011	1.222	1.028	0.014	
5785	157	802.11a	OFDM	20	16.0	15.13	0.10	0 mm	Titanium	Metal Loop	GY6CR01GQ620	6	back	97.3	0.010	1.222	1.028	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											

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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 (%)	SAR (10g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (10g)	Plot #
MHz	Ch.													(W/kg)			(W/kg)	
2441	39	Bluetooth	FHSS	13.0	12.29	0.11	0 mm	Aluminum	Sport	GY6CQ021Q618	1	back	100	0.009	1.178	1.000	0.011	
2441	39	Bluetooth	FHSS	13.0	12.29	-0.02	0 mm	Aluminum	Metal Links	GY6CQ021Q618	1	back	100	0.009	1.178	1.000	0.011	
2441	39	Bluetooth	FHSS	13.0	12.29	-0.06	0 mm	Aluminum	Metal Loop	GY6CQ021Q618	1	back	100	0.008	1.178	1.000	0.009	
2441	39	Bluetooth	FHSS	13.0	12.29	0.00	0 mm	Stainless Steel	Sport	GY6CR01DQ61M	1	back	100	0.014	1.178	1.000	0.016	
2441	39	Bluetooth	FHSS	13.0	12.29	0.11	0 mm	Stainless Steel	Metal Links	GY6CR01DQ61M	1	back	100	0.012	1.178	1.000	0.014	
2441	39	Bluetooth	FHSS	13.0	12.29	-0.07	0 mm	Stainless Steel	Metal Loop	GY6CR01DQ61M	1	back	100	0.012	1.178	1.000	0.014	
2441	39	Bluetooth	FHSS	13.0	12.29	0.17	0 mm	Titanium	Sport	GY6CR005Q620	1	back	100	0.020	1.178	1.000	**0.024**	A24
2441	39	Bluetooth	FHSS	13.0	12.29	0.20	0 mm	Titanium	Metal Links	GY6CR005Q620	1	back	100	0.014	1.178	1.000	0.016	
2441	39	Bluetooth	FHSS	13.0	12.29	0.21	0 mm	Titanium	Metal Loop	GY6CR005Q620	1	back	100	0.012	1.178	1.000	0.014	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							**Extremity 4.0 W/kg (mW/g) averaged over 10 grams**											

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 Publication 865664 D01v01r04, variability SAR tests were required since measured SAR results were equal or greater than 0.8 W/kg and 2.0 W/kg for 10g SAR. Please see Section 12 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.

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 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 > ½ dB, instead of the middle channel, the highest output power channel was used.

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LTE Notes:

1. LTE Considerations: 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.
6. This device can only operate with 16 QAM on the uplink with less than or equal to 27 RB. 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:

1. 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) was not required due to the maximum allowed powers and the highest reported DSSS SAR. See Section 7.6.4 for more information.
2. 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 7.6.5 for more information.
3. 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.
4. 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.
5. WLAN reduced reported SAR was scaled to 30.0% transmission duty factor to determine compliance since the duty factor of the device is limited to 30.0% per the manufacturer.

Bluetooth Notes

1. 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 a 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 was used as a conservative evaluation for the simultaneous transmission analysis.

Table 11-1
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 with Duty Cycle Reduction SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Head SAR	UMTS 850	0.001	0.201	0.202
	UMTS 1750	0.229	0.201	0.430
	UMTS 1900	0.280	0.201	0.481
	LTE Band 26 (Cell)	0.001	0.201	0.202
	LTE Band 5 (Cell)	0.001	0.201	0.202
	LTE Band 66 (AWS)	0.224	0.201	0.425
	LTE Band 25 (PCS)	0.325	0.201	0.526
	LTE Band 7	1.165	0.201	1.366
	LTE Band 41	1.187	0.201	1.388

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Table 11-2
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 with Duty Cycle Reduction SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Head SAR	UMTS 850	0.001	0.177	0.066	0.178	0.067	0.244
	UMTS 1750	0.229	0.177	0.066	0.406	0.295	0.472
	UMTS 1900	0.280	0.177	0.066	0.457	0.346	0.523
	LTE Band 26 (Cell)	0.001	0.177	0.066	0.178	0.067	0.244
	LTE Band 5 (Cell)	0.001	0.177	0.066	0.178	0.067	0.244
	LTE Band 66 (AWS)	0.224	0.177	0.066	0.401	0.290	0.467
	LTE Band 25 (PCS)	0.325	0.177	0.066	0.502	0.391	0.568
	LTE Band 7	1.165	0.177	0.066	1.342	1.231	1.408
	LTE Band 41	1.187	0.177	0.066	1.364	1.253	**1.430**

Table 11-3
Simultaneous Transmission Scenario with Bluetooth and 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	0.177	0.288	0.465

11.4 Extremity SAR Simultaneous Transmission Analysis

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

Table 11-4
Simultaneous Transmission Scenario with 2.4 GHz 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	UMTS 850	0.188	0.070	0.258
	UMTS 1750	0.051	0.070	0.121
	UMTS 1900	0.057	0.070	0.127
	LTE Band 26 (Cell)	0.169	0.070	0.239
	LTE Band 5 (Cell)	0.201	0.070	0.271
	LTE Band 66 (AWS)	0.052	0.070	0.122
	LTE Band 25 (PCS)	0.049	0.070	0.119
	LTE Band 7	0.268	0.070	**0.338**
	LTE Band 41	0.132	0.070	0.202

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Table 11-5
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	UMTS 850	0.188	0.024	0.020	0.212	0.208	0.232
	UMTS 1750	0.051	0.024	0.020	0.075	0.071	0.095
	UMTS 1900	0.057	0.024	0.020	0.081	0.077	0.101
	LTE Band 26 (Cell)	0.169	0.024	0.020	0.193	0.189	0.213
	LTE Band 5 (Cell)	0.201	0.024	0.020	0.225	0.221	0.245
	LTE Band 66 (AWS)	0.052	0.024	0.020	0.076	0.072	0.096
	LTE Band 25 (PCS)	0.049	0.024	0.020	0.073	0.069	0.093
	LTE Band 7	0.268	0.024	0.020	0.292	0.288	0.312
	LTE Band 41	0.132	0.024	0.020	0.156	0.152	0.176

Table 11-6
Simultaneous Transmission Scenario with Bluetooth and 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	0.024	0.020	0.044

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 (~ 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
5) When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

Table 12-1
Head SAR Measurement Variability Results

HEAD VARIABILITY RESULTS													
Band	FREQUENCY		Mode	Service	Side	Spacing	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)	
2450	2506.00	39750	LTE Band 41, 20 MHz Bandwidth	QPSK, 1 RB, 99 RB Offset, Aluminum, Sport	front	10 mm	1.110	1.020	1.09	N/A	N/A	N/A	N/A
2600	2549.50	40185	LTE Band 41, 20 MHz Bandwidth	QPSK, 1 RB, 0 RB Offset, Stainless Steel, Sport	front	10 mm	1.070	1.060	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	85033E	3.5mm Standard Calibration Kit	6/6/2020	Annual	6/6/2021	MY53402352
Agilent	E4438C	ESG Vector Signal Generator	9/11/2019	Annual	9/11/2020	MY45093678
Agilent	E4438C	ESG Vector Signal Generator	9/13/2019	Annual	9/13/2020	MY42081752
Agilent	N5182A	MXG Vector Signal Generator	8/19/2019	Annual	8/19/2020	MY47420837
Agilent	8753ES	S-Parameter Network Analyzer	1/16/2020	Annual	1/16/2021	US39170118
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	343972
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	343971
Anritsu	ML2496A	Power Meter	12/17/2019	Annual	12/17/2020	1138001
Anritsu	MA2411B	Pulse Power Sensor	1/21/2020	Annual	1/21/2021	1339007
Anritsu	MT8820C	Radio Communication Analyzer	7/25/2019	Annual	7/25/2020	6201240328
Anritsu	MT8821C	Radio Communication Analyzer	8/16/2019	Annual	8/16/2020	6201144418
Anritsu	MA24106A	USB Power Sensor	8/27/2019	Annual	8/27/2020	1827533
Anritsu	MA24106A	USB Power Sensor	8/27/2019	Annual	8/27/2020	1827529
Control Company	4352	Ultra Long Stem Thermometer	8/2/2018	Biennial	8/2/2020	181292054
Control Company	4352	Ultra Long Stem Thermometer	8/2/2018	Biennial	8/2/2020	181292061
Control Company	4040	Therm./Clock/Humidity Monitor	6/29/2019	Biennial	6/29/2021	192291470
Control Company	4040	Therm./Clock/Humidity Monitor	6/29/2019	Biennial	6/29/2021	192291455
Control Company	4040	Therm./Clock/Humidity Monitor	6/29/2019	Biennial	6/29/2021	192291460
Insize	1108-150	Digital Caliper	1/17/2020	Biennial	1/17/2022	409193536
MCL	BW-N3W5+	3dB Attenuator	CBT	N/A	CBT	1812
MCL	BW-N6W5+	6dB Attenuator	CBT	N/A	CBT	1311
MCL	BW-N10W5+	10dB Attenuator	CBT	N/A	CBT	1611
Mini-Circuits	NLP-1000+	Low Pass Filter	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-1200+	Low Pass Filter	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
KEYSIGHT	772D	Dual Directional Coupler	CBT	N/A	CBT	N/A
KEYSIGHT	E4438C	VECTOR SIGNAL GENERATOR	6/22/2020	Annual	6/22/2021	MY45092078
Pasternack	PE2208-6	Bidirectional Coupler	CBT	N/A	CBT	N/A
Pasternack	PE2208-10	Bidirectional Coupler	CBT	N/A	CBT	N/A
Rohde & Schwarz	FSP-7	Spectrum Analyzer	1/9/2020	Biennial	1/9/2022	100288
Rohde & Schwarz	CMW500	Radio Communication Tester	8/20/2019	Annual	8/20/2020	106578
Rohde & Schwarz	CMW500	Radio Communication Tester	4/28/2020	Annual	4/28/2021	167285
Rohde & Schwarz	CMW500	Radio Communication Tester	5/13/2020	Annual	5/13/2021	167284
Rohde& Schwarz	CMW500	Wideband Radio Communication Tester	8/8/2019	Annual	8/8/2020	145663
SPEAG	DAK-3.5	Dielectric Assessment Kit	5/12/2020	Annual	5/12/2021	1070
SPEAG	DAKS-3.5	Portable DAK	9/10/2019	Annual	9/10/2020	1045
SPEAG	EX3DV4	SAR Probe	2/19/2020	Annual	2/19/2021	7427
SPEAG	EX3DV4	SAR Probe	4/20/2020	Annual	4/20/2021	7532
SPEAG	EX3DV4	SAR Probe	12/13/2019	Annual	12/13/2020	7490
SPEAG	EX3DV4	SAR Probe	3/20/2020	Annual	3/20/2021	7421
SPEAG	EX3DV4	SAR Probe	1/20/2020	Annual	1/20/2021	3837
SPEAG	EX3DV4	SAR Probe	11/21/2019	Annual	11/21/2020	7420
SPEAG	EX3DV4	SAR Probe	8/29/2019	Annual	8/29/2020	3949
SPEAG	DAE4	Dasy Data Acquisition Electronics	2/13/2020	Annual	2/13/2021	1403
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/15/2020	Annual	4/15/2021	501
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/14/2020	Annual	4/14/2021	1532
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/19/2020	Annual	3/19/2021	604
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/14/2020	Annual	1/14/2021	793
SPEAG	DAE4	Dasy Data Acquisition Electronics	11/13/2019	Annual	11/13/2020	1213
SPEAG	DAE4	Dasy Data Acquisition Electronics	8/12/2019	Annual	8/12/2020	1408
SPEAG	D835V2	835 MHz SAR Dipole	6/20/2019	Biennial	6/20/2021	4d040
SPEAG	D850V2	850 MHz SAR Dipole	8/16/2017	Triennial	8/16/2020	1009
SPEAG	D850V2	850 MHz SAR Dipole	9/8/2017	Triennial	9/8/2020	1010
SPEAG	D1750V2	1750 MHz SAR Dipole	9/7/2017	Triennial	9/7/2020	1104
SPEAG	D2450V2	2450 MHz SAR Dipole	5/16/2018	Triennial	5/16/2021	945
SPEAG	D2450V2	2450 MHz SAR Dipole	11/12/2018	Biennial	11/12/2020	921
SPEAG	D2600V2	2600 MHz SAR Dipole	6/19/2018	Triennial	6/19/2021	1009
SPEAG	D1750V2	1750 MHz SAR Dipole	5/15/2018	Triennial	5/15/2021	1092
SPEAG	D1900V2	1900 MHz SAR Dipole	8/16/2017	Triennial	8/16/2020	5d180
SPEAG	D1900V2	1900 MHz SAR Dipole	9/7/2017	Triennial	9/7/2020	5d181
SPEAG	D2450V2	2450 MHz SAR Dipole	6/14/2019	Biennial	6/14/2021	750
SPEAG	D2600V2	2600 MHz SAR Dipole	9/11/2017	Triennial	9/11/2020	1069
SPEAG	D5GHzV2	5 GHz SAR Dipole	3/13/2018	Triennial	3/13/2021	1123

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	c	d	e= f(d,k)	f	g	h = c x f/e	i = c x g/e	k
Uncertainty Component	**Tol. (± %)**	**Prob. Dist.**	**Div.**	**c_i 1gm**	**c_i 10 gms**	**1gm u_i (± %)**	**10gms u_i (± %)**	**v_i**
Measurement System								
Probe Calibration	6.55	N	1	1.0	1.0	6.6	6.6	∞
Axial Isotropy	0.25	N	1	0.7	0.7	0.2	0.2	∞
Hemishperical Isotropy	1.3	N	1	0.7	0.7	0.9	0.9	∞
Boundary Effect	2.0	R	1.73	1.0	1.0	1.2	1.2	∞
Linearity	0.3	N	1	1.0	1.0	0.3	0.3	∞
System Detection Limits	0.25	R	1.73	1.0	1.0	0.1	0.1	∞
Readout Electronics	0.3	N	1	1.0	1.0	0.3	0.3	∞
Response Time	0.8	R	1.73	1.0	1.0	0.5	0.5	∞
Integration Time	2.6	R	1.73	1.0	1.0	1.5	1.5	∞
RF Ambient Conditions - Noise	3.0	R	1.73	1.0	1.0	1.7	1.7	∞
RF Ambient Conditions - Reflections	3.0	R	1.73	1.0	1.0	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	0.4	R	1.73	1.0	1.0	0.2	0.2	∞
Probe Positioning w/ respect to Phantom	6.7	R	1.73	1.0	1.0	3.9	3.9	∞
Extrapolation, Interpolation & Integration algorithms for Max. SAR Evaluation	4.0	R	1.73	1.0	1.0	2.3	2.3	∞
Test Sample Related								
Test Sample Positioning	2.7	N	1	1.0	1.0	2.7	2.7	35
Device Holder Uncertainty	1.67	N	1	1.0	1.0	1.7	1.7	5
Output Power Variation - SAR drift measurement	5.0	R	1.73	1.0	1.0	2.9	2.9	∞
SAR Scaling	0.0	R	1.73	1.0	1.0	0.0	0.0	∞
Phantom & Tissue Parameters								
Phantom Uncertainty (Shape & Thickness tolerances)	7.6	R	1.73	1.0	1.0	4.4	4.4	∞
Liquid Conductivity - measurement uncertainty	4.2	N	1	0.78	0.71	3.3	3.0	10
Liquid Permittivity - measurement uncertainty	4.1	N	1	0.23	0.26	1.0	1.1	10
Liquid Conductivity - Temperature Uncertainty	3.4	R	1.73	0.78	0.71	1.5	1.4	∞
Liquid Permittivity - Temperature Unceritainty	0.6	R	1.73	0.23	0.26	0.1	0.1	∞
Liquid Conductivity - deviation from target values	5.0	R	1.73	0.64	0.43	1.8	1.2	∞
Liquid Permittivity - deviation from target values	5.0	R	1.73	0.60	0.49	1.7	1.4	∞
Combined Standard Uncertainty (k=1)		RSS				11.5	11.3	60
Expanded Uncertainty (95% CONFIDENCE LEVEL)		k=2				23.0	22.6	

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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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APPENDIX A: SAR TEST DATA

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PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CQ03VQ618

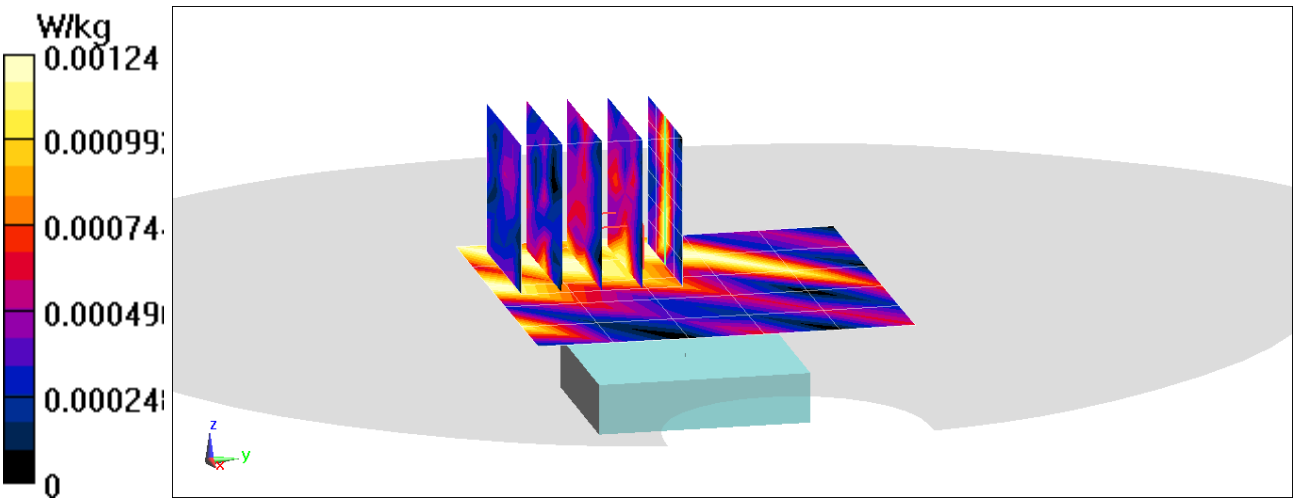
Communication System: UID 0, UMTS; Frequency: 836.6 MHz; Duty Cycle: 1:1
Medium: 835 MHz Head Medium parameters used (interpolated):
f = 836.6 MHz; σ = 0.874 S/m; ε_r = 40.45; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06-29-2020; Ambient Temp: 23.1°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN7427; ConvF(9.58, 9.58, 9.58) @ 836.6 MHz; Calibrated: 2/19/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1403; Calibrated: 2/13/2020
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 850, Head SAR, Front side, Mid.ch
Aluminum, 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 = 1.017 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.00163 W/kg
SAR(1 g) = 0.000844 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 = 85.8%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CR01GQ620

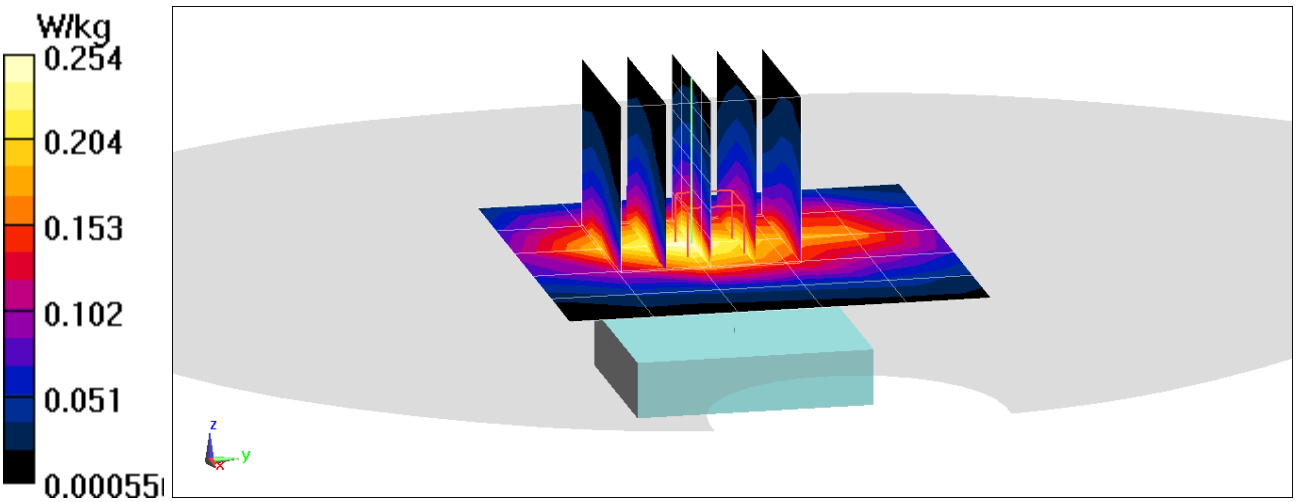
Communication System: UID 0, UMTS; Frequency: 1732.4 MHz; Duty Cycle: 1:1
Medium: 1750 MHz Head Medium parameters used (interpolated):
f = 1732.4 MHz; σ = 1.348 S/m; ε_r = 39.249; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-01-2020; Ambient Temp: 23.5°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7532; ConvF(8.46, 8.46, 8.46) @ 1732.4 MHz; Calibrated: 4/20/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn501; Calibrated: 4/15/2020
Phantom: Twin-SAM V8.0_Left; Type: QD 000 P41 AA; Serial: 1935
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 1750, 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 = 11.84 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.308 W/kg
SAR(1 g) = 0.181 W/kg
Smallest distance from peaks to all points 3 dB below = 11.3 mm
Ratio of SAR at M2 to SAR at M1 = 61.4%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CR01DQ61M

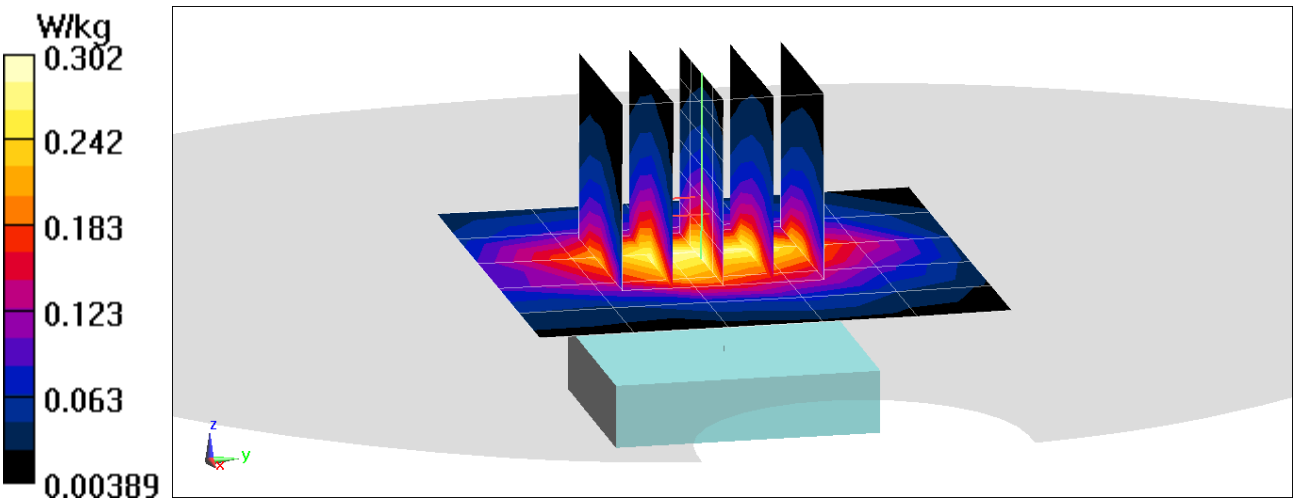
Communication System: UID 0, UMTS; Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Head Medium parameters used:
f = 1880 MHz; σ = 1.431 S/m; ε_r = 38.823; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06-29-2020; Ambient Temp: 20.1°C; Tissue Temp: 20.2°C

Probe: EX3DV4 - SN7490; ConvF(8.27, 8.27, 8.27) @ 1880 MHz; Calibrated: 12/13/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1532; Calibrated: 12/5/2019
Phantom: Twin-SAM V4.0 SUB use; Type: QD 000 P40 CC; Serial: 1403
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 1900, Head SAR, Front side, Mid.ch
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 = 12.84 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.349 W/kg
SAR(1 g) = 0.221 W/kg
Smallest distance from peaks to all points 3 dB below = 12.8 mm
Ratio of SAR at M2 to SAR at M1 = 64.4%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CR01JQ61M

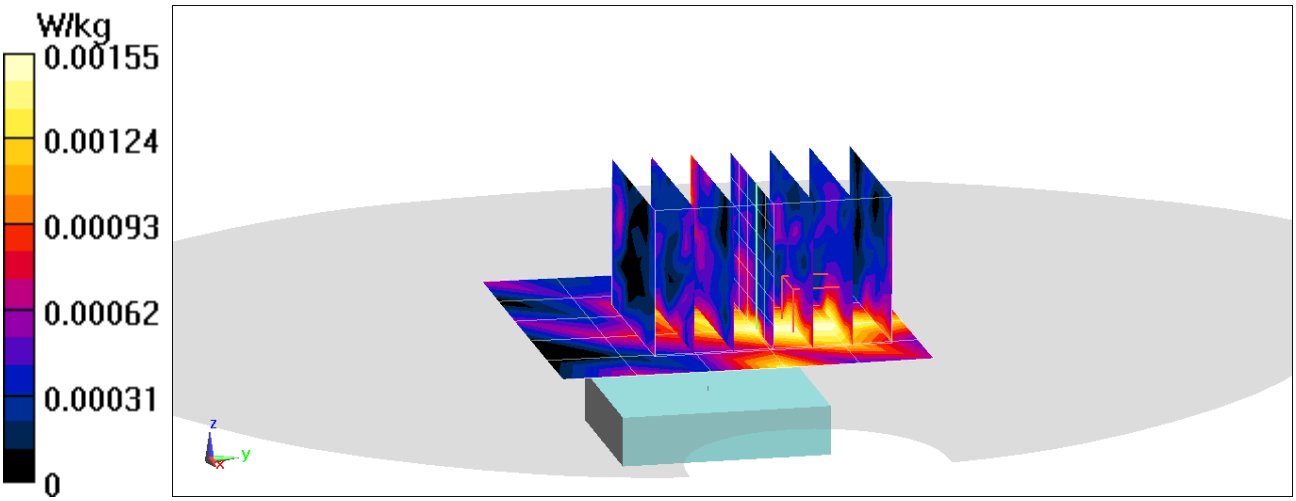
Communication System: UID 0, _LTE Band 26; Frequency: 819 MHz; Duty Cycle: 1:1
Medium: 835 MHz Head Medium parameters used (interpolated):
f = 819 MHz; σ = 0.875 S/m; ε_r = 40.492; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06-24-2020; Ambient Temp: 23.5°C; Tissue Temp: 22.1°C

Probe: EX3DV4 - SN7427; ConvF(9.58, 9.58, 9.58) @ 819 MHz; Calibrated: 2/19/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1403; Calibrated: 2/13/2020
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736
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, 0 RB Offset
Stainless Steel, Sport Wrist Band

Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (6x7x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.9880 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 0.00215 W/kg
SAR(1 g) = 0.00106 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-A2376; Type: Watch; Serial: GY6CR00AQ61M

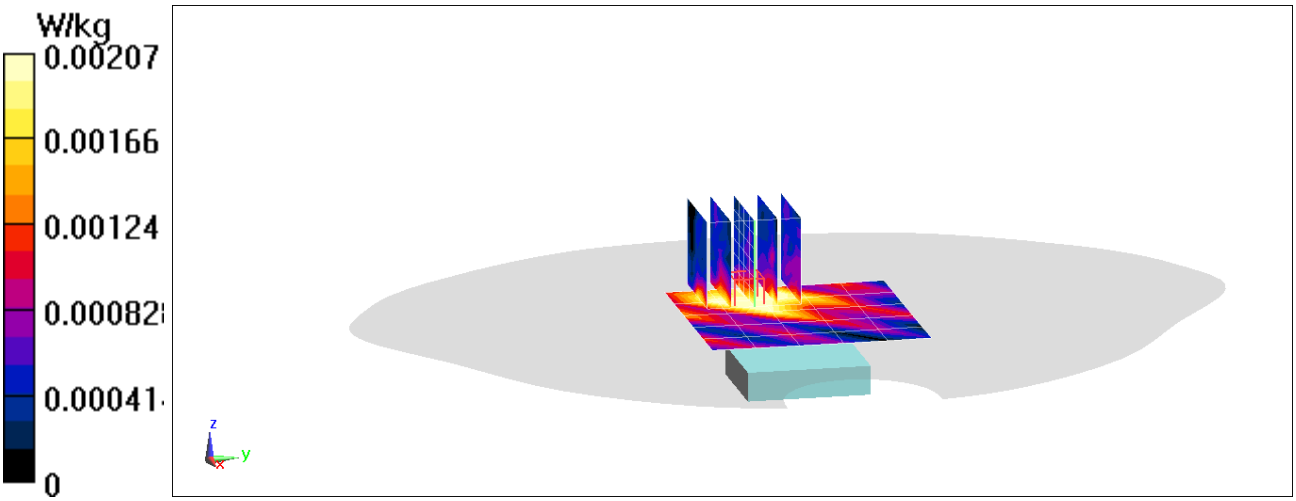
Communication System: UID 0, LTE Band 5 (Cell.); Frequency: 836.5 MHz; Duty Cycle: 1:1
Medium: 835 MHz Head Medium parameters used (interpolated):
f = 836.5 MHz; σ = 0.89 S/m; ε_r = 40.884; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-01-2020; Ambient Temp: 23.5°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN7427; ConvF(9.58, 9.58, 9.58) @ 836.5 MHz; Calibrated: 2/19/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1403; Calibrated: 2/13/2020
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736
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, 49 RB Offset
Stainless Steel, 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 = 1.421 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 0.00291 W/kg
SAR(1 g) = 0.00125 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 = 61.1%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CQ01YQ618

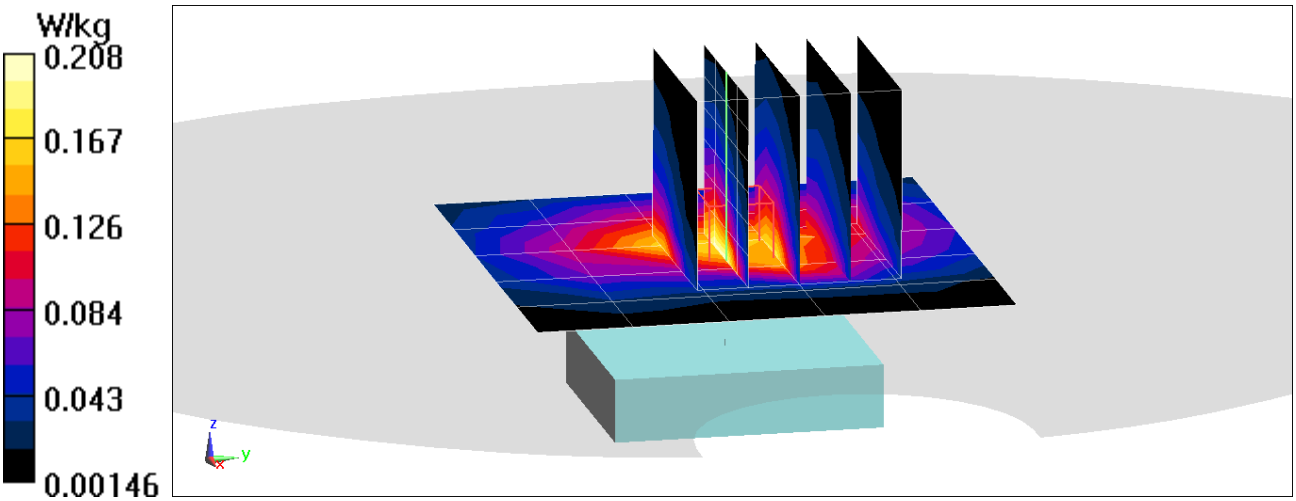
Communication System: UID 0, LTE Band 66 (AWS); Frequency: 1745 MHz; Duty Cycle: 1:1
Medium: 1750 MHz Head Medium parameters used (interpolated):
f = 1745 MHz; σ = 1.357 S/m; ε_r = 40.476; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-07-2020; Ambient Temp: 22.6°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7420; ConvF(8.39, 8.39, 8.39) @ 1745 MHz; Calibrated: 11/21/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1213; Calibrated: 11/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275
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, 50 RB Offset
Aluminum, 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 = 10.15 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.262 W/kg
SAR(1 g) = 0.154 W/kg
Smallest distance from peaks to all points 3 dB below = 9.1 mm
Ratio of SAR at M2 to SAR at M1 = 57.1%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CR004Q620

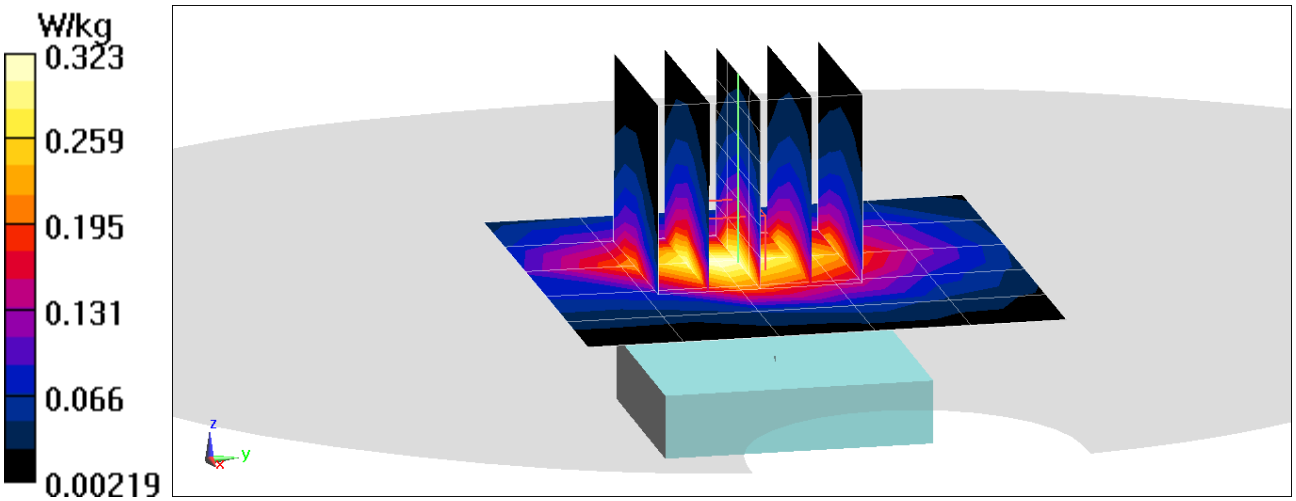
Communication System: UID 0, _LTE Band 25 (PCS); Frequency: 1905 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Head Medium parameters used (interpolated):
f = 1905 MHz; σ = 1.451 S/m; ε_r = 39.122; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-22-2020; Ambient Temp: 22.5°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN3837; ConvF(8.28, 8.28, 8.28) @ 1905 MHz; Calibrated: 1/20/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn793; Calibrated: 1/14/2020
Phantom: Twin-SAM V4.0 Sub; Type: QD 000 P40 CC; Serial: 1357
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 25 (PCS), Head SAR, Front side, High.ch,
20 MHz Bandwidth, QPSK, 1 RB, 50 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 = 12.75 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.400 W/kg
SAR(1 g) = 0.231 W/kg
Smallest distance from peaks to all points 3 dB below = 13.6 mm
Ratio of SAR at M2 to SAR at M1 = 61.1%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CR00QQ61M

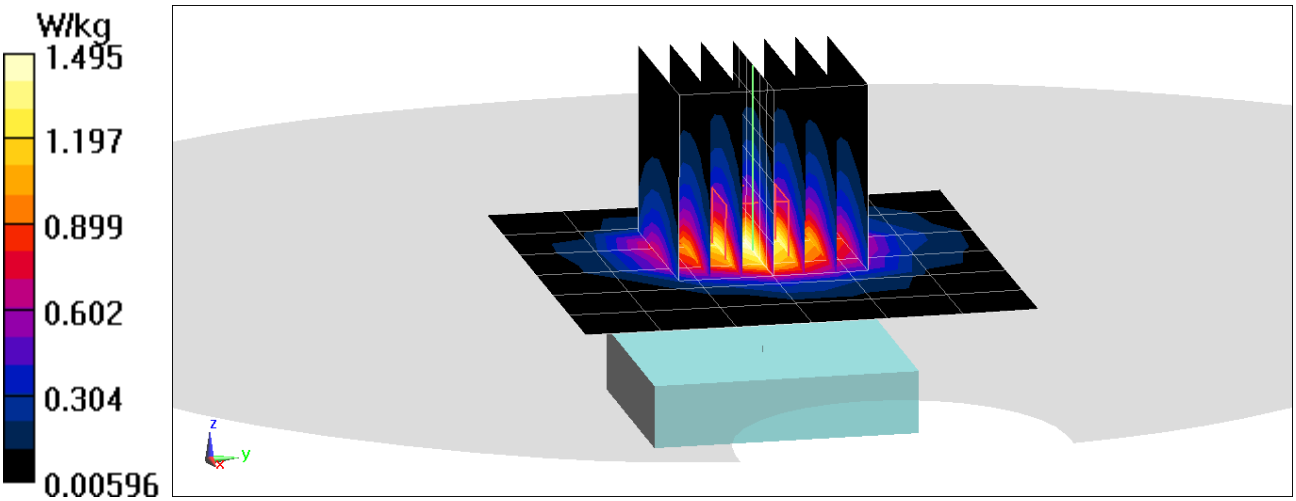
Communication System: UID 0, _LTE Band 7; Frequency: 2560 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Head Medium parameters used (interpolated):
f = 2560 MHz; σ = 1.862 S/m; ε_r = 37.538; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-08-2020; Ambient Temp: 22.5°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7427; ConvF(7, 7, 7) @ 2560 MHz; Calibrated: 2/19/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1403; Calibrated: 2/13/2020
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736
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
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 = 24.55 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.84 W/kg
SAR(1 g) = 1 W/kg
Smallest distance from peaks to all points 3 dB below = 10.8 mm
Ratio of SAR at M2 to SAR at M1 = 56.5%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CQ01NQ618

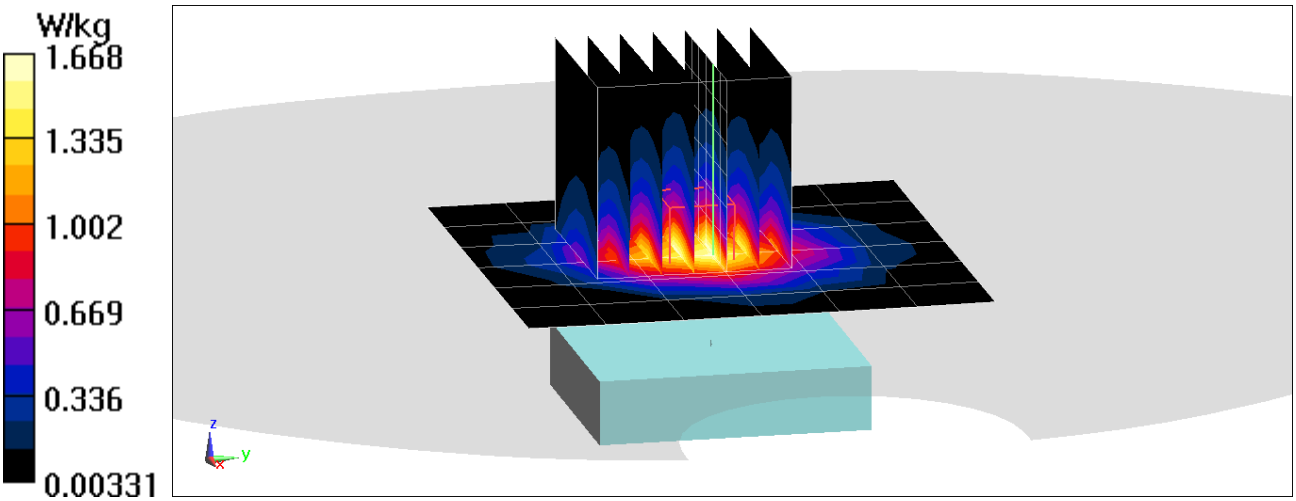
Communication System: UID 0, LTE Band 41 (Class 3); Frequency: 2506 MHz; Duty Cycle: 1:1.58
Medium: 2450 MHz Head Medium parameters used (interpolated):
f = 2506 MHz; σ = 1.947 S/m; ε_r = 39.332; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-01-2020; Ambient Temp: 23.1°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7490; ConvF(7.84, 7.84, 7.84) @ 2506 MHz; Calibrated: 12/13/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1532; Calibrated: 12/5/2019
Phantom: Twin-SAM V4.0 SUB use; Type: QD 000 P40 CC; Serial: 1403
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 41, Head SAR, Front side, Low.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 1 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.64 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 2.07 W/kg
SAR(1 g) = 1.11 W/kg
Smallest distance from peaks to all points 3 dB below = 11.7 mm
Ratio of SAR at M2 to SAR at M1 = 53.7%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CR00SQ61M

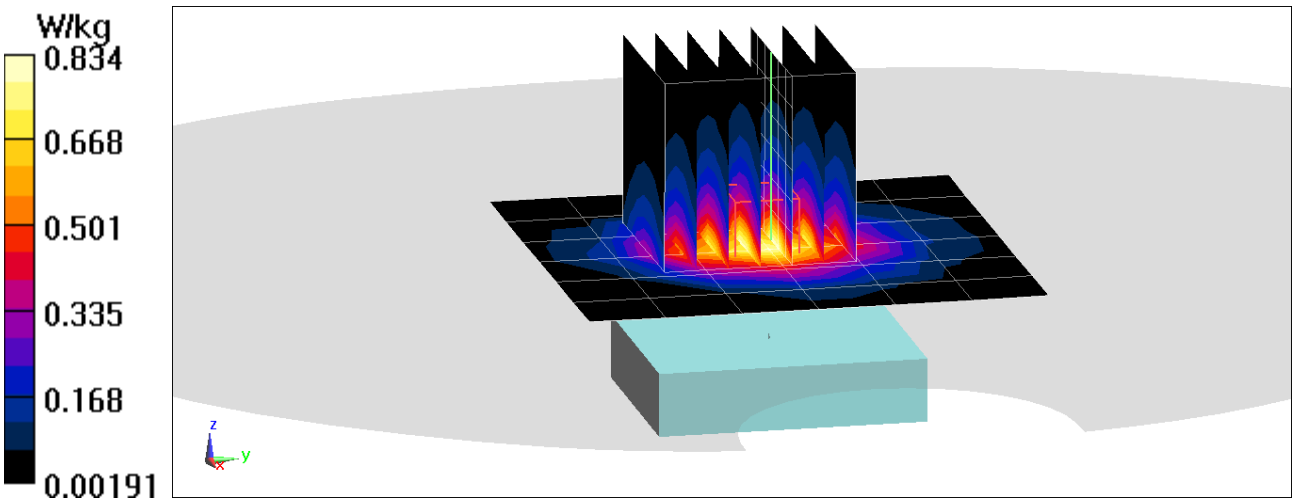
Communication System: UID 0, _IEEE 802.11b; Frequency: 2437 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Head Medium parameters used (interpolated):
f = 2437 MHz; σ = 1.864 S/m; ε_r = 38.646; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-22-2020; Ambient Temp: 21.9°C; Tissue Temp: 20.3°C

Probe: EX3DV4 - SN7490; ConvF(7.84, 7.84, 7.84) @ 2437 MHz; Calibrated: 12/13/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1532; Calibrated: 12/5/2019
Phantom: Twin-SAM V4.0 SUB use; Type: QD 000 P40 CC; Serial: 1403
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: IEEE 802.11b, 22 MHz Bandwidth, Head SAR, Ch 6, 1 Mbps, Front Side 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 = 17.97 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 1.04 W/kg
SAR(1 g) = 0.555 W/kg
Smallest distance from peaks to all points 3 dB below = 12 mm
Ratio of SAR at M2 to SAR at M1 = 53.5%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CR004Q620

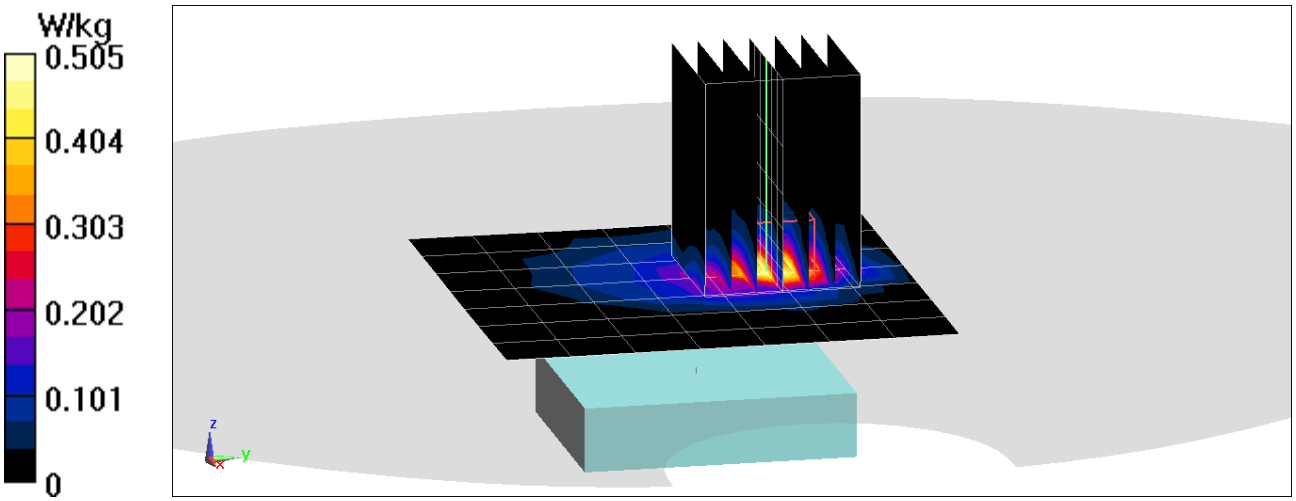
Communication System: UID 0, _IEEE 802.11a; Frequency: 5260 MHz; Duty Cycle: 1:1
Medium: 5 GHz Head Medium parameters used:
f = 5260 MHz; σ = 4.509 S/m; ε_r = 35.721; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-24-2020; Ambient Temp: 22.8°C; Tissue Temp: 22.2°C

Probe: EX3DV4 - SN7420; ConvF(5.18, 5.18, 5.18) @ 5260 MHz; Calibrated: 11/21/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1213; Calibrated: 11/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: IEEE 802.11a, UNII-2A, 20 MHz Bandwidth,
Head SAR, Ch 52, 6 Mbps, Front Side
Titanium, Metal Loop Wrist Band

Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm
Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4
Reference Value = 7.495 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.822 W/kg
SAR(1 g) = 0.227 W/kg
Smallest distance from peaks to all points 3 dB below = 8.2 mm
Ratio of SAR at M2 to SAR at M1 = 66.4%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CR004Q620

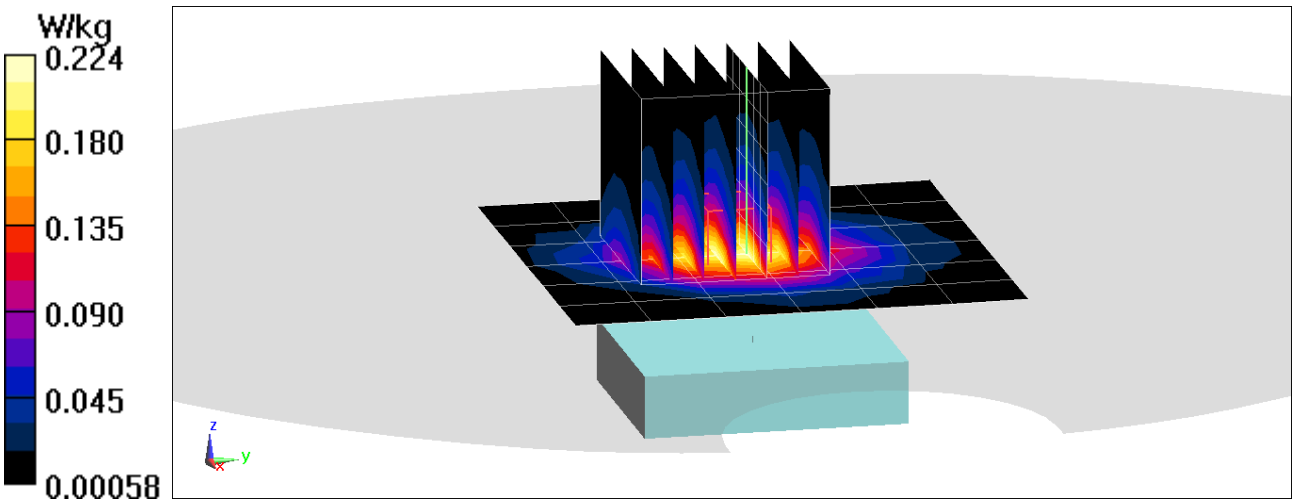
Communication System: UID 0, Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Head Medium parameters used (interpolated):
f = 2441 MHz; σ = 1.835 S/m; ε_r = 38.423; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-26-2020; Ambient Temp: 21.1°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN7490; ConvF(7.84, 7.84, 7.84) @ 2441 MHz; Calibrated: 12/13/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1532; Calibrated: 12/5/2019
Phantom: Twin-SAM V4.0 SUB use; Type: QD 000 P40 CC; Serial: 1403
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: Bluetooth, Head SAR, Ch 39, 1 Mbps, Front Side
Titanium, 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 = 9.415 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.275 W/kg
SAR(1 g) = 0.150 W/kg
Smallest distance from peaks to all points 3 dB below = 13.5 mm
Ratio of SAR at M2 to SAR at M1 = 55.5%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CR007Q620

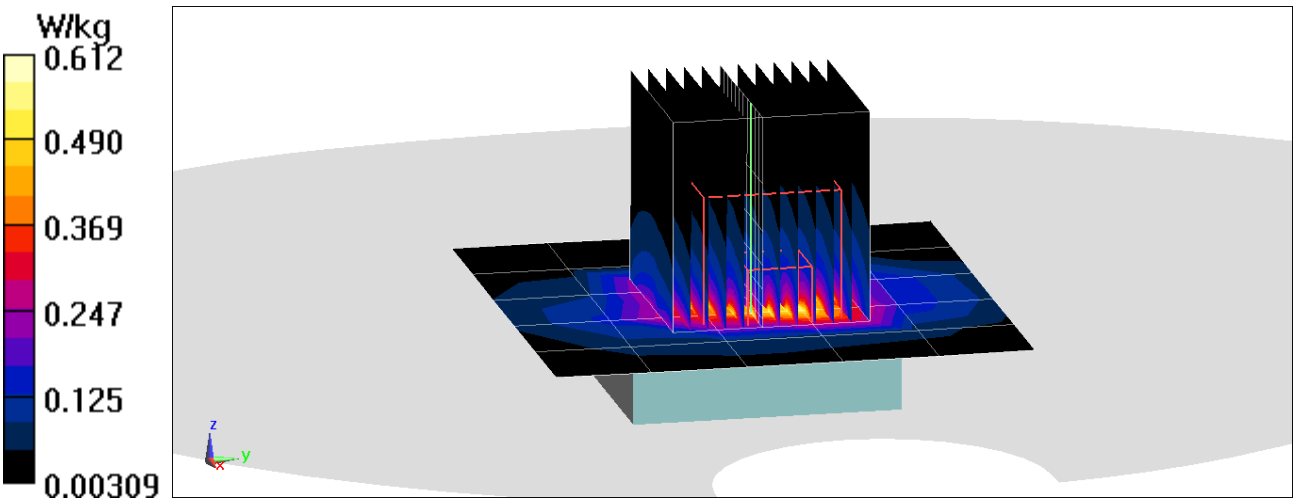
Communication System: UID 0, UMTS; Frequency: 836.6 MHz; Duty Cycle: 1:1
Medium: 835 MHz Body Medium parameters used (interpolated):
f = 836.6 MHz; σ = 0.977 S/m; ε_r = 53.215; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-12-2020; Ambient Temp: 20.1°C; Tissue Temp: 19.8°C

Probe: EX3DV4 - SN7421; ConvF(9.42, 9.42, 9.42) @ 836.6 MHz; Calibrated: 3/20/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn604; Calibrated: 3/19/2020
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: UMTS 850, Extremity SAR, Back side, Mid.ch
Titanium, Metal Links Wrist Band

Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (12x12x8)/Cube 0: Measurement grid: dx=2.8mm, dy=2.8mm, dz=1.4mm; Graded Ratio: 1.4
Reference Value = 10.37 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.26 W/kg
SAR(10 g) = 0.130 W/kg
Smallest distance from peaks to all points 3 dB below = 3.4 mm
Ratio of SAR at M2 to SAR at M1 = 60%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CR00AQ61M

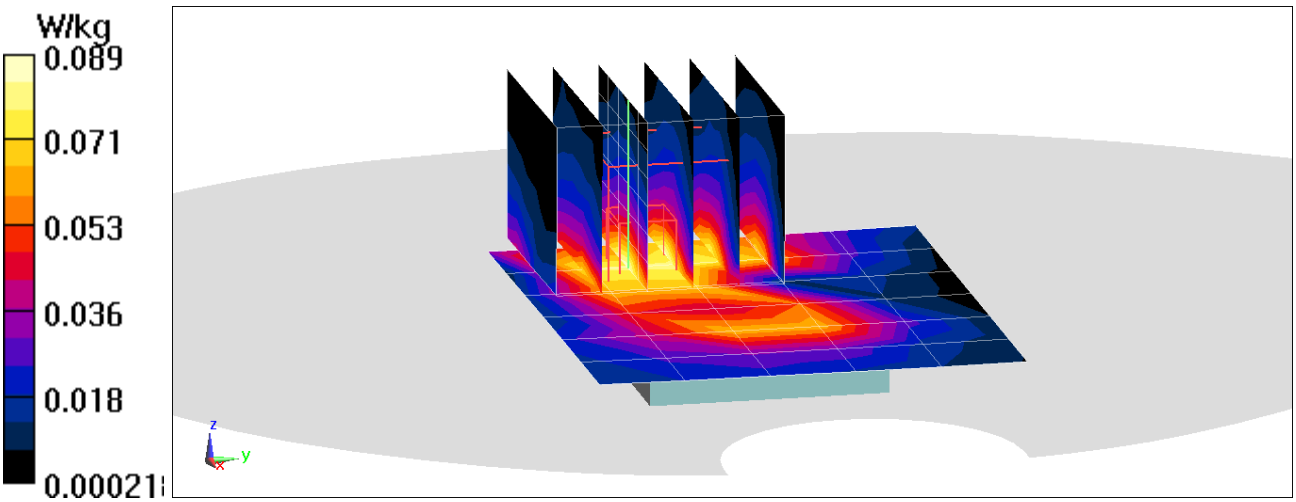
Communication System: UID 0, UMTS; Frequency: 1732.4 MHz; Duty Cycle: 1:1
Medium: 1750 MHz Body Medium parameters used (interpolated):
f = 1732.4 MHz; σ = 1.467 S/m; ε_r = 52.151; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-02-2020; Ambient Temp: 21.4°C; Tissue Temp: 20.3°C

Probe: EX3DV4 - SN3837; ConvF(7.88, 7.88, 7.88) @ 1732.4 MHz; Calibrated: 1/20/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn793; Calibrated: 1/14/2020
Phantom: Twin-SAM V4.0 Main; Type: QD 000 P40 CC; Serial: 1114
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 1750, Extremity SAR, Back side, Mid.ch
Stainless Steel, Metal Links Wrist Band

Area Scan (7x6x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.861 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 0.105 W/kg
SAR(10 g) = 0.040 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 = 62.7%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CR01DQ61M

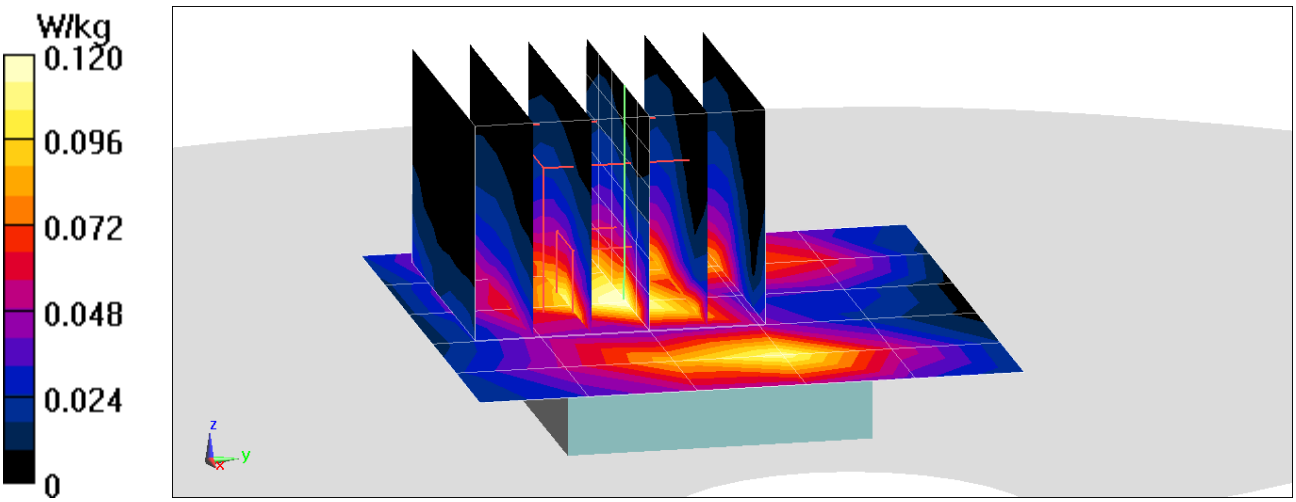
Communication System: UID 0, UMTS; Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Body Medium parameters used:
f = 1880 MHz; σ = 1.559 S/m; ε_r = 52.292; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-08-2020; Ambient Temp: 22.0°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN7532; ConvF(7.96, 7.96, 7.96) @ 1880 MHz; Calibrated: 4/20/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn501; Calibrated: 4/15/2020
Phantom: Twin-SAM V8.0_Left; Type: QD 000 P41 AA; Serial: 1935
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 Links Wrist Band

Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.446 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.151 W/kg
SAR(10 g) = 0.045 W/kg
Smallest distance from peaks to all points 3 dB below = 11.2 mm
Ratio of SAR at M2 to SAR at M1 = 56.6%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CR00EQ620

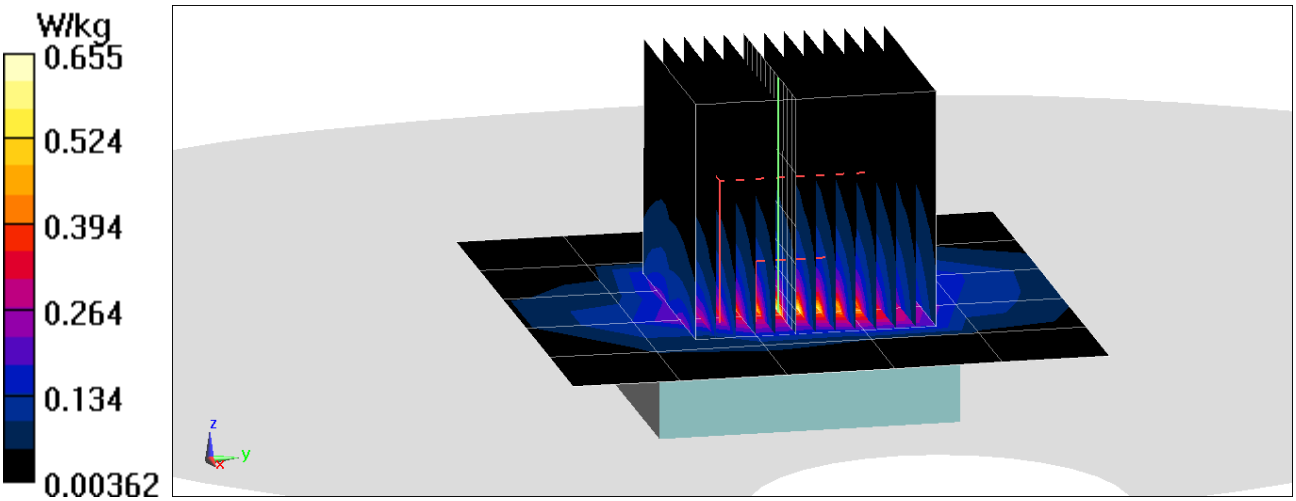
Communication System: UID 0, _LTE Band 26; Frequency: 819 MHz; Duty Cycle: 1:1
Medium: 835 MHz Body Medium parameters used (interpolated):
f = 819 MHz; σ = 0.959 S/m; ε_r = 53.39; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-12-2020; Ambient Temp: 20.1°C; Tissue Temp: 19.8°C

Probe: EX3DV4 - SN7421; ConvF(9.42, 9.42, 9.42) @ 819 MHz; Calibrated: 3/20/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn604; Calibrated: 3/19/2020
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.), Extremity SAR, Back side, Low.ch,
10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset
Titanium, Metal Links Wrist Band

Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (13x13x8)/Cube 0: Measurement grid: dx=2.8mm, dy=2.8mm, dz=1.4mm; Graded Ratio: 1.4
Reference Value = 15.13 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 1.46 W/kg
SAR(10 g) = 0.134 W/kg
Smallest distance from peaks to all points 3 dB below = 3.4 mm
Ratio of SAR at M2 to SAR at M1 = 61.8%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CR00AQ61M

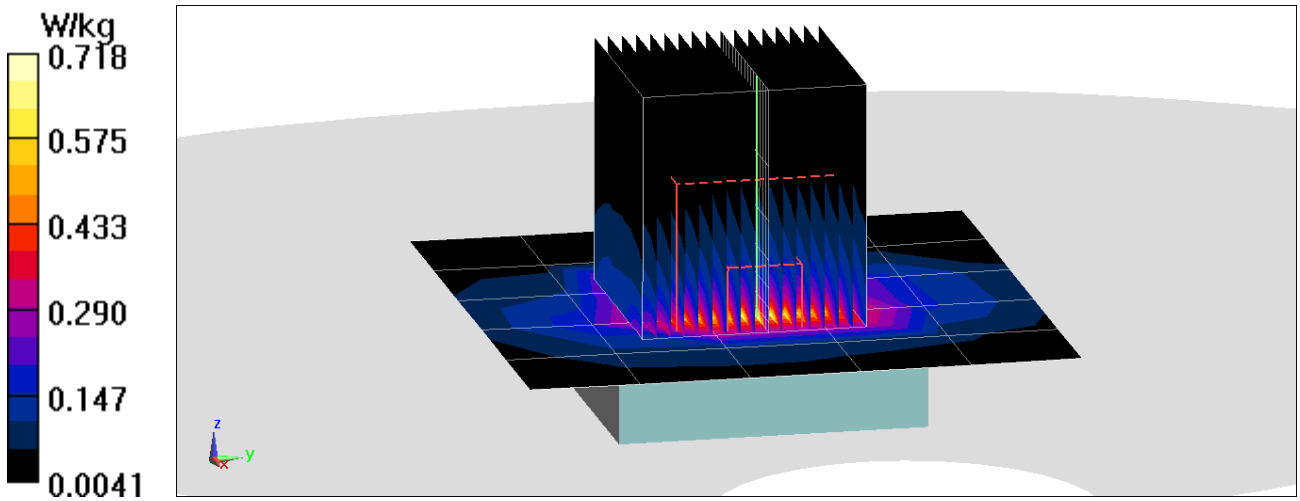
Communication System: UID 0, LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1
Medium: 835 MHz Body Medium parameters used (interpolated):
f = 836.5 MHz; σ = 0.977 S/m; ε_r = 53.216; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-12-2020; Ambient Temp: 20.1°C; Tissue Temp: 19.8°C

Probe: EX3DV4 - SN7421; ConvF(9.42, 9.42, 9.42) @ 836.5 MHz; Calibrated: 3/20/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn604; Calibrated: 3/19/2020
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.), Extremity SAR, Back side, Mid.ch,
10 MHz Bandwidth, QPSK, 1 RB, 49 RB Offset
Stainless Steel, Metal Links Wrist Band

Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (17x17x8)/Cube 0: Measurement grid: dx=1.9mm, dy=1.9mm, dz=1.4mm; Graded Ratio: 1.4
Reference Value = 12.01 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 1.42 W/kg
SAR(10 g) = 0.148 W/kg
Smallest distance from peaks to all points 3 dB below = 2.8 mm
Ratio of SAR at M2 to SAR at M1 = 61.3%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CQ024Q618

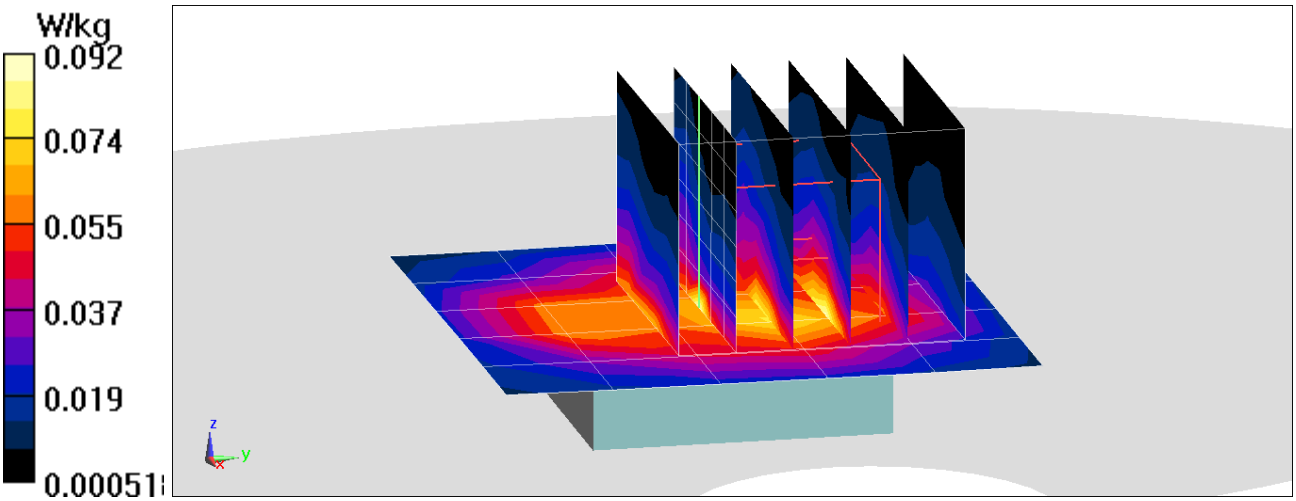
Communication System: UID 0, _LTE Band 66 (AWS); Frequency: 1745 MHz; Duty Cycle: 1:1
Medium: 1750 MHz Body Medium parameters used (interpolated):
f = 1745 MHz; σ = 1.472 S/m; ε_r = 51.533; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 06-30-2020; Ambient Temp: 23.8°C; Tissue Temp: 20.3°C

Probe: EX3DV4 - SN3837; ConvF(7.88, 7.88, 7.88) @ 1745 MHz; Calibrated: 1/20/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn793; Calibrated: 1/14/2020
Phantom: Twin-SAM V4.0 Main; Type: QD 000 P40 CC; Serial: 1114
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 66 (AWS), Extremity SAR, Back side, Mid.ch,
20 MHz Bandwidth, QPSK, 1 RB, 50 RB Offset
Aluminum, Sport Wrist Band

Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.287 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.119 W/kg
SAR(10 g) = 0.036 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 = 33.8%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CQ021Q618

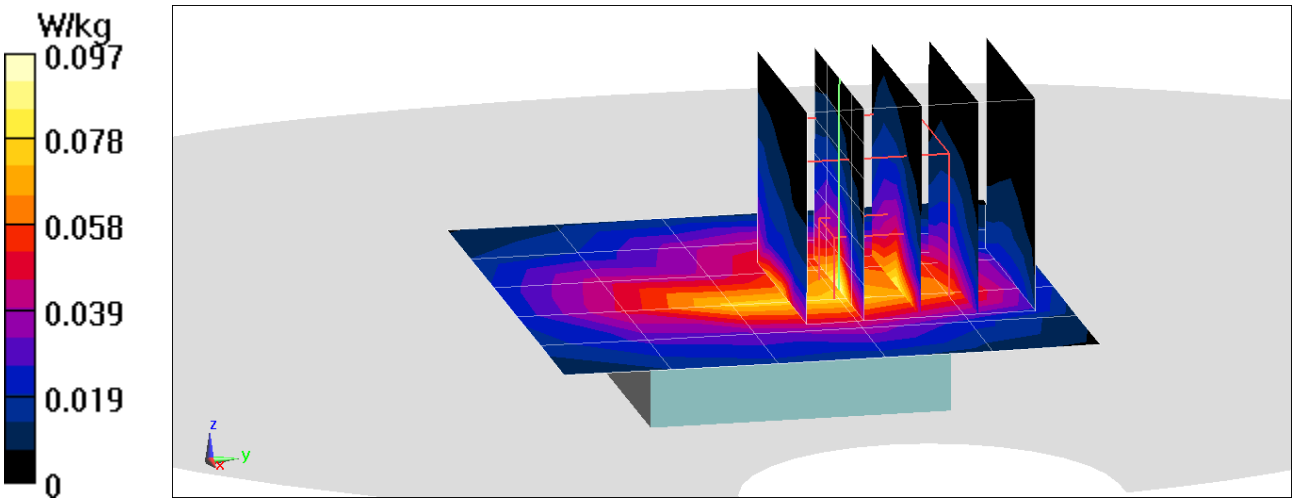
Communication System: UID 0, _LTE Band 25 (PCS); Frequency: 1905 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Body Medium parameters used (interpolated):
f = 1905 MHz; σ = 1.588 S/m; ε_r = 51.086; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-23-2020; Ambient Temp: 23.0°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7421; ConvF(7.68, 7.68, 7.68) @ 1905 MHz; Calibrated: 3/20/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn604; Calibrated: 3/19/2020
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), Extremity SAR, Back side, High.ch,
20 MHz Bandwidth, QPSK, 1 RB, 50 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 = 6.950 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.119 W/kg
SAR(10 g) = 0.035 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 = 60.7%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CR007Q620

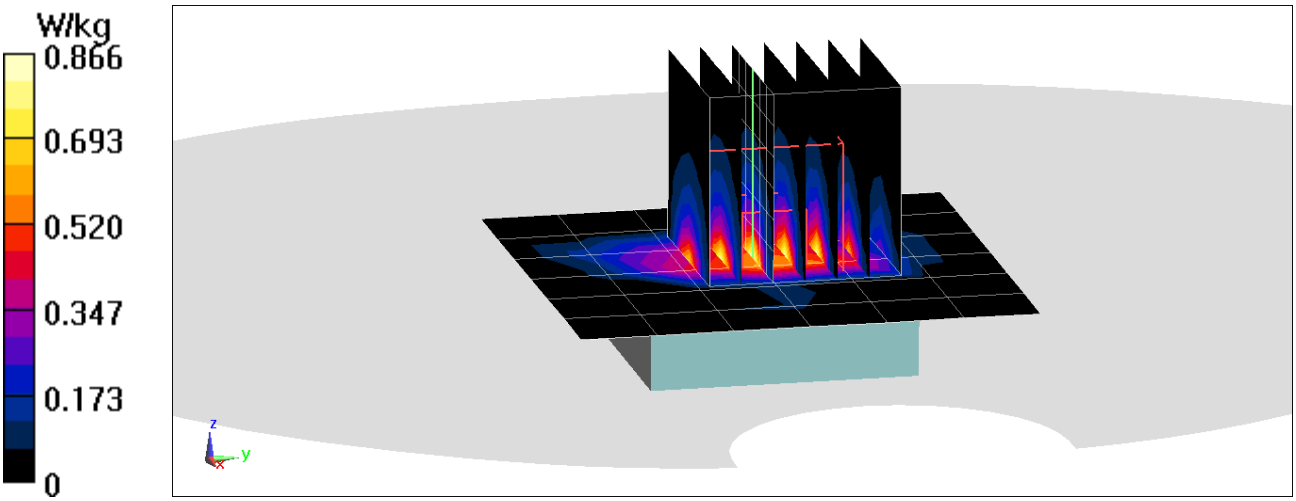
Communication System: UID 0, _LTE Band 7; Frequency: 2560 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Body Medium parameters used (interpolated):
f = 2560 MHz; σ = 2.187 S/m; ε_r = 51.352; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-13-2020; Ambient Temp: 23.3°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN3949; ConvF(7.69, 7.69, 7.69) @ 2560 MHz; Calibrated: 8/29/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1408; Calibrated: 8/12/2019
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, Extremity SAR, Back side, High.ch,
20 MHz Bandwidth, QPSK, 1 RB, 99 RB Offset
Titanium, 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 = 16.26 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 1.10 W/kg
SAR(10 g) = 0.212 W/kg
Smallest distance from peaks to all points 3 dB below = 7 mm
Ratio of SAR at M2 to SAR at M1 = 46.9%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CR00AQ61M

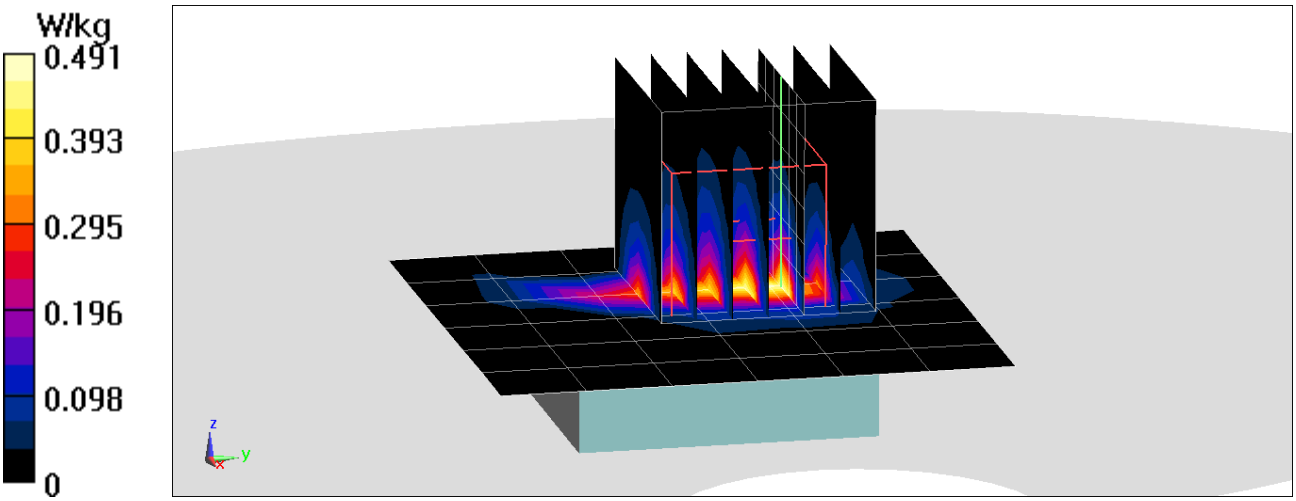
Communication System: UID 0, LTE Band 41 (Class 3); Frequency: 2593 MHz; Duty Cycle: 1:1.58
Medium: 2450 MHz Body Medium parameters used (interpolated):
f = 2593 MHz; σ = 2.194 S/m; ε_r = 50.766; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-20-2020; Ambient Temp: 23.1°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN3949; ConvF(7.69, 7.69, 7.69) @ 2593 MHz; Calibrated: 8/29/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1408; Calibrated: 8/12/2019
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 41, Extremity SAR, Back side, Mid.ch,
20 MHz Bandwidth, QPSK,1 RB, 0 RB Offset
Stainless Steel, 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 = 12.33 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.673 W/kg
SAR(10 g) = 0.118 W/kg
Smallest distance from peaks to all points 3 dB below = 6 mm
Ratio of SAR at M2 to SAR at M1 = 48.9%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CR004Q620

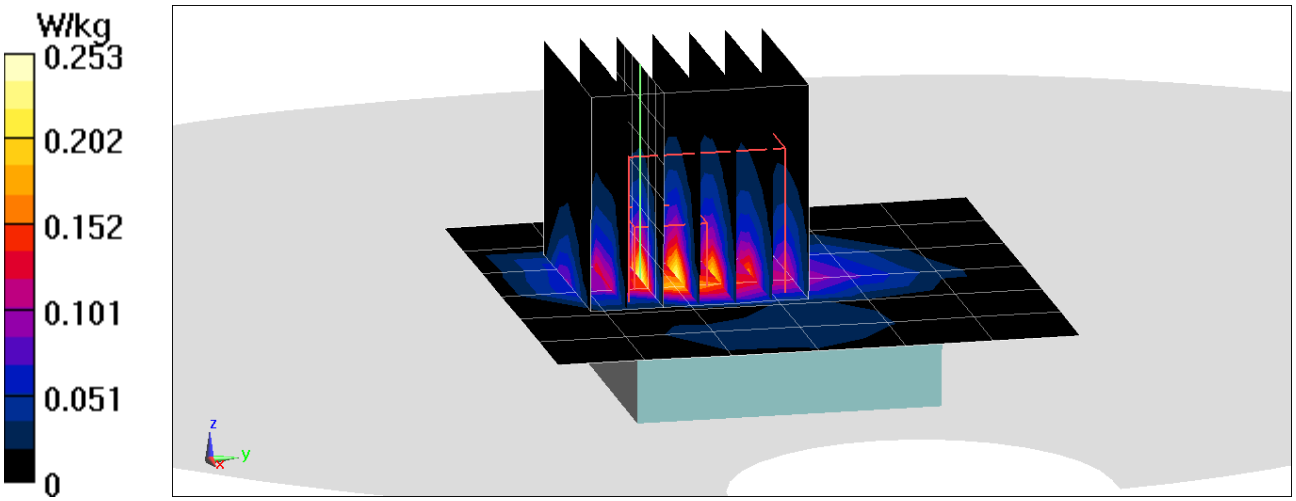
Communication System: UID 0, IEEE 802.11b; Frequency: 2437 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Body Medium parameters used (interpolated):
f = 2437 MHz; σ = 1.982 S/m; ε_r = 51.528; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-22-2020; Ambient Temp: 23.1°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN3949; ConvF(7.75, 7.75, 7.75) @ 2437 MHz; Calibrated: 8/29/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1408; Calibrated: 8/12/2019
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 6, 1 Mbps, Back Side
Titanium, 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 = 9.404 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.319 W/kg
SAR(10 g) = 0.057 W/kg
Smallest distance from peaks to all points 3 dB below = 7 mm
Ratio of SAR at M2 to SAR at M1 = 52.4%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CQ01YQ618

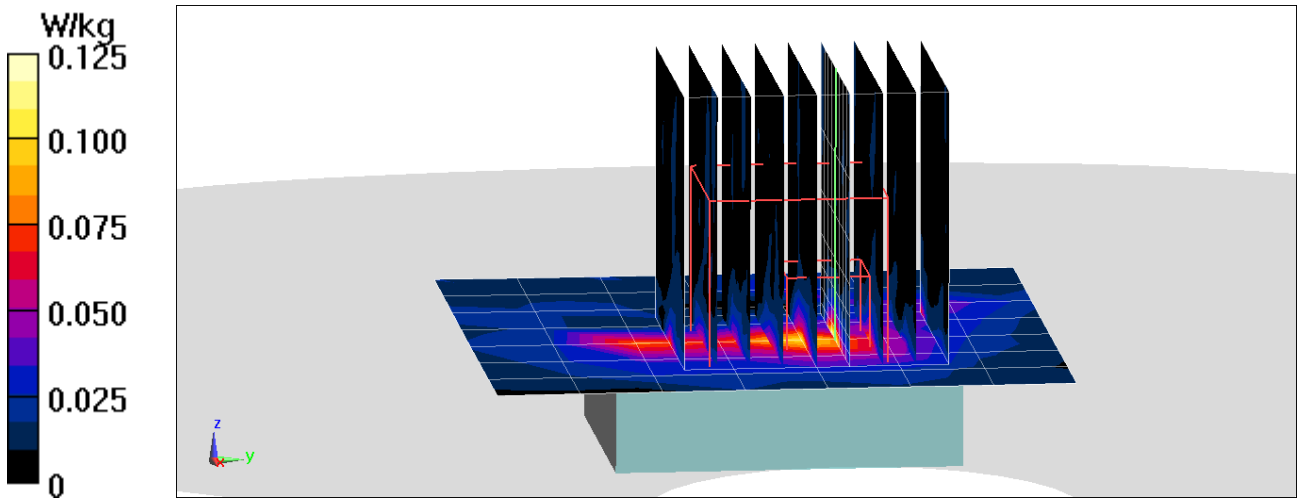
Communication System: UID 0, _IEEE 802.11a; Frequency: 5785 MHz; Duty Cycle: 1:1
Medium: 5 GHz Body Medium parameters used:
f = 5785 MHz; σ = 6.274 S/m; ε_r = 46.981; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-29-2020; Ambient Temp: 21.6°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7420; ConvF(4.28, 4.28, 4.28) @ 5785 MHz; Calibrated: 11/21/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1213; Calibrated: 11/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275
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 157, 6 Mbps, Back Side,
Aluminum, Sport Wrist Band

Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm
Zoom Scan (9x9x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4
Reference Value = 2.822 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 0.233 W/kg
SAR(10 g) = 0.016 W/kg
Smallest distance from peaks to all points 3 dB below = 5.8 mm
Ratio of SAR at M2 to SAR at M1 = 64%



PCTEST

DUT: BCG-A2376; Type: Watch; Serial: GY6CR005Q620

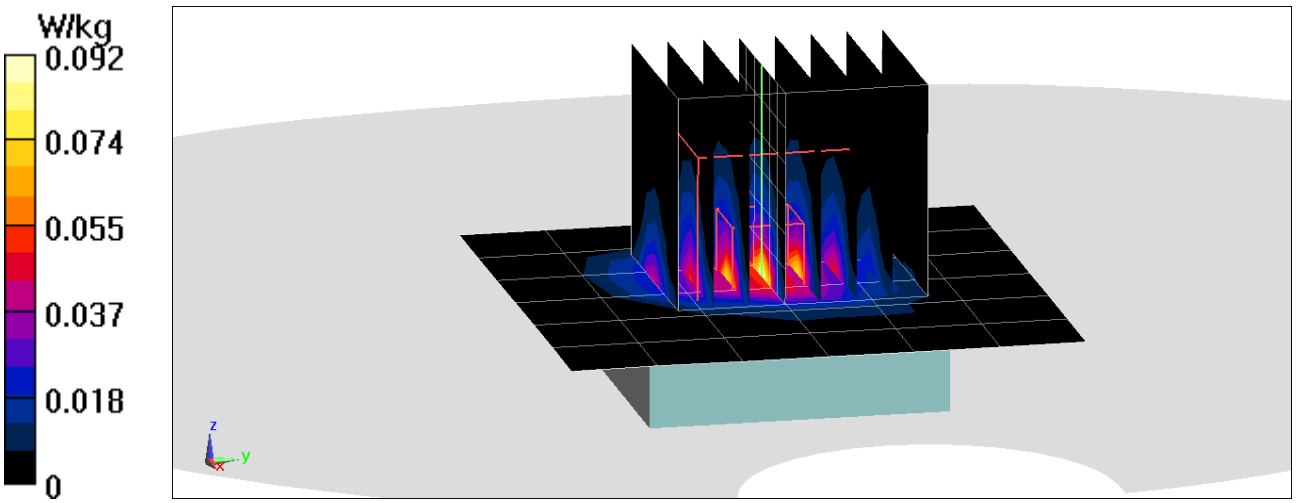
Communication System: UID 0, Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Body Medium parameters used (interpolated):
f = 2441 MHz; σ = 1.999 S/m; ε_r = 51.282; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-27-2020; Ambient Temp: 23.3°C; Tissue Temp: 22.9°C

Probe: EX3DV4 - SN3949; ConvF(7.75, 7.75, 7.75) @ 2441 MHz; Calibrated: 8/29/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1408; Calibrated: 8/12/2019
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: Bluetooth, Extremity SAR, Ch 39, 1 Mbps, Back Side Titanium, Sport Wrist Band

Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Zoom Scan (7x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.198 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 0.117 W/kg
SAR(10 g) = 0.020 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 = 47.3%



APPENDIX B: SYSTEM VERIFICATION

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PCTEST

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

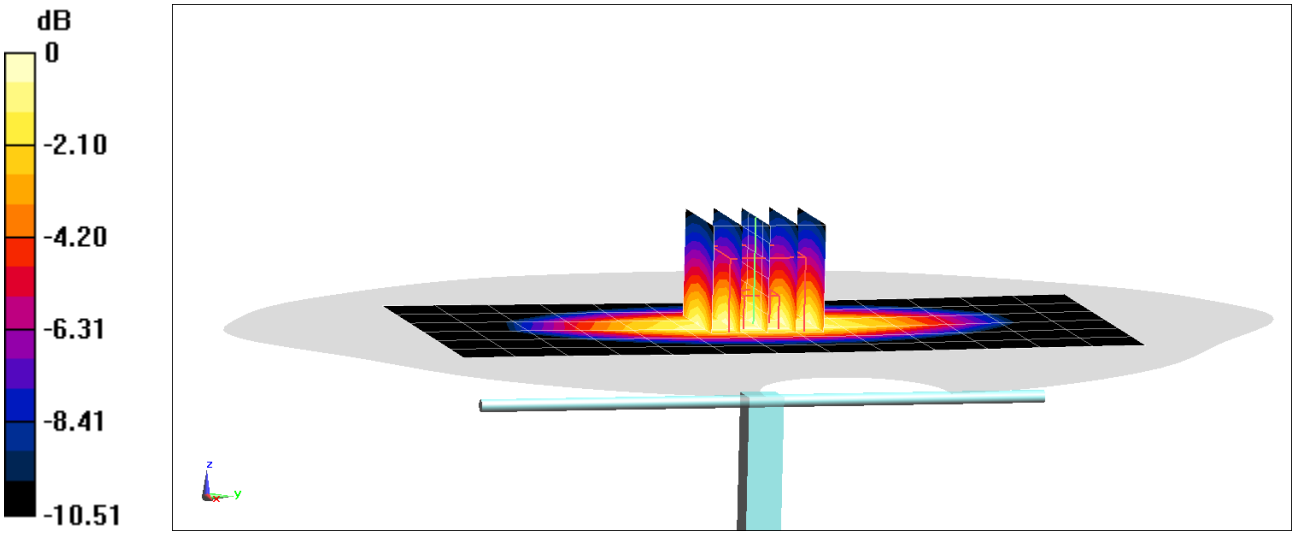
Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1
Medium: 835 MHz Head Medium parameters used:
f = 835 MHz; σ = 0.89 S/m; ε_r = 40.286; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 06-24-2020; Ambient Temp: 23.5°C; Tissue Temp: 22.1°C

Probe: EX3DV4 - SN7427; ConvF(9.58, 9.58, 9.58) @ 835 MHz; Calibrated: 2/19/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1403; Calibrated: 2/13/2020
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736
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=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Peak SAR (extrapolated) = 2.68 W/kg
SAR(1 g) = 1.85 W/kg
Deviation(1 g) = -2.63%



0 dB = 2.43 W/kg = 3.86 dBW/kg

PCTEST

DUT: Dipole 850 MHz; Type: D850V2; Serial: 1009

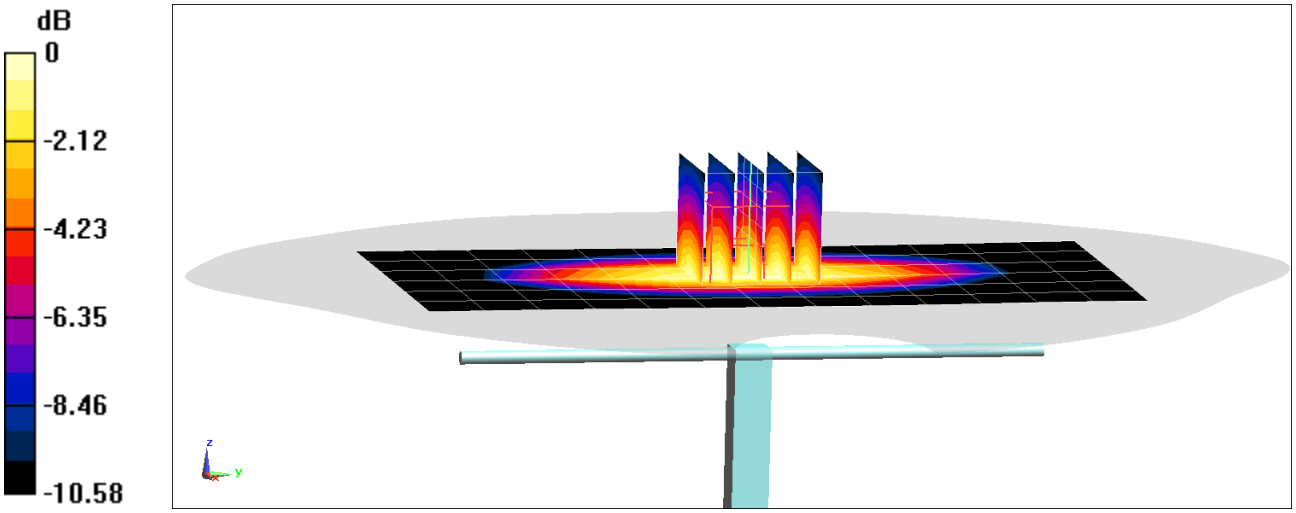
Communication System: UID 0, CW; Frequency: 850 MHz; Duty Cycle: 1:1
Medium: 835 MHz Head Medium parameters used:
f = 850 MHz; σ = 0.878 S/m; ε_r = 40.425; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 06-29-2020; Ambient Temp: 23.1°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN7427; ConvF(9.58, 9.58, 9.58) @ 850 MHz; Calibrated: 2/19/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1403; Calibrated: 2/13/2020
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736
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) = 2.78 W/kg
SAR(1 g) = 1.92 W/kg
Deviation(1 g) = -4.00%



0 dB = 2.52 W/kg = 4.01 dBW/kg

PCTEST

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

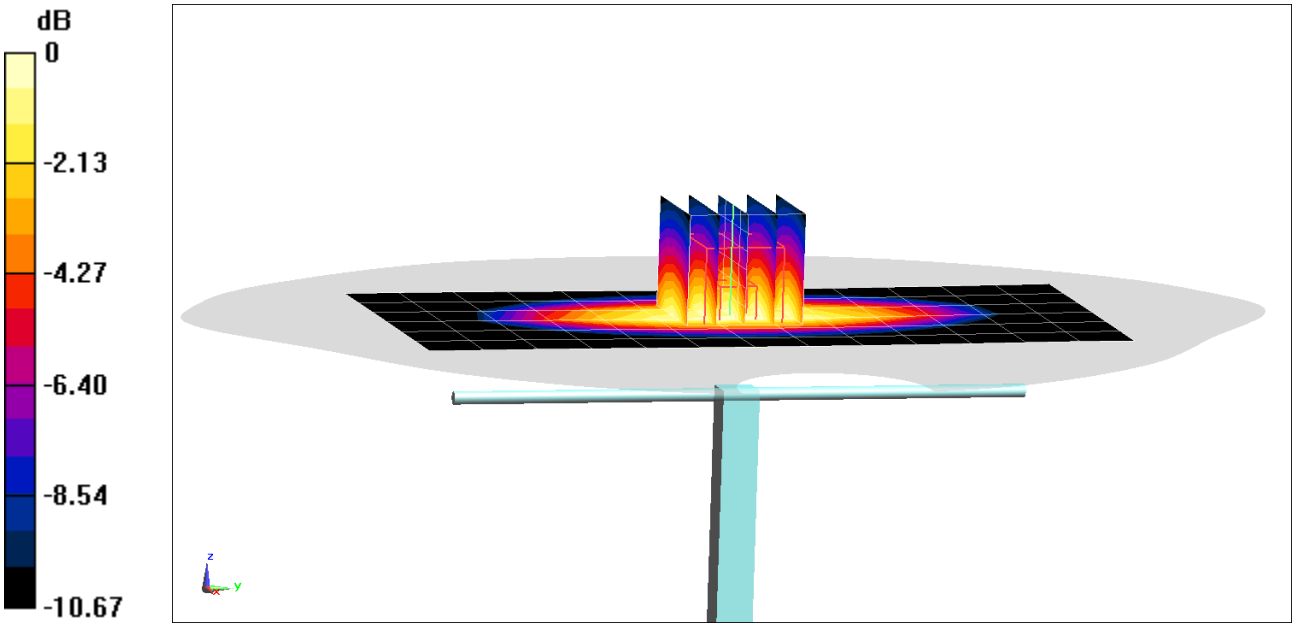
Communication System: UID 0, CW; Frequency: 850 MHz; Duty Cycle: 1:1
Medium: 835 MHz Head Medium parameters used:
f = 850 MHz; σ = 0.895 S/m; ε_r = 40.86; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 07-01-2020; Ambient Temp: 23.5°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN7427; ConvF(9.58, 9.58, 9.58) @ 850 MHz; Calibrated: 2/19/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1403; Calibrated: 2/13/2020
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736
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) = 2.81 W/kg
SAR(1 g) = 1.93 W/kg
Deviation(1 g) = -2.82%



0 dB = 2.54 W/kg = 4.05 dBW/kg

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1104

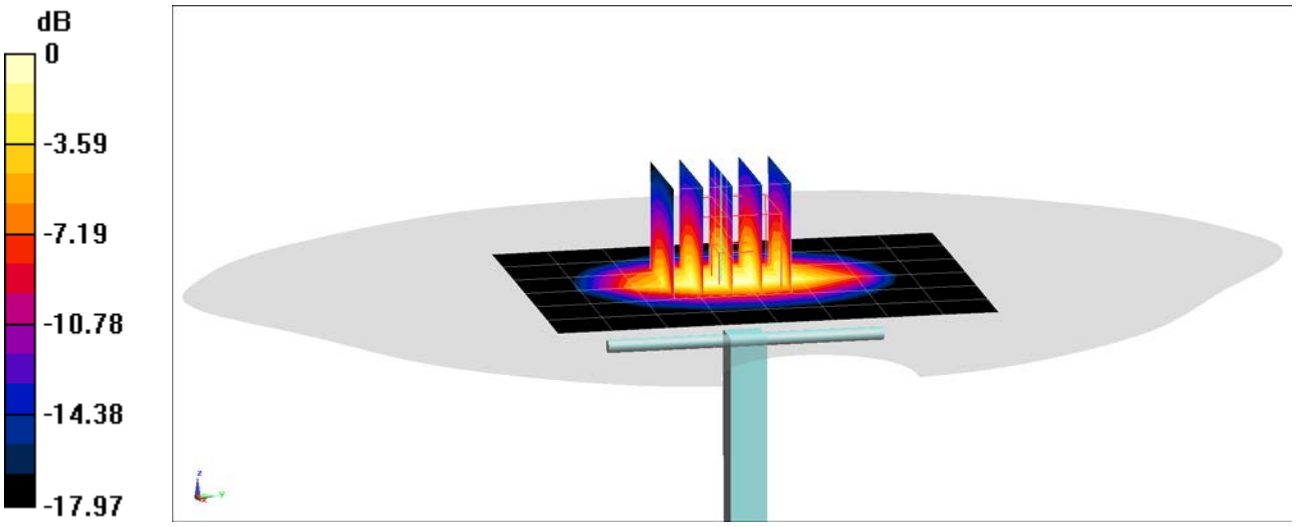
Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1
Medium: 1750 MHz Head Medium parameters used:
f = 1750 MHz; σ = 1.359 S/m; ε_r = 39.227; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-01-2020; Ambient Temp: 23.5°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7532; ConvF(8.46, 8.46, 8.46) @ 1750 MHz; Calibrated: 4/20/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn501; Calibrated: 4/15/2020
Phantom: Twin-SAM V8.0_Left; Type: QD 000 P41 AA; Serial: 1935
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) = 7.02 W/kg
SAR(1 g) = 3.76 W/kg
Deviation(1 g) = 3.30%



0 dB = 5.74 W/kg = 7.59 dBW/kg

PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1092

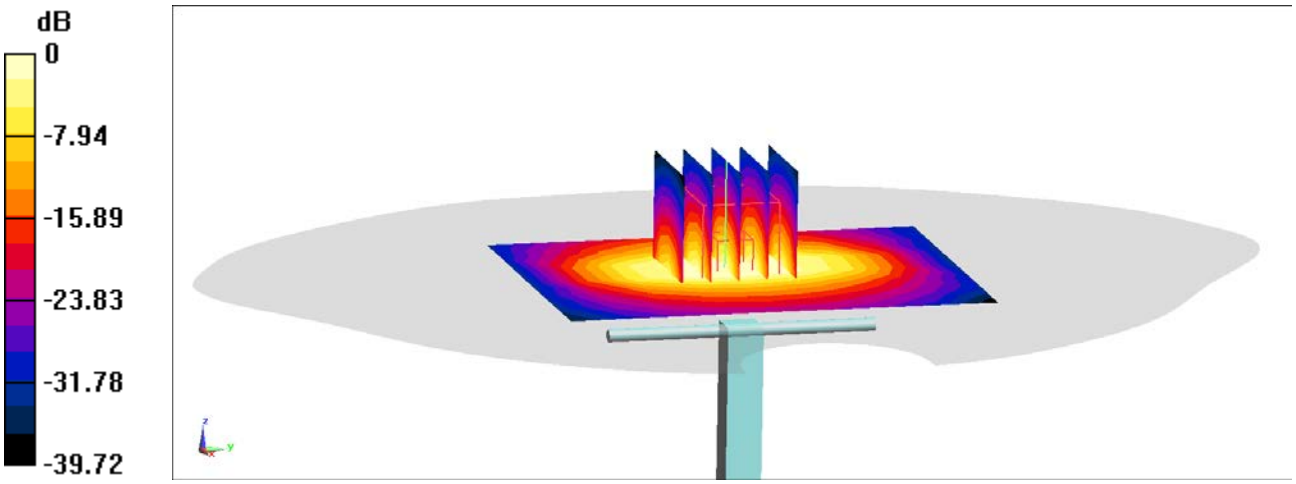
Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1
Medium: 1750 MHz Head Medium parameters used:
f = 1750 MHz; σ = 1.36 S/m; ε_r = 40.469; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-07-2020; Ambient Temp: 22.6°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7420; ConvF(8.39, 8.39, 8.39) @ 1750 MHz; Calibrated: 11/21/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1213; Calibrated: 11/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275
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) = 6.27 W/kg
SAR(1 g) = 3.4 W/kg
Deviation(1 g) = -5.82%



0 dB = 3.73 W/kg = 5.72 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d181

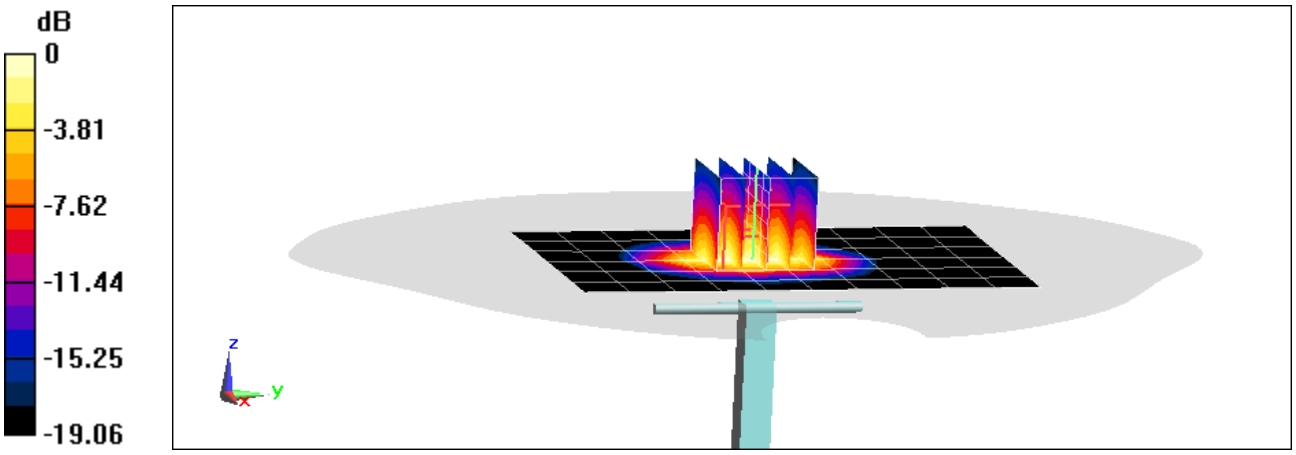
Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Head Medium parameters used (interpolated):
f = 1900 MHz; σ = 1.451 S/m; ε_r = 38.74; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06-29-2020; Ambient Temp: 20.1°C; Tissue Temp: 20.2°C

Probe: EX3DV4 - SN7490; ConvF(8.27, 8.27, 8.27) @ 1900 MHz; Calibrated: 12/13/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1532; Calibrated: 12/5/2019
Phantom: Twin-SAM V4.0 SUB use; Type: QD 000 P40 CC; Serial: 1403
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) = 7.10 W/kg
SAR(1 g) = 3.81 W/kg
Deviation(1 g) = -3.54%



0 dB = 5.99 W/kg = 7.77 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d181

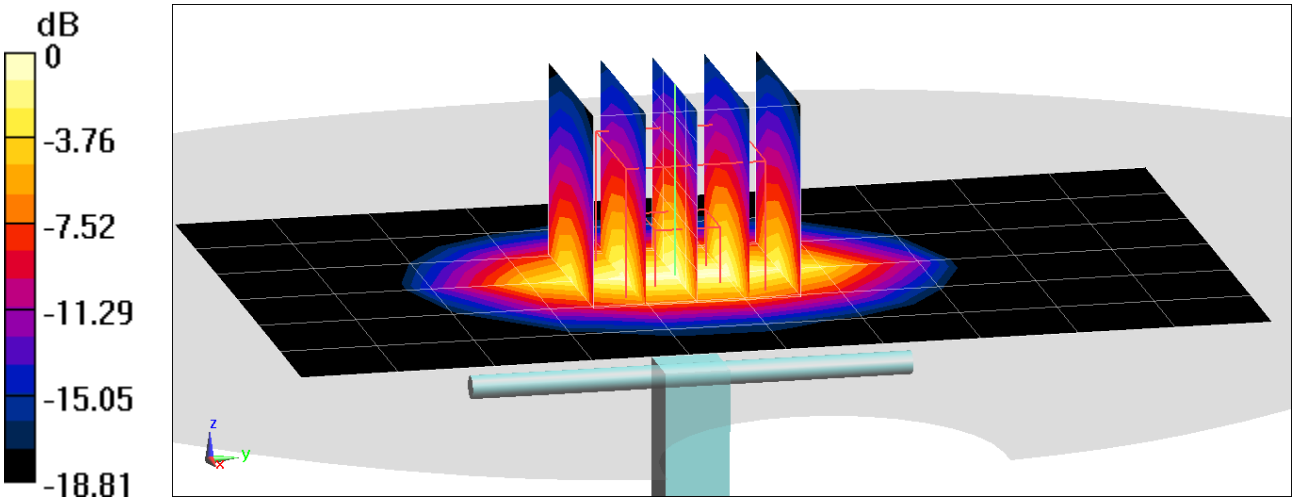
Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Head Medium parameters used (interpolated):
f = 1900 MHz; σ = 1.448 S/m; ε_r = 39.128; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-22-2020; Ambient Temp: 22.5°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN3837; ConvF(8.28, 8.28, 8.28) @ 1900 MHz; Calibrated: 1/20/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn793; Calibrated: 1/14/2020
Phantom: Twin-SAM V4.0 Sub; Type: QD 000 P40 CC; Serial: 1357
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) = 8.12 W/kg
SAR(1 g) = 4.01 W/kg
Deviation(1 g) = 1.52%



0 dB = 6.52 W/kg = 8.14 dBW/kg

PCTEST

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

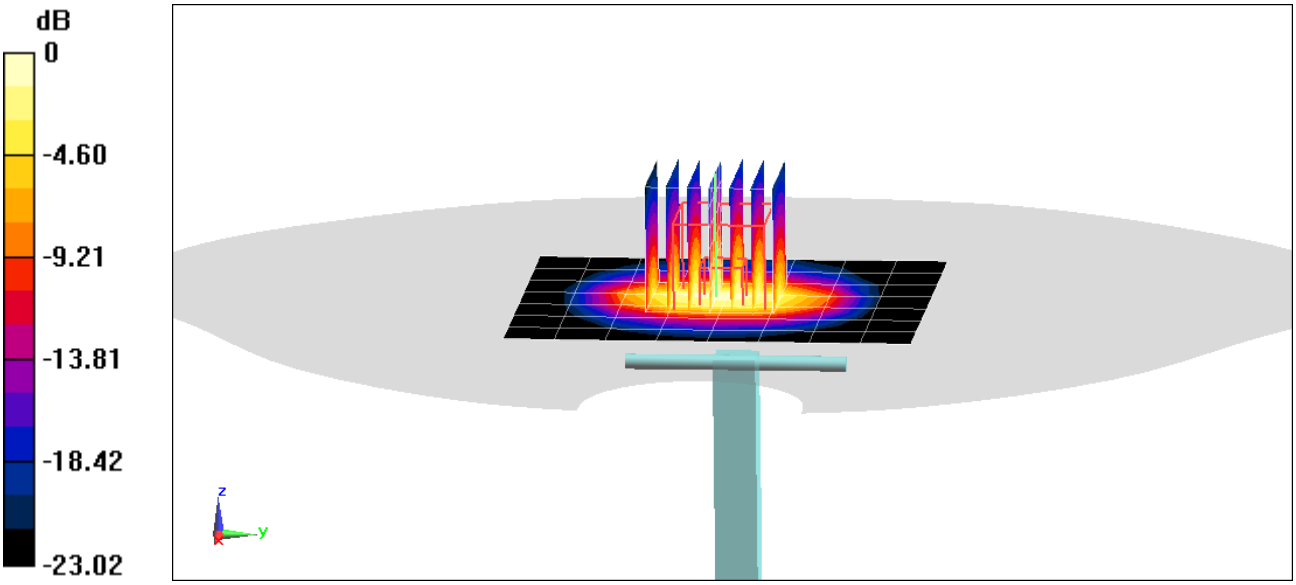
Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Head Medium parameters used:
f = 2450 MHz; σ = 1.88 S/m; ε_r = 39.494; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-01-2020; Ambient Temp: 23.1°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7490; ConvF(7.84, 7.84, 7.84) @ 2450 MHz; Calibrated: 12/13/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1532; Calibrated: 12/5/2019
Phantom: Twin-SAM V4.0 SUB use; Type: QD 000 P40 CC; Serial: 1403
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) = 11.6 W/kg
SAR(1 g) = 5.19 W/kg
Deviation(1 g) = -2.26%



0 dB = 8.66 W/kg = 9.38 dBW/kg

PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 945

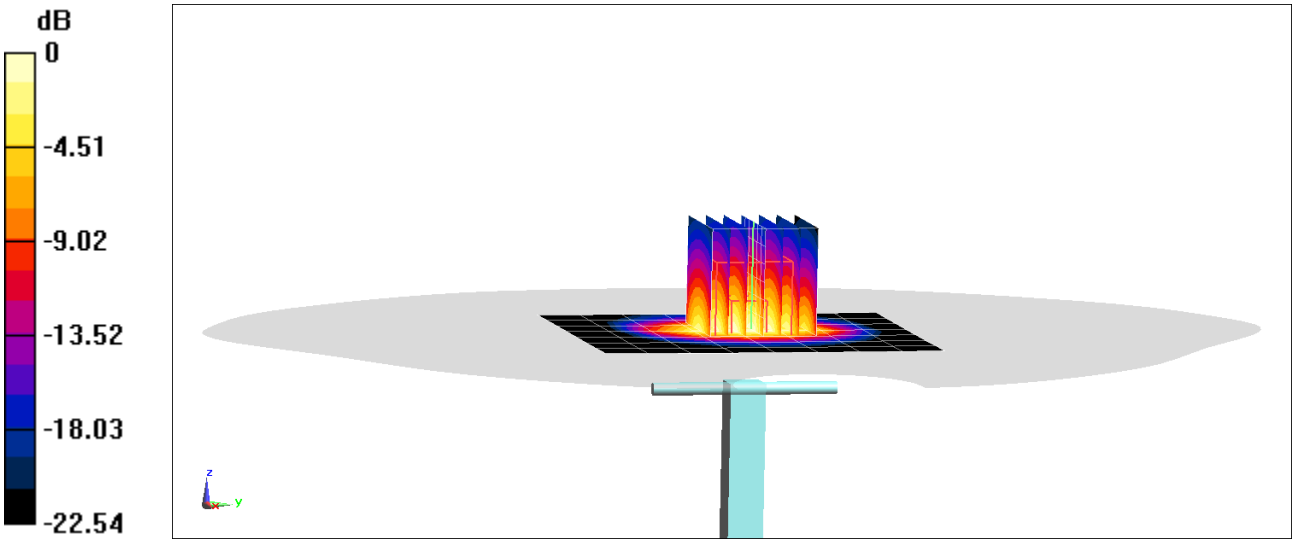
Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Head Medium parameters used:
f = 2450 MHz; σ = 1.776 S/m; ε_r = 37.711; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-08-2020; Ambient Temp: 22.5°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7427; ConvF(7.22, 7.22, 7.22) @ 2450 MHz; Calibrated: 2/19/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1403; Calibrated: 2/13/2020
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736
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) = 11.4 W/kg
SAR(1 g) = 5.45 W/kg
Deviation(1 g) = 6.86%



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

PCTEST

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

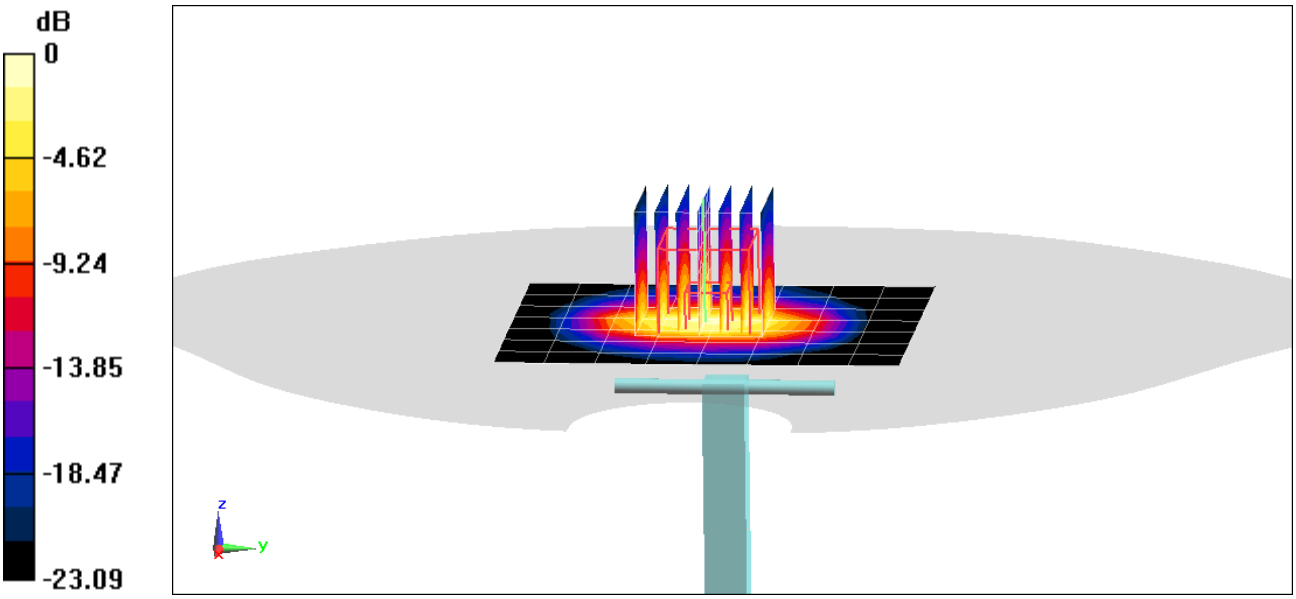
Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Head Medium parameters used:
f = 2450 MHz; σ = 1.877 S/m; ε_r = 38.603; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-22-2020; Ambient Temp: 21.9°C; Tissue Temp: 20.3°C

Probe: EX3DV4 - SN7490; ConvF(7.84, 7.84, 7.84) @ 2450 MHz; Calibrated: 12/13/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1532; Calibrated: 12/5/2019
Phantom: Twin-SAM V4.0 SUB use; Type: QD 000 P40 CC; Serial: 1403
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) = 12.0 W/kg
SAR(1 g) = 5.17 W/kg
Deviation(1 g) = -2.64%



0 dB = 8.75 W/kg = 9.42 dBW/kg

PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 945

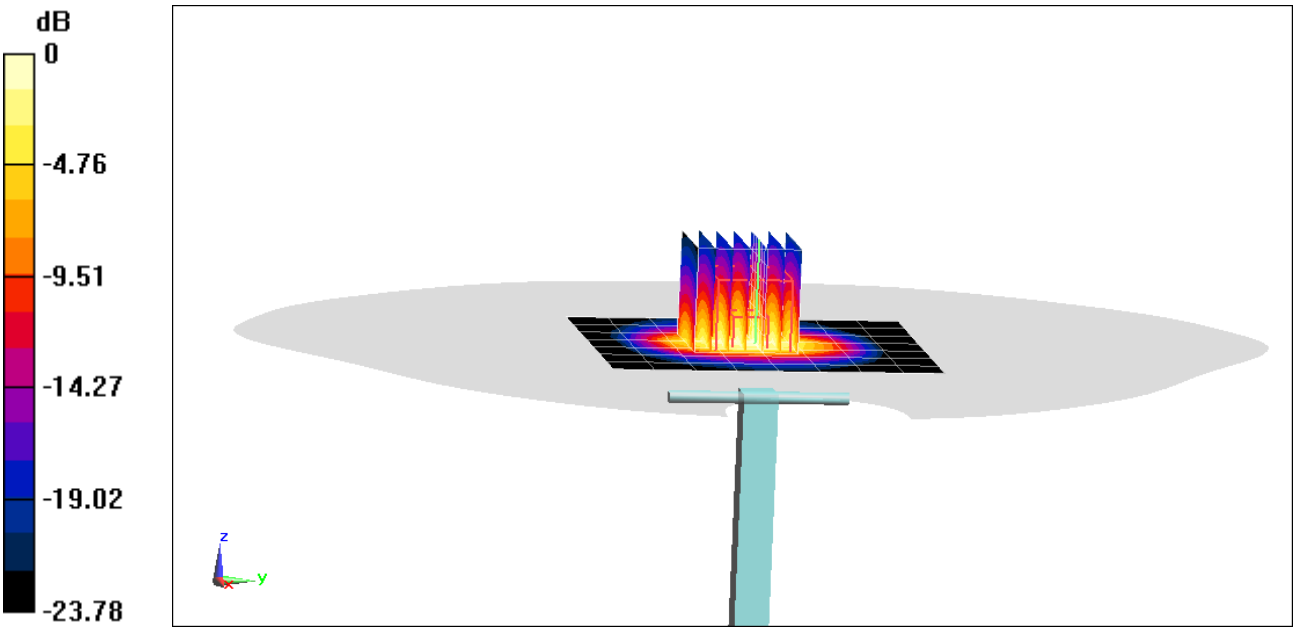
Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Head Medium parameters used:
f = 2450 MHz; σ = 1.845 S/m; ε_r = 38.397; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-26-2020; Ambient Temp: 21.1°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN7490; ConvF(7.84, 7.84, 7.84) @ 2450 MHz; Calibrated: 12/13/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1532; Calibrated: 12/5/2019
Phantom: Twin-SAM V4.0 SUB use; Type: QD 000 P40 CC; Serial: 1403
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) = 11.2 W/kg
SAR(1 g) = 5.03 W/kg
Deviation(1 g) = -1.37%



0 dB = 8.44 W/kg = 9.26 dBW/kg

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

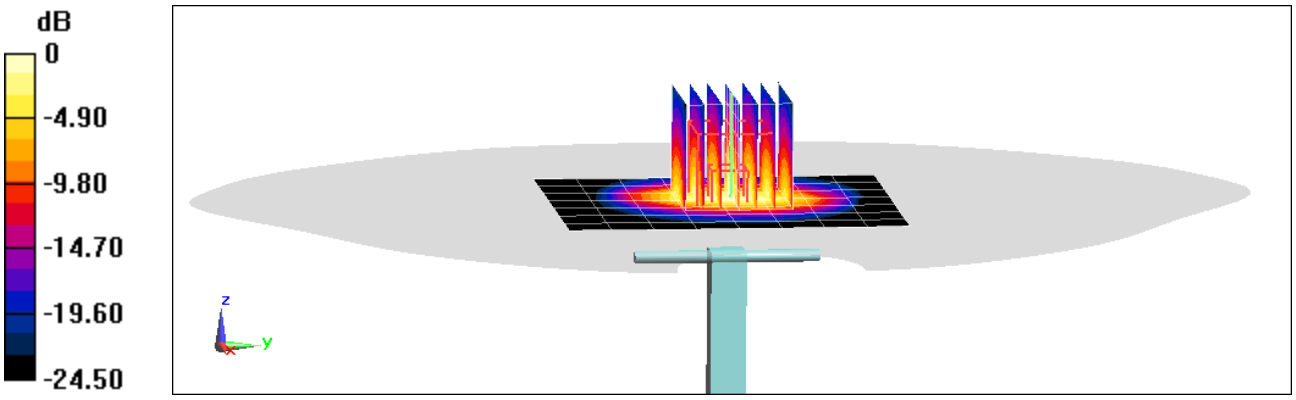
Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Head Medium parameters used:
f = 2450 MHz; σ = 1.843 S/m; ε_r = 38.836; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-31-2020; Ambient Temp: 22.4°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7421; ConvF(7.47, 7.47, 7.47) @ 2450 MHz; Calibrated: 3/20/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn604; Calibrated: 3/19/2020
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)

2450 MHz System Verification at 20.0 dBm (100 mW)

Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm
Zoom Scan (8x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 11.8 W/kg
SAR(1 g) = 5.67 W/kg
Deviation(1 g) = 6.78%



0 dB = 9.59 W/kg = 9.82 dBW/kg

PCTEST

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1069

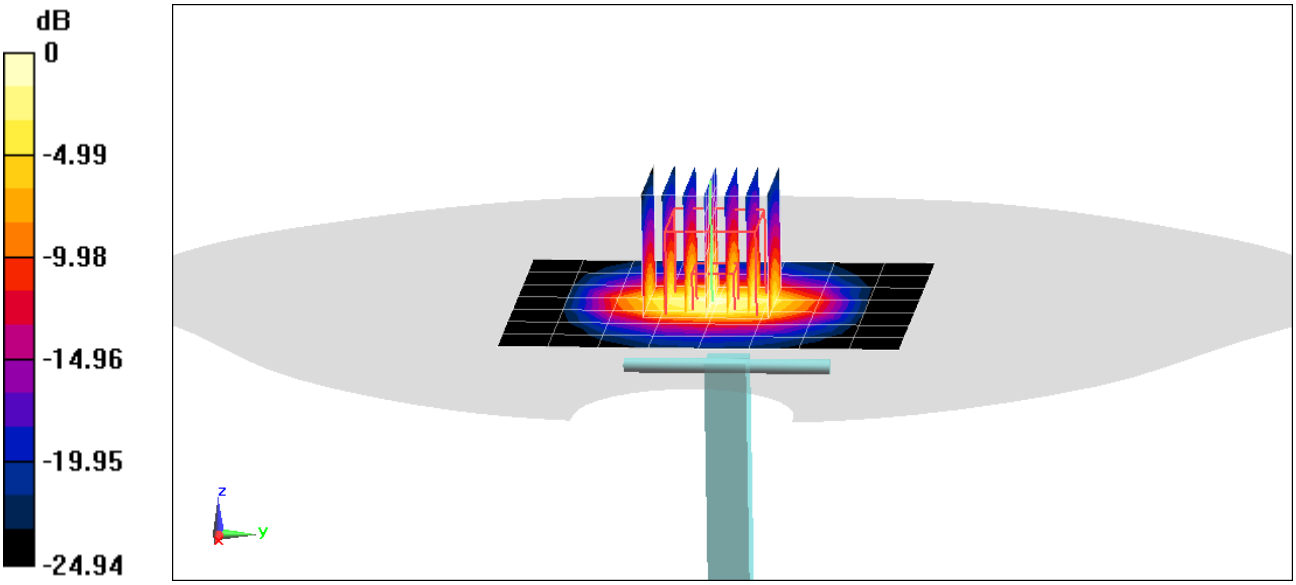
Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Head Medium parameters used:
f = 2600 MHz; σ = 2.052 S/m; ε_r = 39.023; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-01-2020; Ambient Temp: 23.1°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7490; ConvF(7.64, 7.64, 7.64) @ 2600 MHz; Calibrated: 12/13/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1532; Calibrated: 12/5/2019
Phantom: Twin-SAM V4.0 SUB use; Type: QD 000 P40 CC; Serial: 1403
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) = 14.1 W/kg
SAR(1 g) = 5.87 W/kg
Deviation(1 g) = 3.16%



0 dB = 10.2 W/kg = 10.09 dBW/kg

PCTEST

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1009

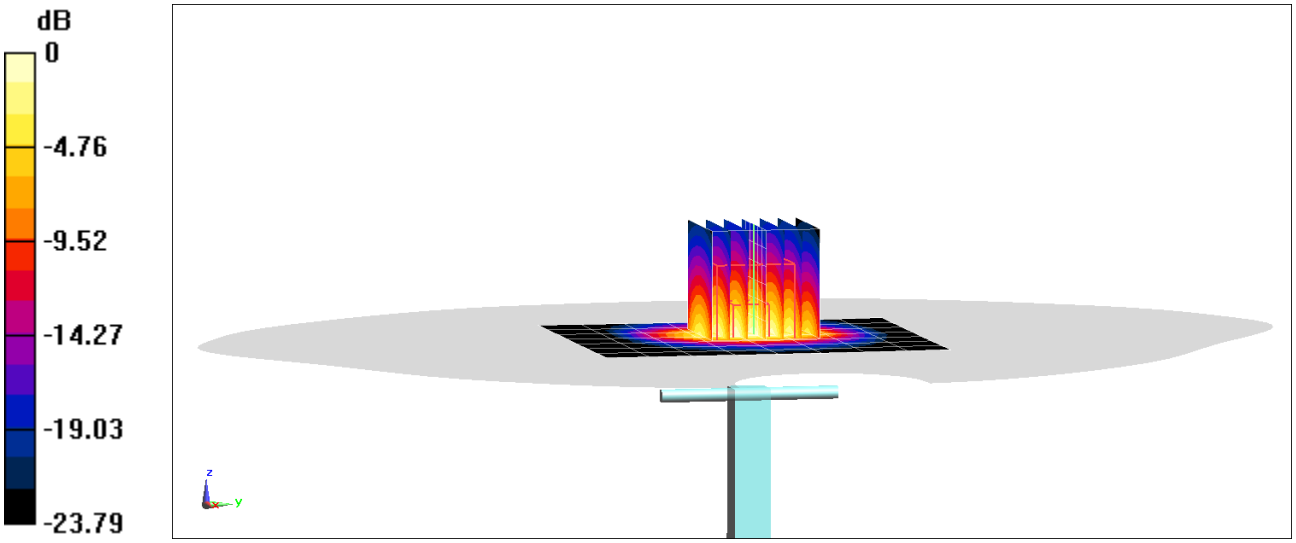
Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Head Medium parameters used:
f = 2600 MHz; σ = 1.895 S/m; ε_r = 37.484; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-08-2020; Ambient Temp: 22.5°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7427; ConvF(7, 7, 7) @ 2600 MHz; Calibrated: 2/19/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1403; Calibrated: 2/13/2020
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736
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) = 12.6 W/kg
SAR(1 g) = 5.8 W/kg
Deviation(1 g) = 3.94%



0 dB = 9.96 W/kg = 9.98 dBW/kg

PCTEST

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1069

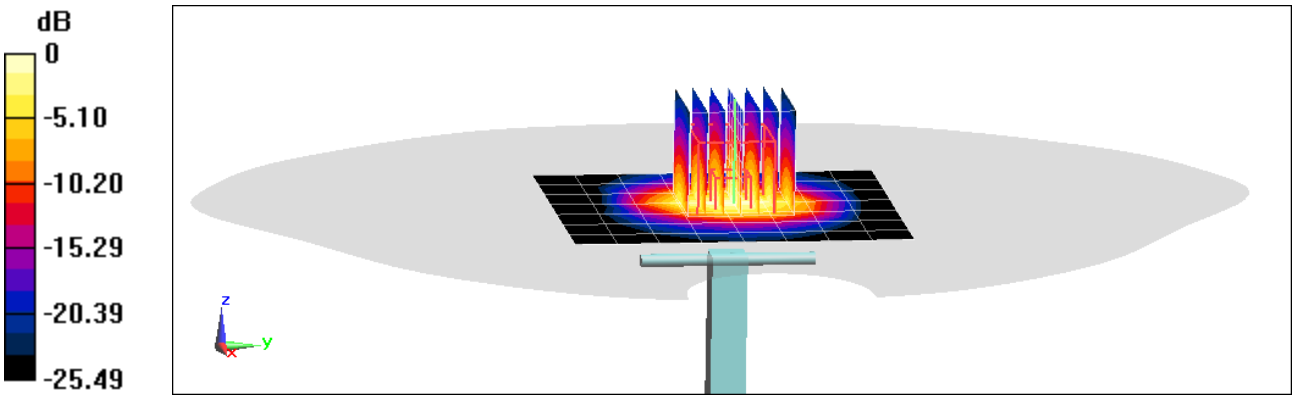
Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Head Medium parameters used:
f = 2600 MHz; σ = 2.012 S/m; ε_r = 38.303; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-31-2020; Ambient Temp: 22.4°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7421; ConvF(7.24, 7.24, 7.24) @ 2600 MHz; Calibrated: 3/20/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn604; Calibrated: 3/19/2020
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)

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) = 12.6 W/kg
SAR(1 g) = 5.81 W/kg
Deviation(1 g) = 2.11%



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

PCTEST

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

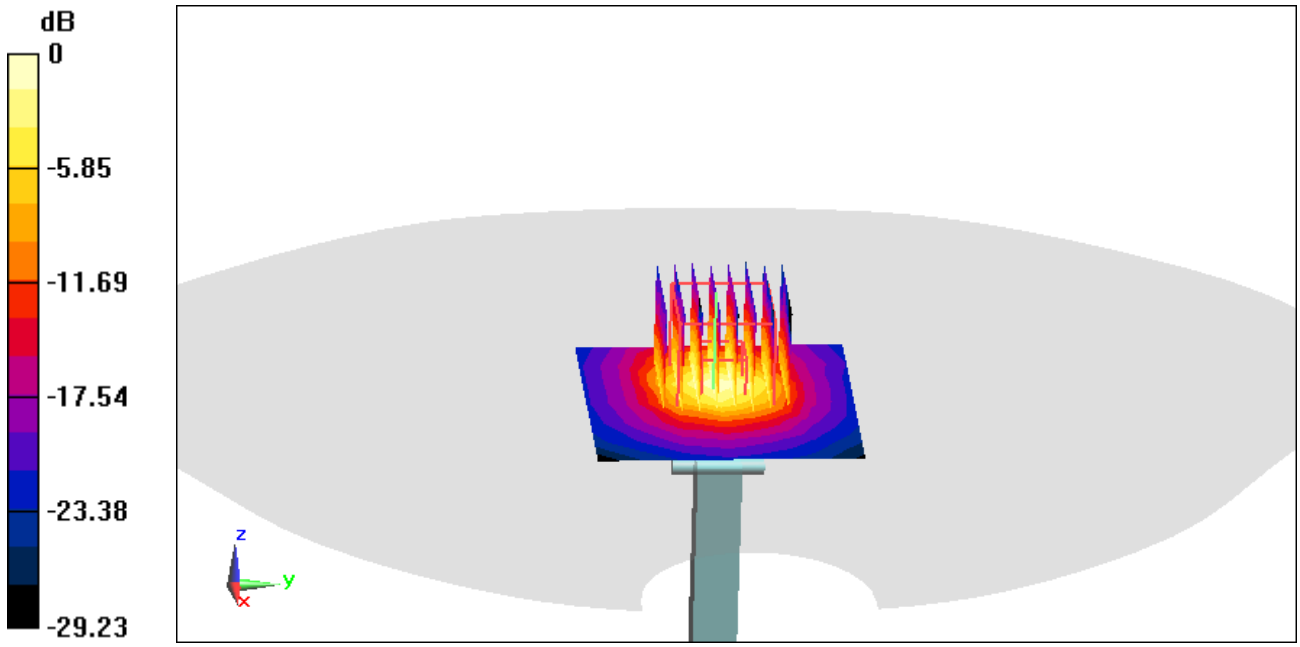
Communication System: UID 0, CW; Frequency: 5250 MHz; Duty Cycle: 1:1
Medium: 5 GHz Head Medium parameters used (interpolated):
f = 5250 MHz; σ = 4.502 S/m; ε_r = 35.745; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-24-2020; Ambient Temp: 22.8°C; Tissue Temp: 22.2°C

Probe: EX3DV4 - SN7420; ConvF(5.18, 5.18, 5.18) @ 5250 MHz; Calibrated: 11/21/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1213; Calibrated: 11/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275
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=10mm, dy=10mm
Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4
Peak SAR (extrapolated) = 15.9 W/kg
SAR(1 g) = 3.95 W/kg
Deviation(1 g) = -3.19%



0 dB = 9.62 W/kg = 9.83 dBW/kg

PCTEST

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

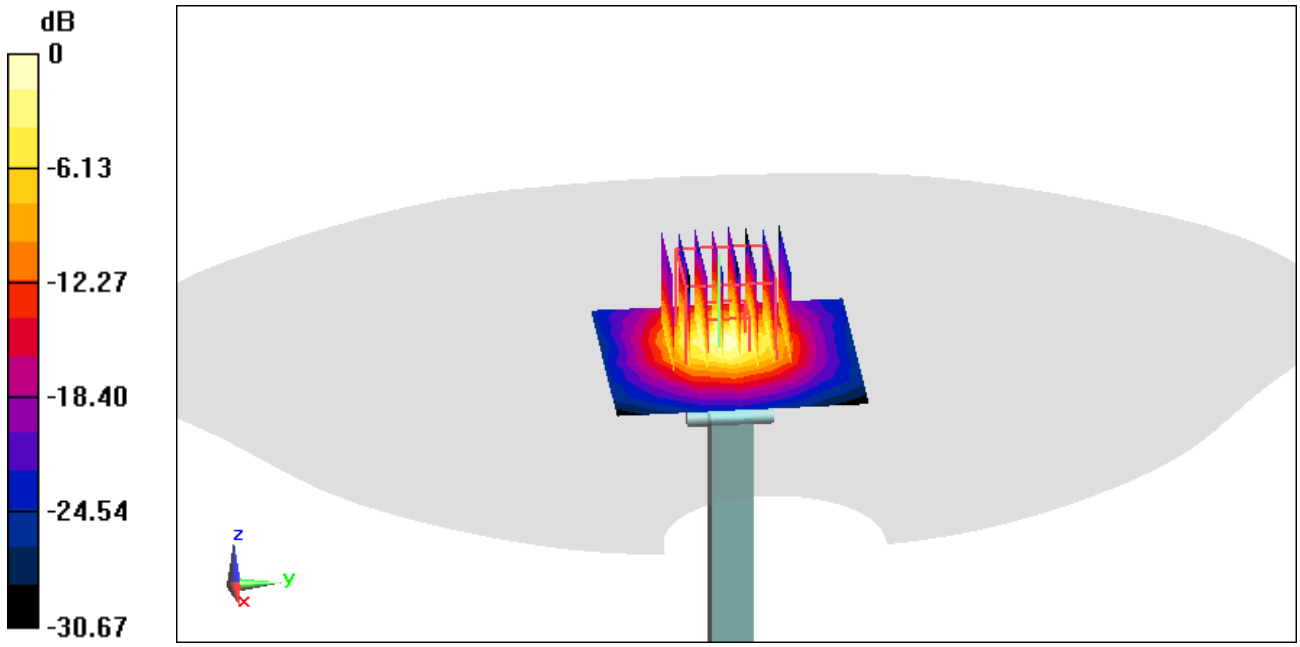
Communication System: UID 0, CW; Frequency: 5600 MHz; Duty Cycle: 1:1
Medium: 5 GHz Head Medium parameters used:
f = 5600 MHz; σ = 4.864 S/m; ε_r = 35.326; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-24-2020; Ambient Temp: 22.8°C; Tissue Temp: 22.2°C

Probe: EX3DV4 - SN7420; ConvF(4.63, 4.63, 4.63) @ 5600 MHz; Calibrated: 11/21/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1213; Calibrated: 11/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275
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) = 18.2 W/kg
SAR(1 g) = 4.22 W/kg
Deviation(1 g) = -0.82%



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

PCTEST

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

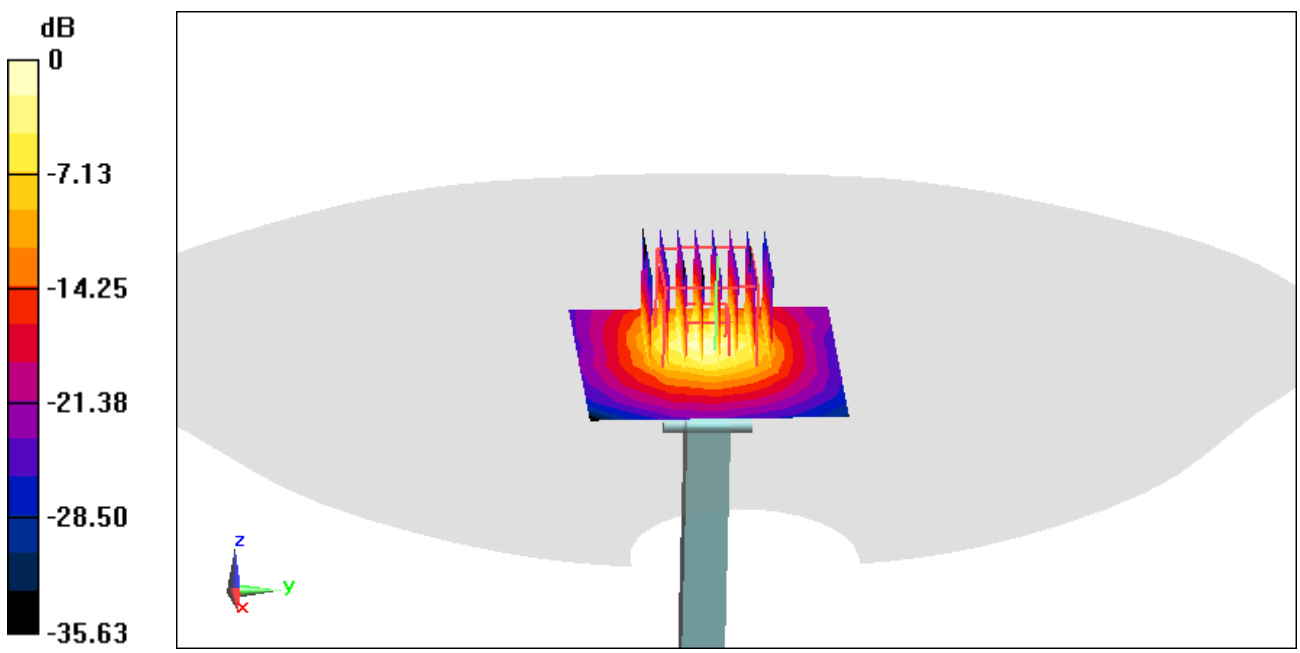
Communication System: UID 0, CW; Frequency: 5750 MHz; Duty Cycle: 1:1
Medium: 5 GHz Head Medium parameters used (interpolated):
f = 5750 MHz; σ = 5.005 S/m; ε_r = 35.077; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-24-2020; Ambient Temp: 22.8°C; Tissue Temp: 22.2°C

Probe: EX3DV4 - SN7420; ConvF(4.84, 4.84, 4.84) @ 5750 MHz; Calibrated: 11/21/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1213; Calibrated: 11/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275
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 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4
Peak SAR (extrapolated) = 17.8 W/kg
SAR(1 g) = 3.96 W/kg
Deviation(1 g) = -1.74%



0 dB = 10.2 W/kg = 10.09 dBW/kg

PCTEST

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

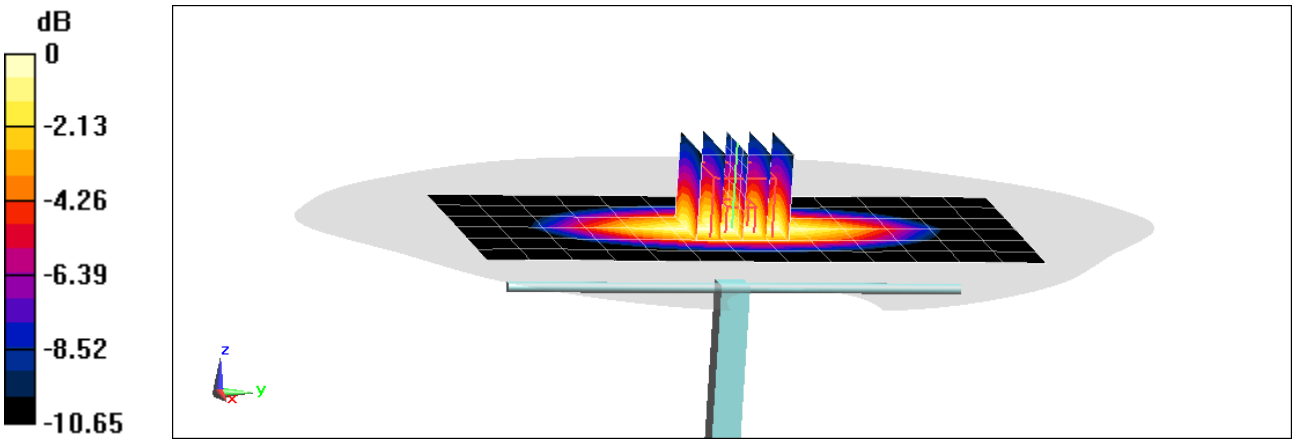
Communication System: UID 0, CW; Frequency: 850 MHz; Duty Cycle: 1:1
Medium: 835 MHz Body Medium parameters used:
f = 850 MHz; σ = 0.99 S/m; ε_r = 53.085; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 07-12-2020; Ambient Temp: 20.1°C; Tissue Temp: 19.8°C

Probe: EX3DV4 - SN7421; ConvF(9.42, 9.42, 9.42) @ 850 MHz; Calibrated: 3/20/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn604; Calibrated: 3/19/2020
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=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Peak SAR (extrapolated) = 3.16 W/kg
SAR(10 g) = 1.41 W/kg
Deviation(10 g) = 5.54%



0 dB = 2.84 W/kg = 4.53 dBW/kg

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1104

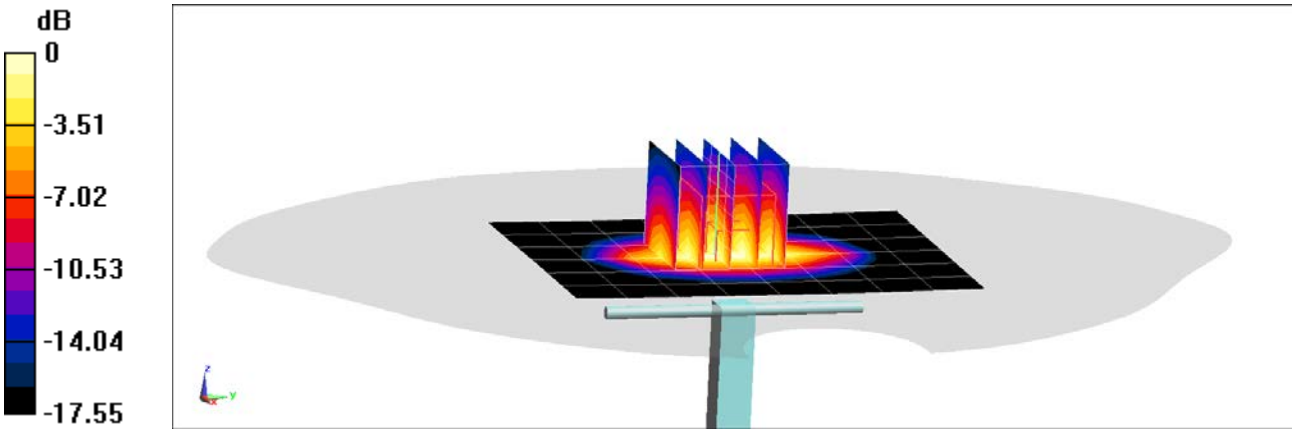
Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1
Medium: 1750 MHz Body Medium parameters used:
f = 1750 MHz; σ = 1.475 S/m; ε_r = 51.528; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06-30-2020; Ambient Temp: 23.8°C; Tissue Temp: 20.3°C

Probe: EX3DV4 - SN3837; ConvF(7.88, 7.88, 7.88) @ 1750 MHz; Calibrated: 1/20/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn793; Calibrated: 1/14/2020
Phantom: Twin-SAM V4.0 Main; Type: QD 000 P40 CC; Serial: 1114
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) = 7.02 W/kg
SAR(10 g) = 2.07 W/kg
Deviation(10 g) = 5.61%



0 dB = 5.89 W/kg = 7.70 dBW/kg

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1092

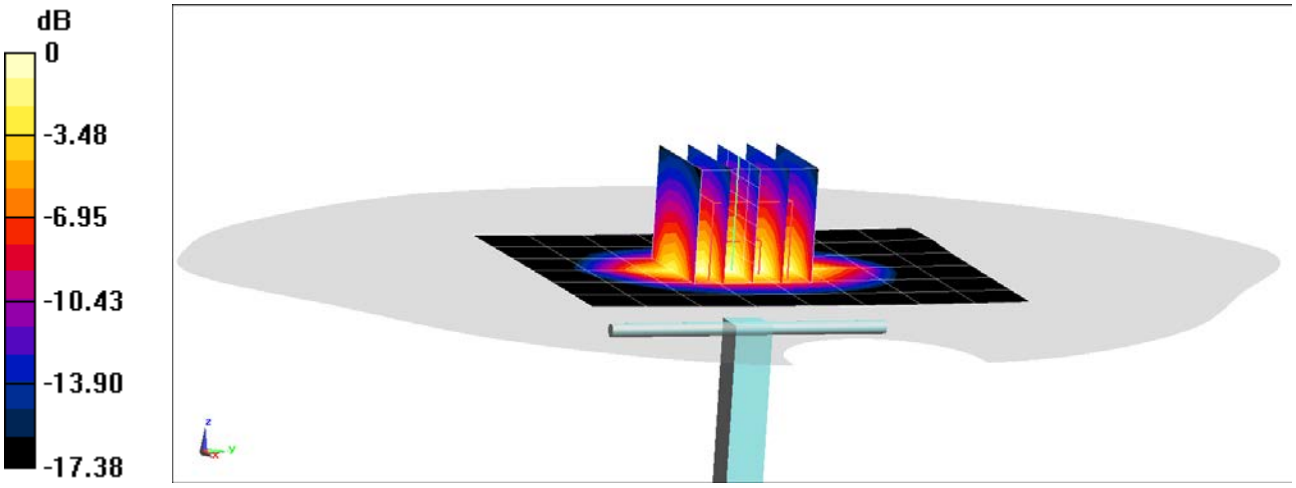
Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1
Medium: 1750 MHz Body Medium parameters used:
f = 1750 MHz; σ = 1.479 S/m; ε_r = 52.125; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-02-2020; Ambient Temp: 21.4°C; Tissue Temp: 20.3°C

Probe: EX3DV4 - SN3837; ConvF(7.88, 7.88, 7.88) @ 1750 MHz; Calibrated: 1/20/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn793; Calibrated: 1/14/2020
Phantom: Twin-SAM V4.0 Main; Type: QD 000 P40 CC; Serial: 1114
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(10 g) = 2 W/kg
Deviation(10 g) = 3.09%



0 dB = 5.94 W/kg = 7.74 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d180

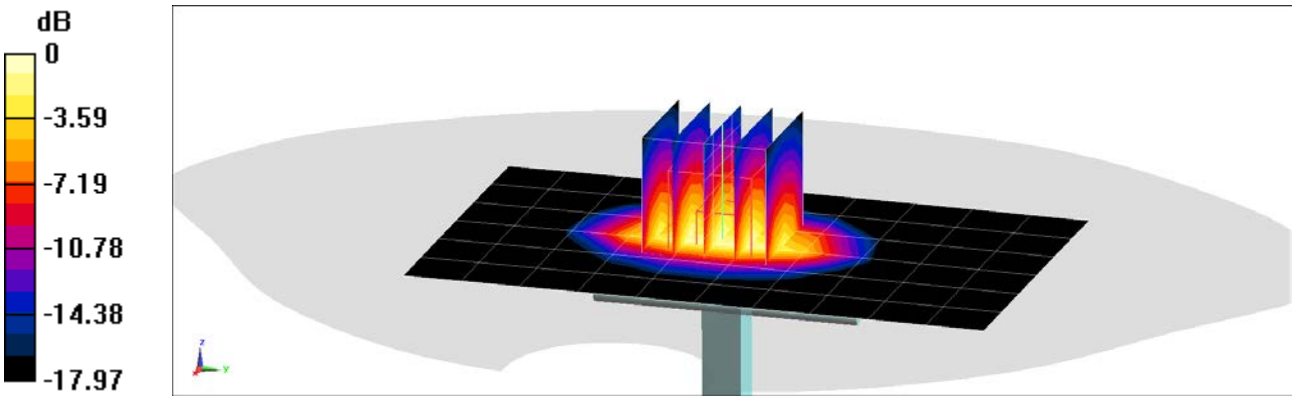
Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Body Medium parameters used (interpolated):
f = 1900 MHz; σ = 1.574 S/m; ε_r = 52.265; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-08-2020; Ambient Temp: 22.0°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN7532; ConvF(7.96, 7.96, 7.96) @ 1900 MHz; Calibrated: 4/20/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn501; Calibrated: 4/15/2020
Phantom: Twin-SAM V8.0_Left; Type: QD 000 P41 AA; Serial: 1935
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) = 7.68 W/kg
SAR(10 g) = 2.14 W/kg
Deviation(10 g) = 2.39%



0 dB = 6.46 W/kg = 8.10 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d181

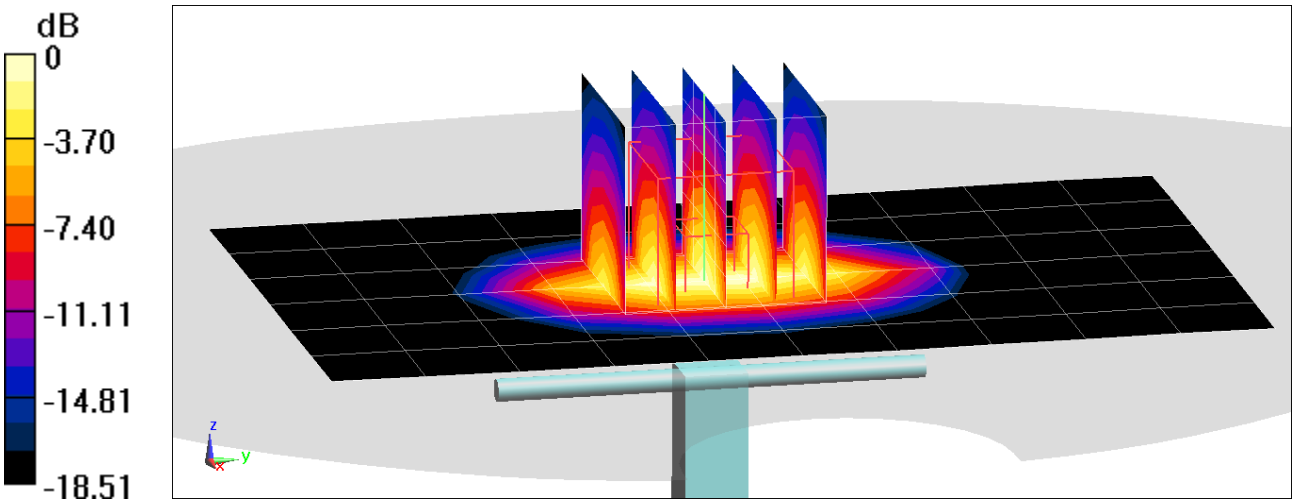
Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Body Medium parameters used (interpolated):
f = 1900 MHz; σ = 1.583 S/m; ε_r = 51.104; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-23-2020; Ambient Temp: 23.0°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7421; ConvF(7.68, 7.68, 7.68) @ 1900 MHz; Calibrated: 3/20/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn604; Calibrated: 3/19/2020
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) = 7.57 W/kg
SAR(10 g) = 2.16 W/kg
Deviation(10 g) = 3.35%



0 dB = 6.50 W/kg = 8.13 dBW/kg

PCTEST

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

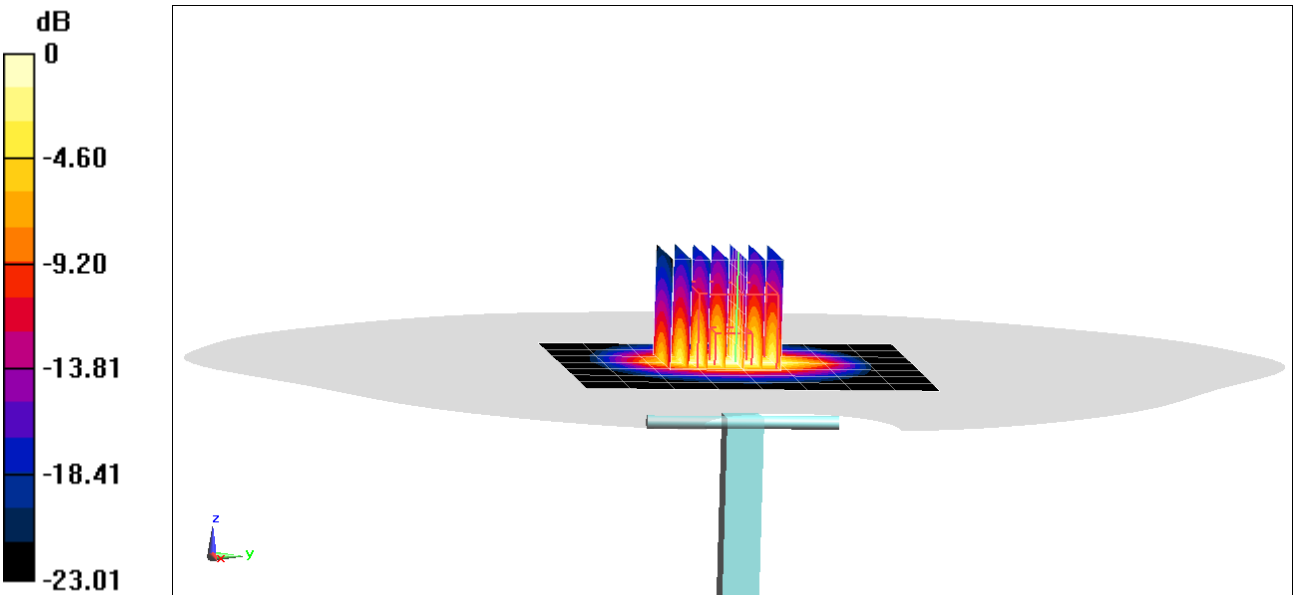
Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Body Medium parameters used:
f = 2450 MHz; σ = 2.031 S/m; ε_r = 51.758; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-13-2020; Ambient Temp: 23.3°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN3949; ConvF(7.75, 7.75, 7.75) @ 2450 MHz; Calibrated: 8/29/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1408; Calibrated: 8/12/2019
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) = 11.3 W/kg
SAR(10 g) = 2.55 W/kg
Deviation(10 g) = 7.14%



0 dB = 9.19 W/kg = 9.63 dBW/kg

PCTEST

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

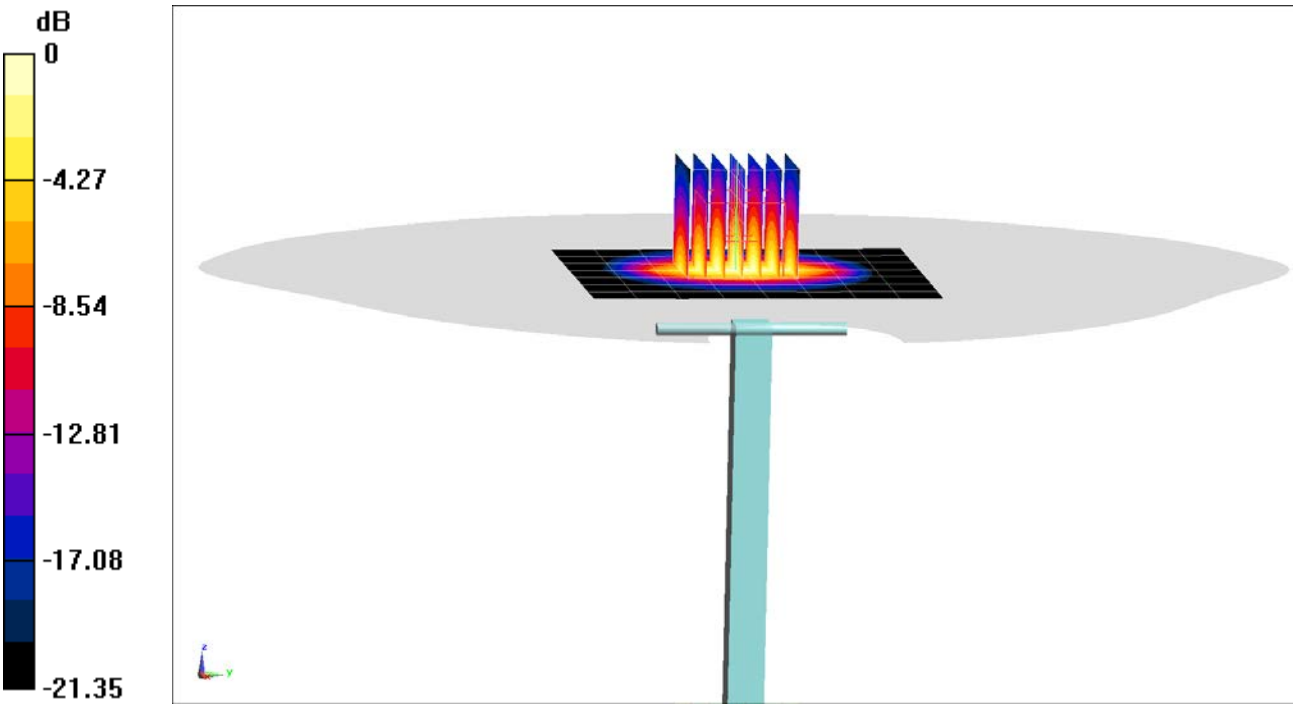
Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Body Medium parameters used:
f = 2450 MHz; σ = 1.997 S/m; ε_r = 51.287; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-20-2020; Ambient Temp: 23.1°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN3949; ConvF(7.75, 7.75, 7.75) @ 2450 MHz; Calibrated: 8/29/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1408; Calibrated: 8/12/2019
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) = 10.8 W/kg
SAR(10 g) = 2.48 W/kg
Deviation(10 g) = 4.20%



0 dB = 8.73 W/kg = 9.41 dBW/kg

PCTEST

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

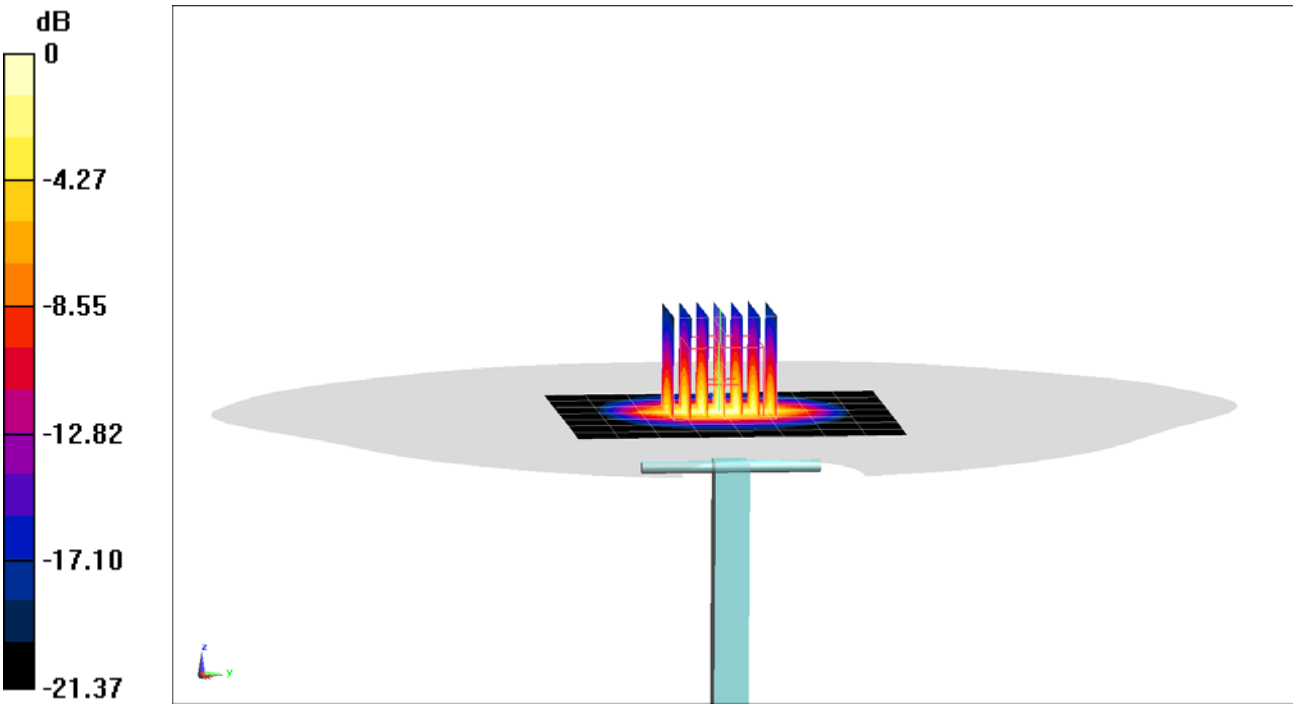
Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Body Medium parameters used:
f = 2450 MHz; σ = 1.999 S/m; ε_r = 51.483; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-22-2020; Ambient Temp: 23.1°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN3949; ConvF(7.75, 7.75, 7.75) @ 2450 MHz; Calibrated: 8/29/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1408; Calibrated: 8/12/2019
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) = 10.9 W/kg
SAR(10 g) = 2.53 W/kg
Deviation(10 g) =4.98%



0 dB = 8.92 W/kg = 9.50 dBW/kg

PCTEST

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

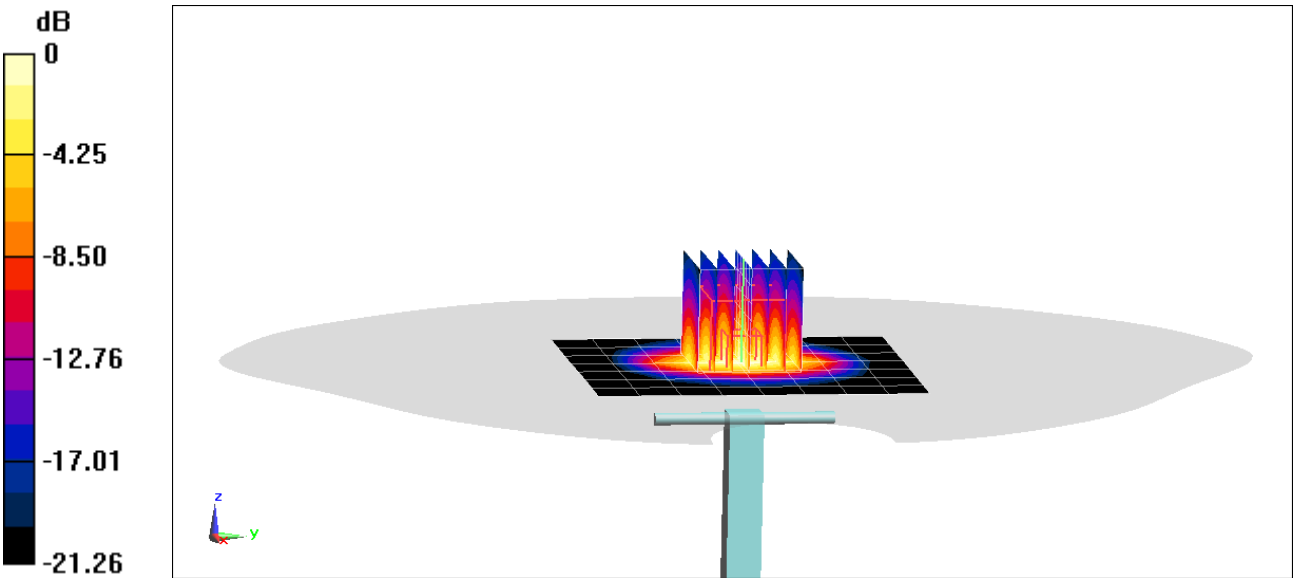
Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Body Medium parameters used:
f = 2450 MHz; σ = 2.011 S/m; ε_r = 51.251; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-27-2020; Ambient Temp: 23.3°C; Tissue Temp: 22.9°C

Probe: EX3DV4 - SN3949; ConvF(7.75, 7.75, 7.75) @ 2450 MHz; Calibrated: 8/29/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1408; Calibrated: 8/12/2019
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) = 9.96 W/kg
SAR(10 g) = 2.25 W/kg
Deviation(10 g) = -6.64%



0 dB = 8.05 W/kg = 9.06 dBW/kg

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1009

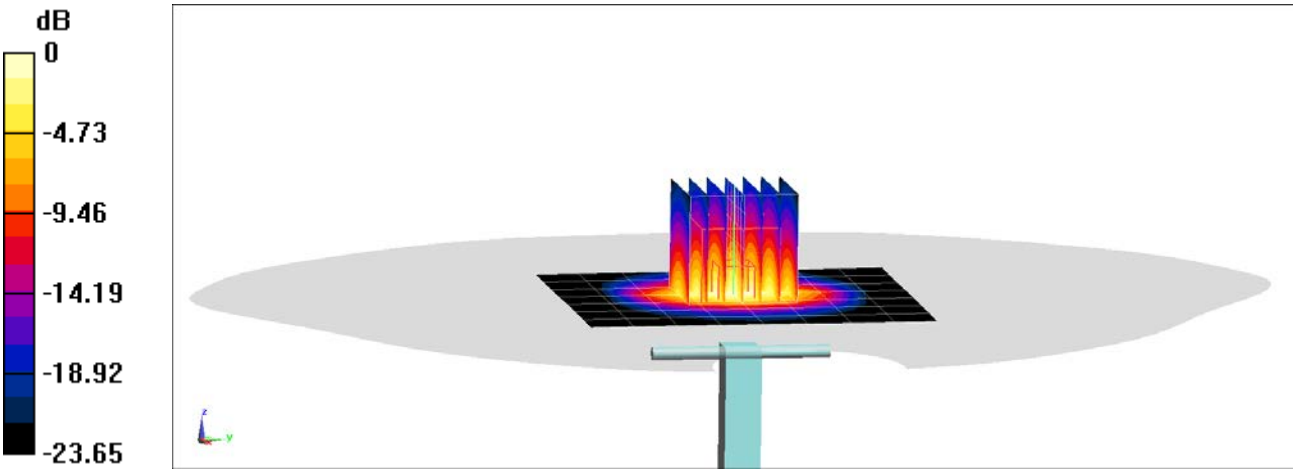
Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Body Medium parameters used:
f = 2600 MHz; σ = 2.25 S/m; ε_r = 51.214; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-13-2020; Ambient Temp: 23.3°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN3949; ConvF(7.69, 7.69, 7.69) @ 2600 MHz; Calibrated: 8/29/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1408; Calibrated: 8/12/2019
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) = 12.6 W/kg
SAR(10 g) = 2.46 W/kg
Deviation(10 g) = -1.60%



0 dB = 9.93 W/kg = 9.97 dBW/kg

PCTEST

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1069

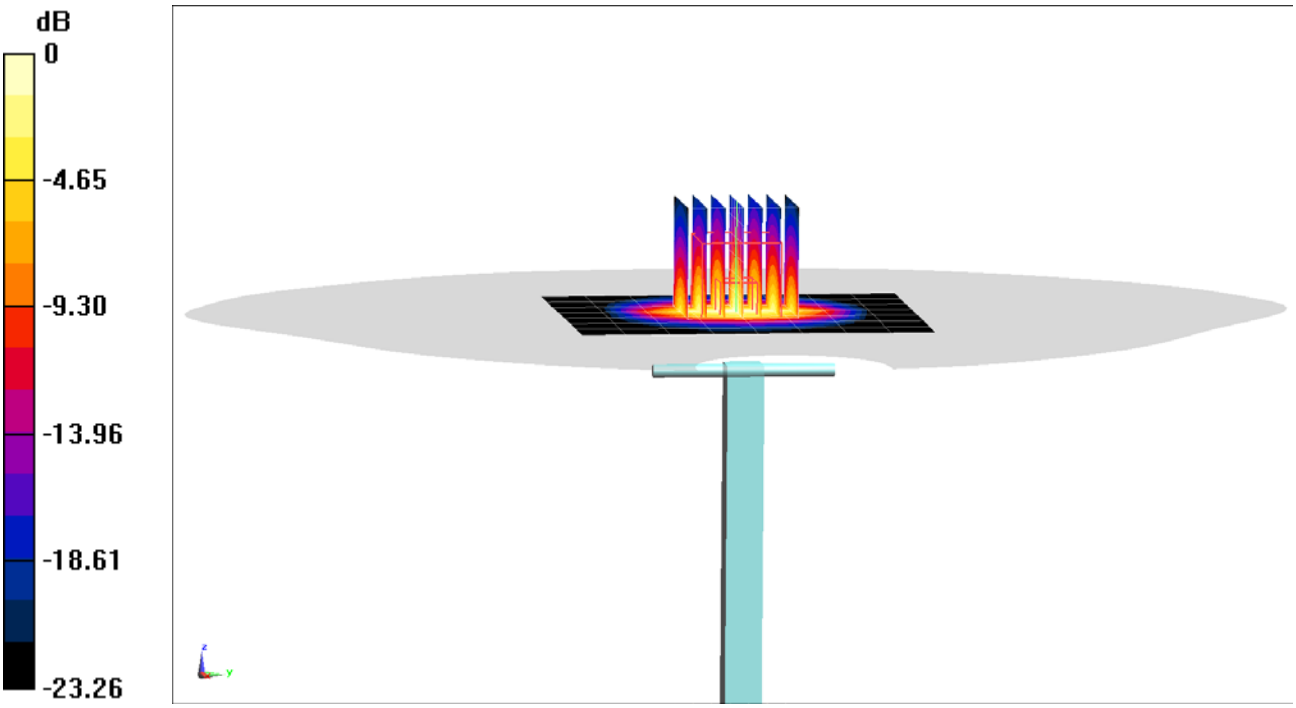
Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Body Medium parameters used:
f = 2600 MHz; σ = 2.204 S/m; ε_r = 50.742; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-20-2020; Ambient Temp: 23.1°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN3949; ConvF(7.69, 7.69, 7.69) @ 2600 MHz; Calibrated: 8/29/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1408; Calibrated: 8/12/2019
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) = 12.6 W/kg
SAR(10 g) = 2.53 W/kg
Deviation(10 g) = 2.02%



0 dB = 10.0 W/kg = 10.00 dBW/kg

PCTEST

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

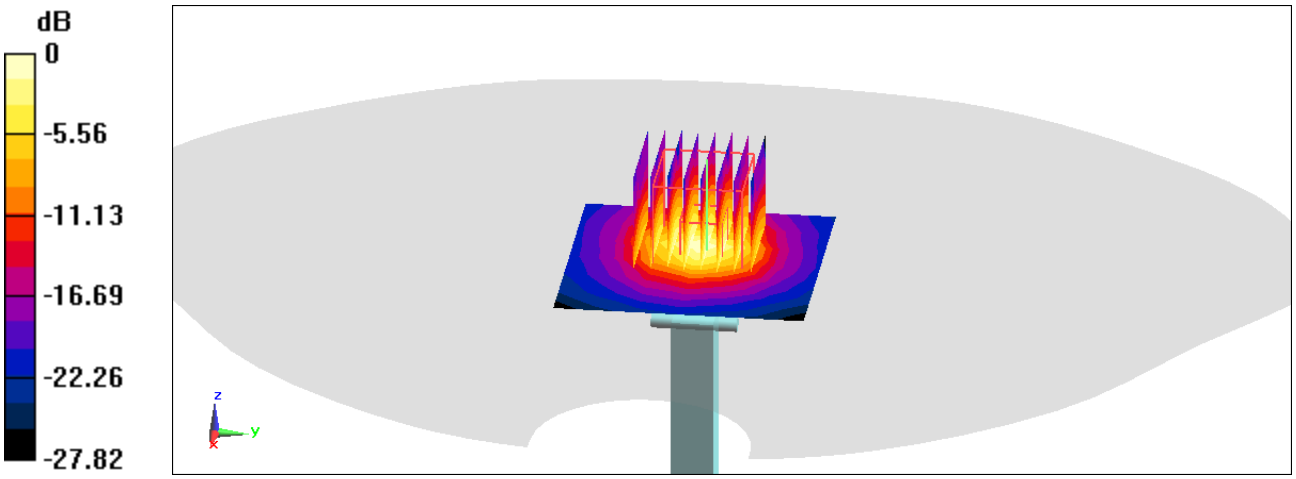
Communication System: UID 0, CW; Frequency: 5250 MHz; Duty Cycle: 1:1
Medium: 5 GHz Body Medium parameters used (interpolated):
f = 5250 MHz; σ = 5.539 S/m; ε_r = 47.886; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-29-2020; Ambient Temp: 21.6°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7420; ConvF(4.8, 4.8, 4.8) @ 5250 MHz; Calibrated: 11/21/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1213; Calibrated: 11/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275
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=10mm, dy=10mm
Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4
Peak SAR (extrapolated) = 14.5 W/kg
SAR(10 g) = 0.949 W/kg
Deviation(10 g) = -7.86%



0 dB = 8.51 W/kg = 9.30 dBW/kg

PCTEST

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

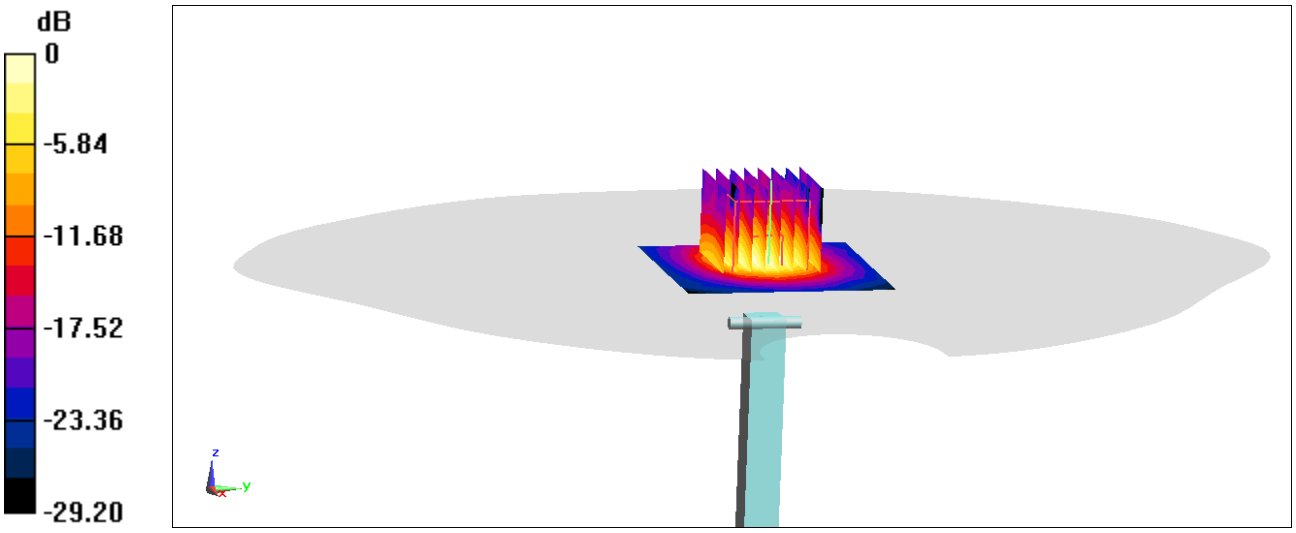
Communication System: UID 0, CW; Frequency: 5600 MHz; Duty Cycle: 1:1
Medium: 5 GHz Body Medium parameters used:
f = 5600 MHz; σ = 6.007 S/m; ε_r = 47.297; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-29-2020; Ambient Temp: 21.6°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7420; ConvF(4.1, 4.1, 4.1) @ 5600 MHz; Calibrated: 11/21/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1213; Calibrated: 11/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275
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) = 18.2 W/kg
SAR(10 g) = 1.09 W/kg
Deviation(10 g) = 0.46%



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

PCTEST

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

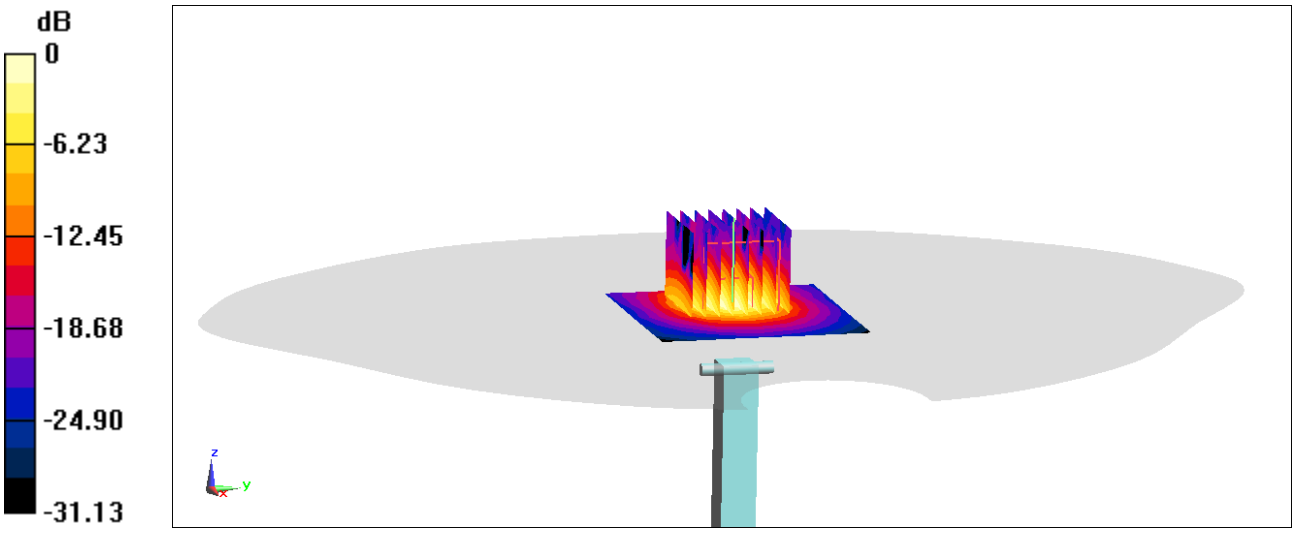
Communication System: UID 0, CW; Frequency: 5750 MHz; Duty Cycle: 1:1
Medium: 5 GHz Body Medium parameters used (interpolated):
f = 5750 MHz; σ = 6.222 S/m; ε_r = 47.031; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-29-2020; Ambient Temp: 21.6°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7420; ConvF(4.28, 4.28, 4.28) @ 5750 MHz; Calibrated: 11/21/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1213; Calibrated: 11/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275
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 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4
Peak SAR (extrapolated) = 18.1 W/kg
SAR(10 g) = 0.997 W/kg
Deviation(10 g) = -4.13%



0 dB = 11.1 W/kg = 10.45 dBW/kg

APPENDIX C: SAR TISSUE SPECIFICATIONS

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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):

$$Y = \frac{j2\omega\varepsilon_r\varepsilon_0}{\left[\ln(b/a)\right]^2}\int_a^b\int_a^b\int_0^\pi \cos\phi' \frac{\exp\left[-j\omega r(\mu_0\varepsilon_r'\varepsilon_0)^{1/2}\right]}{r} d\phi' d\rho' d\rho$$

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	**Ethanediol** 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	**Alkoxylated alcohol, > C_{16}** 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.

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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

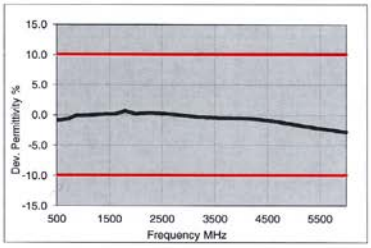
Ambient Condition	22°C ; 30% humidity
TSL Temperature	22°C
Test Date	30-Oct-18
Operator	CL

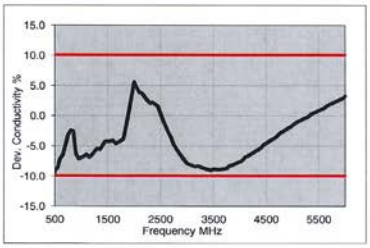
Additional Information

TSL Density
TSL Heat-capacity

Results

	Measured			Target		Diff.to Target [%]	
f [MHz]	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	-6.7
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 1

Figure C-2
600 – 5800 MHz Body Tissue Equivalent Matter

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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

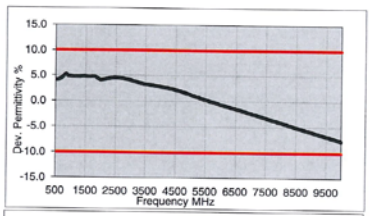
Ambient Condition	22°C ; 30% humidity
TSL Temperature	22°C
Test Date	31-Oct-18
Operator	CL

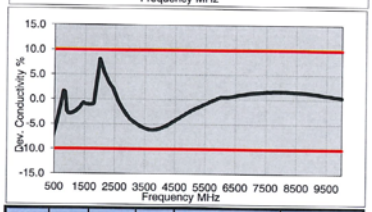
Additional Information

TSL Density
TSL Heat-capacity

Results

	Measured			Target		Diff.to Target [%]	
f [MHz]	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

Figure C-3
600 – 5800 MHz Head Tissue Equivalent Matter

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APPENDIX D: SAR SYSTEM VALIDATION

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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. 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 #	FREQ. [MHz]	DATE	PROBE SN	PROBE CAL. POINT		COND. (σ)	PERM. (εr)	CW VALIDATION			MOD. VALIDATION		
								SENSITIVITY	PROBE LINEARITY	PROBE ISOTROPY	MOD. TYPE	DUTY FACTOR	PAR
AM1	835	3/12/2020	7427	835	Head	0.887	41.650	PASS	PASS	PASS	GMSK	PASS	N/A
AM8	1750	6/25/2020	7532	1750	Head	1.324	40.239	PASS	PASS	PASS	N/A	N/A	N/A
AM2	1750	12/6/2019	7420	1750	Head	1.345	41.100	PASS	PASS	PASS	N/A	N/A	N/A
AM7	1900	5/20/2020	7490	1900	Head	1.417	39.614	PASS	PASS	PASS	GMSK	PASS	N/A
AM6	1900	3/10/2020	3837	1900	Head	1.437	40.780	PASS	PASS	PASS	GMSK	PASS	N/A
AM7	2450	5/22/2020	7490	2450	Head	1.788	38.887	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
AM1	2450	3/13/2020	7427	2450	Head	1.788	38.750	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
AM4	2450	5/13/2020	7421	2450	Head	1.768	37.562	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
AM7	2600	5/22/2020	7490	2600	Head	1.903	38.634	PASS	PASS	PASS	TDD	PASS	N/A
AM1	2600	3/13/2020	7427	2600	Head	1.902	38.470	PASS	PASS	PASS	TDD	PASS	N/A
AM4	2600	5/13/2020	7421	2600	Head	1.887	37.346	PASS	PASS	PASS	TDD	PASS	N/A
AM2	5250	12/9/2019	7420	5250	Head	4.563	35.076	PASS	PASS	PASS	OFDM	N/A	PASS
AM2	5600	12/10/2019	7420	5600	Head	4.957	34.450	PASS	PASS	PASS	OFDM	N/A	PASS
AM2	5750	12/10/2019	7420	5750	Head	5.120	34.190	PASS	PASS	PASS	OFDM	N/A	PASS

Table D-2
SAR System Validation Summary – 10g

SAR SYSTEM #	FREQ. [MHz]	DATE	PROBE SN	PROBE CAL. POINT		COND. (σ)	PERM. (εr)	CW VALIDATION			MOD. VALIDATION		
								SENSITIVITY	PROBE LINEARITY	PROBE ISOTROPY	MOD. TYPE	DUTY FACTOR	PAR
AM4	835	4/22/2020	7421	835	Body	0.992	54.556	PASS	PASS	PASS	GMSK	PASS	N/A
AM6	1750	3/4/2020	3837	1750	Body	1.452	52.122	PASS	PASS	PASS	N/A	N/A	N/A
AM8	1900	5/27/2020	7532	1900	Body	1.561	50.995	PASS	PASS	PASS	GMSK	PASS	N/A
AM4	1900	4/23/2020	7421	1900	Body	1.577	52.969	PASS	PASS	PASS	GMSK	PASS	N/A
AM3	2450	9/4/2019	3949	2450	Body	1.955	52.220	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
AM3	2600	9/4/2019	3949	2600	Body	2.096	51.970	PASS	PASS	PASS	TDD	PASS	N/A
AM2	5250	12/3/2019	7420	5250	Body	5.500	48.380	PASS	PASS	PASS	OFDM	N/A	PASS
AM2	5600	12/3/2019	7420	5600	Body	5.974	47.790	PASS	PASS	PASS	OFDM	N/A	PASS
AM2	5750	12/3/2019	7420	5750	Body	6.180	47.556	PASS	PASS	PASS	OFDM	N/A	PASS

NOTE: While the probes have been calibrated for both CW and modulated signals, all measurements were performed using communication systems calibrated for CW signals only. 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.

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APPENDIX F: POWER REDUCTION VERIFICATION

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This device supports a power reduction mechanism in which a reduced power level is used when the speaker is active, such as when the device is being used near the mouth. The device uses two power tables for cellular radio and implements the appropriate power table based on the speaker state. Near the mouth mode operation was verified by turning the speaker on for each cellular band that implements a separate power level in next to mouth conditions.

This device also implements a separate independent mechanism that reduces the WIFI duty cycle to a maximum of 30% when the cellular radio is turned on. The duty cycle reduction was verified by recording duty cycle with cellular radio on and off for both 2.4 GHz and 5 GHz WIFI.

Details of both mechanisms and the verification procedures can be found in the operational description. The verification results are included below.

1.1 Main Antenna Power Reduction Verification Summary

Table F-1
Main Antenna Power Reduction Verification

Mode/Band	Antenna	Maximum Scenario Maximum Allowed Target Power [dBm]	Reduced Scenario Maximum Allowed Target Power [dBm]	Conducted Power [dBm]		
				Maximum	Test Case 1	Verdict
LTE Band 7	FCM	22.50 (± 1)	19.50 (± 1)	21.54	18.64	PASS
LTE Band 41 (PC3)	FCM	22.50 (± 1)	21.50 (± 1)	22.30	21.30	PASS

Test Case 1: Device Speaker on.

1.2 WLAN Antenna Duty Cycle Reduction Verification Summary

Table F-2
WLAN Antenna Duty Cycle Reduction Verification

Mode/Band	Antenna	Maximum Scenario Maximum Duty Cycle (%)	Reduced Scenario Maximum Duty Cycle (%)	Duty Cycle [%]		
				Maximum	Test Case 1	Verdict
2.4 GHz WLAN	FCM	100.0%	30.0%	96.2%	29.6%	PASS
5 GHz WLAN	FCM	100.0%	30.0%	93.3%	29.3%	PASS

Test Case 1: Cellular radio is on.

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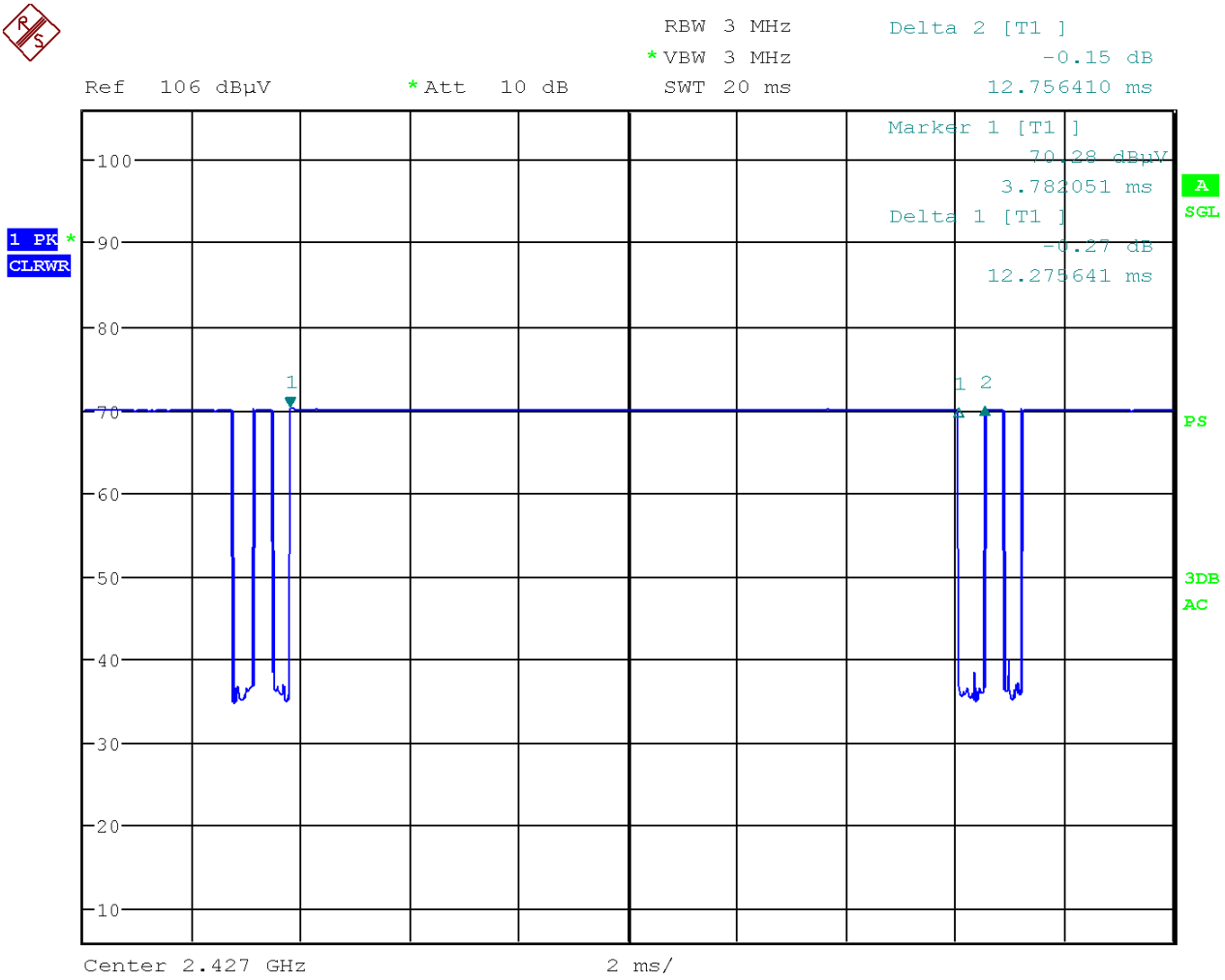
Figure F-1
2.4 GHz WLAN Maximum Transmission Plot



Equation F-1
2.4 GHz WLAN Maximum Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{12.276\ ms}{12.756\ ms} * 100\% = 96.2\%$$

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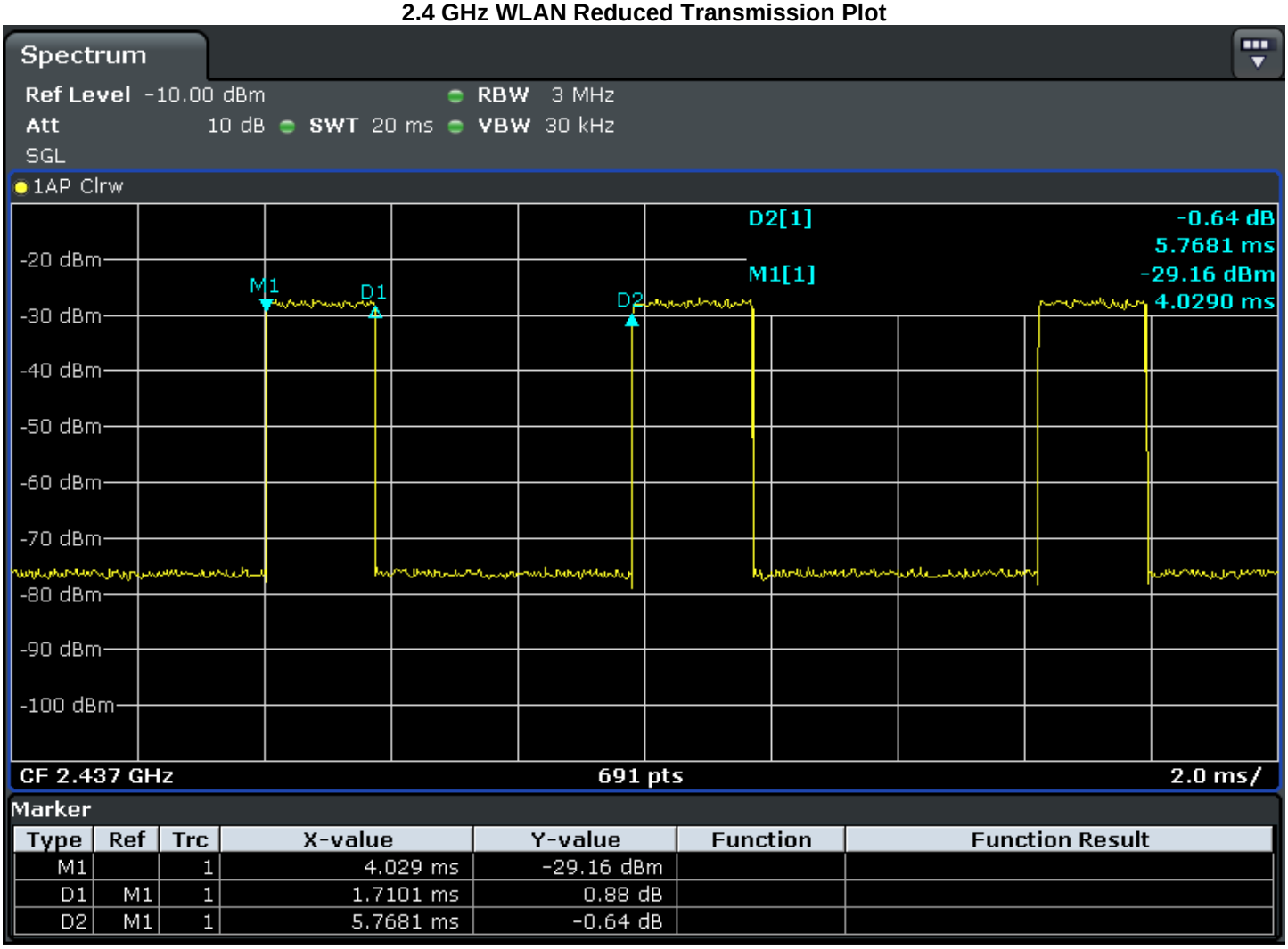
Figure F-2
2.4 GHz WLAN Reduced Transmission Plot



Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	4.029 ms	-29.16 dBm		
D1	M1	1	1.7101 ms	0.88 dB		
D2	M1	1	5.7681 ms	-0.64 dB		

Equation F-2
2.4 GHz WLAN Reduced Duty Cycle Calculation

$$\boldsymbol{Duty\ Cycle} = \frac{\boldsymbol{Pulse\ Width}}{\boldsymbol{Period}} * \mathbf{100\%} = \frac{\mathbf{1.710\ ms}}{\mathbf{5.768\ ms}} * \mathbf{100\%} = \mathbf{29.6\%}$$

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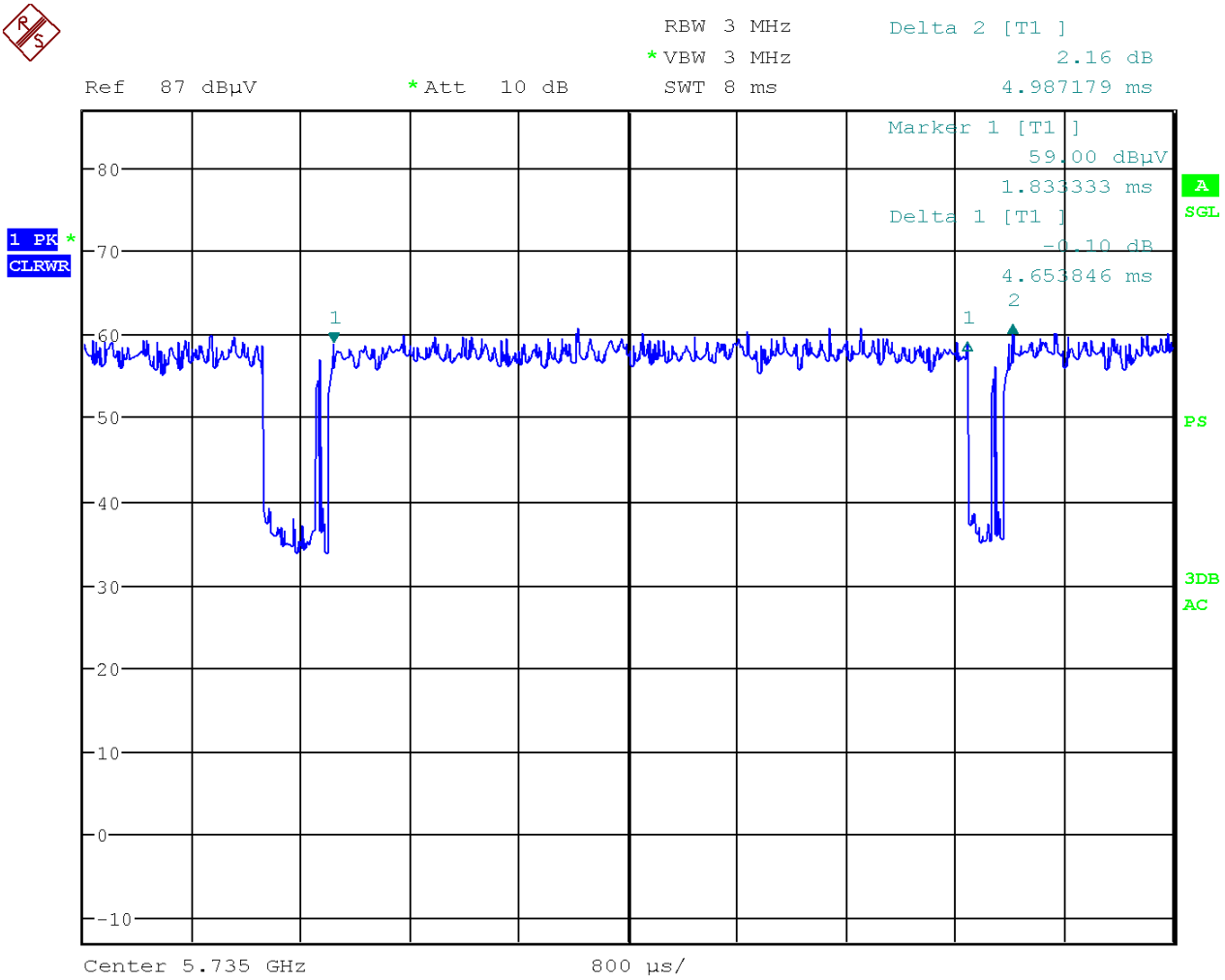
Figure F-3
5 GHz WLAN Maximum Transmission Plot



Equation F-3
5 GHz WLAN Maximum Duty Cycle Calculation

$$\boldsymbol{Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{4.654\ ms}{4.987\ ms} * 100\% = 93.3\%}$$

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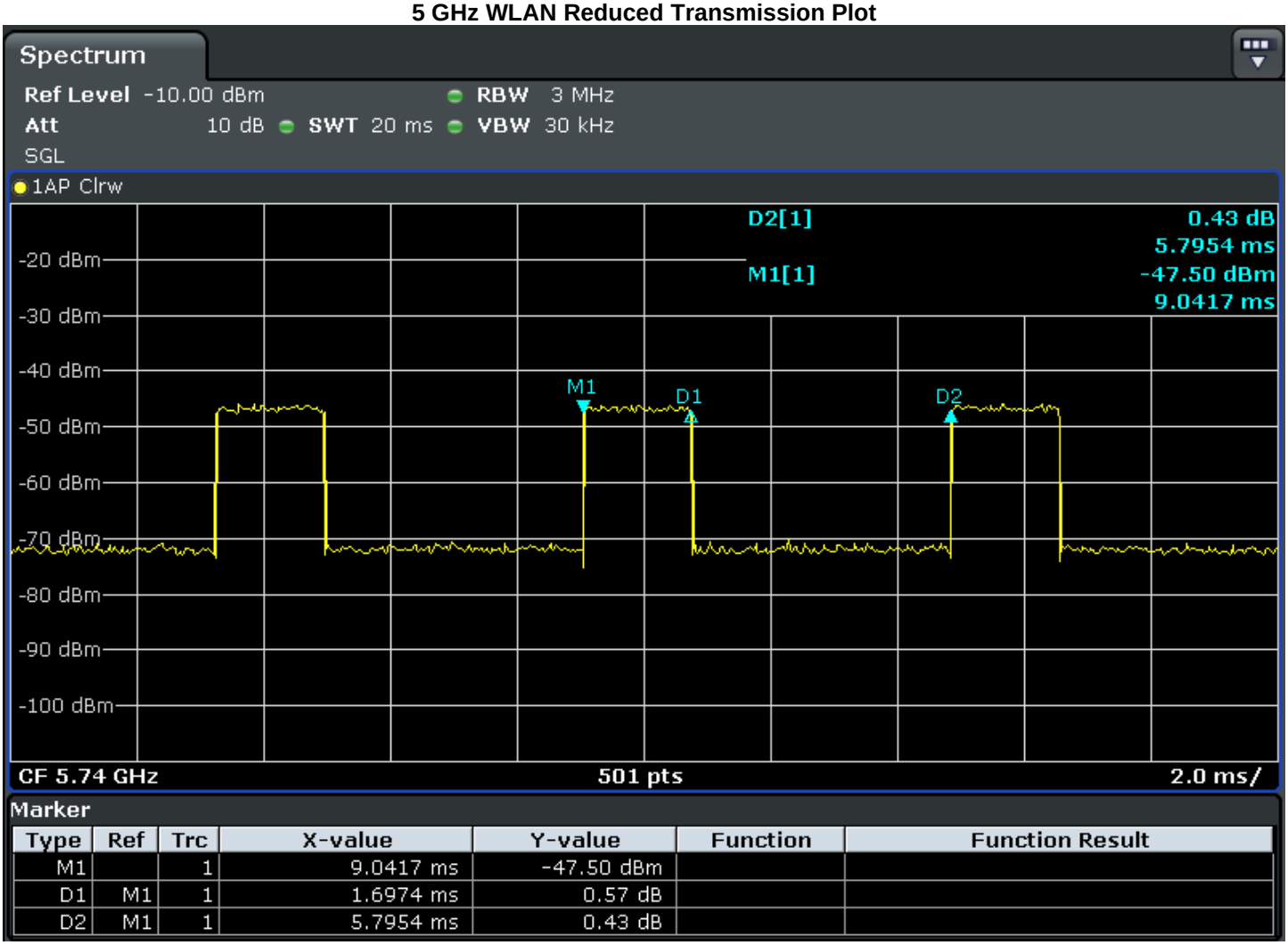
Figure F-4
5 GHz WLAN Reduced Transmission Plot



Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	9.0417 ms	-47.50 dBm		
D1	M1	1	1.6974 ms	0.57 dB		
D2	M1	1	5.7954 ms	0.43 dB		

Equation F-4
5 GHz WLAN Reduced Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{1.697\ ms}{5.795\ ms} * 100\% = 29.3\%$$

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APPENDIX G: PROBE AND DIPOLE CALIBRATION CERTIFICATES

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Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client PC Test

Certificate No: EX3-7427_Feb20

CALIBRATION CERTIFICATE

5-4-2020
ATM

Object	EX3DV4 - SN:7427
Calibration procedure(s)	QA CAL-01.v9, QA CAL-14.v5, QA CAL-23.v5, QA CAL-25.v7 Calibration procedure for dosimetric E-field probes
Calibration date:	February 19, 2020

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	03-Apr-19 (No. 217-02892/02893)	Apr-20
Power sensor NRP-Z91	SN: 103244	03-Apr-19 (No. 217-02892)	Apr-20
Power sensor NRP-Z91	SN: 103245	03-Apr-19 (No. 217-02893)	Apr-20
Reference 20 dB Attenuator	SN: S5277 (20x)	04-Apr-19 (No. 217-02894)	Apr-20
DAE4	SN: 660	27-Dec-19 (No. DAE4-660_Dec19)	Dec-20
Reference Probe ES3DV2	SN: 3013	31-Dec-19 (No. ES3-3013_Dec19)	Dec-20
Secondary Standards	**ID**	**Check Date (in house)**	**Scheduled Check**
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-18)	In house check: Jun-20
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-19)	In house check: Oct-20

	Name	Function	Signature
Calibrated by:	Claudio Leubler	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: February 20, 2020

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., ϑ = 0 is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, ", "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
c) IEC 62209-2, "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)", March 2010
d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- *NORMx,y,z:* Assessed for E-field polarization ϑ = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E^2-field uncertainty inside TSL (see below *ConvF*).
- *NORM(f)x,y,z = NORMx,y,z * frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of *ConvF*.
- *DCPx,y,z:* DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- *PAR:* PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- *Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D* are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. *VR* is the maximum calibration range expressed in RMS voltage across the diode.
- *ConvF and Boundary Effect Parameters:* Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to *NORMx,y,z * ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- *Spherical isotropy (3D deviation from isotropy)*: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset*: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- *Connector Angle*: The angle is assessed using the information gained by determining the *NORMx* (no uncertainty required).

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7427

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu V/(V/m)^2$)[A]	0.54	0.41	0.59	± 10.1 %
DCP (mV)[B]	99.7	100.2	101.0	

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dB√µV	C	D dB	VR mV	Max dev.	Max Unc[E] (k=2)
0	CW	X	0.00	0.00	1.00	0.00	175.5	± 3.5 %	± 4.7 %
		Y	0.00	0.00	1.00		192.4		
		Z	0.00	0.00	1.00		177.5		
10352-AAA	Pulse Waveform (200Hz, 10%)	X	20.00	88.68	18.70	10.00	60.0	± 3.2 %	± 9.6 %
		Y	1.39	60.67	7.81		60.0		
		Z	20.00	89.53	19.23		60.0		
10353-AAA	Pulse Waveform (200Hz, 20%)	X	20.00	90.95	18.66	6.99	80.0	± 2.2 %	± 9.6 %
		Y	1.04	61.79	6.95		80.0		
		Z	20.00	92.76	19.65		80.0		
10354-AAA	Pulse Waveform (200Hz, 40%)	X	20.00	97.43	20.39	3.98	95.0	± 1.2 %	± 9.6 %
		Y	0.41	60.00	4.54		95.0		
		Z	20.00	101.24	22.26		95.0		
10355-AAA	Pulse Waveform (200Hz, 60%)	X	20.00	111.17	25.26	2.22	120.0	± 1.7 %	± 9.6 %
		Y	0.00	152.14	31.98		120.0		
		Z	20.00	118.52	28.55		120.0		
10387-AAA	QPSK Waveform, 1 MHz	X	1.85	69.14	16.52	1.00	150.0	± 3.7 %	± 9.6 %
		Y	1.36	66.74	14.17		150.0		
		Z	1.83	68.63	16.34		150.0		
10388-AAA	QPSK Waveform, 10 MHz	X	2.45	70.30	17.11	0.00	150.0	± 1.0 %	± 9.6 %
		Y	1.85	66.91	15.17		150.0		
		Z	2.45	70.17	17.00		150.0		
10396-AAA	64-QAM Waveform, 100 kHz	X	2.96	71.31	19.32	3.01	150.0	± 1.4 %	± 9.6 %
		Y	2.03	66.08	16.97		150.0		
		Z	3.12	72.49	19.87		150.0		
10399-AAA	64-QAM Waveform, 40 MHz	X	3.64	68.07	16.44	0.00	150.0	± 2.3 %	± 9.6 %
		Y	3.22	66.43	15.48		150.0		
		Z	3.64	68.02	16.39		150.0		
10414-AAA	WLAN CCDF, 64-QAM, 40MHz	X	4.75	65.60	15.67	0.00	150.0	± 4.2 %	± 9.6 %
		Y	4.65	65.95	15.78		150.0		
		Z	4.76	65.54	15.62		150.0		

Note: For details on UID parameters see Appendix

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

[A] The uncertainties of Norm X,Y,Z do not affect the E^2-field uncertainty inside TSL (see Pages 5 and 6).
[B] Numerical linearization parameter: uncertainty not required.
[E] Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7427

Sensor Model Parameters

	C1 fF	C2 fF	α V^{-1}	T1 $ms.V^{-2}$	T2 $ms.V^{-1}$	T3 ms	T4 V^{-2}	T5 V^{-1}	T6
X	39.8	298.30	35.94	9.17	0.00	5.06	0.97	0.27	1.00
Y	29.1	224.68	37.73	3.23	0.19	5.02	0.00	0.26	1.01
Z	42.1	315.28	35.81	8.93	0.00	5.07	1.34	0.20	1.01

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	-32.6
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7427

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) [C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha [G]	Depth [G] (mm)	Unc (k=2)
750	41.9	0.89	10.02	10.02	10.02	0.63	0.80	± 12.0 %
835	41.5	0.90	9.58	9.58	9.58	0.65	0.85	± 12.0 %
1750	40.1	1.37	8.42	8.42	8.42	0.35	0.86	± 12.0 %
1900	40.0	1.40	8.12	8.12	8.12	0.30	0.86	± 12.0 %
2300	39.5	1.67	7.53	7.53	7.53	0.35	0.90	± 12.0 %
2450	39.2	1.80	7.22	7.22	7.22	0.35	0.90	± 12.0 %
2600	39.0	1.96	7.00	7.00	7.00	0.35	0.90	± 12.0 %
5250	35.9	4.71	5.05	5.05	5.05	0.40	1.80	± 13.1 %
5600	35.5	5.07	4.61	4.61	4.61	0.40	1.80	± 13.1 %
5750	35.4	5.22	4.70	4.70	4.70	0.40	1.80	± 13.1 %

[C] Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ± 110 MHz.
[F] At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7427

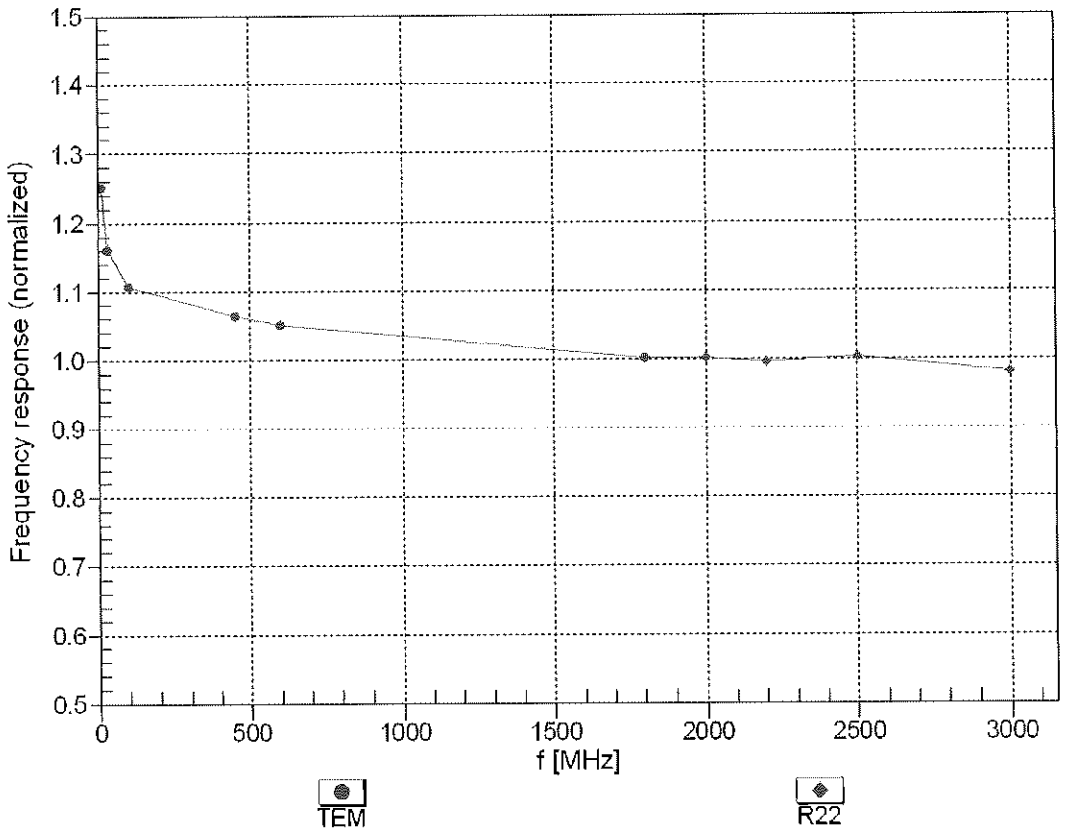
Calibration Parameter Determined in Body Tissue Simulating Media

f (MHz) [C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha [G]	Depth [G] (mm)	Unc (k=2)
750	55.5	0.96	10.16	10.16	10.16	0.51	0.80	± 12.0 %
835	55.2	0.97	9.93	9.93	9.93	0.47	0.80	± 12.0 %
1750	53.4	1.49	7.92	7.92	7.92	0.42	0.86	± 12.0 %
1900	53.3	1.52	7.65	7.65	7.65	0.46	0.86	± 12.0 %
2300	52.9	1.81	7.45	7.45	7.45	0.38	0.90	± 12.0 %
2450	52.7	1.95	7.26	7.26	7.26	0.39	0.90	± 12.0 %
2600	52.5	2.16	7.08	7.08	7.08	0.37	0.90	± 12.0 %
5250	48.9	5.36	4.70	4.70	4.70	0.50	1.90	± 13.1 %
5600	48.5	5.77	4.24	4.24	4.24	0.50	1.90	± 13.1 %
5750	48.3	5.94	4.31	4.31	4.31	0.50	1.90	± 13.1 %

[C] Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ± 110 MHz.
[F] At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

Frequency Response of E-Field

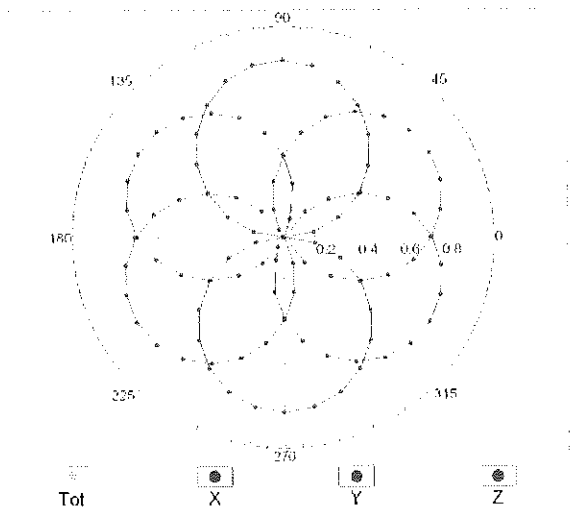
(TEM-Cell:ifi110 EXX, Waveguide: R22)



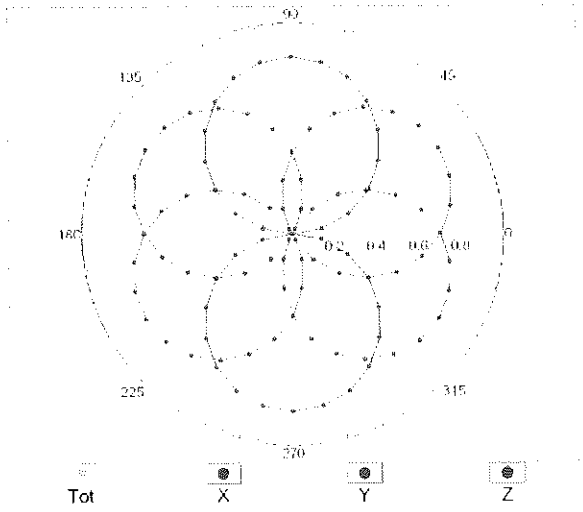
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

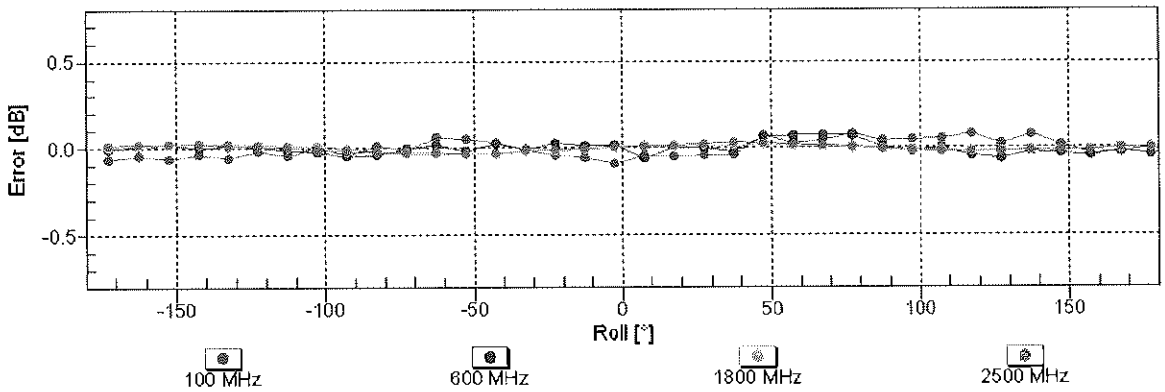
Receiving Pattern (ϕ), ϑ = 0°

f=600 MHz,TEM



f=1800 MHz,R22

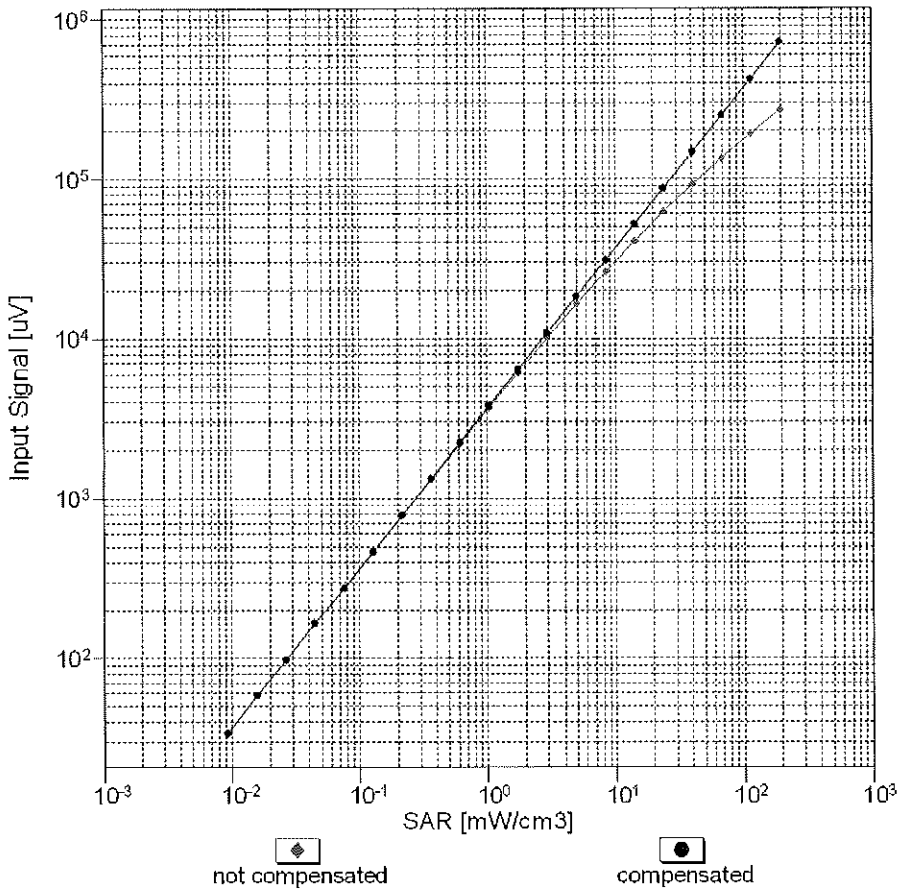


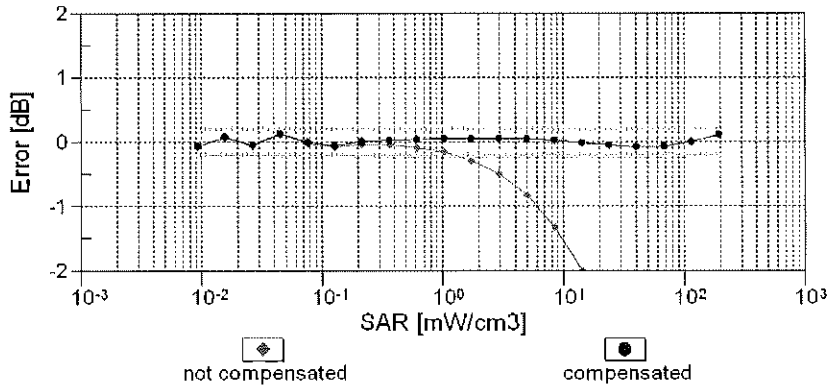


Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

Dynamic Range f(SAR$_{head}$)

(TEM cell , f_{eval}= 1900 MHz)

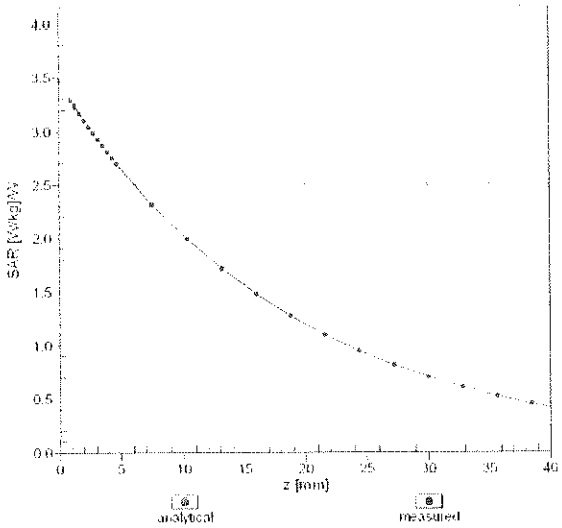




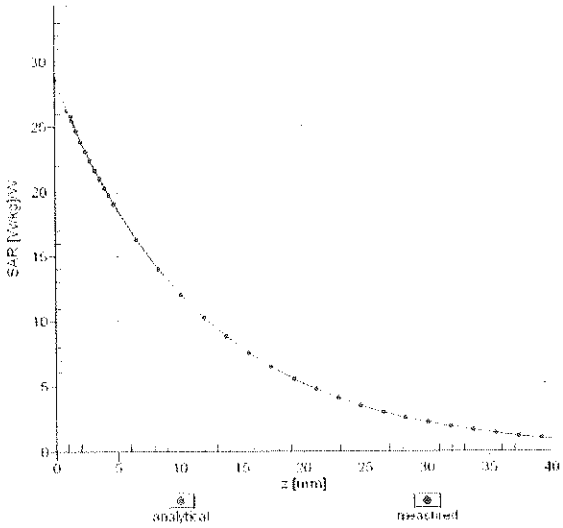
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment

f = 835 MHz,WGLS R9 (H_convF)

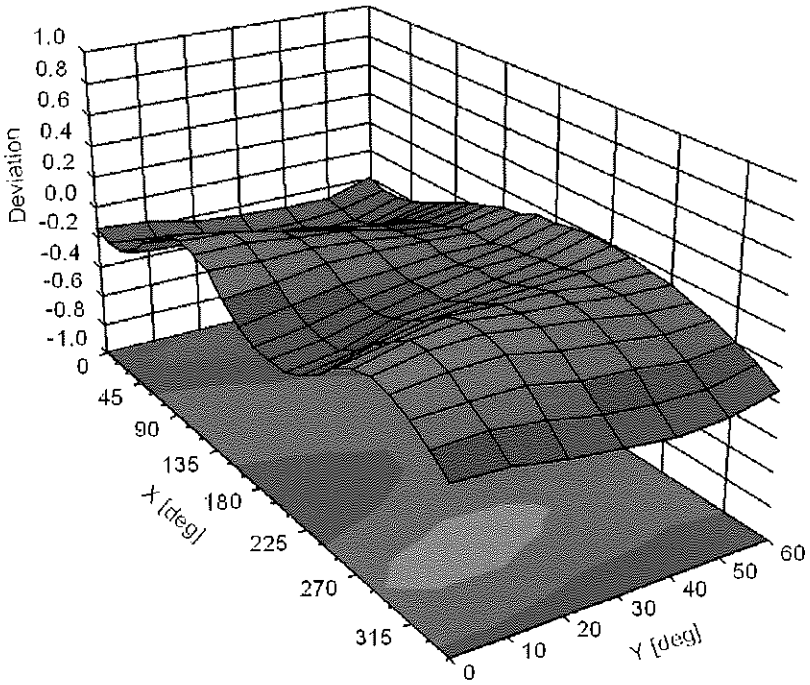


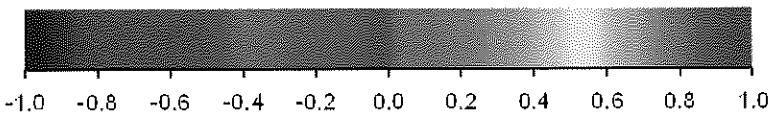
f = 1900 MHz,WGLS R22 (H_convF)



Deviation from Isotropy in Liquid

Error (ϕ, ϑ), f = 900 MHz





Uncertainty of Spherical Isotropy Assessment: ± 2.6% (k=2)

Appendix: Modulation Calibration Parameters

UID	Rev	Communication System Name	Group	PAR (dB)	Unc[E] (k=2)
0		CW	CW	0.00	± 4.7 %
10010	CAA	SAR Validation (Square, 100ms, 10ms)	Test	10.00	± 9.6 %
10011	CAB	UMTS-FDD (WCDMA)	WCDMA	2.91	± 9.6 %
10012	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	± 9.6 %
10013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	9.46	± 9.6 %
10021	DAC	GSM-FDD (TDMA, GMSK)	GSM	9.39	± 9.6 %
10023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.57	± 9.6 %
10024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	6.56	± 9.6 %
10025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	± 9.6 %
10026	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	9.55	± 9.6 %
10027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	GSM	4.80	± 9.6 %
10028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	3.55	± 9.6 %
10029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	GSM	7.78	± 9.6 %
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	± 9.6 %
10031	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Bluetooth	1.87	± 9.6 %
10032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.16	± 9.6 %
10033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	7.74	± 9.6 %
10034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	4.53	± 9.6 %
10035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	3.83	± 9.6 %
10036	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	8.01	± 9.6 %
10037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	± 9.6 %
10038	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.10	± 9.6 %
10039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.57	± 9.6 %
10042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	± 9.6 %
10044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	± 9.6 %
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	± 9.6 %
10049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	10.79	± 9.6 %
10056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	TD-SCDMA	11.01	± 9.6 %
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	± 9.6 %
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	± 9.6 %
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	± 9.6 %
10061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	± 9.6 %
10062	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	± 9.6 %
10063	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	± 9.6 %
10064	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	± 9.6 %
10065	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	± 9.6 %
10066	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	± 9.6 %
10067	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	± 9.6 %
10068	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	± 9.6 %
10069	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	WLAN	10.56	± 9.6 %
10071	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	± 9.6 %
10072	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.62	± 9.6 %
10073	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	WLAN	9.94	± 9.6 %
10074	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.30	± 9.6 %
10075	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.77	± 9.6 %
10076	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	WLAN	10.94	± 9.6 %
10077	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	WLAN	11.00	± 9.6 %
10081	CAB	CDMA2000 (1xRTT, RC3)	CDMA2000	3.97	± 9.6 %
10082	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	AMPS	4.77	± 9.6 %
10090	DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	± 9.6 %
10097	CAB	UMTS-FDD (HSDPA)	WCDMA	3.98	± 9.6 %
10098	CAB	UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	± 9.6 %
10099	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	± 9.6 %
10100	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5.67	± 9.6 %
10101	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %
10102	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10103	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10104	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	± 9.6 %
10105	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	± 9.6 %
10108	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	± 9.6 %

10109	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10110	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10111	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	± 9.6 %
10112	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.59	± 9.6 %
10113	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	± 9.6 %
10114	CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10115	CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	± 9.6 %
10116	CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	± 9.6 %
10117	CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	± 9.6 %
10118	CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	± 9.6 %
10119	CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	± 9.6 %
10140	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10141	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	± 9.6 %
10142	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10143	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	± 9.6 %
10144	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	± 9.6 %
10145	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	± 9.6 %
10146	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	± 9.6 %
10147	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	± 9.6 %
10149	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %
10150	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10151	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	± 9.6 %
10152	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10153	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.05	± 9.6 %
10154	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10155	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10156	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	± 9.6 %
10157	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10158	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.62	± 9.6 %
10159	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	± 9.6 %
10160	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	± 9.6 %
10161	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10162	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	± 9.6 %
10166	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	± 9.6 %
10167	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	± 9.6 %
10168	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	± 9.6 %
10169	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10170	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10171	AAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	± 9.6 %
10172	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10173	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10174	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10175	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10176	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10177	CAI	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10178	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10179	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10180	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10181	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10182	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10183	AAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10184	CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10185	CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	± 9.6 %
10186	AAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10187	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10188	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10189	AAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10193	CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	± 9.6 %
10194	CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	± 9.6 %
10195	CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	± 9.6 %
10196	CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10197	CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	± 9.6 %
10198	CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	± 9.6 %
10219	CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	± 9.6 %

10220	CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	± 9.6 %
10221	CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	± 9.6 %
10222	CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	± 9.6 %
10223	CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	± 9.6 %
10224	CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN	8.08	± 9.6 %
10225	CAB	UMTS-FDD (HSPA+)	WCDMA	5.97	± 9.6 %
10226	CAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	± 9.6 %
10227	CAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	± 9.6 %
10228	CAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	± 9.6 %
10229	CAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10230	CAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10231	CAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	± 9.6 %
10232	CAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10233	CAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10234	CAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10235	CAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10236	CAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10237	CAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10238	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10239	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10240	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10241	CAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	± 9.6 %
10242	CAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	± 9.6 %
10243	CAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	± 9.6 %
10244	CAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	± 9.6 %
10245	CAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	± 9.6 %
10246	CAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	± 9.6 %
10247	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	± 9.6 %
10248	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	± 9.6 %
10249	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10250	CAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	± 9.6 %
10251	CAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	± 9.6 %
10252	CAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TDD	9.24	± 9.6 %
10253	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.90	± 9.6 %
10254	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	± 9.6 %
10255	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD	9.20	± 9.6 %
10256	CAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	± 9.6 %
10257	CAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	± 9.6 %
10258	CAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	± 9.6 %
10259	CAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	± 9.6 %
10260	CAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	± 9.6 %
10261	CAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	± 9.6 %
10262	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	± 9.6 %
10263	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	± 9.6 %
10264	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	± 9.6 %
10265	CAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10266	CAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	± 9.6 %
10267	CAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-TDD	9.30	± 9.6 %
10268	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-TDD	10.06	± 9.6 %
10269	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-TDD	10.13	± 9.6 %
10270	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-TDD	9.58	± 9.6 %
10274	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	WCDMA	4.87	± 9.6 %
10275	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	WCDMA	3.96	± 9.6 %
10277	CAA	PHS (QPSK)	PHS	11.81	± 9.6 %
10278	CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	PHS	11.81	± 9.6 %
10279	CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	PHS	12.18	± 9.6 %
10290	AAB	CDMA2000, RC1, SO55, Full Rate	CDMA2000	3.91	± 9.6 %
10291	AAB	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3.46	± 9.6 %
10292	AAB	CDMA2000, RC3, SO32, Full Rate	CDMA2000	3.39	± 9.6 %
10293	AAB	CDMA2000, RC3, SO3, Full Rate	CDMA2000	3.50	± 9.6 %
10295	AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	CDMA2000	12.49	± 9.6 %
10297	AAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.81	± 9.6 %
10298	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10299	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	± 9.6 %

10300	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10301	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	WiMAX	12.03	± 9.6 %
10302	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	WiMAX	12.57	± 9.6 %
10303	AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	12.52	± 9.6 %
10304	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	11.86	± 9.6 %
10305	AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	WiMAX	15.24	± 9.6 %
10306	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	WiMAX	14.67	± 9.6 %
10307	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	WiMAX	14.49	± 9.6 %
10308	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	WiMAX	14.46	± 9.6 %
10309	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	WiMAX	14.58	± 9.6 %
10310	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	WiMAX	14.57	± 9.6 %
10311	AAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-FDD	6.06	± 9.6 %
10313	AAA	iDEN 1:3	iDEN	10.51	± 9.6 %
10314	AAA	iDEN 1:6	iDEN	13.48	± 9.6 %
10315	AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	WLAN	1.71	± 9.6 %
10316	AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	± 9.6 %
10317	AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	± 9.6 %
10352	AAA	Pulse Waveform (200Hz, 10%)	Generic	10.00	± 9.6 %
10353	AAA	Pulse Waveform (200Hz, 20%)	Generic	6.99	± 9.6 %
10354	AAA	Pulse Waveform (200Hz, 40%)	Generic	3.98	± 9.6 %
10355	AAA	Pulse Waveform (200Hz, 60%)	Generic	2.22	± 9.6 %
10356	AAA	Pulse Waveform (200Hz, 80%)	Generic	0.97	± 9.6 %
10387	AAA	QPSK Waveform, 1 MHz	Generic	5.10	± 9.6 %
10388	AAA	QPSK Waveform, 10 MHz	Generic	5.22	± 9.6 %
10396	AAA	64-QAM Waveform, 100 kHz	Generic	6.27	± 9.6 %
10399	AAA	64-QAM Waveform, 40 MHz	Generic	6.27	± 9.6 %
10400	AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	WLAN	8.37	± 9.6 %
10401	AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	WLAN	8.60	± 9.6 %
10402	AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	WLAN	8.53	± 9.6 %
10403	AAB	CDMA2000 (1xEV-DO, Rev. 0)	CDMA2000	3.76	± 9.6 %
10404	AAB	CDMA2000 (1xEV-DO, Rev. A)	CDMA2000	3.77	± 9.6 %
10406	AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	CDMA2000	5.22	± 9.6 %
10410	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	LTE-TDD	7.82	± 9.6 %
10414	AAA	WLAN CCDF, 64-QAM, 40MHz	Generic	8.54	± 9.6 %
10415	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	WLAN	1.54	± 9.6 %
10416	AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	± 9.6 %
10417	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	± 9.6 %
10418	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	WLAN	8.14	± 9.6 %
10419	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	WLAN	8.19	± 9.6 %
10422	AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN	8.32	± 9.6 %
10423	AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	WLAN	8.47	± 9.6 %
10424	AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	WLAN	8.40	± 9.6 %
10425	AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	WLAN	8.41	± 9.6 %
10426	AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	WLAN	8.45	± 9.6 %
10427	AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	WLAN	8.41	± 9.6 %
10430	AAD	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	LTE-FDD	8.28	± 9.6 %
10431	AAD	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.38	± 9.6 %
10432	AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.34	± 9.6 %
10433	AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FDD	8.34	± 9.6 %
10434	AAA	W-CDMA (BS Test Model 1, 64 DPCH)	WCDMA	8.60	± 9.6 %
10435	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10447	AAD	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.56	± 9.6 %
10448	AAD	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	LTE-FDD	7.53	± 9.6 %
10449	AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	LTE-FDD	7.51	± 9.6 %
10450	AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.48	± 9.6 %

10451	AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	WCDMA	7.59	± 9.6 %
10453	AAD	Validation (Square, 10ms, 1ms)	Test	10.00	± 9.6 %
10456	AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	WLAN	8.63	± 9.6 %
10457	AAA	UMTS-FDD (DC-HSDPA)	WCDMA	6.62	± 9.6 %
10458	AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	CDMA2000	6.55	± 9.6 %
10459	AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	8.25	± 9.6 %
10460	AAA	UMTS-FDD (WCDMA, AMR)	WCDMA	2.39	± 9.6 %
10461	AAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10462	AAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.30	± 9.6 %
10463	AAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	± 9.6 %
10464	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10465	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10466	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 9.6 %
10467	AAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10468	AAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10469	AAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	± 9.6 %
10470	AAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10471	AAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10472	AAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 9.6 %
10473	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10474	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10475	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 9.6 %
10477	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10478	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 9.6 %
10479	AAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10480	AAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.18	± 9.6 %
10481	AAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.45	± 9.6 %
10482	AAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.71	± 9.6 %
10483	AAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.39	± 9.6 %
10484	AAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.47	± 9.6 %
10485	AAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.59	± 9.6 %
10486	AAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.38	± 9.6 %
10487	AAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.60	± 9.6 %
10488	AAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.70	± 9.6 %
10489	AAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.31	± 9.6 %
10490	AAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	± 9.6 %

10491	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10492	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.41	± 9.6 %
10493	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	± 9.6 %
10494	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10495	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.37	± 9.6 %
10496	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	± 9.6 %
10497	AAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	± 9.6 %
10498	AAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.40	± 9.6 %
10499	AAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.68	± 9.6 %
10500	AAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	± 9.6 %
10501	AAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.44	± 9.6 %
10502	AAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.52	± 9.6 %
10503	AAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.72	± 9.6 %
10504	AAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.31	± 9.6 %
10505	AAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	± 9.6 %
10506	AAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10507	AAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.36	± 9.6 %
10508	AAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	± 9.6 %
10509	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.99	± 9.6 %
10510	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.49	± 9.6 %
10511	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.51	± 9.6 %
10512	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10513	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.42	± 9.6 %
10514	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.45	± 9.6 %
10515	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	WLAN	1.58	± 9.6 %
10516	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	WLAN	1.57	± 9.6 %
10517	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	WLAN	1.58	± 9.6 %
10518	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.23	± 9.6 %
10519	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.39	± 9.6 %
10520	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.12	± 9.6 %
10521	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	WLAN	7.97	± 9.6 %
10522	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.45	± 9.6 %
10523	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	WLAN	8.08	± 9.6 %
10524	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	WLAN	8.27	± 9.6 %
10525	AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	WLAN	8.36	± 9.6 %
10526	AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	WLAN	8.42	± 9.6 %
10527	AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	WLAN	8.21	± 9.6 %
10528	AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	WLAN	8.36	± 9.6 %
10529	AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	WLAN	8.36	± 9.6 %
10531	AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	WLAN	8.43	± 9.6 %
10532	AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	WLAN	8.29	± 9.6 %
10533	AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	WLAN	8.38	± 9.6 %

10534	AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	WLAN	8.45	± 9.6 %
10535	AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	WLAN	8.45	± 9.6 %
10536	AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	WLAN	8.32	± 9.6 %
10537	AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	WLAN	8.44	± 9.6 %
10538	AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	WLAN	8.54	± 9.6 %
10540	AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	WLAN	8.39	± 9.6 %
10541	AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	WLAN	8.46	± 9.6 %
10542	AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	WLAN	8.65	± 9.6 %
10543	AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	WLAN	8.65	± 9.6 %
10544	AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	WLAN	8.47	± 9.6 %
10545	AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	WLAN	8.55	± 9.6 %
10546	AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	WLAN	8.35	± 9.6 %
10547	AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	WLAN	8.49	± 9.6 %
10548	AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	WLAN	8.37	± 9.6 %
10550	AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	WLAN	8.38	± 9.6 %
10551	AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	WLAN	8.50	± 9.6 %
10552	AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	WLAN	8.42	± 9.6 %
10553	AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	WLAN	8.45	± 9.6 %
10554	AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	WLAN	8.48	± 9.6 %
10555	AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	WLAN	8.47	± 9.6 %
10556	AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	WLAN	8.50	± 9.6 %
10557	AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	WLAN	8.52	± 9.6 %
10558	AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	WLAN	8.61	± 9.6 %
10560	AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	WLAN	8.73	± 9.6 %
10561	AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	WLAN	8.56	± 9.6 %
10562	AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	WLAN	8.69	± 9.6 %
10563	AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	WLAN	8.77	± 9.6 %
10564	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.25	± 9.6 %
10565	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.45	± 9.6 %
10566	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.13	± 9.6 %
10567	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle)	WLAN	8.00	± 9.6 %
10568	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.37	± 9.6 %
10569	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle)	WLAN	8.10	± 9.6 %
10570	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle)	WLAN	8.30	± 9.6 %
10571	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	WLAN	1.99	± 9.6 %
10572	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	WLAN	1.99	± 9.6 %
10573	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	WLAN	1.98	± 9.6 %
10574	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	WLAN	1.98	± 9.6 %
10575	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.59	± 9.6 %
10576	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	± 9.6 %
10577	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	± 9.6 %
10578	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	± 9.6 %
10579	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.36	± 9.6 %
10580	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	± 9.6 %
10581	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	± 9.6 %
10582	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	± 9.6 %
10583	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.59	± 9.6 %
10584	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	± 9.6 %
10585	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	± 9.6 %
10586	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	± 9.6 %

10587	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.36	± 9.6 %
10588	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	± 9.6 %
10589	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	± 9.6 %
10590	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	± 9.6 %
10591	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	WLAN	8.63	± 9.6 %
10592	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	WLAN	8.79	± 9.6 %
10593	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	WLAN	8.64	± 9.6 %
10594	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	WLAN	8.74	± 9.6 %
10595	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	WLAN	8.74	± 9.6 %
10596	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	WLAN	8.71	± 9.6 %
10597	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	WLAN	8.72	± 9.6 %
10598	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	WLAN	8.50	± 9.6 %
10599	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	WLAN	8.79	± 9.6 %
10600	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	WLAN	8.88	± 9.6 %
10601	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10602	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	WLAN	8.94	± 9.6 %
10603	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	WLAN	9.03	± 9.6 %
10604	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	WLAN	8.76	± 9.6 %
10605	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	WLAN	8.97	± 9.6 %
10606	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10607	AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	WLAN	8.64	± 9.6 %
10608	AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	WLAN	8.77	± 9.6 %
10609	AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	WLAN	8.57	± 9.6 %
10610	AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	WLAN	8.78	± 9.6 %
10611	AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	WLAN	8.70	± 9.6 %
10612	AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	WLAN	8.77	± 9.6 %
10613	AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	WLAN	8.94	± 9.6 %
10614	AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	WLAN	8.59	± 9.6 %
10615	AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10616	AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10617	AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	WLAN	8.81	± 9.6 %
10618	AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	WLAN	8.58	± 9.6 %
10619	AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	WLAN	8.86	± 9.6 %
10620	AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	WLAN	8.87	± 9.6 %
10621	AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	WLAN	8.77	± 9.6 %
10622	AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	WLAN	8.68	± 9.6 %
10623	AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10624	AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	WLAN	8.96	± 9.6 %
10625	AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	WLAN	8.96	± 9.6 %
10626	AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	WLAN	8.83	± 9.6 %
10627	AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	WLAN	8.88	± 9.6 %
10628	AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	WLAN	8.71	± 9.6 %
10629	AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	WLAN	8.85	± 9.6 %
10630	AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	WLAN	8.72	± 9.6 %
10631	AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	WLAN	8.81	± 9.6 %
10632	AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	WLAN	8.74	± 9.6 %
10633	AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	WLAN	8.83	± 9.6 %
10634	AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	WLAN	8.80	± 9.6 %
10635	AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	WLAN	8.81	± 9.6 %
10636	AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	WLAN	8.83	± 9.6 %
10637	AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	WLAN	8.79	± 9.6 %
10638	AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	WLAN	8.86	± 9.6 %
10639	AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	WLAN	8.85	± 9.6 %
10640	AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	WLAN	8.98	± 9.6 %
10641	AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	WLAN	9.06	± 9.6 %
10642	AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	WLAN	9.06	± 9.6 %
10643	AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	WLAN	8.89	± 9.6 %
10644	AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	WLAN	9.05	± 9.6 %
10645	AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	WLAN	9.11	± 9.6 %
10646	AAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	LTE-TDD	11.96	± 9.6 %
10647	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	LTE-TDD	11.96	± 9.6 %
10648	AAA	CDMA2000 (1x Advanced)	CDMA2000	3.45	± 9.6 %
10652	AAE	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	± 9.6 %
10653	AAE	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.42	± 9.6 %

10654	AAD	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.96	± 9.6 %
10655	AAE	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.21	± 9.6 %
10658	AAA	Pulse Waveform (200Hz, 10%)	Test	10.00	± 9.6 %
10659	AAA	Pulse Waveform (200Hz, 20%)	Test	6.99	± 9.6 %
10660	AAA	Pulse Waveform (200Hz, 40%)	Test	3.98	± 9.6 %
10661	AAA	Pulse Waveform (200Hz, 60%)	Test	2.22	± 9.6 %
10662	AAA	Pulse Waveform (200Hz, 80%)	Test	0.97	± 9.6 %
10670	AAA	Bluetooth Low Energy	Bluetooth	2.19	± 9.6 %
10671	AAA	IEEE 802.11ax (20MHz, MCS0, 90pc duty cycle)	WLAN	9.09	± 9.6 %
10672	AAA	IEEE 802.11ax (20MHz, MCS1, 90pc duty cycle)	WLAN	8.57	± 9.6 %
10673	AAA	IEEE 802.11ax (20MHz, MCS2, 90pc duty cycle)	WLAN	8.78	± 9.6 %
10674	AAA	IEEE 802.11ax (20MHz, MCS3, 90pc duty cycle)	WLAN	8.74	± 9.6 %
10675	AAA	IEEE 802.11ax (20MHz, MCS4, 90pc duty cycle)	WLAN	8.90	± 9.6 %
10676	AAA	IEEE 802.11ax (20MHz, MCS5, 90pc duty cycle)	WLAN	8.77	± 9.6 %
10677	AAA	IEEE 802.11ax (20MHz, MCS6, 90pc duty cycle)	WLAN	8.73	± 9.6 %
10678	AAA	IEEE 802.11ax (20MHz, MCS7, 90pc duty cycle)	WLAN	8.78	± 9.6 %
10679	AAA	IEEE 802.11ax (20MHz, MCS8, 90pc duty cycle)	WLAN	8.89	± 9.6 %
10680	AAA	IEEE 802.11ax (20MHz, MCS9, 90pc duty cycle)	WLAN	8.80	± 9.6 %
10681	AAA	IEEE 802.11ax (20MHz, MCS10, 90pc duty cycle)	WLAN	8.62	± 9.6 %
10682	AAA	IEEE 802.11ax (20MHz, MCS11, 90pc duty cycle)	WLAN	8.83	± 9.6 %
10683	AAA	IEEE 802.11ax (20MHz, MCS0, 99pc duty cycle)	WLAN	8.42	± 9.6 %
10684	AAA	IEEE 802.11ax (20MHz, MCS1, 99pc duty cycle)	WLAN	8.26	± 9.6 %
10685	AAA	IEEE 802.11ax (20MHz, MCS2, 99pc duty cycle)	WLAN	8.33	± 9.6 %
10686	AAA	IEEE 802.11ax (20MHz, MCS3, 99pc duty cycle)	WLAN	8.28	± 9.6 %
10687	AAA	IEEE 802.11ax (20MHz, MCS4, 99pc duty cycle)	WLAN	8.45	± 9.6 %
10688	AAA	IEEE 802.11ax (20MHz, MCS5, 99pc duty cycle)	WLAN	8.29	± 9.6 %
10689	AAA	IEEE 802.11ax (20MHz, MCS6, 99pc duty cycle)	WLAN	8.55	± 9.6 %
10690	AAA	IEEE 802.11ax (20MHz, MCS7, 99pc duty cycle)	WLAN	8.29	± 9.6 %
10691	AAA	IEEE 802.11ax (20MHz, MCS8, 99pc duty cycle)	WLAN	8.25	± 9.6 %
10692	AAA	IEEE 802.11ax (20MHz, MCS9, 99pc duty cycle)	WLAN	8.29	± 9.6 %
10693	AAA	IEEE 802.11ax (20MHz, MCS10, 99pc duty cycle)	WLAN	8.25	± 9.6 %
10694	AAA	IEEE 802.11ax (20MHz, MCS11, 99pc duty cycle)	WLAN	8.57	± 9.6 %
10695	AAA	IEEE 802.11ax (40MHz, MCS0, 90pc duty cycle)	WLAN	8.78	± 9.6 %
10696	AAA	IEEE 802.11ax (40MHz, MCS1, 90pc duty cycle)	WLAN	8.91	± 9.6 %
10697	AAA	IEEE 802.11ax (40MHz, MCS2, 90pc duty cycle)	WLAN	8.61	± 9.6 %
10698	AAA	IEEE 802.11ax (40MHz, MCS3, 90pc duty cycle)	WLAN	8.89	± 9.6 %
10699	AAA	IEEE 802.11ax (40MHz, MCS4, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10700	AAA	IEEE 802.11ax (40MHz, MCS5, 90pc duty cycle)	WLAN	8.73	± 9.6 %
10701	AAA	IEEE 802.11ax (40MHz, MCS6, 90pc duty cycle)	WLAN	8.86	± 9.6 %
10702	AAA	IEEE 802.11ax (40MHz, MCS7, 90pc duty cycle)	WLAN	8.70	± 9.6 %
10703	AAA	IEEE 802.11ax (40MHz, MCS8, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10704	AAA	IEEE 802.11ax (40MHz, MCS9, 90pc duty cycle)	WLAN	8.56	± 9.6 %
10705	AAA	IEEE 802.11ax (40MHz, MCS10, 90pc duty cycle)	WLAN	8.69	± 9.6 %
10706	AAA	IEEE 802.11ax (40MHz, MCS11, 90pc duty cycle)	WLAN	8.66	± 9.6 %
10707	AAA	IEEE 802.11ax (40MHz, MCS0, 99pc duty cycle)	WLAN	8.32	± 9.6 %
10708	AAA	IEEE 802.11ax (40MHz, MCS1, 99pc duty cycle)	WLAN	8.55	± 9.6 %
10709	AAA	IEEE 802.11ax (40MHz, MCS2, 99pc duty cycle)	WLAN	8.33	± 9.6 %
10710	AAA	IEEE 802.11ax (40MHz, MCS3, 99pc duty cycle)	WLAN	8.29	± 9.6 %
10711	AAA	IEEE 802.11ax (40MHz, MCS4, 99pc duty cycle)	WLAN	8.39	± 9.6 %
10712	AAA	IEEE 802.11ax (40MHz, MCS5, 99pc duty cycle)	WLAN	8.67	± 9.6 %
10713	AAA	IEEE 802.11ax (40MHz, MCS6, 99pc duty cycle)	WLAN	8.33	± 9.6 %
10714	AAA	IEEE 802.11ax (40MHz, MCS7, 99pc duty cycle)	WLAN	8.26	± 9.6 %
10715	AAA	IEEE 802.11ax (40MHz, MCS8, 99pc duty cycle)	WLAN	8.45	± 9.6 %
10716	AAA	IEEE 802.11ax (40MHz, MCS9, 99pc duty cycle)	WLAN	8.30	± 9.6 %
10717	AAA	IEEE 802.11ax (40MHz, MCS10, 99pc duty cycle)	WLAN	8.48	± 9.6 %
10718	AAA	IEEE 802.11ax (40MHz, MCS11, 99pc duty cycle)	WLAN	8.24	± 9.6 %
10719	AAA	IEEE 802.11ax (80MHz, MCS0, 90pc duty cycle)	WLAN	8.81	± 9.6 %
10720	AAA	IEEE 802.11ax (80MHz, MCS1, 90pc duty cycle)	WLAN	8.87	± 9.6 %
10721	AAA	IEEE 802.11ax (80MHz, MCS2, 90pc duty cycle)	WLAN	8.76	± 9.6 %
10722	AAA	IEEE 802.11ax (80MHz, MCS3, 90pc duty cycle)	WLAN	8.55	± 9.6 %
10723	AAA	IEEE 802.11ax (80MHz, MCS4, 90pc duty cycle)	WLAN	8.70	± 9.6 %
10724	AAA	IEEE 802.11ax (80MHz, MCS5, 90pc duty cycle)	WLAN	8.90	± 9.6 %
10725	AAA	IEEE 802.11ax (80MHz, MCS6, 90pc duty cycle)	WLAN	8.74	± 9.6 %
10726	AAA	IEEE 802.11ax (80MHz, MCS7, 90pc duty cycle)	WLAN	8.72	± 9.6 %

10727	AAA	IEEE 802.11ax (80MHz, MCS8, 90pc duty cycle)	WLAN	8.66	± 9.6 %
10728	AAA	IEEE 802.11ax (80MHz, MCS9, 90pc duty cycle)	WLAN	8.65	± 9.6 %
10729	AAA	IEEE 802.11ax (80MHz, MCS10, 90pc duty cycle)	WLAN	8.64	± 9.6 %
10730	AAA	IEEE 802.11ax (80MHz, MCS11, 90pc duty cycle)	WLAN	8.67	± 9.6 %
10731	AAA	IEEE 802.11ax (80MHz, MCS0, 99pc duty cycle)	WLAN	8.42	± 9.6 %
10732	AAA	IEEE 802.11ax (80MHz, MCS1, 99pc duty cycle)	WLAN	8.46	± 9.6 %
10733	AAA	IEEE 802.11ax (80MHz, MCS2, 99pc duty cycle)	WLAN	8.40	± 9.6 %
10734	AAA	IEEE 802.11ax (80MHz, MCS3, 99pc duty cycle)	WLAN	8.25	± 9.6 %
10735	AAA	IEEE 802.11ax (80MHz, MCS4, 99pc duty cycle)	WLAN	8.33	± 9.6 %
10736	AAA	IEEE 802.11ax (80MHz, MCS5, 99pc duty cycle)	WLAN	8.27	± 9.6 %
10737	AAA	IEEE 802.11ax (80MHz, MCS6, 99pc duty cycle)	WLAN	8.36	± 9.6 %
10738	AAA	IEEE 802.11ax (80MHz, MCS7, 99pc duty cycle)	WLAN	8.42	± 9.6 %
10739	AAA	IEEE 802.11ax (80MHz, MCS8, 99pc duty cycle)	WLAN	8.29	± 9.6 %
10740	AAA	IEEE 802.11ax (80MHz, MCS9, 99pc duty cycle)	WLAN	8.48	± 9.6 %
10741	AAA	IEEE 802.11ax (80MHz, MCS10, 99pc duty cycle)	WLAN	8.40	± 9.6 %
10742	AAA	IEEE 802.11ax (80MHz, MCS11, 99pc duty cycle)	WLAN	8.43	± 9.6 %
10743	AAA	IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle)	WLAN	8.94	± 9.6 %
10744	AAA	IEEE 802.11ax (160MHz, MCS1, 90pc duty cycle)	WLAN	9.16	± 9.6 %
10745	AAA	IEEE 802.11ax (160MHz, MCS2, 90pc duty cycle)	WLAN	8.93	± 9.6 %
10746	AAA	IEEE 802.11ax (160MHz, MCS3, 90pc duty cycle)	WLAN	9.11	± 9.6 %
10747	AAA	IEEE 802.11ax (160MHz, MCS4, 90pc duty cycle)	WLAN	9.04	± 9.6 %
10748	AAA	IEEE 802.11ax (160MHz, MCS5, 90pc duty cycle)	WLAN	8.93	± 9.6 %
10749	AAA	IEEE 802.11ax (160MHz, MCS6, 90pc duty cycle)	WLAN	8.90	± 9.6 %
10750	AAA	IEEE 802.11ax (160MHz, MCS7, 90pc duty cycle)	WLAN	8.79	± 9.6 %
10751	AAA	IEEE 802.11ax (160MHz, MCS8, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10752	AAA	IEEE 802.11ax (160MHz, MCS9, 90pc duty cycle)	WLAN	8.81	± 9.6 %
10753	AAA	IEEE 802.11ax (160MHz, MCS10, 90pc duty cycle)	WLAN	9.00	± 9.6 %
10754	AAA	IEEE 802.11ax (160MHz, MCS11, 90pc duty cycle)	WLAN	8.94	± 9.6 %
10755	AAA	IEEE 802.11ax (160MHz, MCS0, 99pc duty cycle)	WLAN	8.64	± 9.6 %
10756	AAA	IEEE 802.11ax (160MHz, MCS1, 99pc duty cycle)	WLAN	8.77	± 9.6 %
10757	AAA	IEEE 802.11ax (160MHz, MCS2, 99pc duty cycle)	WLAN	8.77	± 9.6 %
10758	AAA	IEEE 802.11ax (160MHz, MCS3, 99pc duty cycle)	WLAN	8.69	± 9.6 %
10759	AAA	IEEE 802.11ax (160MHz, MCS4, 99pc duty cycle)	WLAN	8.58	± 9.6 %
10760	AAA	IEEE 802.11ax (160MHz, MCS5, 99pc duty cycle)	WLAN	8.49	± 9.6 %
10761	AAA	IEEE 802.11ax (160MHz, MCS6, 99pc duty cycle)	WLAN	8.58	± 9.6 %
10762	AAA	IEEE 802.11ax (160MHz, MCS7, 99pc duty cycle)	WLAN	8.49	± 9.6 %
10763	AAA	IEEE 802.11ax (160MHz, MCS8, 99pc duty cycle)	WLAN	8.53	± 9.6 %
10764	AAA	IEEE 802.11ax (160MHz, MCS9, 99pc duty cycle)	WLAN	8.54	± 9.6 %
10765	AAA	IEEE 802.11ax (160MHz, MCS10, 99pc duty cycle)	WLAN	8.54	± 9.6 %
10766	AAA	IEEE 802.11ax (160MHz, MCS11, 99pc duty cycle)	WLAN	8.51	± 9.6 %
10767	AAB	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	7.99	± 9.6 %
10768	AAB	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	± 9.6 %
10769	AAB	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	± 9.6 %
10770	AAB	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	± 9.6 %
10771	AAB	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	± 9.6 %
10772	AAB	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.23	± 9.6 %
10773	AAB	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.03	± 9.6 %
10774	AAB	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	± 9.6 %
10776	AAB	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	± 9.6 %
10778	AAB	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10780	AAB	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	± 9.6 %
10781	AAB	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	± 9.6 %

10782	AAB	5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.43	± 9.6 %
10783	AAB	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	± 9.6 %
10784	AAB	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.29	± 9.6 %
10785	AAB	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.40	± 9.6 %
10786	AAB	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.35	± 9.6 %
10787	AAB	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.44	± 9.6 %
10788	AAB	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	± 9.6 %
10789	AAB	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.37	± 9.6 %
10790	AAB	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	± 9.6 %
10791	AAB	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.83	± 9.6 %
10792	AAB	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.92	± 9.6 %
10793	AAB	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.95	± 9.6 %
10794	AAB	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	± 9.6 %
10795	AAB	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.84	± 9.6 %
10796	AAB	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	± 9.6 %
10797	AAB	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.01	± 9.6 %
10798	AAB	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	± 9.6 %
10799	AAB	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	± 9.6 %
10801	AAB	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	± 9.6 %
10802	AAB	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.87	± 9.6 %
10803	AAB	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	± 9.6 %
10805	AAB	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10806	AAB	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.37	± 9.6 %
10809	AAB	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10810	AAB	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10812	AAB	5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	± 9.6 %
10817	AAB	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	± 9.6 %
10818	AAB	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10819	AAB	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.33	± 9.6 %
10820	AAB	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.30	± 9.6 %
10821	AAB	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10822	AAB	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10823	AAB	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.36	± 9.6 %

10824	AAB	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.39	± 9.6 %
10825	AAB	5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10827	AAB	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.42	± 9.6 %
10828	AAB	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.43	± 9.6 %
10829	AAB	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.40	± 9.6 %
10830	AAB	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.63	± 9.6 %
10831	AAB	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.73	± 9.6 %
10832	AAB	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.74	± 9.6 %
10833	AAB	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	± 9.6 %
10834	AAB	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.75	± 9.6 %
10835	AAB	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	± 9.6 %
10836	AAB	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.66	± 9.6 %
10837	AAB	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.68	± 9.6 %
10839	AAB	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	± 9.6 %
10840	AAB	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.67	± 9.6 %
10841	AAB	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.71	± 9.6 %
10843	AAB	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.49	± 9.6 %
10844	AAB	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10846	AAB	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10854	AAB	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10855	AAB	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.36	± 9.6 %
10856	AAB	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	± 9.6 %
10857	AAB	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.35	± 9.6 %
10858	AAB	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.36	± 9.6 %
10859	AAB	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10860	AAB	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10861	AAB	5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.40	± 9.6 %
10863	AAB	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10864	AAB	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	± 9.6 %
10865	AAB	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10866	AAB	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	± 9.6 %
10868	AAB	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.89	± 9.6 %
10869	AAC	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	± 9.6 %

10870	AAC	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.86	± 9.6 %
10871	AAC	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	5.75	± 9.6 %
10872	AAC	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.52	± 9.6 %
10873	AAC	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	± 9.6 %
10874	AAC	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.65	± 9.6 %
10875	AAC	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	± 9.6 %
10876	AAC	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	8.39	± 9.6 %
10877	AAC	5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	7.95	± 9.6 %
10878	AAC	5G NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.41	± 9.6 %
10879	AAC	5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.12	± 9.6 %
10880	AAC	5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.38	± 9.6 %
10881	AAC	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	± 9.6 %
10882	AAC	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.96	± 9.6 %
10883	AAC	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.57	± 9.6 %
10884	AAC	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.53	± 9.6 %
10885	AAC	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	± 9.6 %
10886	AAC	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.65	± 9.6 %
10887	AAC	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	± 9.6 %
10888	AAC	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	8.35	± 9.6 %
10889	AAC	5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.02	± 9.6 %
10890	AAC	5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.40	± 9.6 %
10891	AAC	5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.13	± 9.6 %
10892	AAC	5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.41	± 9.6 %

[E] Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client **PC Test**

Certificate No: EX3-7532_Apr20

CALIBRATION CERTIFICATE

Object	EX3DV4 - SN:7532
Calibration procedure(s)	QA CAL-01.v9, QA CAL-14.v5, QA CAL-23.v5, QA CAL-25.v7 Calibration procedure for dosimetric E-field probes
Calibration date:	April 20, 2020

5-4-2020 ATM

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	01-Apr-20 (No. 217-03100/03101)	Apr-21
Power sensor NRP-Z91	SN: 103244	01-Apr-20 (No. 217-03100)	Apr-21
Power sensor NRP-Z91	SN: 103245	01-Apr-20 (No. 217-03101)	Apr-21
Reference 20 dB Attenuator	SN: CC2552 (20x)	31-Mar-20 (No. 217-03106)	Apr-21
DAE4	SN: 660	27-Dec-19 (No. DAE4-660_Dec19)	Dec-20
Reference Probe ES3DV2	SN: 3013	31-Dec-19 (No. ES3-3013_Dec19)	Dec-20
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-18)	In house check: Jun-20
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-19)	In house check: Oct-20

	Name	Function	Signature
Calibrated by:	Leif Klysner	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: April 21, 2020

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., ϑ = 0 is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, ", "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
c) IEC 62209-2, "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)", March 2010
d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- *NORMx,y,z:* Assessed for E-field polarization ϑ = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E^2-field uncertainty inside TSL (see below *ConvF*).
- *NORM(f)x,y,z = NORMx,y,z * frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of *ConvF*.
- *DCPx,y,z:* DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- *PAR:* PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- *Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D* are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. *VR* is the maximum calibration range expressed in RMS voltage across the diode.
- *ConvF and Boundary Effect Parameters:* Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to *NORMx,y,z * ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- *Spherical isotropy (3D deviation from isotropy)*: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset*: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- *Connector Angle*: The angle is assessed using the information gained by determining the *NORMx* (no uncertainty required).

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7532

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm (μV/(V/m)^2)[A]	0.46	0.41	0.48	± 10.1 %
DCP (mV)[B]	99.5	99.4	103.3	

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dB√μV	C	D dB	VR mV	Max dev.	Max Unc[E] (k=2)
0	CW	X	0.00	0.00	1.00	0.00	154.5	± 3.3 %	± 4.7 %
		Y	0.00	0.00	1.00		147.8		
		Z	0.00	0.00	1.00		158.2		
10352-AAA	Pulse Waveform (200Hz, 10%)	X	3.07	68.05	11.10	10.00	60.0	± 2.7 %	± 9.6 %
		Y	1.85	63.12	9.19		60.0		
		Z	6.79	76.39	14.61		60.0		
10353-AAA	Pulse Waveform (200Hz, 20%)	X	2.92	70.22	10.95	6.99	80.0	± 1.9 %	± 9.6 %
		Y	1.50	64.59	8.58		80.0		
		Z	20.00	88.19	17.06		80.0		
10354-AAA	Pulse Waveform (200Hz, 40%)	X	20.00	85.29	14.02	3.98	95.0	± 1.1 %	± 9.6 %
		Y	0.40	60.00	5.21		95.0		
		Z	20.00	92.60	17.75		95.0		
10355-AAA	Pulse Waveform (200Hz, 60%)	X	20.00	85.51	13.11	2.22	120.0	± 1.9 %	± 9.6 %
		Y	10.20	129.21	1.27		120.0		
		Z	20.00	101.13	20.44		120.0		
10387-AAA	QPSK Waveform, 1 MHz	X	1.64	68.56	15.58	1.00	150.0	± 3.4 %	± 9.6 %
		Y	1.36	66.15	13.96		150.0		
		Z	1.66	68.82	15.71		150.0		
10388-AAA	QPSK Waveform, 10 MHz	X	2.13	68.57	16.11	0.00	150.0	± 1.2 %	± 9.6 %
		Y	1.87	66.65	14.94		150.0		
		Z	2.13	68.55	16.11		150.0		
10396-AAA	64-QAM Waveform, 100 kHz	X	2.53	69.83	18.54	3.01	150.0	± 1.5 %	± 9.6 %
		Y	2.04	65.93	16.80		150.0		
		Z	2.61	70.30	18.75		150.0		
10399-AAA	64-QAM Waveform, 40 MHz	X	3.46	67.46	15.99	0.00	150.0	± 2.3 %	± 9.6 %
		Y	3.26	66.52	15.41		150.0		
		Z	3.32	66.82	15.67		150.0		
10414-AAA	WLAN CCDF, 64-QAM, 40MHz	X	4.54	65.40	15.44	0.00	150.0	± 4.1 %	± 9.6 %
		Y	4.54	65.43	15.39		150.0		
		Z	4.55	65.51	15.45		150.0		

Note: For details on UID parameters see Appendix

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

[A] The uncertainties of Norm X,Y,Z do not affect the E^2-field uncertainty inside TSL (see Pages 5 and 6).
[B] Numerical linearization parameter: uncertainty not required.
[E] Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7532

Sensor Model Parameters

	C1 fF	C2 fF	α V^{-1}	T1 $ms.V^{-2}$	T2 $ms.V^{-1}$	T3 ms	T4 V^{-2}	T5 V^{-1}	T6
X	30.9	229.25	35.10	5.99	0.00	5.01	1.30	0.07	1.00
Y	29.9	225.12	36.05	3.70	0.17	5.02	0.00	0.25	1.01
Z	29.6	216.10	34.30	5.94	0.00	5.02	1.40	0.05	1.00

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	24.2
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7532

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) [C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha [G]	Depth [G] (mm)	Unc (k=2)
750	41.9	0.89	10.72	10.72	10.72	0.63	0.80	± 12.0 %
835	41.5	0.90	10.41	10.41	10.41	0.35	1.08	± 12.0 %
1750	40.1	1.37	8.46	8.46	8.46	0.36	0.86	± 12.0 %
1900	40.0	1.40	8.06	8.06	8.06	0.33	0.86	± 12.0 %
2300	39.5	1.67	7.97	7.97	7.97	0.32	0.90	± 12.0 %
2450	39.2	1.80	7.60	7.60	7.60	0.33	0.90	± 12.0 %
2600	39.0	1.96	7.35	7.35	7.35	0.40	0.90	± 12.0 %
5250	35.9	4.71	5.13	5.13	5.13	0.40	1.80	± 13.1 %
5600	35.5	5.07	4.48	4.48	4.48	0.40	1.80	± 13.1 %
5750	35.4	5.22	4.69	4.69	4.69	0.40	1.80	± 13.1 %

[C] Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ± 110 MHz.
[F] At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

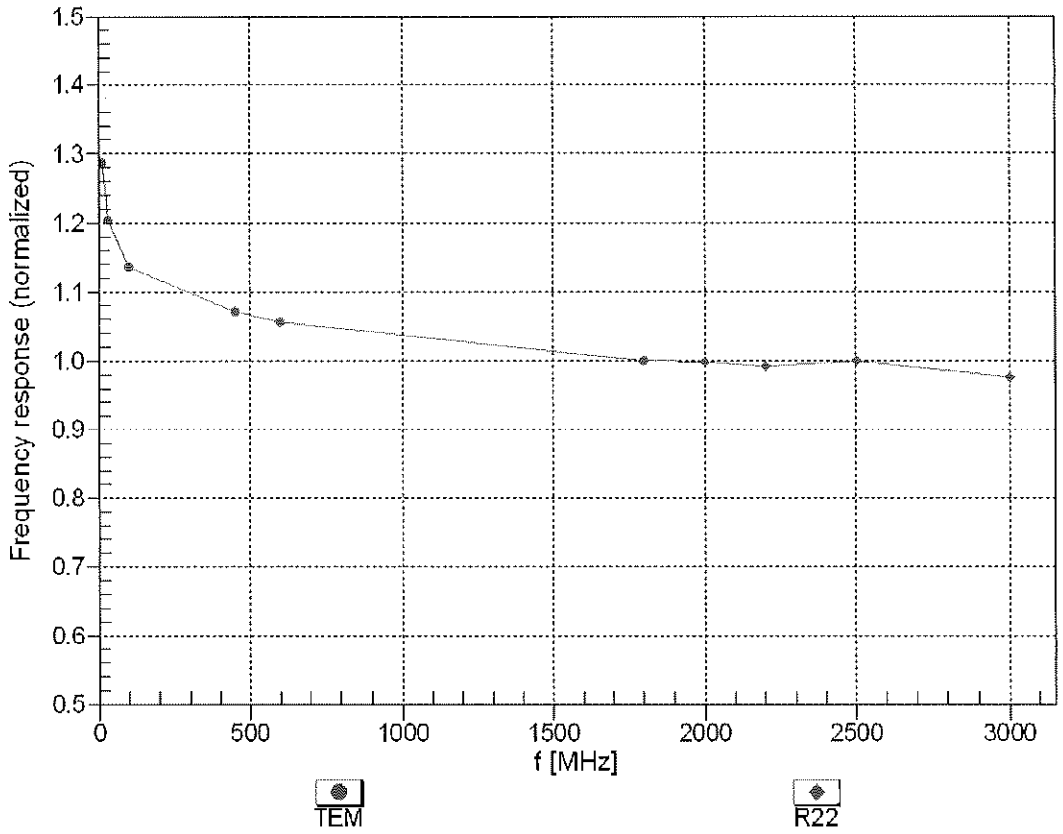
DASY/EASY - Parameters of Probe: EX3DV4 - SN:7532

Calibration Parameter Determined in Body Tissue Simulating Media

f (MHz) [C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha [G]	Depth [G] (mm)	Unc (k=2)
750	55.5	0.96	10.43	10.43	10.43	0.49	0.81	± 12.0 %
835	55.2	0.97	10.00	10.00	10.00	0.45	0.86	± 12.0 %
1750	53.4	1.49	8.34	8.34	8.34	0.38	0.86	± 12.0 %
1900	53.3	1.52	7.96	7.96	7.96	0.36	0.86	± 12.0 %
2300	52.9	1.81	7.79	7.79	7.79	0.40	0.90	± 12.0 %
2450	52.7	1.95	7.51	7.51	7.51	0.41	0.90	± 12.0 %
2600	52.5	2.16	7.38	7.38	7.38	0.36	0.90	± 12.0 %
5250	48.9	5.36	4.64	4.64	4.64	0.50	1.90	± 13.1 %
5600	48.5	5.77	4.21	4.21	4.21	0.50	1.90	± 13.1 %
5750	48.3	5.94	4.18	4.18	4.18	0.50	1.90	± 13.1 %

[C] Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ± 110 MHz.
[F] At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

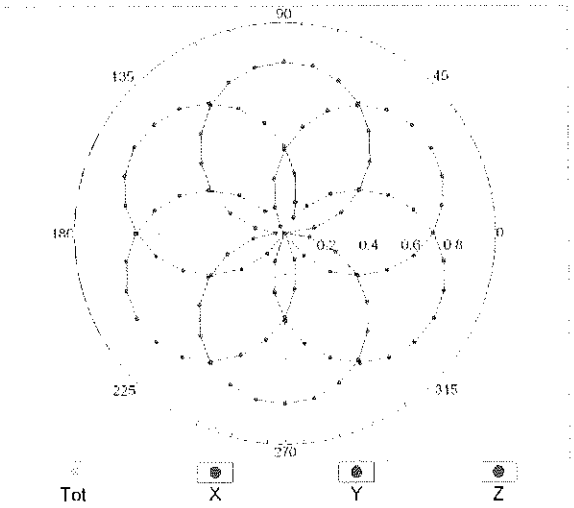
Frequency Response of E-Field
(TEM-Cell:ifi110 EXX, Waveguide: R22)



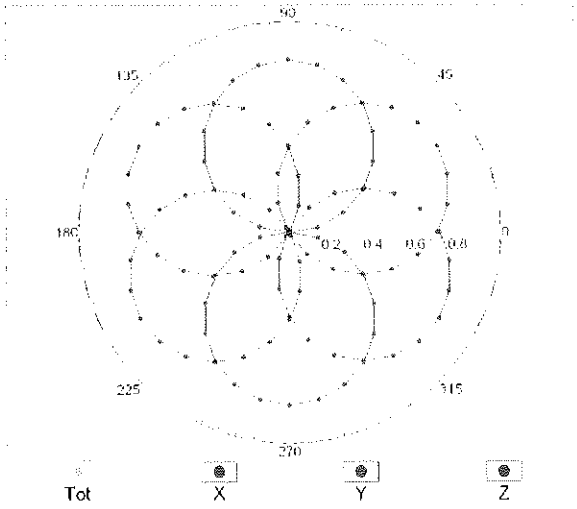
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

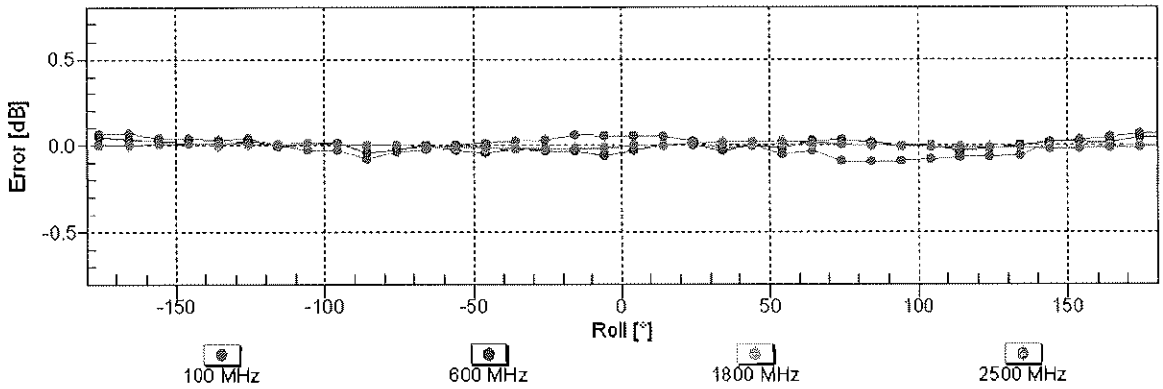
Receiving Pattern (ϕ), ϑ = 0°

f=600 MHz,TEM



f=1800 MHz,R22

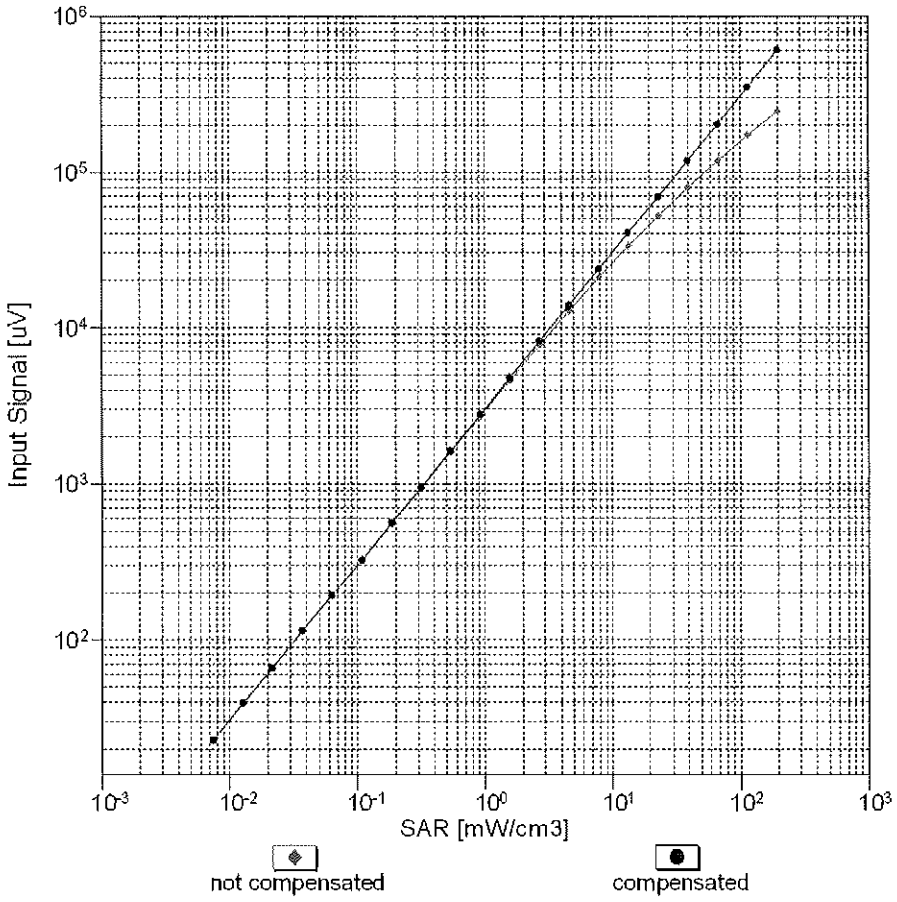


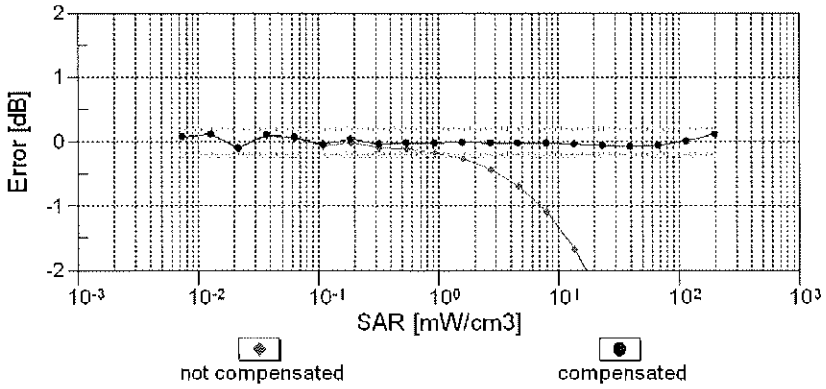


Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

Dynamic Range f(SAR_{head})

(TEM cell , f_{eval}= 1900 MHz)

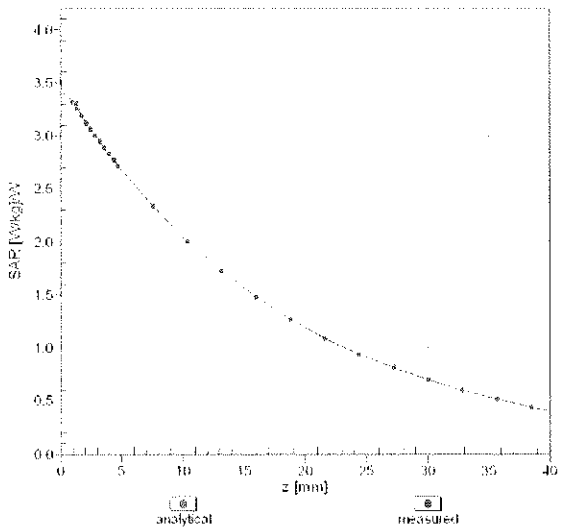




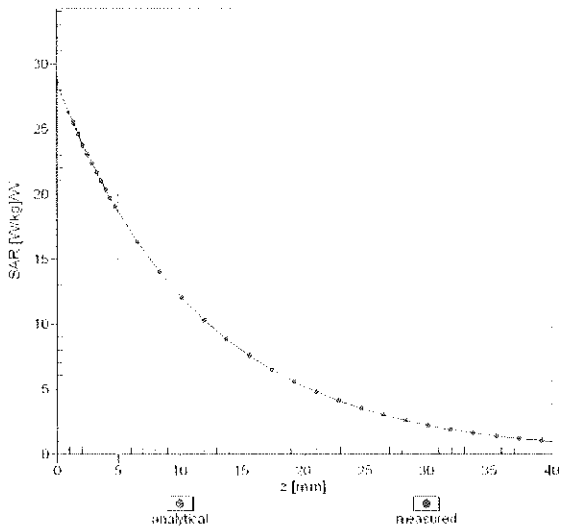
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment

f = 835 MHz,WGLS R9 (H_convF)

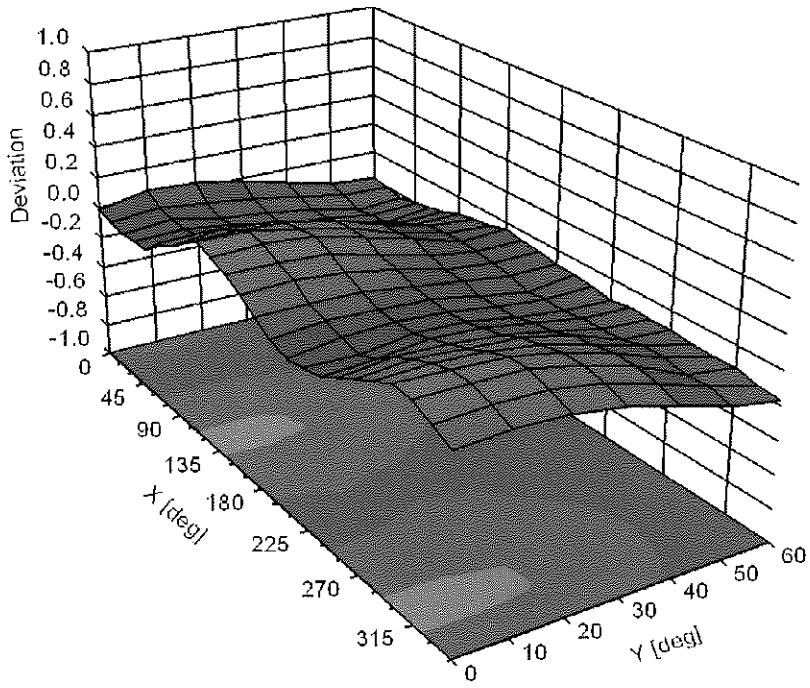


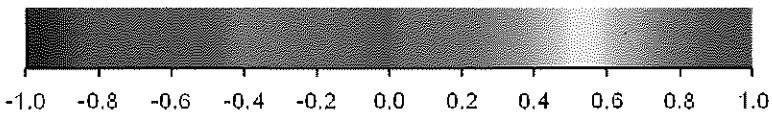
f = 1900 MHz,WGLS R22 (H_convF)



Deviation from Isotropy in Liquid

Error (ϕ, ϑ), f = 900 MHz





Uncertainty of Spherical Isotropy Assessment: ± 2.6% (k=2)

Appendix: Modulation Calibration Parameters

UID	Rev	Communication System Name	Group	PAR (dB)	Unc[E] (k=2)
0		CW	CW	0.00	± 4.7 %
10010	CAA	SAR Validation (Square, 100ms, 10ms)	Test	10.00	± 9.6 %
10011	CAB	UMTS-FDD (WCDMA)	WCDMA	2.91	± 9.6 %
10012	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	± 9.6 %
10013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	9.46	± 9.6 %
10021	DAC	GSM-FDD (TDMA, GMSK)	GSM	9.39	± 9.6 %
10023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.57	± 9.6 %
10024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	6.56	± 9.6 %
10025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	± 9.6 %
10026	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	9.55	± 9.6 %
10027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	GSM	4.80	± 9.6 %
10028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	3.55	± 9.6 %
10029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	GSM	7.78	± 9.6 %
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	± 9.6 %
10031	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Bluetooth	1.87	± 9.6 %
10032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.16	± 9.6 %
10033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	7.74	± 9.6 %
10034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	4.53	± 9.6 %
10035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	3.83	± 9.6 %
10036	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	8.01	± 9.6 %
10037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	± 9.6 %
10038	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.10	± 9.6 %
10039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.57	± 9.6 %
10042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	± 9.6 %
10044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	± 9.6 %
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	± 9.6 %
10049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	10.79	± 9.6 %
10056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	TD-SCDMA	11.01	± 9.6 %
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	± 9.6 %
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	± 9.6 %
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	± 9.6 %
10061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	± 9.6 %
10062	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	± 9.6 %
10063	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	± 9.6 %
10064	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	± 9.6 %
10065	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	± 9.6 %
10066	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	± 9.6 %
10067	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	± 9.6 %
10068	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	± 9.6 %
10069	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	WLAN	10.56	± 9.6 %
10071	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	± 9.6 %
10072	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.62	± 9.6 %
10073	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	WLAN	9.94	± 9.6 %
10074	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.30	± 9.6 %
10075	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.77	± 9.6 %
10076	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	WLAN	10.94	± 9.6 %
10077	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	WLAN	11.00	± 9.6 %
10081	CAB	CDMA2000 (1xRTT, RC3)	CDMA2000	3.97	± 9.6 %
10082	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	AMPS	4.77	± 9.6 %
10090	DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	± 9.6 %
10097	CAB	UMTS-FDD (HSDPA)	WCDMA	3.98	± 9.6 %
10098	CAB	UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	± 9.6 %
10099	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	± 9.6 %
10100	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5.67	± 9.6 %
10101	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %
10102	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10103	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10104	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	± 9.6 %
10105	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	± 9.6 %
10108	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	± 9.6 %

10109	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10110	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10111	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	± 9.6 %
10112	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.59	± 9.6 %
10113	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	± 9.6 %
10114	CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10115	CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	± 9.6 %
10116	CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	± 9.6 %
10117	CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	± 9.6 %
10118	CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	± 9.6 %
10119	CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	± 9.6 %
10140	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10141	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	± 9.6 %
10142	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10143	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	± 9.6 %
10144	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	± 9.6 %
10145	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	± 9.6 %
10146	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	± 9.6 %
10147	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	± 9.6 %
10149	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %
10150	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10151	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	± 9.6 %
10152	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10153	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.05	± 9.6 %
10154	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10155	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10156	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	± 9.6 %
10157	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10158	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.62	± 9.6 %
10159	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	± 9.6 %
10160	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	± 9.6 %
10161	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10162	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	± 9.6 %
10166	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	± 9.6 %
10167	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	± 9.6 %
10168	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	± 9.6 %
10169	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10170	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10171	AAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	± 9.6 %
10172	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10173	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10174	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10175	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10176	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10177	CAI	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10178	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10179	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10180	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10181	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10182	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10183	AAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10184	CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10185	CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	± 9.6 %
10186	AAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10187	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10188	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10189	AAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10193	CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	± 9.6 %
10194	CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	± 9.6 %
10195	CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	± 9.6 %
10196	CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10197	CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	± 9.6 %
10198	CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	± 9.6 %
10219	CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	± 9.6 %

10220	CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	± 9.6 %
10221	CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	± 9.6 %
10222	CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	± 9.6 %
10223	CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	± 9.6 %
10224	CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN	8.08	± 9.6 %
10225	CAB	UMTS-FDD (HSPA+)	WCDMA	5.97	± 9.6 %
10226	CAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	± 9.6 %
10227	CAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	± 9.6 %
10228	CAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	± 9.6 %
10229	CAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10230	CAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10231	CAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	± 9.6 %
10232	CAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10233	CAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10234	CAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10235	CAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10236	CAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10237	CAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10238	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10239	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10240	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10241	CAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	± 9.6 %
10242	CAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	± 9.6 %
10243	CAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	± 9.6 %
10244	CAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	± 9.6 %
10245	CAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	± 9.6 %
10246	CAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	± 9.6 %
10247	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	± 9.6 %
10248	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	± 9.6 %
10249	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10250	CAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	± 9.6 %
10251	CAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	± 9.6 %
10252	CAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TDD	9.24	± 9.6 %
10253	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.90	± 9.6 %
10254	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	± 9.6 %
10255	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD	9.20	± 9.6 %
10256	CAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	± 9.6 %
10257	CAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	± 9.6 %
10258	CAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	± 9.6 %
10259	CAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	± 9.6 %
10260	CAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	± 9.6 %
10261	CAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	± 9.6 %
10262	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	± 9.6 %
10263	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	± 9.6 %
10264	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	± 9.6 %
10265	CAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10266	CAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	± 9.6 %
10267	CAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-TDD	9.30	± 9.6 %
10268	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-TDD	10.06	± 9.6 %
10269	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-TDD	10.13	± 9.6 %
10270	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-TDD	9.58	± 9.6 %
10274	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	WCDMA	4.87	± 9.6 %
10275	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	WCDMA	3.96	± 9.6 %
10277	CAA	PHS (QPSK)	PHS	11.81	± 9.6 %
10278	CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	PHS	11.81	± 9.6 %
10279	CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	PHS	12.18	± 9.6 %
10290	AAB	CDMA2000, RC1, SO55, Full Rate	CDMA2000	3.91	± 9.6 %
10291	AAB	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3.46	± 9.6 %
10292	AAB	CDMA2000, RC3, SO32, Full Rate	CDMA2000	3.39	± 9.6 %
10293	AAB	CDMA2000, RC3, SO3, Full Rate	CDMA2000	3.50	± 9.6 %
10295	AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	CDMA2000	12.49	± 9.6 %
10297	AAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.81	± 9.6 %
10298	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10299	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	± 9.6 %

10300	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10301	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	WiMAX	12.03	± 9.6 %
10302	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3CTRL)	WiMAX	12.57	± 9.6 %
10303	AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	12.52	± 9.6 %
10304	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	11.86	± 9.6 %
10305	AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC)	WiMAX	15.24	± 9.6 %
10306	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC)	WiMAX	14.67	± 9.6 %
10307	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC)	WiMAX	14.49	± 9.6 %
10308	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	WiMAX	14.46	± 9.6 %
10309	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM,AMC 2x3)	WiMAX	14.58	± 9.6 %
10310	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3	WiMAX	14.57	± 9.6 %
10311	AAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-FDD	6.06	± 9.6 %
10313	AAA	iDEN 1:3	iDEN	10.51	± 9.6 %
10314	AAA	iDEN 1:6	iDEN	13.48	± 9.6 %
10315	AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc dc)	WLAN	1.71	± 9.6 %
10316	AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc dc)	WLAN	8.36	± 9.6 %
10317	AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc dc)	WLAN	8.36	± 9.6 %
10352	AAA	Pulse Waveform (200Hz, 10%)	Generic	10.00	± 9.6 %
10353	AAA	Pulse Waveform (200Hz, 20%)	Generic	6.99	± 9.6 %
10354	AAA	Pulse Waveform (200Hz, 40%)	Generic	3.98	± 9.6 %
10355	AAA	Pulse Waveform (200Hz, 60%)	Generic	2.22	± 9.6 %
10356	AAA	Pulse Waveform (200Hz, 80%)	Generic	0.97	± 9.6 %
10387	AAA	QPSK Waveform, 1 MHz	Generic	5.10	± 9.6 %
10388	AAA	QPSK Waveform, 10 MHz	Generic	5.22	± 9.6 %
10396	AAA	64-QAM Waveform, 100 kHz	Generic	6.27	± 9.6 %
10399	AAA	64-QAM Waveform, 40 MHz	Generic	6.27	± 9.6 %
10400	AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc dc)	WLAN	8.37	± 9.6 %
10401	AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc dc)	WLAN	8.60	± 9.6 %
10402	AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc dc)	WLAN	8.53	± 9.6 %
10403	AAB	CDMA2000 (1xEV-DO, Rev. 0)	CDMA2000	3.76	± 9.6 %
10404	AAB	CDMA2000 (1xEV-DO, Rev. A)	CDMA2000	3.77	± 9.6 %
10406	AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	CDMA2000	5.22	± 9.6 %
10410	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Sub=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10414	AAA	WLAN CCDF, 64-QAM, 40MHz	Generic	8.54	± 9.6 %
10415	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc dc)	WLAN	1.54	± 9.6 %
10416	AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc dc)	WLAN	8.23	± 9.6 %
10417	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc dc)	WLAN	8.23	± 9.6 %
10418	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Long)	WLAN	8.14	± 9.6 %
10419	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Short)	WLAN	8.19	± 9.6 %
10422	AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN	8.32	± 9.6 %
10423	AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	WLAN	8.47	± 9.6 %
10424	AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	WLAN	8.40	± 9.6 %
10425	AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	WLAN	8.41	± 9.6 %
10426	AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	WLAN	8.45	± 9.6 %
10427	AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	WLAN	8.41	± 9.6 %
10430	AAD	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	LTE-FDD	8.28	± 9.6 %
10431	AAD	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.38	± 9.6 %
10432	AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.34	± 9.6 %
10433	AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FDD	8.34	± 9.6 %
10434	AAA	W-CDMA (BS Test Model 1, 64 DPCH)	WCDMA	8.60	± 9.6 %
10435	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Sub)	LTE-TDD	7.82	± 9.6 %
10447	AAD	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.56	± 9.6 %
10448	AAD	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	LTE-FDD	7.53	± 9.6 %
10449	AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	LTE-FDD	7.51	± 9.6 %
10450	AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.48	± 9.6 %
10451	AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	WCDMA	7.59	± 9.6 %
10453	AAD	Validation (Square, 10ms, 1ms)	Test	10.00	± 9.6 %
10456	AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc dc)	WLAN	8.63	± 9.6 %
10457	AAA	UMTS-FDD (DC-HSDPA)	WCDMA	6.62	± 9.6 %
10458	AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	CDMA2000	6.55	± 9.6 %
10459	AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	8.25	± 9.6 %
10460	AAA	UMTS-FDD (WCDMA, AMR)	WCDMA	2.39	± 9.6 %
10461	AAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Sub)	LTE-TDD	7.82	± 9.6 %
10462	AAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Sub)	LTE-TDD	8.30	± 9.6 %

10463	AAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Sub)	LTE-TDD	8.56	± 9.6 %
10464	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Sub)	LTE-TDD	7.82	± 9.6 %
10465	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	± 9.6 %
10466	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	± 9.6 %
10467	AAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub)	LTE-TDD	7.82	± 9.6 %
10468	AAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	± 9.6 %
10469	AAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Sub)	LTE-TDD	8.56	± 9.6 %
10470	AAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Sub)	LTE-TDD	7.82	± 9.6 %
10471	AAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	± 9.6 %
10472	AAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	± 9.6 %
10473	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Sub)	LTE-TDD	7.82	± 9.6 %
10474	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	± 9.6 %
10475	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	± 9.6 %
10477	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	± 9.6 %
10478	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	± 9.6 %
10479	AAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Sub)	LTE-TDD	7.74	± 9.6 %
10480	AAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Sub)	LTE-TDD	8.18	± 9.6 %
10481	AAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Sub)	LTE-TDD	8.45	± 9.6 %
10482	AAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Sub)	LTE-TDD	7.71	± 9.6 %
10483	AAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, Sub)	LTE-TDD	8.39	± 9.6 %
10484	AAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Sub)	LTE-TDD	8.47	± 9.6 %
10485	AAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Sub)	LTE-TDD	7.59	± 9.6 %
10486	AAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Sub)	LTE-TDD	8.38	± 9.6 %
10487	AAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Sub)	LTE-TDD	8.60	± 9.6 %
10488	AAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Sub)	LTE-TDD	7.70	± 9.6 %
10489	AAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Sub)	LTE-TDD	8.31	± 9.6 %
10490	AAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Sub)	LTE-TDD	8.54	± 9.6 %
10491	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Sub)	LTE-TDD	7.74	± 9.6 %
10492	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Sub)	LTE-TDD	8.41	± 9.6 %
10493	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Sub)	LTE-TDD	8.55	± 9.6 %
10494	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Sub)	LTE-TDD	7.74	± 9.6 %
10495	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Sub)	LTE-TDD	8.37	± 9.6 %
10496	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Sub)	LTE-TDD	8.54	± 9.6 %
10497	AAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Sub)	LTE-TDD	7.67	± 9.6 %
10498	AAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Sub)	LTE-TDD	8.40	± 9.6 %
10499	AAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Sub)	LTE-TDD	8.68	± 9.6 %
10500	AAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Sub)	LTE-TDD	7.67	± 9.6 %
10501	AAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Sub)	LTE-TDD	8.44	± 9.6 %
10502	AAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Sub)	LTE-TDD	8.52	± 9.6 %
10503	AAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Sub)	LTE-TDD	7.72	± 9.6 %
10504	AAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Sub)	LTE-TDD	8.31	± 9.6 %
10505	AAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Sub)	LTE-TDD	8.54	± 9.6 %
10506	AAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Sub)	LTE-TDD	7.74	± 9.6 %
10507	AAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Sub)	LTE-TDD	8.36	± 9.6 %
10508	AAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Sub)	LTE-TDD	8.55	± 9.6 %
10509	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Sub)	LTE-TDD	7.99	± 9.6 %
10510	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Sub)	LTE-TDD	8.49	± 9.6 %
10511	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Sub)	LTE-TDD	8.51	± 9.6 %
10512	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Sub)	LTE-TDD	7.74	± 9.6 %
10513	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Sub)	LTE-TDD	8.42	± 9.6 %
10514	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Sub)	LTE-TDD	8.45	± 9.6 %
10515	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc dc)	WLAN	1.58	± 9.6 %
10516	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc dc)	WLAN	1.57	± 9.6 %
10517	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc dc)	WLAN	1.58	± 9.6 %
10518	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc dc)	WLAN	8.23	± 9.6 %
10519	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc dc)	WLAN	8.39	± 9.6 %
10520	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc dc)	WLAN	8.12	± 9.6 %
10521	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc dc)	WLAN	7.97	± 9.6 %
10522	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc dc)	WLAN	8.45	± 9.6 %
10523	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc dc)	WLAN	8.08	± 9.6 %
10524	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc dc)	WLAN	8.27	± 9.6 %
10525	AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc dc)	WLAN	8.36	± 9.6 %
10526	AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc dc)	WLAN	8.42	± 9.6 %
10527	AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc dc)	WLAN	8.21	± 9.6 %

10528	AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc dc)	WLAN	8.36	± 9.6 %
10529	AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc dc)	WLAN	8.36	± 9.6 %
10531	AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc dc)	WLAN	8.43	± 9.6 %
10532	AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc dc)	WLAN	8.29	± 9.6 %
10533	AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc dc)	WLAN	8.38	± 9.6 %
10534	AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc dc)	WLAN	8.45	± 9.6 %
10535	AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc dc)	WLAN	8.45	± 9.6 %
10536	AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc dc)	WLAN	8.32	± 9.6 %
10537	AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc dc)	WLAN	8.44	± 9.6 %
10538	AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc dc)	WLAN	8.54	± 9.6 %
10540	AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc dc)	WLAN	8.39	± 9.6 %
10541	AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc dc)	WLAN	8.46	± 9.6 %
10542	AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc dc)	WLAN	8.65	± 9.6 %
10543	AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc dc)	WLAN	8.65	± 9.6 %
10544	AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc dc)	WLAN	8.47	± 9.6 %
10545	AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc dc)	WLAN	8.55	± 9.6 %
10546	AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc dc)	WLAN	8.35	± 9.6 %
10547	AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc dc)	WLAN	8.49	± 9.6 %
10548	AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc dc)	WLAN	8.37	± 9.6 %
10550	AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc dc)	WLAN	8.38	± 9.6 %
10551	AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc dc)	WLAN	8.50	± 9.6 %
10552	AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc dc)	WLAN	8.42	± 9.6 %
10553	AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc dc)	WLAN	8.45	± 9.6 %
10554	AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc dc)	WLAN	8.48	± 9.6 %
10555	AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc dc)	WLAN	8.47	± 9.6 %
10556	AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc dc)	WLAN	8.50	± 9.6 %
10557	AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc dc)	WLAN	8.52	± 9.6 %
10558	AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc dc)	WLAN	8.61	± 9.6 %
10560	AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc dc)	WLAN	8.73	± 9.6 %
10561	AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc dc)	WLAN	8.56	± 9.6 %
10562	AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc dc)	WLAN	8.69	± 9.6 %
10563	AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc dc)	WLAN	8.77	± 9.6 %
10564	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc dc)	WLAN	8.25	± 9.6 %
10565	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc dc)	WLAN	8.45	± 9.6 %
10566	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc dc)	WLAN	8.13	± 9.6 %
10567	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc dc)	WLAN	8.00	± 9.6 %
10568	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc dc)	WLAN	8.37	± 9.6 %
10569	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc dc)	WLAN	8.10	± 9.6 %
10570	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc dc)	WLAN	8.30	± 9.6 %
10571	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc dc)	WLAN	1.99	± 9.6 %
10572	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc dc)	WLAN	1.99	± 9.6 %
10573	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc dc)	WLAN	1.98	± 9.6 %
10574	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc dc)	WLAN	1.98	± 9.6 %
10575	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc dc)	WLAN	8.59	± 9.6 %
10576	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc dc)	WLAN	8.60	± 9.6 %
10577	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc dc)	WLAN	8.70	± 9.6 %
10578	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc dc)	WLAN	8.49	± 9.6 %
10579	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc dc)	WLAN	8.36	± 9.6 %
10580	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc dc)	WLAN	8.76	± 9.6 %
10581	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc dc)	WLAN	8.35	± 9.6 %
10582	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc dc)	WLAN	8.67	± 9.6 %
10583	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc dc)	WLAN	8.59	± 9.6 %
10584	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc dc)	WLAN	8.60	± 9.6 %
10585	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc dc)	WLAN	8.70	± 9.6 %
10586	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc dc)	WLAN	8.49	± 9.6 %
10587	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc dc)	WLAN	8.36	± 9.6 %
10588	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc dc)	WLAN	8.76	± 9.6 %
10589	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc dc)	WLAN	8.35	± 9.6 %
10590	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc dc)	WLAN	8.67	± 9.6 %
10591	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc dc)	WLAN	8.63	± 9.6 %
10592	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc dc)	WLAN	8.79	± 9.6 %
10593	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc dc)	WLAN	8.64	± 9.6 %
10594	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc dc)	WLAN	8.74	± 9.6 %
10595	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc dc)	WLAN	8.74	± 9.6 %

10596	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc dc)	WLAN	8.71	± 9.6 %
10597	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc dc)	WLAN	8.72	± 9.6 %
10598	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc dc)	WLAN	8.50	± 9.6 %
10599	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc dc)	WLAN	8.79	± 9.6 %
10600	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc dc)	WLAN	8.88	± 9.6 %
10601	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc dc)	WLAN	8.82	± 9.6 %
10602	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc dc)	WLAN	8.94	± 9.6 %
10603	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc dc)	WLAN	9.03	± 9.6 %
10604	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc dc)	WLAN	8.76	± 9.6 %
10605	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc dc)	WLAN	8.97	± 9.6 %
10606	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc dc)	WLAN	8.82	± 9.6 %
10607	AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc dc)	WLAN	8.64	± 9.6 %
10608	AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc dc)	WLAN	8.77	± 9.6 %
10609	AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc dc)	WLAN	8.57	± 9.6 %
10610	AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc dc)	WLAN	8.78	± 9.6 %
10611	AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc dc)	WLAN	8.70	± 9.6 %
10612	AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc dc)	WLAN	8.77	± 9.6 %
10613	AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc dc)	WLAN	8.94	± 9.6 %
10614	AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc dc)	WLAN	8.59	± 9.6 %
10615	AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc dc)	WLAN	8.82	± 9.6 %
10616	AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc dc)	WLAN	8.82	± 9.6 %
10617	AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc dc)	WLAN	8.81	± 9.6 %
10618	AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc dc)	WLAN	8.58	± 9.6 %
10619	AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc dc)	WLAN	8.86	± 9.6 %
10620	AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc dc)	WLAN	8.87	± 9.6 %
10621	AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc dc)	WLAN	8.77	± 9.6 %
10622	AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc dc)	WLAN	8.68	± 9.6 %
10623	AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc dc)	WLAN	8.82	± 9.6 %
10624	AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc dc)	WLAN	8.96	± 9.6 %
10625	AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc dc)	WLAN	8.96	± 9.6 %
10626	AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc dc)	WLAN	8.83	± 9.6 %
10627	AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc dc)	WLAN	8.88	± 9.6 %
10628	AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc dc)	WLAN	8.71	± 9.6 %
10629	AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc dc)	WLAN	8.85	± 9.6 %
10630	AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc dc)	WLAN	8.72	± 9.6 %
10631	AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc dc)	WLAN	8.81	± 9.6 %
10632	AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc dc)	WLAN	8.74	± 9.6 %
10633	AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc dc)	WLAN	8.83	± 9.6 %
10634	AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc dc)	WLAN	8.80	± 9.6 %
10635	AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc dc)	WLAN	8.81	± 9.6 %
10636	AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc dc)	WLAN	8.83	± 9.6 %
10637	AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc dc)	WLAN	8.79	± 9.6 %
10638	AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc dc)	WLAN	8.86	± 9.6 %
10639	AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc dc)	WLAN	8.85	± 9.6 %
10640	AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc dc)	WLAN	8.98	± 9.6 %
10641	AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc dc)	WLAN	9.06	± 9.6 %
10642	AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc dc)	WLAN	9.06	± 9.6 %
10643	AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc dc)	WLAN	8.89	± 9.6 %
10644	AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc dc)	WLAN	9.05	± 9.6 %
10645	AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc dc)	WLAN	9.11	± 9.6 %
10646	AAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub=2,7)	LTE-TDD	11.96	± 9.6 %
10647	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Sub=2,7)	LTE-TDD	11.96	± 9.6 %
10648	AAA	CDMA2000 (1x Advanced)	CDMA2000	3.45	± 9.6 %
10652	AAE	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	± 9.6 %
10653	AAE	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.42	± 9.6 %
10654	AAD	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.96	± 9.6 %
10655	AAE	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.21	± 9.6 %
10658	AAA	Pulse Waveform (200Hz, 10%)	Test	10.00	± 9.6 %
10659	AAA	Pulse Waveform (200Hz, 20%)	Test	6.99	± 9.6 %
10660	AAA	Pulse Waveform (200Hz, 40%)	Test	3.98	± 9.6 %
10661	AAA	Pulse Waveform (200Hz, 60%)	Test	2.22	± 9.6 %
10662	AAA	Pulse Waveform (200Hz, 80%)	Test	0.97	± 9.6 %
10670	AAA	Bluetooth Low Energy	Bluetooth	2.19	± 9.6 %
10671	AAA	IEEE 802.11ax (20MHz, MCS0, 90pc dc)	WLAN	9.09	± 9.6 %

10672	AAA	IEEE 802.11ax (20MHz, MCS1, 90pc dc)	WLAN	8.57	± 9.6 %
10673	AAA	IEEE 802.11ax (20MHz, MCS2, 90pc dc)	WLAN	8.78	± 9.6 %
10674	AAA	IEEE 802.11ax (20MHz, MCS3, 90pc dc)	WLAN	8.74	± 9.6 %
10675	AAA	IEEE 802.11ax (20MHz, MCS4, 90pc dc)	WLAN	8.90	± 9.6 %
10676	AAA	IEEE 802.11ax (20MHz, MCS5, 90pc dc)	WLAN	8.77	± 9.6 %
10677	AAA	IEEE 802.11ax (20MHz, MCS6, 90pc dc)	WLAN	8.73	± 9.6 %
10678	AAA	IEEE 802.11ax (20MHz, MCS7, 90pc dc)	WLAN	8.78	± 9.6 %
10679	AAA	IEEE 802.11ax (20MHz, MCS8, 90pc dc)	WLAN	8.89	± 9.6 %
10680	AAA	IEEE 802.11ax (20MHz, MCS9, 90pc dc)	WLAN	8.80	± 9.6 %
10681	AAA	IEEE 802.11ax (20MHz, MCS10, 90pc dc)	WLAN	8.62	± 9.6 %
10682	AAA	IEEE 802.11ax (20MHz, MCS11, 90pc dc)	WLAN	8.83	± 9.6 %
10683	AAA	IEEE 802.11ax (20MHz, MCS0, 99pc dc)	WLAN	8.42	± 9.6 %
10684	AAA	IEEE 802.11ax (20MHz, MCS1, 99pc dc)	WLAN	8.26	± 9.6 %
10685	AAA	IEEE 802.11ax (20MHz, MCS2, 99pc dc)	WLAN	8.33	± 9.6 %
10686	AAA	IEEE 802.11ax (20MHz, MCS3, 99pc dc)	WLAN	8.28	± 9.6 %
10687	AAA	IEEE 802.11ax (20MHz, MCS4, 99pc dc)	WLAN	8.45	± 9.6 %
10688	AAA	IEEE 802.11ax (20MHz, MCS5, 99pc dc)	WLAN	8.29	± 9.6 %
10689	AAA	IEEE 802.11ax (20MHz, MCS6, 99pc dc)	WLAN	8.55	± 9.6 %
10690	AAA	IEEE 802.11ax (20MHz, MCS7, 99pc dc)	WLAN	8.29	± 9.6 %
10691	AAA	IEEE 802.11ax (20MHz, MCS8, 99pc dc)	WLAN	8.25	± 9.6 %
10692	AAA	IEEE 802.11ax (20MHz, MCS9, 99pc dc)	WLAN	8.29	± 9.6 %
10693	AAA	IEEE 802.11ax (20MHz, MCS10, 99pc dc)	WLAN	8.25	± 9.6 %
10694	AAA	IEEE 802.11ax (20MHz, MCS11, 99pc dc)	WLAN	8.57	± 9.6 %
10695	AAA	IEEE 802.11ax (40MHz, MCS0, 90pc dc)	WLAN	8.78	± 9.6 %
10696	AAA	IEEE 802.11ax (40MHz, MCS1, 90pc dc)	WLAN	8.91	± 9.6 %
10697	AAA	IEEE 802.11ax (40MHz, MCS2, 90pc dc)	WLAN	8.61	± 9.6 %
10698	AAA	IEEE 802.11ax (40MHz, MCS3, 90pc dc)	WLAN	8.89	± 9.6 %
10699	AAA	IEEE 802.11ax (40MHz, MCS4, 90pc dc)	WLAN	8.82	± 9.6 %
10700	AAA	IEEE 802.11ax (40MHz, MCS5, 90pc dc)	WLAN	8.73	± 9.6 %
10701	AAA	IEEE 802.11ax (40MHz, MCS6, 90pc dc)	WLAN	8.86	± 9.6 %
10702	AAA	IEEE 802.11ax (40MHz, MCS7, 90pc dc)	WLAN	8.70	± 9.6 %
10703	AAA	IEEE 802.11ax (40MHz, MCS8, 90pc dc)	WLAN	8.82	± 9.6 %
10704	AAA	IEEE 802.11ax (40MHz, MCS9, 90pc dc)	WLAN	8.56	± 9.6 %
10705	AAA	IEEE 802.11ax (40MHz, MCS10, 90pc dc)	WLAN	8.69	± 9.6 %
10706	AAA	IEEE 802.11ax (40MHz, MCS11, 90pc dc)	WLAN	8.66	± 9.6 %
10707	AAA	IEEE 802.11ax (40MHz, MCS0, 99pc dc)	WLAN	8.32	± 9.6 %
10708	AAA	IEEE 802.11ax (40MHz, MCS1, 99pc dc)	WLAN	8.55	± 9.6 %
10709	AAA	IEEE 802.11ax (40MHz, MCS2, 99pc dc)	WLAN	8.33	± 9.6 %
10710	AAA	IEEE 802.11ax (40MHz, MCS3, 99pc dc)	WLAN	8.29	± 9.6 %
10711	AAA	IEEE 802.11ax (40MHz, MCS4, 99pc dc)	WLAN	8.39	± 9.6 %
10712	AAA	IEEE 802.11ax (40MHz, MCS5, 99pc dc)	WLAN	8.67	± 9.6 %
10713	AAA	IEEE 802.11ax (40MHz, MCS6, 99pc dc)	WLAN	8.33	± 9.6 %
10714	AAA	IEEE 802.11ax (40MHz, MCS7, 99pc dc)	WLAN	8.26	± 9.6 %
10715	AAA	IEEE 802.11ax (40MHz, MCS8, 99pc dc)	WLAN	8.45	± 9.6 %
10716	AAA	IEEE 802.11ax (40MHz, MCS9, 99pc dc)	WLAN	8.30	± 9.6 %
10717	AAA	IEEE 802.11ax (40MHz, MCS10, 99pc dc)	WLAN	8.48	± 9.6 %
10718	AAA	IEEE 802.11ax (40MHz, MCS11, 99pc dc)	WLAN	8.24	± 9.6 %
10719	AAA	IEEE 802.11ax (80MHz, MCS0, 90pc dc)	WLAN	8.81	± 9.6 %
10720	AAA	IEEE 802.11ax (80MHz, MCS1, 90pc dc)	WLAN	8.87	± 9.6 %
10721	AAA	IEEE 802.11ax (80MHz, MCS2, 90pc dc)	WLAN	8.76	± 9.6 %
10722	AAA	IEEE 802.11ax (80MHz, MCS3, 90pc dc)	WLAN	8.55	± 9.6 %
10723	AAA	IEEE 802.11ax (80MHz, MCS4, 90pc dc)	WLAN	8.70	± 9.6 %
10724	AAA	IEEE 802.11ax (80MHz, MCS5, 90pc dc)	WLAN	8.90	± 9.6 %
10725	AAA	IEEE 802.11ax (80MHz, MCS6, 90pc dc)	WLAN	8.74	± 9.6 %
10726	AAA	IEEE 802.11ax (80MHz, MCS7, 90pc dc)	WLAN	8.72	± 9.6 %
10727	AAA	IEEE 802.11ax (80MHz, MCS8, 90pc dc)	WLAN	8.66	± 9.6 %
10728	AAA	IEEE 802.11ax (80MHz, MCS9, 90pc dc)	WLAN	8.65	± 9.6 %
10729	AAA	IEEE 802.11ax (80MHz, MCS10, 90pc dc)	WLAN	8.64	± 9.6 %
10730	AAA	IEEE 802.11ax (80MHz, MCS11, 90pc dc)	WLAN	8.67	± 9.6 %
10731	AAA	IEEE 802.11ax (80MHz, MCS0, 99pc dc)	WLAN	8.42	± 9.6 %
10732	AAA	IEEE 802.11ax (80MHz, MCS1, 99pc dc)	WLAN	8.46	± 9.6 %
10733	AAA	IEEE 802.11ax (80MHz, MCS2, 99pc dc)	WLAN	8.40	± 9.6 %
10734	AAA	IEEE 802.11ax (80MHz, MCS3, 99pc dc)	WLAN	8.25	± 9.6 %
10735	AAA	IEEE 802.11ax (80MHz, MCS4, 99pc dc)	WLAN	8.33	± 9.6 %

10736	AAA	IEEE 802.11ax (80MHz, MCS5, 99pc dc)	WLAN	8.27	± 9.6 %
10737	AAA	IEEE 802.11ax (80MHz, MCS6, 99pc dc)	WLAN	8.36	± 9.6 %
10738	AAA	IEEE 802.11ax (80MHz, MCS7, 99pc dc)	WLAN	8.42	± 9.6 %
10739	AAA	IEEE 802.11ax (80MHz, MCS8, 99pc dc)	WLAN	8.29	± 9.6 %
10740	AAA	IEEE 802.11ax (80MHz, MCS9, 99pc dc)	WLAN	8.48	± 9.6 %
10741	AAA	IEEE 802.11ax (80MHz, MCS10, 99pc dc)	WLAN	8.40	± 9.6 %
10742	AAA	IEEE 802.11ax (80MHz, MCS11, 99pc dc)	WLAN	8.43	± 9.6 %
10743	AAA	IEEE 802.11ax (160MHz, MCS0, 90pc dc)	WLAN	8.94	± 9.6 %
10744	AAA	IEEE 802.11ax (160MHz, MCS1, 90pc dc)	WLAN	9.16	± 9.6 %
10745	AAA	IEEE 802.11ax (160MHz, MCS2, 90pc dc)	WLAN	8.93	± 9.6 %
10746	AAA	IEEE 802.11ax (160MHz, MCS3, 90pc dc)	WLAN	9.11	± 9.6 %
10747	AAA	IEEE 802.11ax (160MHz, MCS4, 90pc dc)	WLAN	9.04	± 9.6 %
10748	AAA	IEEE 802.11ax (160MHz, MCS5, 90pc dc)	WLAN	8.93	± 9.6 %
10749	AAA	IEEE 802.11ax (160MHz, MCS6, 90pc dc)	WLAN	8.90	± 9.6 %
10750	AAA	IEEE 802.11ax (160MHz, MCS7, 90pc dc)	WLAN	8.79	± 9.6 %
10751	AAA	IEEE 802.11ax (160MHz, MCS8, 90pc dc)	WLAN	8.82	± 9.6 %
10752	AAA	IEEE 802.11ax (160MHz, MCS9, 90pc dc)	WLAN	8.81	± 9.6 %
10753	AAA	IEEE 802.11ax (160MHz, MCS10, 90pc dc)	WLAN	9.00	± 9.6 %
10754	AAA	IEEE 802.11ax (160MHz, MCS11, 90pc dc)	WLAN	8.94	± 9.6 %
10755	AAA	IEEE 802.11ax (160MHz, MCS0, 99pc dc)	WLAN	8.64	± 9.6 %
10756	AAA	IEEE 802.11ax (160MHz, MCS1, 99pc dc)	WLAN	8.77	± 9.6 %
10757	AAA	IEEE 802.11ax (160MHz, MCS2, 99pc dc)	WLAN	8.77	± 9.6 %
10758	AAA	IEEE 802.11ax (160MHz, MCS3, 99pc dc)	WLAN	8.69	± 9.6 %
10759	AAA	IEEE 802.11ax (160MHz, MCS4, 99pc dc)	WLAN	8.58	± 9.6 %
10760	AAA	IEEE 802.11ax (160MHz, MCS5, 99pc dc)	WLAN	8.49	± 9.6 %
10761	AAA	IEEE 802.11ax (160MHz, MCS6, 99pc dc)	WLAN	8.58	± 9.6 %
10762	AAA	IEEE 802.11ax (160MHz, MCS7, 99pc dc)	WLAN	8.49	± 9.6 %
10763	AAA	IEEE 802.11ax (160MHz, MCS8, 99pc dc)	WLAN	8.53	± 9.6 %
10764	AAA	IEEE 802.11ax (160MHz, MCS9, 99pc dc)	WLAN	8.54	± 9.6 %
10765	AAA	IEEE 802.11ax (160MHz, MCS10, 99pc dc)	WLAN	8.54	± 9.6 %
10766	AAA	IEEE 802.11ax (160MHz, MCS11, 99pc dc)	WLAN	8.51	± 9.6 %
10767	AAC	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	7.99	± 9.6 %
10768	AAC	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	± 9.6 %
10769	AAC	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	± 9.6 %
10770	AAC	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	± 9.6 %
10771	AAC	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	± 9.6 %
10772	AAC	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.23	± 9.6 %
10773	AAC	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.03	± 9.6 %
10774	AAC	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	± 9.6 %
10775	AAB	5G NR (CP-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	± 9.6 %
10776	AAC	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	± 9.6 %
10777	AAB	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	± 9.6 %
10778	AAC	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10779	AAB	5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.42	± 9.6 %
10780	AAC	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	± 9.6 %
10781	AAC	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	± 9.6 %
10782	AAC	5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.43	± 9.6 %
10783	AAC	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	± 9.6 %
10784	AAC	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.29	± 9.6 %
10785	AAC	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.40	± 9.6 %
10786	AAC	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.35	± 9.6 %
10787	AAC	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.44	± 9.6 %
10788	AAC	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	± 9.6 %
10789	AAC	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.37	± 9.6 %
10790	AAC	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	± 9.6 %
10791	AAC	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.83	± 9.6 %
10792	AAC	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.92	± 9.6 %
10793	AAC	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.95	± 9.6 %
10794	AAC	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	± 9.6 %
10795	AAC	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.84	± 9.6 %
10796	AAC	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	± 9.6 %
10797	AAC	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.01	± 9.6 %
10798	AAC	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	± 9.6 %
10799	AAC	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	± 9.6 %

10801	AAC	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	± 9.6 %
10802	AAC	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.87	± 9.6 %
10803	AAC	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	± 9.6 %
10805	AAC	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10806	AAC	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.37	± 9.6 %
10809	AAC	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10810	AAC	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10812	AAC	5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	± 9.6 %
10817	AAC	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	± 9.6 %
10818	AAC	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10819	AAC	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.33	± 9.6 %
10820	AAC	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.30	± 9.6 %
10821	AAC	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10822	AAC	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10823	AAC	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.36	± 9.6 %
10824	AAC	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.39	± 9.6 %
10825	AAC	5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10827	AAC	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.42	± 9.6 %
10828	AAC	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.43	± 9.6 %
10829	AAC	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.40	± 9.6 %
10830	AAC	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.63	± 9.6 %
10831	AAC	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.73	± 9.6 %
10832	AAC	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.74	± 9.6 %
10833	AAC	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	± 9.6 %
10834	AAC	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.75	± 9.6 %
10835	AAC	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	± 9.6 %
10836	AAC	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.66	± 9.6 %
10837	AAC	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.68	± 9.6 %
10839	AAC	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	± 9.6 %
10840	AAC	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.67	± 9.6 %
10841	AAC	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.71	± 9.6 %
10843	AAC	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.49	± 9.6 %
10844	AAC	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10846	AAC	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10854	AAC	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10855	AAC	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.36	± 9.6 %
10856	AAC	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	± 9.6 %
10857	AAC	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.35	± 9.6 %
10858	AAC	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.36	± 9.6 %
10859	AAC	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10860	AAC	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10861	AAC	5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.40	± 9.6 %
10863	AAC	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10864	AAC	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	± 9.6 %
10865	AAC	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	± 9.6 %
10866	AAC	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	± 9.6 %
10868	AAC	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.89	± 9.6 %
10869	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	± 9.6 %
10870	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.86	± 9.6 %
10871	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	5.75	± 9.6 %
10872	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.52	± 9.6 %
10873	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	± 9.6 %
10874	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.65	± 9.6 %
10875	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	± 9.6 %
10876	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	8.39	± 9.6 %
10877	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	7.95	± 9.6 %
10878	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.41	± 9.6 %
10879	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.12	± 9.6 %
10880	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.38	± 9.6 %
10881	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	± 9.6 %
10882	AAD	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.96	± 9.6 %
10883	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.57	± 9.6 %
10884	AAD	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.53	± 9.6 %
10885	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	± 9.6 %