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SAR EVALUATION REPORT

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

Date of Testing:
07/05/2019 - 07/24/2019
Test Site/Location:
PCTEST Lab, Morgan Hill, CA, USA
Document Serial No.:
1C1905130011-01-R1.BCG

FCC ID:	**BCG-A2157**
APPLICANT:	**APPLE, INC.**

DUT Type:	Watch
Application Type:	Certification
FCC Rule Part(s):	CFR §2.1093
Model:	A2157

Equipment Class	Band & Mode	Tx Frequency	SAR	
			1g Head (W/kg)	10g Extremity (W/kg)
PCT	UMTS 850	826.40 - 846.60 MHz	< 0.1	0.25
PCT	UMTS 1750	1712.4 - 1752.6 MHz	0.25	< 0.1
PCT	UMTS 1900	1852.4 - 1907.6 MHz	0.48	0.11
PCT	LTE Band 26 (Cell)	814.7 - 848.3 MHz	< 0.1	0.25
PCT	LTE Band 5 (Cell)	824.7 - 848.3 MHz	< 0.1	0.26
PCT	LTE Band 66 (AWS)	1710.7 - 1779.3 MHz	0.34	0.14
PCT	LTE Band 4 (AWS)	1710.7 - 1754.3 MHz	N/A	N/A
PCT	LTE Band 25 (PCS)	1850.7 - 1914.3 MHz	0.47	0.10
PCT	LTE Band 2 (PCS)	1850.7 - 1909.3 MHz	N/A	N/A
PCT	LTE Band 7	2502.5 - 2567.5 MHz	0.52	0.21
PCT	LTE Band 41	2498.5 - 2687.5 MHz	0.42	0.12
DTS	2.4 GHz WLAN	2412 - 2472 MHz	0.20	< 0.1
DSS/DTS	Bluetooth	2402 - 2480 MHz	0.13	< 0.1
Simultaneous SAR per KDB 690783 D01v01r03:			0.71	0.32

Note: This revised Test Report (S/N: 1C1905130011-01-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

The SAR Tick is an initiative of the Mobile & Wireless Forum (MWF). While a product may be considered eligible, use of the SAR Tick logo requires an agreement with the MWF. Further details can be obtained by emailing: sartick@mwfai.info.

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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
Bluetooth	Data	2402 - 2480 MHz
NFC	Data	13.56 MHz

1.2 Power Reduction for SAR

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

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.

Table 1.3.1 Summary Maximum and Nominal Conducted Powers – UMTS Mode

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

Table 1.3.2 Summary Maximum and Nominal Conducted Powers – 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**

Table 1.3.3 Summary Maximum Conducted Powers – WiFi Mode

Mode / Band		Modulated Average (dBm)				
		Ch. 1	Ch. 2-10	Ch. 11	Ch. 12	Ch. 13
IEEE 802.11b (2.4 GHz)	Maximum	**19.0**				**18.0**
IEEE 802.11g (2.4 GHz)	Maximum	**17.5**	**18.5**	**17.0**	**15.0**	**7.0**
IEEE 802.11n (2.4 GHz)	Maximum	**17.5**	**18.5**	**17.0**	**15.0**	**7.0**

Table 1.3.4 Summary Maximum and Nominal Conducted Powers – Bluetooth Mode

Mode / Band		Modulated Average (dBm)
Bluetooth BDR/LE	Maximum	**17.5**
Bluetooth EDR	Maximum	**13.0**
Bluetooth HDR4	Maximum	**12.5**
Bluetooth HDR8	Maximum	**10.0**

1.4 DUT Antenna Locations

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

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 F.

1.6 Simultaneous Transmission Capabilities

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

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

Table 1-1
Simultaneous Transmission Scenarios

No.	Capable Transmit Configuration	Head	Extremity
1	UMTS + 2.4 GHz WI-FI	Yes	Yes
2	UMTS + 2.4 GHz Bluetooth	Yes	Yes
3	LTE + 2.4 GHz WI-FI	Yes	Yes
4	LTE + 2.4 GHz Bluetooth	Yes	Yes

1. 2.4 GHz WLAN, and 2.4 GHz Bluetooth share the same antenna path and cannot transmit simultaneously.
2. All licensed modes share the same antenna path and cannot transmit simultaneously.
3. 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.
4. This device supports VOLTE and VoWIFI

1.7 Miscellaneous SAR Test Considerations

(A) WIFI

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

(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 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.

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.

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 Wristband Types

This device has four housing types that were evaluated independently for SAR: Aluminum, Stainless Steel, Titanium, and Ceramic. 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.

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.				

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]

4 DOSIMETRIC ASSESSMENT

4.1 Measurement Procedure

The evaluation was performed using the following procedure compliant to FCC KDB Publication 865664 D01v01r04.

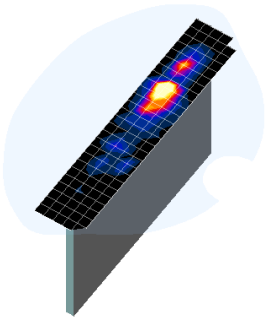

Figure 4-1
Sample SAR Area Scan

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

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.

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.

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.

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.

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 for 1g SAR and ≤ 2.0 W/kg for 10g SAR, 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 for 1g SAR and > 3.625 W/kg for 10g SAR, 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 for 1g SAR and < 2.0 W/kg for 10g SAR.
d. Per Section 5.2.4 and 5.3, SAR tests for higher order modulations and lower bandwidths configurations are not required when the conducted power of the required test configurations determined by Sections 5.2.1 through 5.2.3 is less than or equal to ½ dB higher than the equivalent configuration using QPSK modulation and when the QPSK SAR for those configurations is <1.45 W/kg for 1g SAR and < 3.625 W/kg for 10g SAR.
e. This device can only operate with 16QAM on the uplink with less than or equal to 27 RB. For 16 QAM configurations with 10 MHz, 15 MHz, and 20 MHz bandwidths, LTE powers for RB size or 15 (“50% RB”) and 27 (“100% RB) with offsets to upper edge, middle, and lower ede of the channel are additionally measured for both QPSK and 16 QAM modulations to support comparison and SAR test exclusion per section 5.2.4 and 5.3.

7.5.5 TDD

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

7.6 SAR Testing with 802.11 Transmitters

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

7.6.1 General Device Setup

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

8 RF CONDUCTED POWERS

8.1 UMTS Conducted Powers

Table 8-1
Maximum Conducted Powers

3GPP Release Version	Mode	3GPP 34.121 Subtest	Cellular Band [dBm]			AWS Band [dBm]			PCS Band [dBm]			3GPP MPR [dB]
			4132	4183	4233	1312	1412	1513	9262	9400	9538	
99	WCDMA	12.2 kbps RMC	24.42	24.29	24.30	23.41	23.48	23.37	23.42	23.45	23.36	-
99		12.2 kbps AMR	24.50	24.41	24.47	23.37	23.35	23.48	23.38	23.28	23.24	-
6	HSDPA	Subtest 1	24.46	24.43	24.40	23.23	23.44	23.41	23.36	23.44	23.29	0
6		Subtest 2	23.62	23.59	23.47	22.22	22.50	22.40	22.43	22.51	22.28	0
6		Subtest 3	23.04	23.06	22.93	21.71	22.00	21.95	21.92	21.98	21.74	0.5
6		Subtest 4	22.80	22.81	22.70	21.50	21.69	21.67	21.62	21.69	21.50	0.5
6	HSUPA	Subtest 1	23.37	23.37	23.32	22.27	22.50	22.42	22.35	22.41	22.26	0
6		Subtest 2	21.38	21.37	21.26	20.10	20.16	20.15	20.17	20.25	20.02	2
6		Subtest 3	22.10	22.12	22.02	21.00	21.05	21.02	21.01	21.10	21.00	1
6		Subtest 4	21.68	21.62	21.45	20.18	20.38	20.39	20.41	20.55	20.29	2
6		Subtest 5	23.63	23.56	23.48	22.28	22.50	22.45	22.45	22.56	22.35	0

This device does not support DC-HSDPA.

Figure 8-1
Power Measurement Setup

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	23.89	**24.08**	23.79	0
	1	25	23.86	23.98	23.71	0
	1	49	23.80	23.93	23.68	0
	25	0	23.39	**23.43**	23.34	1
	25	12	23.30	23.40	23.32	1
	25	25	23.34	23.39	23.25	1
	50	0	23.32	23.33	23.32	1
	15	0	23.39	23.49	23.50	1
	15	17	23.36	23.50	23.49	1
	15	35	23.42	23.49	23.47	1
	27	0	23.33	23.48	23.48	1
	27	12	23.38	23.44	23.46	1
	27	23	23.37	23.44	23.43	1
16QAM	1	0	23.25	23.39	23.32	1
	1	25	23.23	23.33	23.22	1
	1	49	23.15	23.23	23.11	1
	25	0	22.49	22.45	22.44	2
	25	12	22.42	22.43	22.47	2
	25	25	22.42	22.44	22.43	2
	15	0	22.41	22.41	22.48	2
	15	17	22.41	22.48	22.45	2
	15	35	22.42	22.42	22.41	2
	27	0	22.38	22.34	22.41	2
	27	12	22.41	22.33	22.41	2
	27	23	22.42	22.34	22.41	2

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	24.15	24.08	24.03	0
	1	12	24.10	24.06	23.97	0
	1	24	24.01	24.12	23.82	0
	12	0	23.42	23.42	23.47	1
	12	6	23.41	23.44	23.48	1
	12	13	23.44	23.40	23.44	1
	25	0	23.45	23.45	23.50	1
16QAM	1	0	23.28	23.21	23.28	1
	1	12	23.35	23.18	23.19	1
	1	24	23.22	23.15	23.08	1
	12	0	22.39	22.32	22.39	2
	12	6	22.39	22.42	22.39	2
	12	13	22.42	22.44	22.32	2
	25	0	22.35	22.38	22.38	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	23.78	23.65	23.64	0
	1	7	23.79	23.64	23.55	0
	1	14	23.69	23.68	23.56	0
	8	0	23.30	23.28	23.13	1
	8	4	23.29	23.33	23.10	1
	8	7	23.30	23.33	23.12	1
	15	0	23.27	23.34	23.16	1
16QAM	1	0	23.28	23.23	23.28	1
	1	7	23.24	23.14	23.20	1
	1	14	23.16	23.11	23.25	1
	8	0	22.40	22.37	22.26	2
	8	4	22.45	22.41	22.23	2
	8	7	22.44	22.38	22.23	2
	15	0	22.40	22.39	22.26	2

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	23.59	23.65	23.52	0
	1	2	23.53	23.64	23.51	0
	1	5	23.53	23.66	23.63	0
	3	0	23.65	23.58	23.53	0
	3	2	23.64	23.59	23.51	0
	3	3	23.55	23.62	23.50	0
	6	0	23.19	23.24	22.98	1
16QAM	1	0	23.50	23.31	23.21	1
	1	2	23.49	23.36	23.20	1
	1	5	23.47	23.32	23.21	1
	3	0	23.17	23.25	23.05	1
	3	2	23.22	23.30	22.99	1
	3	3	23.21	23.32	23.00	1
	6	0	22.46	22.50	22.34	2

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	**23.95**	0
	1	25	23.90	0
	1	49	23.88	0
	25	0	**23.47**	1
	25	12	23.41	1
	25	25	23.43	1
	50	0	23.38	1
	15	0	23.19	1
	15	17	23.19	1
	15	35	23.26	1
	27	0	23.13	1
	27	12	23.12	1
	27	23	23.22	1
16QAM	1	0	23.34	1
	1	25	23.40	1
	1	49	23.35	1
	25	0	22.48	2
	25	12	22.46	2
	25	25	22.50	2
	15	0	22.49	2
	15	17	22.75	2
	15	35	22.75	2
	27	0	22.84	2
	27	12	22.67	2
	27	23	22.63	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.

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	23.62	23.74	23.85	0
	1	12	23.61	23.75	23.64	0
	1	24	23.61	23.84	23.63	0
	12	0	23.27	23.34	23.39	1
	12	6	23.23	23.32	23.37	1
	12	13	23.22	23.40	23.39	1
	25	0	23.38	23.41	23.43	1
16QAM	1	0	23.24	23.39	23.01	1
	1	12	23.36	23.41	23.06	1
	1	24	23.40	23.34	23.03	1
	12	0	22.47	22.38	22.36	2
	12	6	22.44	22.36	22.38	2
	12	13	22.50	22.40	22.33	2
	25	0	22.42	22.42	22.35	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	23.81	23.61	23.58	0
	1	7	23.77	23.63	23.55	0
	1	14	23.68	23.60	23.59	0
	8	0	23.39	23.28	23.15	1
	8	4	23.38	23.26	23.16	1
	8	7	23.39	23.35	23.13	1
	15	0	23.42	23.31	23.17	1
16QAM	1	0	23.09	23.15	23.00	1
	1	7	23.17	23.09	22.92	1
	1	14	22.99	23.22	22.91	1
	8	0	22.47	22.45	22.48	2
	8	4	22.46	22.44	22.45	2
	8	7	22.50	22.46	22.46	2
	15	0	22.43	22.47	22.46	2

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	23.77	23.63	23.55	0
	1	2	23.75	23.54	23.56	0
	1	5	23.59	23.55	23.57	0
	3	0	23.75	23.51	23.51	0
	3	2	23.65	23.50	23.60	0
	3	3	23.65	23.50	23.51	0
	6	0	23.22	23.10	22.93	1
16QAM	1	0	23.00	22.69	23.26	1
	1	2	23.10	22.71	23.22	1
	1	5	23.17	22.75	23.29	1
	3	0	22.53	22.54	23.16	1
	3	2	22.51	22.60	23.14	1
	3	3	22.50	22.58	23.20	1
	6	0	22.34	22.44	22.50	2

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	22.50	22.54	**22.66**	0
	1	50	22.44	22.59	22.64	0
	1	99	22.45	22.64	22.59	0
	50	0	21.95	22.15	**22.40**	1
	50	25	21.89	22.11	22.33	1
	50	50	21.96	22.16	22.28	1
	100	0	22.19	22.37	22.39	1
	15	0	22.77	22.97	22.78	0
	15	42	22.83	23.12	22.85	0
	15	85	22.72	23.03	22.72	0
	27	0	22.34	22.49	22.39	1
	27	37	22.37	22.50	22.39	1
	27	73	22.40	22.39	22.37	1
16QAM	1	0	21.79	22.28	22.14	1
	1	50	21.61	22.31	22.17	1
	1	99	21.71	22.22	22.08	1
	15	0	22.12	22.50	21.70	1
	15	42	22.10	22.12	21.65	1
	15	85	22.07	22.50	21.55	1
	27	0	21.38	21.42	21.50	2
	27	37	21.40	21.44	21.50	2
	27	73	21.39	21.46	21.42	2

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	22.70	22.66	22.72	0
	1	36	22.61	22.76	22.80	0
	1	74	22.54	22.69	22.78	0
	36	0	22.12	22.19	22.17	1
	36	18	22.05	22.23	22.21	1
	36	37	22.06	22.21	22.10	1
	75	0	22.14	22.28	22.26	1
	15	0	22.70	22.79	22.70	0
	15	30	22.73	22.91	22.78	0
	15	60	22.77	22.88	22.72	0
	27	0	22.11	22.24	22.07	1
	27	24	22.11	22.30	22.13	1
	27	48	22.11	22.28	22.07	1
16QAM	1	0	22.49	22.45	22.50	1
	1	36	22.41	22.46	22.45	1
	1	74	22.39	22.49	22.46	1
	15	0	22.32	22.45	22.43	1
	15	30	22.37	22.40	22.45	1
	15	60	22.39	22.48	22.43	1
	27	0	21.45	21.46	21.47	2
	27	24	21.42	21.49	21.50	2
	27	48	21.40	21.47	21.42	2

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	22.55	22.56	22.62	0
	1	25	22.50	22.58	22.66	0
	1	49	22.51	22.52	22.60	0
	25	0	21.99	22.12	22.08	1
	25	12	21.95	22.12	22.09	1
	25	25	21.94	22.14	22.11	1
	50	0	21.94	22.09	22.12	1
	15	0	22.08	22.14	22.16	1
	15	17	21.96	22.16	22.15	1
	15	35	22.02	22.19	22.18	1
	27	0	21.98	22.11	22.08	1
	27	12	21.94	22.12	22.09	1
	27	23	21.96	22.13	22.00	1
16QAM	1	0	22.47	22.30	22.46	1
	1	25	22.49	22.30	22.50	1
	1	49	22.43	22.43	22.50	1
	25	0	21.34	21.30	21.31	2
	25	12	21.46	21.31	21.36	2
	25	25	21.46	21.32	21.35	2
	15	0	21.46	21.38	21.30	2
	15	17	21.33	21.36	21.34	2
	15	35	21.32	21.31	21.33	2
	27	0	21.34	21.28	21.30	2
	27	12	21.49	21.24	21.31	2
	27	23	21.44	21.28	21.31	2

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	22.70	22.53	22.50	0
	1	12	22.63	22.56	22.53	0
	1	24	22.58	22.66	22.53	0
	12	0	21.99	22.06	22.09	1
	12	6	21.89	22.06	22.02	1
	12	13	21.89	22.07	22.03	1
	25	0	21.91	22.07	22.04	1
16QAM	1	0	22.50	22.46	22.49	1
	1	12	22.48	22.42	22.50	1
	1	24	22.46	22.40	22.47	1
	12	0	21.31	21.38	21.38	2
	12	6	21.45	21.40	21.39	2
	12	13	21.48	21.30	21.33	2
	25	0	21.32	21.37	21.42	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	22.57	22.48	22.61	0
	1	7	22.55	22.55	22.55	0
	1	14	22.51	22.56	22.63	0
	8	0	21.87	21.78	21.92	1
	8	4	21.86	21.81	21.93	1
	8	7	21.78	21.87	21.92	1
	15	0	21.85	21.86	21.91	1
16QAM	1	0	22.44	22.43	22.33	1
	1	7	22.44	22.45	22.50	1
	1	14	22.45	22.45	22.45	1
	8	0	21.48	21.38	21.44	2
	8	4	21.50	21.37	21.44	2
	8	7	21.45	21.35	21.41	2
	15	0	21.49	21.32	21.40	2

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	22.78	22.52	22.67	0
	1	2	22.73	22.54	22.68	0
	1	5	22.67	22.56	22.65	0
	3	0	22.69	22.67	22.78	0
	3	2	22.70	22.68	22.71	0
	3	3	22.68	22.67	22.72	0
	6	0	21.86	21.84	21.95	1
16QAM	1	0	22.50	22.41	22.38	1
	1	2	22.47	22.37	22.39	1
	1	5	22.40	22.34	22.38	1
	3	0	22.48	22.45	22.29	1
	3	2	22.47	22.39	22.42	1
	3	3	22.39	22.41	22.34	1
	6	0	21.50	21.45	21.41	2

8.2.4 LTE Band 25

Table 8-16
LTE Band 25 (AWS) 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	23.15	22.91	**23.21**	0
	1	50	23.16	22.78	23.15	0
	1	99	23.17	22.80	23.17	0
	50	0	22.36	22.09	22.29	1
	50	25	22.38	22.04	22.27	1
	50	50	22.36	22.01	**22.37**	1
	100	0	22.40	22.08	22.42	1
	15	0	22.88	23.21	23.42	0
	15	42	22.95	23.40	23.40	0
	15	85	22.96	23.39	23.44	0
	27	0	22.27	22.33	22.37	1
	27	37	22.39	22.50	22.48	1
	27	73	22.32	22.40	22.48	1
16QAM	1	0	22.39	22.44	22.45	1
	1	50	22.44	22.43	22.40	1
	1	99	22.50	22.41	22.30	1
	15	0	22.15	21.95	22.03	1
	15	42	22.09	22.09	21.98	1
	15	85	21.99	22.09	21.99	1
	27	0	21.37	21.23	21.27	2
	27	37	21.47	21.40	21.24	2
	27	73	21.36	21.36	21.32	2

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	23.48	23.32	23.35	0
	1	36	23.50	23.38	23.40	0
	1	74	23.42	23.44	23.27	0
	36	0	22.50	22.45	22.46	1
	36	18	22.50	22.50	22.50	1
	36	37	22.49	22.45	22.49	1
	75	0	22.50	22.34	22.37	1
	15	0	23.46	23.43	23.30	0
	15	30	23.49	23.39	23.35	0
	15	60	23.36	23.50	23.34	0
	27	0	22.44	22.41	22.32	1
	27	24	22.49	22.47	22.42	1
	27	48	22.47	22.49	22.45	1
16QAM	1	0	22.34	22.19	22.36	1
	1	36	22.36	22.30	22.36	1
	1	74	22.36	22.23	22.33	1
	15	0	21.87	21.91	21.88	1
	15	30	21.99	22.09	21.91	1
	15	60	21.91	21.92	21.82	1
	27	0	21.17	21.14	21.22	2
	27	24	21.26	21.32	21.25	2
	27	48	21.18	21.23	21.27	2

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	23.35	23.08	23.12	0
	1	25	23.32	23.12	23.09	0
	1	49	23.32	23.20	23.07	0
	25	0	22.45	22.44	22.34	1
	25	12	22.43	22.46	22.36	1
	25	25	22.48	22.50	22.42	1
	50	0	22.39	22.42	22.42	1
	15	0	22.48	22.43	22.38	1
	15	17	22.46	22.41	22.42	1
	15	35	22.50	22.48	22.42	1
	27	0	22.42	22.45	22.44	1
	27	12	22.41	22.46	22.48	1
	27	23	22.47	22.50	22.32	1
16QAM	1	0	22.35	22.00	22.24	1
	1	25	22.37	22.03	22.26	1
	1	49	22.50	22.19	22.19	1
	25	0	21.28	21.27	21.12	2
	25	12	21.22	21.31	21.17	2
	25	25	21.30	21.31	21.17	2
	15	0	21.32	21.29	21.18	2
	15	17	21.28	21.38	21.21	2
	15	35	21.35	21.36	21.14	2
	27	0	21.22	21.27	21.13	2
	27	12	21.20	21.27	21.13	2
	27	23	21.26	21.32	21.17	2

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	22.88	22.87	22.80	0
	1	12	22.88	22.82	22.67	0
	1	24	22.81	22.88	22.74	0
	12	0	22.46	22.49	22.24	1
	12	6	22.46	22.49	22.23	1
	12	13	22.44	22.50	22.18	1
	25	0	22.46	22.39	22.29	1
16QAM	1	0	22.17	22.34	22.01	1
	1	12	22.07	22.23	21.98	1
	1	24	22.12	22.09	22.12	1
	12	0	21.18	21.25	21.00	2
	12	6	21.18	21.22	20.97	2
	12	13	21.19	21.22	20.91	2
	25	0	21.17	21.21	21.05	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	22.68	22.55	22.58	0
	1	7	22.66	22.56	22.54	0
	1	14	22.60	22.56	22.55	0
	8	0	22.19	22.20	22.00	1
	8	4	22.19	22.19	21.93	1
	8	7	22.18	22.22	21.97	1
	15	0	22.18	22.23	21.98	1
16QAM	1	0	22.20	21.86	22.09	1
	1	7	22.15	21.89	22.04	1
	1	14	22.22	22.00	22.08	1
	8	0	21.10	21.10	21.06	2
	8	4	21.10	21.10	20.91	2
	8	7	21.08	21.13	20.93	2
	15	0	21.07	21.08	20.91	2

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	22.59	22.52	22.58	0
	1	2	22.56	22.51	22.62	0
	1	5	22.57	22.53	22.55	0
	3	0	22.62	22.66	22.56	0
	3	2	22.59	22.65	22.58	0
	3	3	22.60	22.68	22.54	0
	6	0	22.06	22.13	22.01	1
16QAM	1	0	22.16	21.91	21.90	1
	1	2	22.27	21.92	21.92	1
	1	5	22.26	22.10	22.17	1
	3	0	21.75	21.77	21.69	1
	3	2	21.76	21.77	21.60	1
	3	3	21.78	21.80	21.63	1
	6	0	21.06	21.18	20.93	2

8.2.5 LTE Band 7

Table 8-22
LTE Band 7 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	**22.62**	22.54	22.51	0
	1	50	22.60	22.53	22.57	0
	1	99	22.51	22.45	22.49	0
	50	0	**21.86**	21.69	21.67	1
	50	25	21.77	21.67	21.71	1
	50	50	21.70	21.65	21.72	1
	100	0	21.85	21.79	21.84	1
	15	0	22.15	22.16	22.00	0
	15	42	22.05	22.13	22.10	0
	15	85	22.07	22.03	22.07	0
	27	0	21.50	21.25	21.18	1
	27	37	21.42	21.27	21.31	1
	27	73	21.33	21.17	21.24	1
16QAM	1	0	21.44	21.47	21.15	1
	1	50	21.58	21.36	21.21	1
	1	99	21.45	21.34	21.19	1
	15	0	21.92	21.83	21.61	1
	15	42	21.88	21.79	21.63	1
	15	85	21.76	21.71	21.57	1
	27	0	20.55	20.35	20.30	2
	27	37	20.47	20.38	20.43	2
	27	73	20.37	20.27	20.38	2

Table 8-23
LTE Band 7 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	22.79	22.79	22.68	0
	1	36	22.82	22.82	22.74	0
	1	74	22.71	22.72	22.89	0
	36	0	21.94	21.85	21.77	1
	36	18	21.95	21.87	21.75	1
	36	37	21.94	21.85	21.74	1
	75	0	22.00	21.88	22.00	1
	15	0	22.02	22.07	22.15	0
	15	30	22.10	22.02	22.09	0
	15	60	22.01	22.05	22.06	0
	27	0	21.96	21.98	21.95	1
	27	24	21.92	21.99	22.00	1
	27	48	21.90	21.96	21.99	1
16QAM	1	0	21.29	21.06	21.15	1
	1	36	21.54	21.02	21.20	1
	1	74	21.44	21.01	21.18	1
	15	0	21.05	21.00	21.04	1
	15	30	21.25	21.02	21.09	1
	15	60	21.24	21.00	21.07	1
	27	0	20.27	20.13	20.17	2
	27	24	20.23	20.10	20.27	2
	27	48	20.16	20.01	20.13	2

Table 8-24
LTE Band 7 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	22.72	22.46	22.61	0
	1	25	22.74	22.44	22.62	0
	1	49	22.75	22.42	22.59	0
	25	0	22.00	21.83	21.81	1
	25	12	21.98	21.81	21.75	1
	25	25	21.98	21.80	21.77	1
	50	0	21.96	21.77	21.75	1
	15	0	21.97	21.87	21.96	1
	15	17	22.00	21.85	21.88	1
	15	35	21.93	21.82	21.81	1
	27	0	21.94	21.83	21.78	1
	27	12	21.94	21.80	21.73	1
	27	23	21.89	21.80	21.74	1
16QAM	1	0	21.47	21.02	21.32	1
	1	25	21.57	21.00	21.35	1
	1	49	21.58	21.03	21.33	1
	25	0	20.31	20.16	20.34	2
	25	12	20.27	20.13	20.27	2
	25	25	20.19	20.14	20.27	2
	15	0	20.40	20.23	20.37	2
	15	17	20.29	20.19	20.29	2
	15	35	20.23	20.16	20.28	2
	27	0	20.27	20.14	20.33	2
	27	12	20.23	20.14	20.26	2
	27	23	20.15	20.11	20.28	2

Table 8-25
LTE Band 7 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	22.36	22.60	22.30	0
	1	12	22.34	22.47	22.25	0
	1	24	22.37	22.48	22.28	0
	12	0	21.62	21.74	21.32	1
	12	6	21.43	21.51	21.31	1
	12	13	21.45	21.52	21.32	1
	25	0	21.41	21.51	21.33	1
16QAM	1	0	21.92	22.05	21.72	1
	1	12	21.97	22.00	21.82	1
	1	24	22.09	22.03	21.81	1
	12	0	20.82	20.89	20.74	2
	12	6	20.80	20.85	20.70	2
	12	13	20.81	20.84	20.69	2
	25	0	20.91	20.91	20.63	2

8.2.6 LTE Band 41

Table 8-26
LTE Band 41 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	22.89	22.84	22.80	22.79	22.88	0
	1	50	22.99	22.80	22.72	22.85	22.83	0
	1	99	**23.00**	22.76	22.69	22.87	22.78	0
	50	0	**21.99**	21.86	21.85	21.86	21.87	1
	50	25	21.98	21.81	21.80	21.92	21.83	1
	50	50	21.92	21.79	21.77	21.97	21.83	1
	100	0	21.93	21.77	21.81	21.95	21.90	1
	15	0	22.94	22.88	22.88	22.82	22.82	0
	15	42	22.88	22.91	22.90	22.97	22.88	0
	15	85	22.92	22.84	22.82	22.94	22.72	0
	27	0	21.98	21.88	21.90	21.89	21.81	1
	27	37	21.96	21.92	21.92	22.00	21.91	1
	27	73	21.95	21.84	21.83	22.00	21.85	1
16QAM	1	0	21.80	21.53	21.42	21.65	21.35	1
	1	50	21.83	21.49	21.20	21.61	21.46	1
	1	99	21.93	21.51	21.17	21.74	21.27	1
	15	0	21.62	21.45	21.49	21.50	21.40	1
	15	42	21.69	21.48	21.52	21.62	21.47	1
	15	85	21.56	21.44	21.46	21.64	21.45	1
	27	0	20.77	20.55	20.60	20.43	20.44	2
	27	37	20.74	20.52	20.51	20.55	20.57	2
	27	73	20.64	20.50	20.46	20.56	20.53	2

Table 8-27
LTE Band 41 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	22.97	22.75	22.81	22.77	22.75	0
	1	36	23.00	22.82	22.85	22.87	22.84	0
	1	74	22.99	22.73	22.75	22.83	22.74	0
	36	0	21.94	21.83	21.82	21.79	21.80	1
	36	18	21.91	21.86	21.85	21.89	21.81	1
	36	37	21.92	21.82	21.80	21.88	21.78	1
	75	0	22.00	21.77	21.80	21.88	21.82	1
	15	0	22.87	22.74	22.79	22.77	22.69	0
	15	30	22.97	22.81	22.84	22.88	22.74	0
	15	60	22.83	22.71	22.73	22.80	22.67	0
	27	0	21.98	21.80	21.84	21.82	21.81	1
	27	24	22.00	21.84	21.88	21.96	21.86	1
	27	48	21.88	21.76	21.79	21.92	21.80	1
16QAM	1	0	21.92	21.83	21.73	21.76	21.79	1
	1	36	22.00	21.82	21.87	21.91	21.86	1
	1	74	21.96	21.76	21.70	21.96	21.75	1
	15	0	21.61	21.44	21.48	21.49	21.44	1
	15	30	21.69	21.52	21.50	21.59	21.46	1
	15	60	21.55	21.42	21.42	21.59	21.42	1
	27	0	20.71	20.50	20.55	20.55	20.53	2
	27	24	20.77	20.56	20.55	20.71	20.58	2
	27	48	20.63	20.44	20.52	20.66	20.52	2

Table 8-28
LTE Band 41 Conducted Powers – 10 MHz Bandwidth

LTE Band 41 10 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	Design MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)	
			Conducted Power [dBm]					
QPSK	1	0	22.95	22.79	22.81	22.61	22.80	0
	1	25	22.93	22.76	22.79	22.65	22.71	0
	1	49	22.96	22.75	22.75	22.69	22.70	0
	25	0	21.96	21.87	21.86	21.83	21.81	1
	25	12	22.00	21.87	21.84	21.90	21.80	1
	25	25	21.92	21.87	21.84	21.91	21.81	1
	50	0	21.90	21.82	21.81	21.87	21.76	1
	15	0	21.92	21.95	21.92	21.87	21.88	1
	15	17	22.00	21.91	21.88	21.97	21.87	1
	15	35	21.92	21.93	21.86	21.99	21.84	1
	27	0	21.92	21.87	21.83	21.83	21.79	1
	27	12	21.94	21.85	21.80	21.91	21.77	1
	27	23	21.90	21.81	21.80	21.92	21.79	1
16QAM	1	0	21.90	21.87	21.96	21.94	21.82	1
	1	25	21.95	21.88	21.83	21.88	21.84	1
	1	49	22.00	21.82	21.76	21.98	21.85	1
	25	0	20.72	20.59	20.50	20.59	20.56	2
	25	12	20.76	20.56	20.48	20.65	20.54	2
	25	25	20.69	20.55	20.51	20.67	20.55	2
	15	0	20.82	20.68	20.70	20.70	20.67	2
	15	17	20.80	20.67	20.68	20.76	20.68	2
	15	35	20.77	20.63	20.62	20.70	20.66	2
	27	0	20.74	20.54	20.56	20.59	20.53	2
	27	12	20.73	20.60	20.56	20.66	20.53	2
	27	23	20.64	20.58	20.54	20.69	20.50	2

Table 8-29
LTE Band 41 Conducted Powers - 5 MHz Bandwidth

LTE Band 41 5 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	Design MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)	
			Conducted Power [dBm]					
QPSK	1	0	22.73	22.50	22.55	22.54	22.30	0
	1	12	22.75	22.55	22.53	22.52	22.50	0
	1	24	22.80	22.52	22.53	22.52	22.43	0
	12	0	22.00	21.91	21.91	21.88	21.79	1
	12	6	21.99	21.90	21.84	21.93	21.78	1
	12	13	21.99	21.90	21.87	21.92	21.80	1
	25	0	22.00	21.87	21.85	21.91	21.78	1
16QAM	1	0	21.95	21.58	21.86	21.93	21.50	1
	1	12	22.00	21.89	21.83	21.85	21.74	1
	1	24	21.97	21.88	21.76	21.84	21.74	1
	12	0	20.81	20.69	20.65	20.65	20.60	2
	12	6	20.85	20.70	20.64	20.72	20.55	2
	12	13	20.81	20.67	20.67	20.75	20.58	2
	25	0	20.72	20.58	20.61	20.67	20.52	2

8.3 WLAN Conducted Powers

Table 8-30
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	19.00	17.50	17.50
2417	2	N/A	18.50	18.48
2437	6	**19.00**	18.48	18.49
2457	10	N/A	18.48	18.48
2462	11	18.97	16.98	16.96

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

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

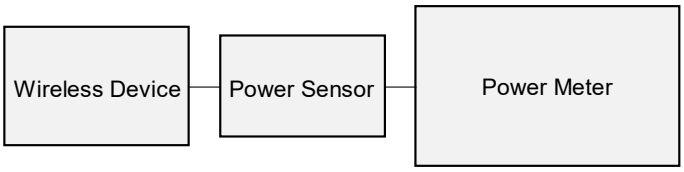

Figure 8-2
Power Measurement Setup

8.4 Bluetooth Conducted Powers

Table 8-31
Bluetooth Average RF Power

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	15.79	37.931
2441	GFSK	1.0	39	**15.84**	38.371
2480	GFSK	1.0	78	15.70	37.154

Note 1: 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.

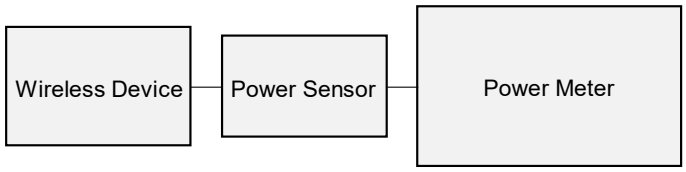

Figure 8-3
Power Measurement Setup

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
7/15/2019	835H	21.9	820	0.892	41.704	0.899	41.578	-0.78%	0.30%
			835	0.906	41.499	0.900	41.500	0.67%	0.00%
			850	0.921	41.309	0.916	41.500	0.55%	-0.46%
7/18/2019	835H	21.6	820	0.868	40.397	0.899	41.578	-3.45%	-2.84%
			835	0.882	40.191	0.900	41.500	-2.00%	-3.15%
			850	0.896	39.993	0.916	41.500	-2.18%	-3.63%
7/18/2019	1750H	21.8	1710	1.347	39.382	1.348	40.142	-0.07%	-1.89%
			1750	1.371	39.339	1.371	40.079	0.00%	-1.85%
			1790	1.393	39.296	1.394	40.016	-0.07%	-1.80%
7/16/2019	1900H	21.4	1850	1.432	40.131	1.400	40.000	2.29%	0.33%
			1880	1.450	40.075	1.400	40.000	3.57%	0.19%
			1910	1.469	40.028	1.400	40.000	4.93%	0.07%
7/23/2019	1900H	22.3	1850	1.423	38.491	1.400	40.000	1.64%	-3.77%
			1880	1.440	38.444	1.400	40.000	2.86%	-3.89%
			1910	1.458	38.403	1.400	40.000	4.14%	-3.99%
7/16/2019	2450H	20.9	2400	1.837	39.770	1.756	39.289	4.61%	1.22%
			2450	1.875	39.689	1.800	39.200	4.17%	1.25%
			2500	1.917	39.592	1.855	39.136	3.34%	1.17%
			2550	1.957	39.519	1.909	39.073	2.51%	1.14%
			2600	1.999	39.416	1.964	39.009	1.78%	1.04%
			2650	2.040	39.334	2.018	38.945	1.09%	1.00%
			2700	2.080	39.234	2.073	38.882	0.34%	0.91%
7/20/2019	2450H	21.4	2400	1.768	37.936	1.756	39.289	0.68%	-3.44%
			2450	1.805	37.862	1.800	39.200	0.28%	-3.41%
			2500	1.845	37.766	1.855	39.136	-0.54%	-3.50%
7/23/2019	2450H	23.2	2400	1.837	39.220	1.756	39.289	4.61%	-0.18%
			2450	1.888	39.042	1.800	39.200	4.89%	-0.40%
			2500	1.944	38.850	1.855	39.136	4.80%	-0.73%
7/24/2019	2450H	20.1	2400	1.788	38.374	1.756	39.289	1.82%	-2.33%
			2450	1.827	38.304	1.800	39.200	1.50%	-2.29%
			2500	1.868	38.215	1.855	39.136	0.70%	-2.35%
			2550	1.910	38.132	1.909	39.073	0.05%	-2.41%
			2600	1.952	38.025	1.964	39.009	-0.61%	-2.52%
			2650	1.996	37.952	2.018	38.945	-1.09%	-2.55%
			2700	2.035	37.833	2.073	38.882	-1.83%	-2.70%

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
7/20/2019	835B	21.1	820	0.975	53.523	0.969	55.258	0.62%	-3.14%
			835	0.990	53.349	0.970	55.200	2.06%	-3.35%
			850	1.005	53.181	0.988	55.154	1.72%	-3.58%
7/5/2019	1750B	20.9	1710	1.479	52.115	1.463	53.537	1.09%	-2.66%
			1750	1.506	52.068	1.488	53.432	1.21%	-2.55%
			1790	1.533	52.009	1.514	53.326	1.25%	-2.47%
7/5/2019	1900B	22.8	1850	1.552	51.791	1.520	53.300	2.11%	-2.83%
			1880	1.571	51.754	1.520	53.300	3.36%	-2.90%
			1910	1.592	51.709	1.520	53.300	4.74%	-2.98%
7/20/2019	1900B	22.4	1850	1.507	51.698	1.520	53.300	-0.86%	-3.01%
			1880	1.527	51.651	1.520	53.300	0.46%	-3.09%
			1910	1.547	51.619	1.520	53.300	1.78%	-3.15%
7/18/2019	2450B	23.0	2400	1.962	51.089	1.902	52.767	3.15%	-3.18%
			2450	2.004	51.032	1.950	52.700	2.77%	-3.17%
			2500	2.050	50.958	2.021	52.636	1.43%	-3.19%
			2550	2.095	50.903	2.092	52.573	0.14%	-3.18%
			2600	2.143	50.818	2.163	52.509	-0.92%	-3.22%
			2650	2.191	50.741	2.234	52.445	-1.92%	-3.25%
			2700	2.237	50.637	2.305	52.382	-2.95%	-3.33%
7/22/2019	2450B	23.4	2400	1.993	51.405	1.902	52.767	4.78%	-2.58%
			2450	2.035	51.328	1.950	52.700	4.36%	-2.60%
			2500	2.079	51.251	2.021	52.636	2.87%	-2.63%

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.

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 E.

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)	$Deviation_{1g}$ (%)
AM4	835	HEAD	07/15/2019	23.1	21.9	0.200	4d180	7532	1.870	9.600	9.350	-2.60%
AM4	835	HEAD	07/18/2019	23.2	21.6	0.200	4d180	7532	1.870	9.600	9.350	-2.60%
AM7	1750	HEAD	07/18/2019	21.8	21.6	0.100	1104	3837	3.770	36.400	37.700	3.57%
AM7	1900	HEAD	07/16/2019	22.6	21.4	0.100	5d026	3837	3.980	40.200	39.800	-1.00%
AM6	1900	HEAD	07/23/2019	21.3	20.5	0.100	5d030	7427	3.940	39.900	39.400	-1.25%
AM5	2450	HEAD	07/16/2019	20.7	20.9	0.100	750	3318	5.330	53.100	53.300	0.38%
AM2	2450	HEAD	07/20/2019	22.9	21.6	0.100	750	7490	5.420	53.100	54.200	2.07%
AM8	2450	HEAD	07/23/2019	21.5	21.5	0.100	750	7416	5.410	53.100	54.100	1.88%
AM2	2450	HEAD	07/24/2019	19.5	20.1	0.100	921	7490	5.470	53.100	54.700	3.01%
AM5	2600	HEAD	07/16/2019	20.7	20.9	0.100	1042	3318	6.080	57.700	60.800	5.37%
AM2	2600	HEAD	07/24/2019	19.5	20.1	0.100	1069	7490	6.010	56.900	60.100	5.62%

Table 9-4
System Verification Results – 10g

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	835	BODY	07/20/2019	23.5	21.1	0.200	4d180	7532	1.340	6.310	6.700	6.18%
AM7	1750	BODY	07/05/2019	22.6	20.8	0.100	1092	3837	1.810	19.400	18.100	-6.70%
AM2	1900	BODY	07/05/2019	22.7	22.8	0.100	5d026	7490	2.080	21.200	20.800	-1.89%
AM7	1900	BODY	07/20/2019	21.6	20.4	0.100	5d181	3837	1.960	20.900	19.600	-6.22%
AM5	2450	BODY	07/18/2019	22.9	21.8	0.100	750	3318	2.440	24.100	24.400	1.24%
AM1	2450	BODY	07/22/2019	22.1	22.7	0.100	750	7421	2.500	24.100	25.000	3.73%
AM5	2600	BODY	07/18/2019	22.9	21.8	0.100	1042	3318	2.500	24.900	25.000	0.40%

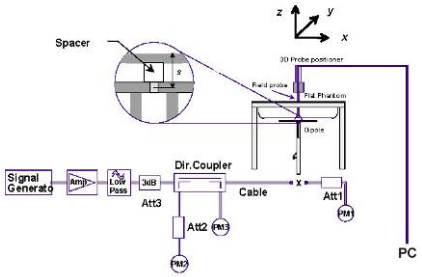

Figure 9-1
System Verification Setup Diagram

Figure 9-2
System Verification Setup Photo

10 SAR DATA SUMMARY

10.1 Standalone Head SAR Data

Table 10-1
UMTS Head SAR

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Spacing	Housing Type	Wristband Type	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
836.60	4183	UMTS 850	RMC	25.0	24.29	-0.19	Front	10 mm	Aluminum	Sport	D92YT024MWCX	1:1	0.000	1.178	0.000	
836.60	4183	UMTS 850	RMC	25.0	24.29	0.01	Front	10 mm	Aluminum	Metal Links	D92YT024MWCX	1:1	0.001	1.178	0.001	
836.60	4183	UMTS 850	RMC	25.0	24.29	0.02	Front	10 mm	Aluminum	Metal Loop	D92YT029MWCX	1:1	0.000	1.178	0.000	
836.60	4183	UMTS 850	RMC	25.0	24.29	0.04	Front	10 mm	Stainless Steel	Sport	D92YT02AMWDK	1:1	0.001	1.178	0.001	
836.60	4183	UMTS 850	RMC	25.0	24.29	0.03	Front	10 mm	Stainless Steel	Metal Links	D92YT025MWDK	1:1	0.001	1.178	0.001	
836.60	4183	UMTS 850	RMC	25.0	24.29	0.08	Front	10 mm	Stainless Steel	Metal Loop	D92YT025MWDK	1:1	0.001	1.178	0.001	
836.60	4183	UMTS 850	RMC	25.0	24.29	-0.02	Front	10 mm	Titanium	Sport	D92YV00DMWDR	1:1	0.001	1.178	0.001	A1
836.60	4183	UMTS 850	RMC	25.0	24.29	0.01	Front	10 mm	Titanium	Metal Links	D92YT02AMWDK	1:1	0.001	1.178	0.001	
836.60	4183	UMTS 850	RMC	25.0	24.29	-0.04	Front	10 mm	Titanium	Metal Loop	D92YT02AMWDK	1:1	0.001	1.178	0.001	
836.60	4183	UMTS 850	RMC	25.0	24.29	0.15	Front	10 mm	Ceramic	Sport	D92YV019MWFG	1:1	0.001	1.178	0.001	
836.60	4183	UMTS 850	RMC	25.0	24.29	0.05	Front	10 mm	Ceramic	Metal Links	D92YV01BMWFG	1:1	0.000	1.178	0.000	
836.60	4183	UMTS 850	RMC	25.0	24.29	0.01	Front	10 mm	Ceramic	Metal Loop	D92YV01FMWFG	1:1	0.001	1.178	0.001	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	-0.02	Front	10 mm	Aluminum	Sport	D92YT024MWCX	1:1	0.118	1.127	0.133	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	-0.04	Front	10 mm	Aluminum	Metal Links	D92YT024MWCX	1:1	0.159	1.127	0.179	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	0.04	Front	10 mm	Aluminum	Metal Loop	D92YT029MWCX	1:1	0.190	1.127	0.214	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	0.03	Front	10 mm	Stainless Steel	Sport	D92YT029MWDK	1:1	0.144	1.127	0.162	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	-0.06	Front	10 mm	Stainless Steel	Metal Links	D92YT029MWDK	1:1	0.192	1.127	0.216	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	0.06	Front	10 mm	Stainless Steel	Metal Loop	D92YT025MWDK	1:1	0.185	1.127	0.208	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	0.16	Front	10 mm	Titanium	Sport	D92YV004MWDR	1:1	0.141	1.127	0.159	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	0.08	Front	10 mm	Titanium	Metal Links	D92YV004MWDR	1:1	0.219	1.127	0.247	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	0.08	Front	10 mm	Titanium	Metal Loop	D92YV001MWDR	1:1	0.205	1.127	0.231	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	0.03	Front	10 mm	Ceramic	Sport	D92YV019MWFG	1:1	0.143	1.127	0.161	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	0.08	Front	10 mm	Ceramic	Metal Links	D92YV019MWFG	1:1	0.172	1.127	0.194	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	0.02	Front	10 mm	Ceramic	Metal Loop	D92YV01DMWFG	1:1	0.222	1.127	0.250	A2
1880.00	9400	UMTS 1900	RMC	24.0	23.45	0.00	Front	10 mm	Aluminum	Sport	D92YT029MWCX	1:1	0.189	1.135	0.215	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	-0.02	Front	10 mm	Aluminum	Metal Links	D92YT024MWCX	1:1	0.260	1.135	0.295	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	-0.05	Front	10 mm	Aluminum	Metal Loop	D92YT024MWCX	1:1	0.266	1.135	0.302	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	-0.01	Front	10 mm	Stainless Steel	Sport	D92YT026MWDK	1:1	0.225	1.135	0.255	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	0.10	Front	10 mm	Stainless Steel	Metal Links	D92YT025MWDK	1:1	0.214	1.135	0.243	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	0.12	Front	10 mm	Stainless Steel	Metal Loop	D92YT02AMWDK	1:1	0.243	1.135	0.276	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	0.03	Front	10 mm	Titanium	Sport	D92YV00WMWDR	1:1	0.209	1.135	0.237	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	0.00	Front	10 mm	Titanium	Metal Links	D92YV00WMWDR	1:1	0.202	1.135	0.229	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	0.15	Front	10 mm	Titanium	Metal Loop	D92YV001MWDR	1:1	0.269	1.135	0.305	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	0.01	Front	10 mm	Ceramic	Sport	D92YV01DMWFG	1:1	0.421	1.135	0.478	A3
1880.00	9400	UMTS 1900	RMC	24.0	23.45	0.06	Front	10 mm	Ceramic	Metal Links	D92YV01DMWFG	1:1	0.199	1.135	0.226	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	-0.07	Front	10 mm	Ceramic	Metal Loop	D92YV01DMWFG	1:1	0.294	1.135	0.334	
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
LTE Band 26 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Spacing	Housing Type	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Sport	25.0	24.08	0.01	0	Front	10 mm	Aluminum	QPSK	1	0	D92YT024MWCX	1:1	0.000	1.236	0.000	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Sport	24.0	23.43	0.03	1	Front	10 mm	Aluminum	QPSK	25	0	D92YT024MWCX	1:1	0.000	1.140	0.000	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Links	25.0	24.08	0.01	0	Front	10 mm	Aluminum	QPSK	1	0	D92YT024MWCX	1:1	0.000	1.236	0.000	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Links	24.0	23.43	-0.01	1	Front	10 mm	Aluminum	QPSK	25	0	D92YT024MWCX	1:1	0.000	1.140	0.000	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Loop	25.0	24.08	-0.07	0	Front	10 mm	Aluminum	QPSK	1	0	D92YT024MWCX	1:1	0.000	1.236	0.000	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Loop	24.0	23.43	0.00	1	Front	10 mm	Aluminum	QPSK	25	0	D92YT024MWCX	1:1	0.000	1.140	0.000	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Sport	25.0	24.08	0.02	0	Front	10 mm	Stainless Steel	QPSK	1	0	D92YT025MWDK	1:1	0.000	1.236	0.000	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Sport	24.0	23.43	0.02	1	Front	10 mm	Stainless Steel	QPSK	25	0	D92YT025MWDK	1:1	0.000	1.140	0.000	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Links	25.0	24.08	0.03	0	Front	10 mm	Stainless Steel	QPSK	1	0	D92YT02AMWDK	1:1	0.000	1.236	0.000	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Links	24.0	23.43	-0.01	1	Front	10 mm	Stainless Steel	QPSK	25	0	D92YT02AMWDK	1:1	0.000	1.140	0.000	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Loop	25.0	24.08	-0.06	0	Front	10 mm	Stainless Steel	QPSK	1	0	D92YT029MWDK	1:1	0.000	1.236	0.000	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Loop	24.0	23.43	0.00	1	Front	10 mm	Stainless Steel	QPSK	25	0	D92YT029MWDK	1:1	0.000	1.140	0.000	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Sport	25.0	24.08	0.06	0	Front	10 mm	Titanium	QPSK	1	0	D92YV00WMWDR	1:1	0.001	1.236	0.001	A4
831.50	26865	Mid	LTE Band 26 (Cell)	10	Sport	24.0	23.43	0.11	1	Front	10 mm	Titanium	QPSK	25	0	D92YV00WMWDR	1:1	0.001	1.140	0.001	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Links	25.0	24.08	0.07	0	Front	10 mm	Titanium	QPSK	1	0	D92YV004MWDR	1:1	0.001	1.236	0.001	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Links	24.0	23.43	-0.01	1	Front	10 mm	Titanium	QPSK	25	0	D92YV004MWDR	1:1	0.001	1.140	0.001	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Loop	25.0	24.08	0.01	0	Front	10 mm	Titanium	QPSK	1	0	D92YV00DMWDR	1:1	0.000	1.236	0.000	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Loop	24.0	23.43	0.04	1	Front	10 mm	Titanium	QPSK	25	0	D92YV00DMWDR	1:1	0.000	1.140	0.000	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Sport	25.0	24.08	0.00	0	Front	10 mm	Ceramic	QPSK	1	0	D92YV019MWFG	1:1	0.001	1.236	0.001	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Sport	24.0	23.43	0.01	1	Front	10 mm	Ceramic	QPSK	25	0	D92YV019MWFG	1:1	0.000	1.140	0.000	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Links	25.0	24.08	0.00	0	Front	10 mm	Ceramic	QPSK	1	0	D92YV01FMWFG	1:1	0.000	1.236	0.000	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Links	24.0	23.43	0.00	1	Front	10 mm	Ceramic	QPSK	25	0	D92YV01FMWFG	1:1	0.000	1.140	0.000	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Loop	25.0	24.08	0.04	0	Front	10 mm	Ceramic	QPSK	1	0	D92YV01BMWFG	1:1	0.000	1.236	0.000	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Loop	24.0	23.43	0.00	1	Front	10 mm	Ceramic	QPSK	25	0	D92YV01BMWFG	1:1	0.000	1.140	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 10-3
LTE Band 5 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Spacing	Housing Type	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (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	23.95	0.00	0	Front	10 mm	Aluminum	QPSK	1	0	D92YT024MWCX	1:1	0.000	1.274	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	24.0	23.47	0.00	1	Front	10 mm	Aluminum	QPSK	25	0	D92YT024MWCX	1:1	0.000	1.130	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	25.0	23.95	0.01	0	Front	10 mm	Aluminum	QPSK	1	0	D92YT024MWCX	1:1	0.001	1.274	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	24.0	23.47	0.05	1	Front	10 mm	Aluminum	QPSK	25	0	D92YT024MWCX	1:1	0.001	1.130	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	25.0	23.95	0.00	0	Front	10 mm	Aluminum	QPSK	1	0	D92YT024MWCX	1:1	0.000	1.274	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	24.0	23.47	0.00	1	Front	10 mm	Aluminum	QPSK	25	0	D92YT024MWCX	1:1	0.000	1.130	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	25.0	23.95	-0.04	0	Front	10 mm	Stainless Steel	QPSK	1	0	D92YT025MWDK	1:1	0.001	1.274	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	24.0	23.47	-0.02	1	Front	10 mm	Stainless Steel	QPSK	25	0	D92YT025MWDK	1:1	0.001	1.130	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	25.0	23.95	0.00	0	Front	10 mm	Stainless Steel	QPSK	1	0	D92YT02AMWDK	1:1	0.000	1.274	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	24.0	23.47	0.01	1	Front	10 mm	Stainless Steel	QPSK	25	0	D92YT02AMWDK	1:1	0.000	1.130	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	25.0	23.95	0.00	0	Front	10 mm	Stainless Steel	QPSK	1	0	D92YT029MWDK	1:1	0.000	1.274	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	24.0	23.47	0.03	1	Front	10 mm	Stainless Steel	QPSK	25	0	D92YT029MWDK	1:1	0.000	1.130	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	25.0	23.95	0.01	0	Front	10 mm	Titanium	QPSK	1	0	D92YV00DMWDR	1:1	0.001	1.274	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	24.0	23.47	0.01	1	Front	10 mm	Titanium	QPSK	25	0	D92YV00DMWDR	1:1	0.000	1.130	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	25.0	23.95	0.02	0	Front	10 mm	Titanium	QPSK	1	0	D92YV00WMWDR	1:1	0.002	1.274	0.003	A5
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	24.0	23.47	0.03	1	Front	10 mm	Titanium	QPSK	25	0	D92YV00WMWDR	1:1	0.002	1.130	0.002	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	25.0	23.95	-0.05	0	Front	10 mm	Titanium	QPSK	1	0	D92YV001MWDR	1:1	0.000	1.274	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	24.0	23.47	0.00	1	Front	10 mm	Titanium	QPSK	25	0	D92YV001MWDR	1:1	0.000	1.130	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	25.0	23.95	0.00	0	Front	10 mm	Ceramic	QPSK	1	0	D92YV01DMWFG	1:1	0.001	1.274	0.001	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	24.0	23.47	-0.08	1	Front	10 mm	Ceramic	QPSK	25	0	D92YV01DMWFG	1:1	0.000	1.130	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	25.0	23.95	-0.06	0	Front	10 mm	Ceramic	QPSK	1	0	D92YV01FMWFG	1:1	0.000	1.274	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	24.0	23.47	0.02	1	Front	10 mm	Ceramic	QPSK	25	0	D92YV01FMWFG	1:1	0.000	1.130	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	25.0	23.95	0.10	0	Front	10 mm	Ceramic	QPSK	1	0	D92YV019MWFG	1:1	0.000	1.274	0.000	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	24.0	23.47	0.00	1	Front	10 mm	Ceramic	QPSK	25	0	D92YV019MWFG	1:1	0.000	1.130	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 10-4
LTE Band 66 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Spacing	Housing Type	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
1770.00	132572	High	LTE Band 66 (AWS)	20	Sport	24.0	22.66	-0.07	0	Front	10 mm	Aluminum	QPSK	1	0	D92YT029MWCX	1:1	0.134	1.361	0.182	
1770.00	132572	High	LTE Band 66 (AWS)	20	Sport	23.0	22.40	0.03	1	Front	10 mm	Aluminum	QPSK	50	0	D92YT029MWCX	1:1	0.113	1.148	0.130	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Links	24.0	22.66	-0.10	0	Front	10 mm	Aluminum	QPSK	1	0	D92YT024MWCX	1:1	0.232	1.361	0.316	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Links	23.0	22.40	-0.11	1	Front	10 mm	Aluminum	QPSK	50	0	D92YT024MWCX	1:1	0.193	1.148	0.222	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Loop	24.0	22.66	0.03	0	Front	10 mm	Aluminum	QPSK	1	0	D92YT029MWCX	1:1	0.215	1.361	0.293	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Loop	23.0	22.40	-0.04	1	Front	10 mm	Aluminum	QPSK	50	0	D92YT029MWCX	1:1	0.177	1.148	0.203	
1770.00	132572	High	LTE Band 66 (AWS)	20	Sport	24.0	22.66	0.03	0	Front	10 mm	Stainless Steel	QPSK	1	0	D92YT026MWDK	1:1	0.149	1.361	0.203	
1770.00	132572	High	LTE Band 66 (AWS)	20	Sport	23.0	22.40	0.03	1	Front	10 mm	Stainless Steel	QPSK	50	0	D92YT026MWDK	1:1	0.124	1.148	0.142	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Links	24.0	22.66	0.00	0	Front	10 mm	Stainless Steel	QPSK	1	0	D92YT029MWDK	1:1	0.237	1.361	0.323	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Links	23.0	22.40	-0.01	1	Front	10 mm	Stainless Steel	QPSK	50	0	D92YT029MWDK	1:1	0.201	1.148	0.231	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Loop	24.0	22.66	0.02	0	Front	10 mm	Stainless Steel	QPSK	1	0	D92YT02AMWDK	1:1	0.253	1.361	0.344	A6
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Loop	23.0	22.40	0.10	1	Front	10 mm	Stainless Steel	QPSK	50	0	D92YT02AMWDK	1:1	0.221	1.148	0.254	
1770.00	132572	High	LTE Band 66 (AWS)	20	Sport	24.0	22.66	0.02	0	Front	10 mm	Titanium	QPSK	1	0	D92YV00WMWDR	1:1	0.168	1.361	0.229	
1770.00	132572	High	LTE Band 66 (AWS)	20	Sport	23.0	22.40	0.01	1	Front	10 mm	Titanium	QPSK	50	0	D92YV00WMWDR	1:1	0.137	1.148	0.157	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Links	24.0	22.66	0.11	0	Front	10 mm	Titanium	QPSK	1	0	D92YV004MWDR	1:1	0.225	1.361	0.306	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Links	23.0	22.40	0.02	1	Front	10 mm	Titanium	QPSK	50	0	D92YV004MWDR	1:1	0.196	1.148	0.225	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Loop	24.0	22.66	0.14	0	Front	10 mm	Titanium	QPSK	1	0	D92YV00DMWDR	1:1	0.202	1.361	0.275	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Loop	23.0	22.40	-0.03	1	Front	10 mm	Titanium	QPSK	50	0	D92YV00DMWDR	1:1	0.172	1.148	0.197	
1770.00	132572	High	LTE Band 66 (AWS)	20	Sport	24.0	22.66	0.20	0	Front	10 mm	Ceramic	QPSK	1	0	D92YV019MWFG	1:1	0.172	1.361	0.234	
1770.00	132572	High	LTE Band 66 (AWS)	20	Sport	23.0	22.40	-0.03	1	Front	10 mm	Ceramic	QPSK	50	0	D92YV019MWFG	1:1	0.141	1.148	0.162	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Links	24.0	22.66	-0.02	0	Front	10 mm	Ceramic	QPSK	1	0	D92YV01FMWFG	1:1	0.134	1.361	0.182	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Links	23.0	22.40	-0.12	1	Front	10 mm	Ceramic	QPSK	50	0	D92YV01FMWFG	1:1	0.114	1.148	0.131	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Loop	24.0	22.66	0.10	0	Front	10 mm	Ceramic	QPSK	1	0	D92YV01BMWFG	1:1	0.214	1.361	0.291	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Loop	23.0	22.40	0.07	1	Front	10 mm	Ceramic	QPSK	50	0	D92YV01BMWFG	1:1	0.183	1.148	0.210	
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 10-5
LTE Band 25 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Spacing	Housing Type	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (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	23.21	-0.15	0	Front	10 mm	Aluminum	QPSK	1	0	D92YT024MWCX	1:1	0.254	1.199	0.305	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	23.0	22.37	-0.19	1	Front	10 mm	Aluminum	QPSK	50	50	D92YT024MWCX	1:1	0.204	1.156	0.236	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	24.0	23.21	0.00	0	Front	10 mm	Aluminum	QPSK	1	0	D92YT029MWCX	1:1	0.279	1.199	0.335	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	23.0	22.37	-0.07	1	Front	10 mm	Aluminum	QPSK	50	50	D92YT029MWCX	1:1	0.222	1.156	0.257	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	24.0	23.21	0.03	0	Front	10 mm	Aluminum	QPSK	1	0	D92YT024MWCX	1:1	0.391	1.199	0.469	A7
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	23.0	22.37	-0.17	1	Front	10 mm	Aluminum	QPSK	50	50	D92YT024MWCX	1:1	0.319	1.156	0.369	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	24.0	23.21	0.20	0	Front	10 mm	Stainless Steel	QPSK	1	0	D92YT029MWDK	1:1	0.288	1.199	0.345	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	23.0	22.37	-0.07	1	Front	10 mm	Stainless Steel	QPSK	50	50	D92YT029MWDK	1:1	0.252	1.156	0.291	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	24.0	23.21	0.02	0	Front	10 mm	Stainless Steel	QPSK	1	0	D92YT025MWDK	1:1	0.264	1.199	0.317	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	23.0	22.37	-0.02	1	Front	10 mm	Stainless Steel	QPSK	50	50	D92YT025MWDK	1:1	0.220	1.156	0.254	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	24.0	23.21	0.03	0	Front	10 mm	Stainless Steel	QPSK	1	0	D92YT026MWDK	1:1	0.310	1.199	0.372	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	23.0	22.37	-0.05	1	Front	10 mm	Stainless Steel	QPSK	50	50	D92YT026MWDK	1:1	0.271	1.156	0.313	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	24.0	23.21	0.13	0	Front	10 mm	Titanium	QPSK	1	0	D92YV004MWDR	1:1	0.267	1.199	0.320	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	23.0	22.37	-0.05	1	Front	10 mm	Titanium	QPSK	50	50	D92YV004MWDR	1:1	0.226	1.156	0.261	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	24.0	23.21	0.07	0	Front	10 mm	Titanium	QPSK	1	0	D92YV00DMWDR	1:1	0.239	1.199	0.287	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	23.0	22.37	-0.06	1	Front	10 mm	Titanium	QPSK	50	50	D92YV00DMWDR	1:1	0.204	1.156	0.236	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	24.0	23.21	0.03	0	Front	10 mm	Titanium	QPSK	1	0	D92YV001MWDR	1:1	0.272	1.199	0.326	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	23.0	22.37	-0.14	1	Front	10 mm	Titanium	QPSK	50	50	D92YV001MWDR	1:1	0.230	1.156	0.266	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	24.0	23.21	0.13	0	Front	10 mm	Ceramic	QPSK	1	0	D92YV019MWFG	1:1	0.363	1.199	0.435	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	23.0	22.37	0.07	1	Front	10 mm	Ceramic	QPSK	50	50	D92YV019MWFG	1:1	0.313	1.156	0.362	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	24.0	23.21	0.02	0	Front	10 mm	Ceramic	QPSK	1	0	D92YV01BMWFG	1:1	0.226	1.199	0.271	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	23.0	22.37	-0.11	1	Front	10 mm	Ceramic	QPSK	50	50	D92YV01BMWFG	1:1	0.188	1.156	0.217	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	24.0	23.21	0.03	0	Front	10 mm	Ceramic	QPSK	1	0	D92YV01DMWFG	1:1	0.308	1.199	0.369	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	23.0	22.37	0.03	1	Front	10 mm	Ceramic	QPSK	50	50	D92YV01DMWFG	1:1	0.237	1.156	0.274	
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 7 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Spacing	Housing Type	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2510.00	20850	Low	LTE Band 7	20	Sport	23.5	22.62	-0.17	0	Front	10 mm	Aluminum	QPSK	1	0	D92YT024MWCX	1:1	0.368	1.225	0.451	
2510.00	20850	Low	LTE Band 7	20	Sport	22.5	21.86	-0.12	1	Front	10 mm	Aluminum	QPSK	50	0	D92YT024MWCX	1:1	0.348	1.159	0.403	
2510.00	20850	Low	LTE Band 7	20	Metal Links	23.5	22.62	-0.05	0	Front	10 mm	Aluminum	QPSK	1	0	D92YT029MWCX	1:1	0.330	1.225	0.404	
2510.00	20850	Low	LTE Band 7	20	Metal Links	22.5	21.86	-0.03	1	Front	10 mm	Aluminum	QPSK	50	0	D92YT029MWCX	1:1	0.284	1.159	0.329	
2510.00	20850	Low	LTE Band 7	20	Metal Loop	23.5	22.62	-0.02	0	Front	10 mm	Aluminum	QPSK	1	0	D92YT024MWCX	1:1	0.300	1.225	0.368	
2510.00	20850	Low	LTE Band 7	20	Metal Loop	22.5	21.86	-0.19	1	Front	10 mm	Aluminum	QPSK	50	0	D92YT024MWCX	1:1	0.275	1.159	0.319	
2510.00	20850	Low	LTE Band 7	20	Sport	23.5	22.62	-0.02	0	Front	10 mm	Stainless Steel	QPSK	1	0	D92YT029MWDK	1:1	0.376	1.225	0.461	
2510.00	20850	Low	LTE Band 7	20	Sport	22.5	21.86	-0.02	1	Front	10 mm	Stainless Steel	QPSK	50	0	D92YT029MWDK	1:1	0.290	1.159	0.336	
2510.00	20850	Low	LTE Band 7	20	Metal Links	23.5	22.62	-0.03	0	Front	10 mm	Stainless Steel	QPSK	1	0	D92YT026MWDK	1:1	0.286	1.225	0.350	
2510.00	20850	Low	LTE Band 7	20	Metal Links	22.5	21.86	0.01	1	Front	10 mm	Stainless Steel	QPSK	50	0	D92YT026MWDK	1:1	0.271	1.159	0.314	
2510.00	20850	Low	LTE Band 7	20	Metal Loop	23.5	22.62	-0.07	0	Front	10 mm	Stainless Steel	QPSK	1	0	D92YT02AMWDK	1:1	0.320	1.225	0.392	
2510.00	20850	Low	LTE Band 7	20	Metal Loop	22.5	21.86	-0.06	1	Front	10 mm	Stainless Steel	QPSK	50	0	D92YT02AMWDK	1:1	0.234	1.159	0.271	
2510.00	20850	Low	LTE Band 7	20	Sport	23.5	22.62	-0.15	0	Front	10 mm	Titanium	QPSK	1	0	D92YV001MWDR	1:1	0.420	1.225	**0.515**	A8
2535.00	21100	Mid	LTE Band 7	20	Sport	23.5	22.54	-0.05	0	Front	10 mm	Titanium	QPSK	1	0	D92YV001MWDR	1:1	0.379	1.247	0.473	
2560.00	21350	High	LTE Band 7	20	Sport	23.5	22.57	-0.03	0	Front	10 mm	Titanium	QPSK	1	50	D92YV001MWDR	1:1	0.412	1.239	0.510	
2510.00	20850	Low	LTE Band 7	20	Sport	22.5	21.86	-0.04	1	Front	10 mm	Titanium	QPSK	50	0	D92YV001MWDR	1:1	0.332	1.159	0.385	
2510.00	20850	Low	LTE Band 7	20	Metal Links	23.5	22.62	-0.07	0	Front	10 mm	Titanium	QPSK	1	0	D92YV002MWDR	1:1	0.383	1.225	0.469	
2510.00	20850	Low	LTE Band 7	20	Metal Links	22.5	21.86	-0.03	1	Front	10 mm	Titanium	QPSK	50	0	D92YV002MWDR	1:1	0.283	1.159	0.328	
2510.00	20850	Low	LTE Band 7	20	Metal Loop	23.5	22.62	-0.08	0	Front	10 mm	Titanium	QPSK	1	0	D92YV00WMWDR	1:1	0.308	1.225	0.377	
2510.00	20850	Low	LTE Band 7	20	Metal Loop	22.5	21.86	-0.03	1	Front	10 mm	Titanium	QPSK	50	0	D92YV00WMWDR	1:1	0.248	1.159	0.287	
2510.00	20850	Low	LTE Band 7	20	Sport	23.5	22.62	-0.07	0	Front	10 mm	Ceramic	QPSK	1	0	D92YV01BMWFG	1:1	0.342	1.225	0.419	
2510.00	20850	Low	LTE Band 7	20	Sport	22.5	21.86	-0.04	1	Front	10 mm	Ceramic	QPSK	50	0	D92YV01BMWFG	1:1	0.301	1.159	0.349	
2510.00	20850	Low	LTE Band 7	20	Metal Links	23.5	22.62	0.02	0	Front	10 mm	Ceramic	QPSK	1	0	D92YV01FMWFG	1:1	0.271	1.225	0.332	
2510.00	20850	Low	LTE Band 7	20	Metal Links	22.5	21.86	-0.19	1	Front	10 mm	Ceramic	QPSK	50	0	D92YV01FMWFG	1:1	0.213	1.159	0.247	
2510.00	20850	Low	LTE Band 7	20	Metal Loop	23.5	22.62	-0.13	0	Front	10 mm	Ceramic	QPSK	1	0	D92YV019MWFG	1:1	0.275	1.225	0.337	
2510.00	20850	Low	LTE Band 7	20	Metal Loop	22.5	21.86	-0.05	1	Front	10 mm	Ceramic	QPSK	50	0	D92YV019MWFG	1:1	0.245	1.159	0.284	
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 10-7
LTE Band 41 Head SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Spacing	Housing Type	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2506.00	39750	Low	LTE Band 41	20	Sport	23.5	23.00	-0.03	0	Front	10 mm	Alumium	QPSK	1	99	D92YT029MWCX	1:1.58	0.241	1.122	0.270	
2506.00	39750	Low	LTE Band 41	20	Sport	22.5	21.99	-0.06	1	Front	10 mm	Alumium	QPSK	50	0	D92YT029MWCX	1:1.58	0.185	1.125	0.208	
2506.00	39750	Low	LTE Band 41	20	Metal Links	23.5	23.00	-0.07	0	Front	10 mm	Alumium	QPSK	1	99	D92YT024MWCX	1:1.58	0.182	1.122	0.204	
2506.00	39750	Low	LTE Band 41	20	Metal Links	22.5	21.99	-0.16	1	Front	10 mm	Alumium	QPSK	50	0	D92YT024MWCX	1:1.58	0.140	1.125	0.158	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	23.5	23.00	-0.06	0	Front	10 mm	Alumium	QPSK	1	99	D92YT029MWCX	1:1.58	0.212	1.122	0.238	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	22.5	21.99	0.00	1	Front	10 mm	Alumium	QPSK	50	0	D92YT029MWCX	1:1.58	0.156	1.125	0.176	
2506.00	39750	Low	LTE Band 41	20	Sport	23.5	23.00	-0.08	0	Front	10 mm	Stainless Steel	QPSK	1	99	D92YT026MWDK	1:1.58	0.233	1.122	0.261	
2506.00	39750	Low	LTE Band 41	20	Sport	22.5	21.99	-0.05	1	Front	10 mm	Stainless Steel	QPSK	50	0	D92YT026MWDK	1:1.58	0.175	1.125	0.197	
2506.00	39750	Low	LTE Band 41	20	Metal Links	23.5	23.00	0.05	0	Front	10 mm	Stainless Steel	QPSK	1	99	D92YT025MWDK	1:1.58	0.192	1.122	0.215	
2506.00	39750	Low	LTE Band 41	20	Metal Links	22.5	21.99	-0.04	1	Front	10 mm	Stainless Steel	QPSK	50	0	D92YT025MWDK	1:1.58	0.147	1.125	0.165	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	23.5	23.00	-0.03	0	Front	10 mm	Stainless Steel	QPSK	1	99	D92YT029MWDK	1:1.58	0.244	1.122	0.274	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	22.5	21.99	0.02	1	Front	10 mm	Stainless Steel	QPSK	50	0	D92YT029MWDK	1:1.58	0.172	1.125	0.194	
2506.00	39750	Low	LTE Band 41	20	Sport	23.5	23.00	-0.06	0	Front	10 mm	Titanium	QPSK	1	99	D92YV001MWDR	1:1.58	0.370	1.122	0.415	A9
2506.00	39750	Low	LTE Band 41	20	Sport	22.5	21.99	-0.03	1	Front	10 mm	Titanium	QPSK	50	0	D92YV001MWDR	1:1.58	0.272	1.125	0.306	
2506.00	39750	Low	LTE Band 41	20	Metal Links	23.5	23.00	0.00	0	Front	10 mm	Titanium	QPSK	1	99	D92YV00DMWDR	1:1.58	0.289	1.122	0.324	
2506.00	39750	Low	LTE Band 41	20	Metal Links	22.5	21.99	-0.03	1	Front	10 mm	Titanium	QPSK	50	0	D92YV00DMWDR	1:1.58	0.208	1.125	0.234	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	23.5	23.00	-0.15	0	Front	10 mm	Titanium	QPSK	1	99	D92YV004MWDR	1:1.58	0.278	1.122	0.312	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	22.5	21.99	-0.08	1	Front	10 mm	Titanium	QPSK	50	0	D92YV004MWDR	1:1.58	0.203	1.125	0.228	
2506.00	39750	Low	LTE Band 41	20	Sport	23.5	23.00	-0.04	0	Front	10 mm	Ceramic	QPSK	1	99	D92YV01BMWFG	1:1.58	0.250	1.122	0.281	
2506.00	39750	Low	LTE Band 41	20	Sport	22.5	21.99	0.03	1	Front	10 mm	Ceramic	QPSK	50	0	D92YV01BMWFG	1:1.58	0.204	1.125	0.230	
2506.00	39750	Low	LTE Band 41	20	Metal Links	23.5	23.00	-0.04	0	Front	10 mm	Ceramic	QPSK	1	99	D92YV019MWFG	1:1.58	0.192	1.122	0.215	
2506.00	39750	Low	LTE Band 41	20	Metal Links	22.5	21.99	0.04	1	Front	10 mm	Ceramic	QPSK	50	0	D92YV019MWFG	1:1.58	0.160	1.125	0.180	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	23.5	23.00	0.05	0	Front	10 mm	Ceramic	QPSK	1	99	D92YV01DMWFG	1:1.58	0.200	1.122	0.224	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	22.5	21.99	0.04	1	Front	10 mm	Ceramic	QPSK	50	0	D92YV01DMWFG	1:1.58	0.161	1.125	0.181	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Head
Spatial Peak	1.6 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 1 gram

Table 10-8
2.4 GHz WLAN Head SAR

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Housing Type	Wristband Type	Device Serial Number	Data Rate (Mbps)	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.														(W/kg)			(W/kg)	
2437	6	802.11b	DSSS	22	19.0	19.00	0.08	Front	10 mm	Aluminum	Sport	D92YT024MWCX	1	100.0	0.196	1.000	1.000	**0.196**	**A10**
2437	6	802.11b	DSSS	22	19.0	19.00	0.05	Front	10 mm	Aluminum	Metal Links	D92YT024MWCX	1	100.0	0.147	1.000	1.000	0.147	
2437	6	802.11b	DSSS	22	19.0	19.00	0.12	Front	10 mm	Aluminum	Metal Loop	D92YT024MWCX	1	100.0	0.133	1.000	1.000	0.133	
2437	6	802.11b	DSSS	22	19.0	19.00	-0.14	Front	10 mm	Stainless Steel	Sport	D92YT029MWDK	1	100.0	0.180	1.000	1.000	0.180	
2437	6	802.11b	DSSS	22	19.0	19.00	-0.09	Front	10 mm	Stainless Steel	Metal Links	D92YT029MWDK	1	100.0	0.149	1.000	1.000	0.149	
2437	6	802.11b	DSSS	22	19.0	19.00	0.02	Front	10 mm	Stainless Steel	Metal Loop	D92YT029MWDK	1	100.0	0.140	1.000	1.000	0.140	
2437	6	802.11b	DSSS	22	19.0	19.00	0.10	Front	10 mm	Titanium	Sport	D92YV00WMWDR	1	100.0	0.196	1.000	1.000	**0.196**	
2437	6	802.11b	DSSS	22	19.0	19.00	0.11	Front	10 mm	Titanium	Metal Links	D92YV00WMWDR	1	100.0	0.126	1.000	1.000	0.126	
2437	6	802.11b	DSSS	22	19.0	19.00	0.04	Front	10 mm	Titanium	Metal Loop	D92YV00WMWDR	1	100.0	0.155	1.000	1.000	0.155	
2437	6	802.11b	DSSS	22	19.0	19.00	-0.19	Front	10 mm	Ceramic	Sport	D92YV01DMWFG	1	100.0	0.171	1.000	1.000	0.171	
2437	6	802.11b	DSSS	22	19.0	19.00	0.14	Front	10 mm	Ceramic	Metal Links	D92YV01DMWFG	1	100.0	0.147	1.000	1.000	0.147	
2437	6	802.11b	DSSS	22	19.0	19.00	-0.11	Front	10 mm	Ceramic	Metal Loop	D92YV01DMWFG	1	100.0	0.138	1.000	1.000	0.138	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Head
Spatial Peak	1.6 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 1 gram

Table 10-9
Bluetooth Head SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Housing Type	Wristband Type	Device Serial Number	Data Rate (Mbps)	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.													(W/kg)			(W/kg)	
2441.00	39	Bluetooth	FHSS	17.5	15.84	-0.01	Front	10 mm	Aluminum	Sport	D92YT024MWCX	1	100	0.078	1.466	1.000	0.114	
2441.00	39	Bluetooth	FHSS	17.5	15.84	0.03	Front	10 mm	Aluminum	Metal Links	D92YT024MWCX	1	100	0.054	1.466	1.000	0.079	
2441.00	39	Bluetooth	FHSS	17.5	15.84	0.02	Front	10 mm	Aluminum	Metal Loop	D92YT024MWCX	1	100	0.056	1.466	1.000	0.082	
2441.00	39	Bluetooth	FHSS	17.5	15.84	0.05	Front	10 mm	Stainless Steel	Sport	D92YT029MWDK	1	100	0.070	1.466	1.000	0.103	
2441.00	39	Bluetooth	FHSS	17.5	15.84	-0.04	Front	10 mm	Stainless Steel	Metal Links	D92YT029MWDK	1	100	0.063	1.466	1.000	0.092	
2441.00	39	Bluetooth	FHSS	17.5	15.84	-0.04	Front	10 mm	Stainless Steel	Metal Loop	D92YT029MWDK	1	100	0.057	1.466	1.000	0.084	
2441.00	39	Bluetooth	FHSS	17.5	15.84	0.01	Front	10 mm	Titanium	Sport	D92YV00WMWDR	1	100	0.073	1.466	1.000	0.107	
2441.00	39	Bluetooth	FHSS	17.5	15.84	0.03	Front	10 mm	Titanium	Metal Links	D92YV00WMWDR	1	100	0.056	1.466	1.000	0.082	
2441.00	39	Bluetooth	FHSS	17.5	15.84	0.08	Front	10 mm	Titanium	Metal Loop	D92YV00WMWDR	1	100	0.060	1.466	1.000	0.088	
2441.00	39	Bluetooth	FHSS	17.5	15.84	0.02	Front	10 mm	Ceramic	Sport	D92YV01BMWFG	1	100	0.087	1.466	1.000	**0.128**	**A11**
2441.00	39	Bluetooth	FHSS	17.5	15.84	0.08	Front	10 mm	Ceramic	Metal Links	D92YV01BMWFG	1	100	0.061	1.466	1.000	0.089	
2441.00	39	Bluetooth	FHSS	17.5	15.84	0.12	Front	10 mm	Ceramic	Metal Loop	D92YV01BMWFG	1	100	0.069	1.466	1.000	0.101	
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 10-10
UMTS 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	Scaling Factor	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.													(W/kg)	(W/kg)	
836.60	4183	UMTS 850	RMC	25.0	24.29	0.02	0 mm	Aluminum	Sport	D92YT024MWCX	1:1	back	1.178	0.160	0.188	
836.60	4183	UMTS 850	RMC	25.0	24.29	-0.09	0 mm	Aluminum	Metal Links	D92YT024MWCX	1:1	back	1.178	0.212	0.250	A12
836.60	4183	UMTS 850	RMC	25.0	24.29	0.11	0 mm	Aluminum	Metal Loop	D92YT024MWCX	1:1	back	1.178	0.206	0.243	
836.60	4183	UMTS 850	RMC	25.0	24.29	0.03	0 mm	Stainless Steel	Sport	D92YT02AMWDK	1:1	back	1.178	0.109	0.128	
836.60	4183	UMTS 850	RMC	25.0	24.29	0.03	0 mm	Stainless Steel	Metal Links	D92YT025MWDK	1:1	back	1.178	0.190	0.224	
836.60	4183	UMTS 850	RMC	25.0	24.29	0.05	0 mm	Stainless Steel	Metal Loop	D92YT02AMWDK	1:1	back	1.178	0.175	0.206	
836.60	4183	UMTS 850	RMC	25.0	24.29	0.04	0 mm	Titanium	Sport	D92YV00DMWDR	1:1	back	1.178	0.119	0.140	
836.60	4183	UMTS 850	RMC	25.0	24.29	0.12	0 mm	Titanium	Metal Links	D92YV004MWDR	1:1	back	1.178	0.170	0.200	
836.60	4183	UMTS 850	RMC	25.0	24.29	0.00	0 mm	Titanium	Metal Loop	D92YV00DMWDR	1:1	back	1.178	0.140	0.165	
836.60	4183	UMTS 850	RMC	25.0	24.29	0.02	0 mm	Ceramic	Sport	D92YV01DMWFG	1:1	back	1.178	0.088	0.104	
836.60	4183	UMTS 850	RMC	25.0	24.29	0.02	0 mm	Ceramic	Metal Links	D92YV01FMWFG	1:1	back	1.178	0.133	0.157	
836.60	4183	UMTS 850	RMC	25.0	24.29	0.07	0 mm	Ceramic	Metal Loop	D92YV01FMWFG	1:1	back	1.178	0.099	0.117	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	-0.03	0 mm	Aluminum	Sport	D92YT024MWCX	1:1	back	1.127	0.036	0.041	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	0.12	0 mm	Aluminum	Metal Links	D92YT024MWCX	1:1	back	1.127	0.033	0.037	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	0.00	0 mm	Aluminum	Metal Loop	D92YT024MWCX	1:1	back	1.127	0.017	0.019	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	-0.07	0 mm	Stainless Steel	Sport	D92YT029MWDK	1:1	back	1.127	0.051	0.057	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	-0.03	0 mm	Stainless Steel	Metal Links	D92YT029MWDK	1:1	back	1.127	0.026	0.029	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	0.06	0 mm	Stainless Steel	Metal Loop	D92YT025MWDK	1:1	back	1.127	0.015	0.017	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	-0.11	0 mm	Titanium	Sport	D92YV00WMWDR	1:1	back	1.127	0.047	0.053	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	0.15	0 mm	Titanium	Metal Links	D92YV00WMWDR	1:1	back	1.127	0.033	0.037	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	-0.09	0 mm	Titanium	Metal Loop	D92YV001MWDR	1:1	back	1.127	0.028	0.032	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	-0.08	0 mm	Ceramic	Sport	D92YV019MWFG	1:1	back	1.127	0.055	0.062	
1732.40	1412	UMTS 1750	RMC	24.0	23.48	-0.18	0 mm	Ceramic	Metal Links	D92YV019MWFG	1:1	back	1.127	0.070	0.079	A13
1732.40	1412	UMTS 1750	RMC	24.0	23.48	0.03	0 mm	Ceramic	Metal Loop	D92YV01BMWFG	1:1	back	1.127	0.041	0.046	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	0.00	0 mm	Aluminum	Sport	D92YT024MWCX	1:1	back	1.135	0.047	0.053	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	0.02	0 mm	Aluminum	Metal Links	D92YT024MWCX	1:1	back	1.135	0.028	0.032	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	-0.02	0 mm	Aluminum	Metal Loop	D92YT024MWCX	1:1	back	1.135	0.033	0.037	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	-0.17	0 mm	Stainless Steel	Sport	D92YT02AMWDK	1:1	back	1.135	0.038	0.043	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	0.02	0 mm	Stainless Steel	Metal Links	D92YT02AMWDK	1:1	back	1.135	0.047	0.053	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	-0.03	0 mm	Stainless Steel	Metal Loop	D92YT025MWDK	1:1	back	1.135	0.019	0.022	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	0.00	0 mm	Titanium	Sport	D92YV00DMWDR	1:1	back	1.135	0.079	0.090	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	0.07	0 mm	Titanium	Metal Links	D92YV00WMWDR	1:1	back	1.135	0.035	0.040	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	-0.05	0 mm	Titanium	Metal Loop	D92YV00DMWDR	1:1	back	1.135	0.011	0.012	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	0.05	0 mm	Ceramic	Sport	D92YV01DMWFG	1:1	back	1.135	0.100	0.114	A14
1880.00	9400	UMTS 1900	RMC	24.0	23.45	0.02	0 mm	Ceramic	Metal Links	D92YV01DMWFG	1:1	back	1.135	0.061	0.069	
1880.00	9400	UMTS 1900	RMC	24.0	23.45	0.00	0 mm	Ceramic	Metal Loop	D92YV01FMWFG	1:1	back	1.135	0.094	0.107	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Extremity 4.0 W/kg (mW/g) averaged over 10 gram						

Table 10-11
LTE Band 26 Extremity SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Housing Type	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	Scaling Factor	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																		(W/kg)	(W/kg)	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Sport	25.0	24.08	-0.03	0	Aluminum	D92YT024MWCX	QPSK	1	0	0 mm	Back	1:1	1.236	0.129	0.159	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Sport	24.0	23.43	-0.03	1	Aluminum	D92YT024MWCX	QPSK	25	0	0 mm	Back	1:1	1.140	0.106	0.121	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Links	25.0	24.08	0.02	0	Aluminum	D92YT024MWCX	QPSK	1	0	0 mm	Back	1:1	1.236	0.205	0.253	A15
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Links	24.0	23.43	-0.02	1	Aluminum	D92YT024MWCX	QPSK	25	0	0 mm	Back	1:1	1.140	0.167	0.190	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Loop	25.0	24.08	-0.07	0	Aluminum	D92YT024MWCX	QPSK	1	0	0 mm	Back	1:1	1.236	0.158	0.195	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Loop	24.0	23.43	-0.11	1	Aluminum	D92YT024MWCX	QPSK	25	0	0 mm	Back	1:1	1.140	0.135	0.154	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Sport	25.0	24.08	0.04	0	Stainless Steel	D92YT02AMWDK	QPSK	1	0	0 mm	Back	1:1	1.236	0.115	0.142	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Sport	24.0	23.43	-0.07	1	Stainless Steel	D92YT02AMWDK	QPSK	25	0	0 mm	Back	1:1	1.140	0.096	0.109	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Links	25.0	24.08	0.06	0	Stainless Steel	D92YT029MWDK	QPSK	1	0	0 mm	Back	1:1	1.236	0.164	0.203	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Links	24.0	23.43	-0.02	1	Stainless Steel	D92YT029MWDK	QPSK	25	0	0 mm	Back	1:1	1.140	0.138	0.157	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Loop	25.0	24.08	0.02	0	Stainless Steel	D92YT026MWDK	QPSK	1	0	0 mm	Back	1:1	1.236	0.140	0.173	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Loop	24.0	23.43	-0.13	1	Stainless Steel	D92YT026MWDK	QPSK	25	0	0 mm	Back	1:1	1.140	0.116	0.132	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Sport	25.0	24.08	0.16	0	Titanium	D92YV004MWDR	QPSK	1	0	0 mm	Back	1:1	1.236	0.125	0.155	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Sport	24.0	23.43	-0.04	1	Titanium	D92YV004MWDR	QPSK	25	0	0 mm	Back	1:1	1.140	0.107	0.122	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Links	25.0	24.08	0.02	0	Titanium	D92YV00WMWDR	QPSK	1	0	0 mm	Back	1:1	1.236	0.191	0.236	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Links	24.0	23.43	-0.03	1	Titanium	D92YV00WMWDR	QPSK	25	0	0 mm	Back	1:1	1.140	0.165	0.188	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Loop	25.0	24.08	-0.01	0	Titanium	D92YV00WMWDR	QPSK	1	0	0 mm	Back	1:1	1.236	0.107	0.132	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Loop	24.0	23.43	0.03	1	Titanium	D92YV00WMWDR	QPSK	25	0	0 mm	Back	1:1	1.140	0.093	0.106	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Sport	25.0	24.08	0.08	0	Ceramic	D92YV01DMWFG	QPSK	1	0	0 mm	Back	1:1	1.236	0.082	0.101	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Sport	24.0	23.43	0.00	1	Ceramic	D92YV01DMWFG	QPSK	25	0	0 mm	Back	1:1	1.140	0.069	0.079	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Links	25.0	24.08	0.08	0	Ceramic	D92YV01BMWFG	QPSK	1	0	0 mm	Back	1:1	1.236	0.146	0.180	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Links	24.0	23.43	-0.07	1	Ceramic	D92YV01BMWFG	QPSK	25	0	0 mm	Back	1:1	1.140	0.119	0.136	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Loop	25.0	24.08	0.06	0	Ceramic	D92YV019MWFG	QPSK	1	0	0 mm	Back	1:1	1.236	0.128	0.158	
831.50	26865	Mid	LTE Band 26 (Cell)	10	Metal Loop	24.0	23.43	-0.01	1	Ceramic	D92YV019MWFG	QPSK	25	0	0 mm	Back	1:1	1.140	0.105	0.120	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Extremity 4.0 W/kg (mW/g) averaged over 10 gram		

Table 10-12
LTE Band 5 Extremity SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Housing Type	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	Scaling Factor	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																		(W/kg)	(W/kg)	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	25.0	23.95	0.00	0	Aluminum	D92YT024MWCX	QPSK	1	0	0 mm	Back	1:1	1.274	0.126	0.161	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	24.0	23.47	0.07	1	Aluminum	D92YT024MWCX	QPSK	25	0	0 mm	Back	1:1	1.130	0.117	0.132	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	25.0	23.95	0.04	0	Aluminum	D92YT024MWCX	QPSK	1	0	0 mm	Back	1:1	1.274	0.200	0.255	A16
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	24.0	23.47	0.06	1	Aluminum	D92YT024MWCX	QPSK	25	0	0 mm	Back	1:1	1.130	0.181	0.205	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	25.0	23.95	-0.04	0	Aluminum	D92YT024MWCX	QPSK	1	0	0 mm	Back	1:1	1.274	0.152	0.194	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	24.0	23.47	-0.08	1	Aluminum	D92YT024MWCX	QPSK	25	0	0 mm	Back	1:1	1.130	0.140	0.158	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	25.0	23.95	0.07	0	Stainless Steel	D92YT029MWDK	QPSK	1	0	0 mm	Back	1:1	1.274	0.096	0.122	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	24.0	23.47	0.10	1	Stainless Steel	D92YT029MWDK	QPSK	25	0	0 mm	Back	1:1	1.130	0.086	0.097	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	25.0	23.95	0.05	0	Stainless Steel	D92YT026MWDK	QPSK	1	0	0 mm	Back	1:1	1.274	0.160	0.204	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	24.0	23.47	0.02	1	Stainless Steel	D92YT026MWDK	QPSK	25	0	0 mm	Back	1:1	1.130	0.139	0.157	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	25.0	23.95	0.05	0	Stainless Steel	D92YT025MWDK	QPSK	1	0	0 mm	Back	1:1	1.274	0.118	0.150	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	24.0	23.47	0.11	1	Stainless Steel	D92YT025MWDK	QPSK	25	0	0 mm	Back	1:1	1.130	0.107	0.121	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	25.0	23.95	0.05	0	Titanium	D92YV004MWDR	QPSK	1	0	0 mm	Back	1:1	1.274	0.107	0.136	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	24.0	23.47	0.07	1	Titanium	D92YV004MWDR	QPSK	25	0	0 mm	Back	1:1	1.130	0.100	0.113	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	25.0	23.95	0.06	0	Titanium	D92YV00DMWDR	QPSK	1	0	0 mm	Back	1:1	1.274	0.176	0.224	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	24.0	23.47	-0.09	1	Titanium	D92YV00DMWDR	QPSK	25	0	0 mm	Back	1:1	1.130	0.164	0.185	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	25.0	23.95	0.14	0	Titanium	D92YV00WMWDR	QPSK	1	0	0 mm	Back	1:1	1.274	0.128	0.163	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	24.0	23.47	0.03	1	Titanium	D92YV00WMWDR	QPSK	25	0	0 mm	Back	1:1	1.130	0.116	0.131	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	25.0	23.95	-0.01	0	Ceramic	D92YV01BMWFG	QPSK	1	0	0 mm	Back	1:1	1.274	0.062	0.079	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Sport	24.0	23.47	0.03	1	Ceramic	D92YV01BMWFG	QPSK	25	0	0 mm	Back	1:1	1.130	0.055	0.062	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	25.0	23.95	-0.07	0	Ceramic	D92YV019MWFG	QPSK	1	0	0 mm	Back	1:1	1.274	0.142	0.181	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Links	24.0	23.47	0.03	1	Ceramic	D92YV019MWFG	QPSK	25	0	0 mm	Back	1:1	1.130	0.122	0.138	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	25.0	23.95	-0.03	0	Ceramic	D92YV01FMWFG	QPSK	1	0	0 mm	Back	1:1	1.274	0.100	0.127	
836.50	20525	Mid	LTE Band 5 (Cell)	10	Metal Loop	24.0	23.47	0.07	1	Ceramic	D92YV01FMWFG	QPSK	25	0	0 mm	Back	1:1	1.130	0.087	0.098	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Extremity
Spatial Peak	4.0 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 10 gram

Table 10-13
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	Scaling Factor	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																		(W/kg)	(W/kg)	
1770.00	132572	High	LTE Band 66 (AWS)	20	Sport	24.0	22.66	-0.08	0	Aluminum	D92YT024MWCX	QPSK	1	0	0 mm	Back	1:1	1.361	0.038	0.052	
1770.00	132572	High	LTE Band 66 (AWS)	20	Sport	23.0	22.40	-0.08	1	Aluminum	D92YT024MWCX	QPSK	50	0	0 mm	Back	1:1	1.148	0.032	0.037	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Links	24.0	22.66	0.05	0	Aluminum	D92YT024MWCX	QPSK	1	0	0 mm	Back	1:1	1.361	0.025	0.034	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Links	23.0	22.40	-0.20	1	Aluminum	D92YT024MWCX	QPSK	50	0	0 mm	Back	1:1	1.148	0.021	0.024	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Loop	24.0	22.66	-0.05	0	Aluminum	D92YT024MWCX	QPSK	1	0	0 mm	Back	1:1	1.361	0.008	0.011	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Loop	23.0	22.40	0.03	1	Aluminum	D92YT024MWCX	QPSK	50	0	0 mm	Back	1:1	1.148	0.007	0.008	
1770.00	132572	High	LTE Band 66 (AWS)	20	Sport	24.0	22.66	-0.07	0	Stainless Steel	D92YT026MWDK	QPSK	1	0	0 mm	Back	1:1	1.361	0.031	0.042	
1770.00	132572	High	LTE Band 66 (AWS)	20	Sport	23.0	22.40	0.07	1	Stainless Steel	D92YT026MWDK	QPSK	50	0	0 mm	Back	1:1	1.148	0.028	0.032	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Links	24.0	22.66	0.11	0	Stainless Steel	D92YT025MWDK	QPSK	1	0	0 mm	Back	1:1	1.361	0.038	0.052	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Links	23.0	22.40	0.04	1	Stainless Steel	D92YT025MWDK	QPSK	50	0	0 mm	Back	1:1	1.148	0.031	0.036	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Loop	24.0	22.66	-0.03	0	Stainless Steel	D92YT02AMWDK	QPSK	1	0	0 mm	Back	1:1	1.361	0.015	0.020	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Loop	23.0	22.40	0.03	1	Stainless Steel	D92YT02AMWDK	QPSK	50	0	0 mm	Back	1:1	1.148	0.013	0.015	
1770.00	132572	High	LTE Band 66 (AWS)	20	Sport	24.0	22.66	-0.04	0	Titanium	D92YV00DMWDR	QPSK	1	0	0 mm	Back	1:1	1.361	0.072	0.098	
1770.00	132572	High	LTE Band 66 (AWS)	20	Sport	23.0	22.40	-0.10	1	Titanium	D92YV00DMWDR	QPSK	50	0	0 mm	Back	1:1	1.148	0.060	0.069	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Links	24.0	22.66	-0.05	0	Titanium	D92YV004MWDR	QPSK	1	0	0 mm	Back	1:1	1.361	0.029	0.039	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Links	23.0	22.40	0.03	1	Titanium	D92YV004MWDR	QPSK	50	0	0 mm	Back	1:1	1.148	0.029	0.033	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Loop	24.0	22.66	-0.02	0	Titanium	D92YV00DMWDR	QPSK	1	0	0 mm	Back	1:1	1.361	0.064	0.087	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Loop	23.0	22.40	0.01	1	Titanium	D92YV00DMWDR	QPSK	50	0	0 mm	Back	1:1	1.148	0.052	0.060	
1770.00	132572	High	LTE Band 66 (AWS)	20	Sport	24.0	22.66	-0.08	0	Ceramic	D92YV01BMWFG	QPSK	1	0	0 mm	Back	1:1	1.361	0.047	0.064	
1770.00	132572	High	LTE Band 66 (AWS)	20	Sport	23.0	22.40	-0.02	1	Ceramic	D92YV01BMWFG	QPSK	50	0	0 mm	Back	1:1	1.148	0.038	0.044	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Links	24.0	22.66	0.11	0	Ceramic	D92YV01FMWFG	QPSK	1	0	0 mm	Back	1:1	1.361	0.043	0.059	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Links	23.0	22.40	0.02	1	Ceramic	D92YV01FMWFG	QPSK	50	0	0 mm	Back	1:1	1.148	0.035	0.040	
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Loop	24.0	22.66	-0.03	0	Ceramic	D92YV01DMWFG	QPSK	1	0	0 mm	Back	1:1	1.361	0.099	0.135	A17
1770.00	132572	High	LTE Band 66 (AWS)	20	Metal Loop	23.0	22.40	0.01	1	Ceramic	D92YV01DMWFG	QPSK	50	0	0 mm	Back	1:1	1.148	0.082	0.094	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Extremity 4.0 W/kg (mW/g) averaged over 10 gram									

Table 10-14
LTE Band 25 Extremity SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Housing Type	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	Scaling Factor	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																		(W/kg)	(W/kg)	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	24.0	23.21	-0.13	0	Aluminum	D92YT029MWCX	QPSK	1	0	0 mm	Back	1:1	1.199	0.072	0.086	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	23.0	22.37	-0.05	1	Aluminum	D92YT029MWCX	QPSK	50	50	0 mm	Back	1:1	1.156	0.062	0.072	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	24.0	23.21	-0.20	0	Aluminum	D92YT029MWCX	QPSK	1	0	0 mm	Back	1:1	1.199	0.048	0.058	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	23.0	22.37	-0.02	1	Aluminum	D92YT029MWCX	QPSK	50	50	0 mm	Back	1:1	1.156	0.039	0.045	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	24.0	23.21	0.02	0	Aluminum	D92YT024MWCX	QPSK	1	0	0 mm	Back	1:1	1.199	0.035	0.042	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	23.0	22.37	-0.02	1	Aluminum	D92YT024MWCX	QPSK	50	50	0 mm	Back	1:1	1.156	0.024	0.028	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	24.0	23.21	-0.04	0	Stainless Steel	D92YT025MWDK	QPSK	1	0	0 mm	Back	1:1	1.199	0.042	0.050	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	23.0	22.37	-0.16	1	Stainless Steel	D92YT025MWDK	QPSK	50	50	0 mm	Back	1:1	1.156	0.033	0.038	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	24.0	23.21	-0.02	0	Stainless Steel	D92YT026MWDK	QPSK	1	0	0 mm	Back	1:1	1.199	0.041	0.049	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	23.0	22.37	-0.03	1	Stainless Steel	D92YT026MWDK	QPSK	50	50	0 mm	Back	1:1	1.156	0.034	0.039	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	24.0	23.21	0.03	0	Stainless Steel	D92YT02AMWDK	QPSK	1	0	0 mm	Back	1:1	1.199	0.012	0.014	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	23.0	22.37	-0.06	1	Stainless Steel	D92YT02AMWDK	QPSK	50	50	0 mm	Back	1:1	1.156	0.009	0.010	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	24.0	23.21	-0.06	0	Titanium	D92YV00DMWDR	QPSK	1	0	0 mm	Back	1:1	1.199	0.080	0.096	A18
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	23.0	22.37	-0.03	1	Titanium	D92YV00DMWDR	QPSK	50	50	0 mm	Back	1:1	1.156	0.064	0.074	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	24.0	23.21	0.13	0	Titanium	D92YV004MWDR	QPSK	1	0	0 mm	Back	1:1	1.199	0.043	0.052	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	23.0	22.37	0.11	1	Titanium	D92YV004MWDR	QPSK	50	50	0 mm	Back	1:1	1.156	0.033	0.038	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	24.0	23.21	0.09	0	Titanium	D92YV004MWDR	QPSK	1	0	0 mm	Back	1:1	1.199	0.012	0.014	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	23.0	22.37	0.03	1	Titanium	D92YV004MWDR	QPSK	50	50	0 mm	Back	1:1	1.156	0.009	0.010	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	24.0	23.21	-0.04	0	Ceramic	D92YV01DMWFG	QPSK	1	0	0 mm	Back	1:1	1.199	0.055	0.066	
1905.00	26590	High	LTE Band 25 (PCS)	20	Sport	23.0	22.37	-0.04	1	Ceramic	D92YV01DMWFG	QPSK	50	50	0 mm	Back	1:1	1.156	0.029	0.034	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	24.0	23.21	0.16	0	Ceramic	D92YV019MWFG	QPSK	1	0	0 mm	Back	1:1	1.199	0.059	0.071	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Links	23.0	22.37	0.05	1	Ceramic	D92YV019MWFG	QPSK	50	50	0 mm	Back	1:1	1.156	0.049	0.057	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	24.0	23.21	0.10	0	Ceramic	D92YV01BMWFG	QPSK	1	0	0 mm	Back	1:1	1.199	0.012	0.014	
1905.00	26590	High	LTE Band 25 (PCS)	20	Metal Loop	23.0	22.37	-0.11	1	Ceramic	D92YV01BMWFG	QPSK	50	50	0 mm	Back	1:1	1.156	0.010	0.012	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Extremity
Spatial Peak	4.0 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 10 gram

Table 10-15
LTE Band 7 Extremity SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Wristband Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Housing Type	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	Scaling Factor	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																		(W/kg)	(W/kg)	
2510.00	20850	Low	LTE Band 7	20	Sport	23.5	22.62	-0.03	0	Aluminum	D92YT024MWCX	QPSK	1	0	0 mm	Back	1:1	1.225	0.107	0.131	
2510.00	20850	Low	LTE Band 7	20	Sport	22.5	21.86	-0.05	1	Aluminum	D92YT024MWCX	QPSK	50	0	0 mm	Back	1:1	1.159	0.066	0.076	
2510.00	20850	Low	LTE Band 7	20	Metal Links	23.5	22.62	0.17	0	Aluminum	D92YT024MWCX	QPSK	1	0	0 mm	Back	1:1	1.225	0.117	0.143	
2510.00	20850	Low	LTE Band 7	20	Metal Links	22.5	21.86	-0.06	1	Aluminum	D92YT024MWCX	QPSK	50	0	0 mm	Back	1:1	1.159	0.103	0.119	
2510.00	20850	Low	LTE Band 7	20	Metal Loop	23.5	22.62	0.18	0	Aluminum	D92YT024MWCX	QPSK	1	0	0 mm	Back	1:1	1.225	0.106	0.130	
2510.00	20850	Low	LTE Band 7	20	Metal Loop	22.5	21.86	0.04	1	Aluminum	D92YT024MWCX	QPSK	50	0	0 mm	Back	1:1	1.159	0.085	0.099	
2510.00	20850	Low	LTE Band 7	20	Sport	23.5	22.62	-0.08	0	Stainless Steel	D92YT029MWDK	QPSK	1	0	0 mm	Back	1:1	1.225	0.129	0.158	
2510.00	20850	Low	LTE Band 7	20	Sport	22.5	21.86	-0.05	1	Stainless Steel	D92YT029MWDK	QPSK	50	0	0 mm	Back	1:1	1.159	0.104	0.121	
2510.00	20850	Low	LTE Band 7	20	Metal Links	23.5	22.62	-0.09	0	Stainless Steel	D92YT025MWDK	QPSK	1	0	0 mm	Back	1:1	1.225	0.148	0.181	
2510.00	20850	Low	LTE Band 7	20	Metal Links	22.5	21.86	-0.01	1	Stainless Steel	D92YT025MWDK	QPSK	50	0	0 mm	Back	1:1	1.159	0.099	0.115	
2510.00	20850	Low	LTE Band 7	20	Metal Loop	23.5	22.62	-0.02	0	Stainless Steel	D92YT02AMWDK	QPSK	1	0	0 mm	Back	1:1	1.225	0.098	0.120	
2510.00	20850	Low	LTE Band 7	20	Metal Loop	22.5	21.86	-0.03	1	Stainless Steel	D92YT02AMWDK	QPSK	50	0	0 mm	Back	1:1	1.159	0.093	0.108	
2510.00	20850	Low	LTE Band 7	20	Sport	23.5	22.62	0.02	0	Titanium	D92YV001MWDR	QPSK	1	0	0 mm	Back	1:1	1.225	0.105	0.129	
2510.00	20850	Low	LTE Band 7	20	Sport	22.5	21.86	0.03	1	Titanium	D92YV001MWDR	QPSK	50	0	0 mm	Back	1:1	1.159	0.101	0.117	
2510.00	20850	Low	LTE Band 7	20	Metal Links	23.5	22.62	0.03	0	Titanium	D92YV00DMWDR	QPSK	1	0	0 mm	Back	1:1	1.225	0.124	0.152	
2510.00	20850	Low	LTE Band 7	20	Metal Links	22.5	21.86	0.12	1	Titanium	D92YV00DMWDR	QPSK	50	0	0 mm	Back	1:1	1.159	0.103	0.119	
2510.00	20850	Low	LTE Band 7	20	Metal Loop	23.5	22.62	0.11	0	Titanium	D92YV004MWDR	QPSK	1	0	0 mm	Back	1:1	1.225	0.141	0.173	
2510.00	20850	Low	LTE Band 7	20	Metal Loop	22.5	21.86	-0.19	1	Titanium	D92YV004MWDR	QPSK	50	0	0 mm	Back	1:1	1.159	0.118	0.137	
2510.00	20850	Low	LTE Band 7	20	Sport	23.5	22.62	-0.17	0	Ceramic	D92YV01FMWFG	QPSK	1	0	0 mm	Back	1:1	1.225	0.132	0.162	
2510.00	20850	Low	LTE Band 7	20	Sport	22.5	21.86	-0.19	1	Ceramic	D92YV01FMWFG	QPSK	50	0	0 mm	Back	1:1	1.159	0.104	0.121	
2510.00	20850	Low	LTE Band 7	20	Metal Links	23.5	22.62	-0.02	0	Ceramic	D92YV019MWFG	QPSK	1	0	0 mm	Back	1:1	1.225	0.174	0.213	A19
2510.00	20850	Low	LTE Band 7	20	Metal Links	22.5	21.86	-0.18	1	Ceramic	D92YV019MWFG	QPSK	50	0	0 mm	Back	1:1	1.159	0.138	0.160	
2510.00	20850	Low	LTE Band 7	20	Metal Loop	23.5	22.62	0.07	0	Ceramic	D92YV01DMWFG	QPSK	1	0	0 mm	Back	1:1	1.225	0.083	0.102	
2510.00	20850	Low	LTE Band 7	20	Metal Loop	22.5	21.86	-0.17	1	Ceramic	D92YV01DMWFG	QPSK	50	0	0 mm	Back	1:1	1.159	0.074	0.086	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Extremity
Spatial Peak	4.0 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 10 gram

Table 10-16
LTE Band 41 Extremity SAR

MEASUREMENT RESULTS

FREQUENCY			Mode	Bandwidth [MHz]	Wrist Band Type	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Wristband Type	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	Scaling Factor	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																		(W/kg)	(W/kg)	
2506.00	39750	Low	LTE Band 41	20	Sport	23.5	23.00	-0.05	0	Aluminum	D92YT029MWCX	QPSK	1	99	0 mm	Back	1:1.58	1.122	0.102	0.114	
2506.00	39750	Low	LTE Band 41	20	Sport	22.5	21.99	-0.02	1	Aluminum	D92YT029MWCX	QPSK	50	0	0 mm	Back	1:1.58	1.125	0.070	0.079	
2506.00	39750	Low	LTE Band 41	20	Metal Links	23.5	23.00	0.03	0	Aluminum	D92YT024MWCX	QPSK	1	99	0 mm	Back	1:1.58	1.122	0.070	0.079	
2506.00	39750	Low	LTE Band 41	20	Metal Links	22.5	21.99	0.03	1	Aluminum	D92YT024MWCX	QPSK	50	0	0 mm	Back	1:1.58	1.125	0.051	0.057	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	23.5	23.00	0.10	0	Aluminum	D92YT029MWCX	QPSK	1	99	0 mm	Back	1:1.58	1.122	0.084	0.094	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	22.5	21.99	0.14	1	Aluminum	D92YT029MWCX	QPSK	50	0	0 mm	Back	1:1.58	1.125	0.061	0.069	
2506.00	39750	Low	LTE Band 41	20	Sport	23.5	23.00	0.12	0	Stainless Steel	D92YT02AMWDK	QPSK	1	99	0 mm	Back	1:1.58	1.122	0.056	0.063	
2506.00	39750	Low	LTE Band 41	20	Sport	22.5	21.99	-0.03	1	Stainless Steel	D92YT02AMWDK	QPSK	50	0	0 mm	Back	1:1.58	1.125	0.040	0.045	
2506.00	39750	Low	LTE Band 41	20	Metal Links	23.5	23.00	0.13	0	Stainless Steel	D92YT025MWDK	QPSK	1	99	0 mm	Back	1:1.58	1.122	0.072	0.081	
2506.00	39750	Low	LTE Band 41	20	Metal Links	22.5	21.99	0.03	1	Stainless Steel	D92YT025MWDK	QPSK	50	0	0 mm	Back	1:1.58	1.125	0.062	0.070	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	23.5	23.00	0.11	0	Stainless Steel	D92YT026MWDK	QPSK	1	99	0 mm	Back	1:1.58	1.122	0.048	0.054	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	22.5	21.99	0.09	1	Stainless Steel	D92YT026MWDK	QPSK	50	0	0 mm	Back	1:1.58	1.125	0.040	0.045	
2506.00	39750	Low	LTE Band 41	20	Sport	23.5	23.00	0.18	0	Titanium	D92YV001MWDR	QPSK	1	99	0 mm	Back	1:1.58	1.122	0.090	0.101	
2506.00	39750	Low	LTE Band 41	20	Sport	22.5	21.99	0.02	1	Titanium	D92YV001MWDR	QPSK	50	0	0 mm	Back	1:1.58	1.125	0.070	0.079	
2506.00	39750	Low	LTE Band 41	20	Metal Links	23.5	23.00	-0.03	0	Titanium	D92YV00DMWDR	QPSK	1	99	0 mm	Back	1:1.58	1.122	0.086	0.096	
2506.00	39750	Low	LTE Band 41	20	Metal Links	22.5	21.99	-0.07	1	Titanium	D92YV00DMWDR	QPSK	50	0	0 mm	Back	1:1.58	1.125	0.062	0.070	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	23.5	23.00	0.02	0	Titanium	D92YV004MWDR	QPSK	1	99	0 mm	Back	1:1.58	1.122	0.109	0.122	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	22.5	21.99	0.06	1	Titanium	D92YV004MWDR	QPSK	50	0	0 mm	Back	1:1.58	1.125	0.071	0.080	
2506.00	39750	Low	LTE Band 41	20	Sport	23.5	23.00	0.13	0	Ceramic	D92YV01FMWFG	QPSK	1	99	0 mm	Back	1:1.58	1.122	0.073	0.082	
2506.00	39750	Low	LTE Band 41	20	Sport	22.5	21.99	-0.18	1	Ceramic	D92YV01FMWFG	QPSK	50	0	0 mm	Back	1:1.58	1.125	0.060	0.068	
2506.00	39750	Low	LTE Band 41	20	Metal Links	23.5	23.00	-0.14	0	Ceramic	D92YV019MWFG	QPSK	1	99	0 mm	Back	1:1.58	1.122	0.110	0.123	A20
2506.00	39750	Low	LTE Band 41	20	Metal Links	22.5	21.99	0.16	1	Ceramic	D92YV019MWFG	QPSK	50	0	0 mm	Back	1:1.58	1.125	0.076	0.086	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	23.5	23.00	0.14	0	Ceramic	D92YV01DMWFG	QPSK	1	99	0 mm	Back	1:1.58	1.122	0.074	0.083	
2506.00	39750	Low	LTE Band 41	20	Metal Loop	22.5	21.99	0.05	1	Ceramic	D92YV01DMWFG	QPSK	50	0	0 mm	Back	1:1.58	1.125	0.045	0.051	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Extremity
Spatial Peak	4.0 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 10 gram

Table 10-17
2.4 GHz WLAN Extremity SAR

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Housing Type	Wristband Type	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)	(W/kg)	
2437	6	802.11b	DSSS	22	19.0	19.00	-0.19	0 mm	Aluminum	Sport	D92YT024MWCX	1	Back	100.0	1.000	1.000	0.039	0.039	
2437	6	802.11b	DSSS	22	19.0	19.00	0.02	0 mm	Aluminum	Metal Links	D92YT024MWCX	1	Back	100.0	1.000	1.000	0.040	0.040	
2437	6	802.11b	DSSS	22	19.0	19.00	0.19	0 mm	Aluminum	Metal Loop	D92YT024MWCX	1	Back	100.0	1.000	1.000	0.057	0.057	
2437	6	802.11b	DSSS	22	19.0	19.00	-0.03	0 mm	Stainless Steel	Sport	D92YT02AMWDK	1	Back	100.0	1.000	1.000	0.035	0.035	
2437	6	802.11b	DSSS	22	19.0	19.00	-0.04	0 mm	Stainless Steel	Metal Links	D92YT02AMWDK	1	Back	100.0	1.000	1.000	0.046	0.046	
2437	6	802.11b	DSSS	22	19.0	19.00	0.03	0 mm	Stainless Steel	Metal Loop	D92YT02AMWDK	1	Back	100.0	1.000	1.000	0.037	0.037	
2437	6	802.11b	DSSS	22	19.0	19.00	0.15	0 mm	Titanium	Sport	D92YV00WMWDR	1	Back	100.0	1.000	1.000	0.044	0.044	
2437	6	802.11b	DSSS	22	19.0	19.00	0.15	0 mm	Titanium	Metal Links	D92YV00WMWDR	1	Back	100.0	1.000	1.000	0.049	0.049	
2437	6	802.11b	DSSS	22	19.0	19.00	0.20	0 mm	Titanium	Metal Loop	D92YV00WMWDR	1	Back	100.0	1.000	1.000	0.040	0.040	
2437	6	802.11b	DSSS	22	19.0	19.00	0.20	0 mm	Ceramic	Sport	D92YV01BMWFG	1	Back	100.0	1.000	1.000	0.044	0.044	
2437	6	802.11b	DSSS	22	19.0	19.00	0.02	0 mm	Ceramic	Metal Links	D92YV01BMWFG	1	Back	100.0	1.000	1.000	0.050	0.050	
2437	6	802.11b	DSSS	22	19.0	19.00	0.00	0 mm	Ceramic	Metal Loop	D92YV01BMWFG	1	Back	100.0	1.000	1.000	0.060	0.060	A21

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Extremity
Spatial Peak	4.0 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 10 gram

Table 10-18
Bluetooth Extremity SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Housing Type	Wristband Type	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.															(W/kg)	(W/kg)	
2441	39	Bluetooth	FHSS	17.5	15.84	0.03	0 mm	Aluminum	Sport	D92YT024MWCX	1	back	100	1.466	1.000	0.015	0.022	
2441	39	Bluetooth	FHSS	17.5	15.84	0.02	0 mm	Aluminum	Metal Links	D92YT024MWCX	1	back	100	1.466	1.000	0.021	0.031	
2441	39	Bluetooth	FHSS	17.5	15.84	0.07	0 mm	Aluminum	Metal Loop	D92YT024MWCX	1	back	100	1.466	1.000	0.023	0.034	
2441	39	Bluetooth	FHSS	17.5	15.84	0.02	0 mm	Stainless Steel	Sport	D92YT025MWDK	1	back	100	1.466	1.000	0.015	0.022	
2441	39	Bluetooth	FHSS	17.5	15.84	0.02	0 mm	Stainless Steel	Metal Links	D92YT025MWDK	1	back	100	1.466	1.000	0.018	0.026	
2441	39	Bluetooth	FHSS	17.5	15.84	0.02	0 mm	Stainless Steel	Metal Loop	D92YT025MWDK	1	back	100	1.466	1.000	0.017	0.025	
2441	39	Bluetooth	FHSS	17.5	15.84	-0.02	0 mm	Titanium	Sport	D92YV001MWDR	1	back	100	1.466	1.000	0.014	0.021	
2441	39	Bluetooth	FHSS	17.5	15.84	0.05	0 mm	Titanium	Metal Links	D92YV001MWDR	1	back	100	1.466	1.000	0.022	0.032	
2441	39	Bluetooth	FHSS	17.5	15.84	0.02	0 mm	Titanium	Metal Loop	D92YV001MWDR	1	back	100	1.466	1.000	0.019	0.028	
2441	39	Bluetooth	FHSS	17.5	15.84	-0.16	0 mm	Ceramic	Sport	D92YV01FMWFG	1	back	100	1.466	1.000	0.023	0.034	
2441	39	Bluetooth	FHSS	17.5	15.84	0.17	0 mm	Ceramic	Metal Links	D92YV019MWFG	1	back	100	1.466	1.000	0.027	0.040	A22
2441	39	Bluetooth	FHSS	17.5	15.84	0.05	0 mm	Ceramic	Metal Loop	D92YV019MWFG	1	back	100	1.466	1.000	0.023	0.034	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Extremity
Spatial Peak	4.0 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 10 gram

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 not required since measured SAR results for all frequency bands were less than 0.8 W/kg and 2.0 W/kg for 10g SAR.
7. This device has four housing types: Aluminum, Stainless Steel, Titanium, and Ceramic. 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 in was tested under RMC 12.2 kbps with HSPA Inactive per KDB Publication 941225 D01v03r01. AMR and HSPA SAR was not required per the 3G Test Reduction Procedure in KDB Publication 941225 D01v03r01.
2. Per FCC KDB Publication 447498 D01v06, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg for 1g evaluations and ≤ 2.0 W/kg for 10g SAR then testing at the other channels is not required for such test configuration(s). When the maximum output power variation across the required test channels is > ½ dB, instead of the middle channel, the highest output power channel was used.

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 7.6.2 for more information.
2. 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.
3. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools. The reported SAR was scaled to the 100% transmission duty factor to determine compliance. The maximum achievable duty cycles for all modes were determined based on measurements performed on a spectrum analyzer in zero-span mode with RBW = 8 MHz, VBW = 50 MHz, and detector = peak per guidance of Section 6.0 b) of ANSI C63. 10-2013 and KDB 558074 D01 v04. The RBW and VBW were both greater than 50/T, where T is the minimum transmission duration, and the number of sweep points across T was greater than 100.

Bluetooth Notes

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.

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 Section 6.3.4.1.2, 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 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Head SAR	UMTS 850	0.001	0.196	0.197
	UMTS 1750	0.250	0.196	0.446
	UMTS 1900	0.478	0.196	0.674
	LTE Band 26 (Cell)	0.001	0.196	0.197
	LTE Band 5 (Cell)	0.003	0.196	0.199
	LTE Band 66 (AWS)	0.344	0.196	0.540
	LTE Band 25 (PCS)	0.469	0.196	0.665
	LTE Band 7	0.515	0.196	**0.711**
	LTE Band 41	0.415	0.196	0.611

Table 11-2
Simultaneous Transmission Scenario with Bluetooth (Head at 1.0 cm)

Exposure Condition	Mode	3G/4G SAR (W/kg)	Bluetooth SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Head SAR	UMTS 850	0.001	0.128	0.129
	UMTS 1750	0.250	0.128	0.378
	UMTS 1900	0.478	0.128	0.606
	LTE Band 26 (Cell)	0.001	0.128	0.129
	LTE Band 5 (Cell)	0.003	0.128	0.131
	LTE Band 66 (AWS)	0.344	0.128	0.472
	LTE Band 25 (PCS)	0.469	0.128	0.597
	LTE Band 7	0.515	0.128	**0.643**
	LTE Band 41	0.415	0.128	0.543

11.4 Extremity SAR Simultaneous Transmission Analysis

Table 11-3
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 SAR	UMTS 850	0.250	0.060	0.310
	UMTS 1750	0.079	0.060	0.139
	UMTS 1900	0.114	0.060	0.174
	LTE Band 26 (Cell)	0.253	0.060	0.313
	LTE Band 5 (Cell)	0.255	0.060	**0.315**
	LTE Band 66 (AWS)	0.135	0.060	0.195
	LTE Band 25 (PCS)	0.096	0.060	0.156
	LTE Band 7	0.213	0.060	0.273
	LTE Band 41	0.123	0.060	0.183

Table 11-4
Simultaneous Transmission Scenario with Bluetooth (Extremity at 0.0 cm)

Exposure Condition	Mode	3G/4G SAR (W/kg)	Bluetooth SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Extremity SAR	UMTS 850	0.250	0.040	0.290
	UMTS 1750	0.079	0.040	0.119
	UMTS 1900	0.114	0.040	0.154
	LTE Band 26 (Cell)	0.253	0.040	0.293
	LTE Band 5 (Cell)	0.255	0.040	**0.295**
	LTE Band 66 (AWS)	0.135	0.040	0.175
	LTE Band 25 (PCS)	0.096	0.040	0.136
	LTE Band 7	0.213	0.040	0.253
	LTE Band 41	0.123	0.040	0.163

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.

12 SAR MEASUREMENT VARIABILITY

12.1 Measurement Variability

Per FCC KDB Publication 865664 D01v01, SAR measurement variability was not assessed for each frequency band since all measured SAR values are < 0.80 W/kg for 1g SAR and < 2.0 W/kg for 10g SAR.

12.2 Measurement Uncertainty

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

13 EQUIPMENT LIST

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	8753ES	Network Analyzer	3/19/2019	Annual	3/19/2020	MY40001472
Agilent	E4438C	ESG Vector Signal Generator	6/27/2019	Annual	6/27/2020	MY45093852
Agilent	E4440A	PSA Series Spectrum Analyzer	11/14/2018	Annual	11/14/2019	MY46186272
Agilent	E5515C	Wireless Communications Test Set	2/28/2018	Biennial	2/28/2020	GB41450275
Agilent	N5182A	MXG Vector Signal Generator	6/27/2019	Annual	6/27/2020	US46240505
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	343972
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	343971
Anritsu	MA24106A	USB Power Sensor	5/6/2019	Annual	5/6/2020	1231538
Anritsu	MA24106A	USB Power Sensor	6/21/2019	Annual	6/21/2020	1244515
Anritsu	MA24106A	USB Power Sensor	7/8/2019	Annual	7/8/2020	1248508
Anritsu	MA2411B	Pulse Power Sensor	10/30/2018	Annual	10/30/2019	1207470
Anritsu	MA2411B	Pulse Power Sensor	11/20/2018	Annual	11/20/2019	1339007
Anritsu	ML2495A	Power Meter	10/21/2018	Annual	10/21/2019	941001
Anritsu	ML2495A	Power Meter	11/20/2018	Annual	11/20/2019	1039008
Control Company	4040	Digital Thermometer	2/28/2018	Biennial	2/25/2020	82374
Control Company	4040	Temperature / Humidity Monitor	2/28/2018	Biennial	2/28/2020	150761911
Control Company	4352	Ultra Long Stem Thermometer	8/2/2018	Biennial	8/2/2020	181334696
Control Company	4352	Ultra Long Stem Thermometer	2/28/2018	Biennial	2/28/2020	170330160
Keysight Technologies	AT/N6705B	DC Power Supply	CBT	N/A	CBT	MY53001315
MCL	BW-N6W5+	6dB Attenuator	CBT	N/A	CBT	1139
Mini Circuits	SLP-2400+	Low Pass Filter	CBT	N/A	CBT	R8979500903
Mini Circuits	BW-N20W5+	DC to 18 GHz Precision Fixed 20 dB Attenuator	CBT	N/A	CBT	N/A
Mini Circuits	NLP-1200+	Low Pass filter DC to 1000 MHz	CBT	N/A	CBT	N/A
Mini Circuits	LP-2950+	Low Pass Filter DC to 2700 MHz	CBT	N/A	CBT	N/A
Mitutoyo	CD-6"CSX	Digital Caliper	4/18/2018	Biennial	4/18/2020	13264165
Narda	4772-3	Attenuator (3dB)	CBT	N/A	CBT	9406
Narda	BW-S3W2	Attenuator (3dB)	CBT	N/A	CBT	120
Pasternack	PE2208-6	Bidirectional Coupler	CBT	N/A	CBT	N/A
Pasternack	PE2209-10	Bidirectional Coupler	CBT	N/A	CBT	N/A
Seekonk	NC-100	Torque Wrench	4/18/2018	Biennial	4/18/2020	N/A
Seekonk	NC-100	Torque Wrench (8" lb)	5/23/2018	Biennial	5/23/2020	N/A
Pasternack	NC-100	Torque Wrench	11/1/2017	Biennial	11/1/2019	N/A
Rohde & Schwarz	CMW500	Radio Communication Tester	6/24/2019	Annual	6/24/2020	101699
Rohde & Schwarz	CMW500	Radio Communication Tester	6/26/2019	Annual	6/26/2020	108843
Rohde & Schwarz	CMW500	Radio Communication Tester	4/15/2019	Annual	4/15/2020	167284
Rohde & Schwarz	CMW500	Radio Communication Tester	4/17/2019	Annual	4/17/2020	167285
SPEAG	D835V2	835 MHz SAR Dipole	5/18/2018	Biennial	5/18/2020	4d180
SPEAG	D1750V2	1750 MHz SAR Dipole	9/7/2017	Biennial	9/7/2019	1104
SPEAG	D1750V2	1750 MHz SAR Dipole	5/15/2018	Biennial	5/15/2020	1092
SPEAG	D1900V2	1900 MHz SAR Dipole	9/7/2017	Biennial	9/7/2019	5d181
SPEAG	D1900V2	1900 MHz SAR Dipole	5/14/2018	Biennial	5/14/2020	5d026
SPEAG	D1900V2	1900 MHz SAR Dipole	6/19/2019	Annual	6/19/2020	5d030
SPEAG	D2450V2	2450 MHz SAR Dipole	11/12/2018	Annual	11/12/2019	921
SPEAG	D2450V2	2450 MHz SAR Dipole	6/14/2019	Annual	6/14/2020	750
SPEAG	D2600V2	2600 MHz SAR Dipole	9/11/2017	Biennial	9/11/2019	1069
SPEAG	D2600V2	2600 MHz SAR Dipole	6/14/2019	Annual	6/14/2020	1042
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/17/2019	Annual	4/17/2020	501
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/15/2019	Annual	1/15/2020	793
SPEAG	DAE4	Dasy Data Acquisition Electronics	2/13/2019	Annual	2/13/2020	1403
SPEAG	DAE4	Dasy Data Acquisition Electronics	8/14/2018	Annual	8/14/2019	1408
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/15/2019	Annual	1/15/2020	1532
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/14/2019	Annual	6/14/2020	701
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/13/2019	Annual	3/13/2020	604
SPEAG	DAK-3.5	Dielectric Assessment Kit	5/7/2019	Annual	5/7/2020	1070
SPEAG	DAKS-3.5	Portable DAK	9/11/2018	Annual	9/11/2019	1045
SPEAG	EX3DV4	SAR Probe	4/12/2019	Annual	4/12/2020	7532
SPEAG	EX3DV4	SAR Probe	1/28/2019	Annual	1/28/2020	3837
SPEAG	EX3DV4	SAR Probe	2/19/2019	Annual	2/19/2020	7427
SPEAG	ES3DV3	SAR Probe	11/19/2018	Annual	11/19/2019	3318
SPEAG	EX3DV4	SAR Probe	1/24/2019	Annual	1/24/2020	7490
SPEAG	EX3DV4	SAR Probe	6/19/2019	Annual	6/19/2020	7416
SPEAG	EX3DV4	SAR Probe	3/18/2019	Annual	3/18/2020	7421

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.

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

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	

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]

16 REFERENCES

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APPENDIX A: SAR TEST DATA

PCTEST ENGINEERING LABORATORY, INC.

DUT: BCG-A2157; Type: Watch; Serial: D92YV00DMWDR

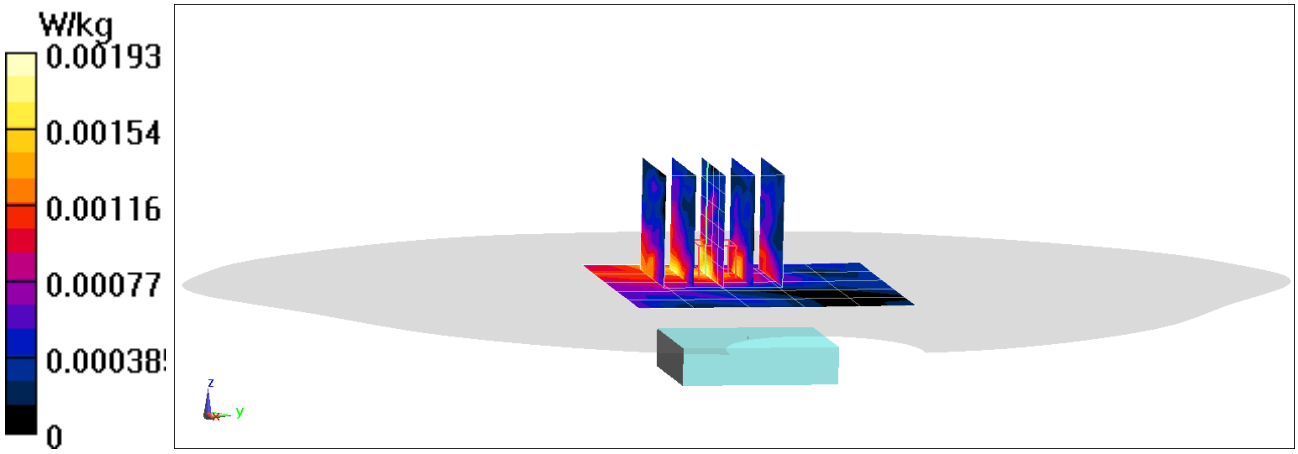
Communication System: UID 0, UMTS; Frequency: 836.6 MHz; Duty Cycle: 1:1
Medium: 835 MHz Head Medium parameters used (interpolated):
$f = 836.6$ MHz; $\sigma = 0.908$ S/m; $\varepsilon_r = 41.479$; $\rho = 1000$ kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-15-2019; Ambient Temp: 23.1°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7532; ConvF(10.45, 10.45, 10.45) @ 836.6 MHz; Calibrated: 4/12/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn501; Calibrated: 4/17/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: UMTS 850, Head SAR, Front side, Mid.ch
Titanium, 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 = 1.123 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.00213 W/kg
SAR(1 g) = 0.00149 W/kg



PCTEST ENGINEERING LABORATORY, INC.

DUT: BCG-A2157; Type: Watch; Serial: D92YV01DMWFG

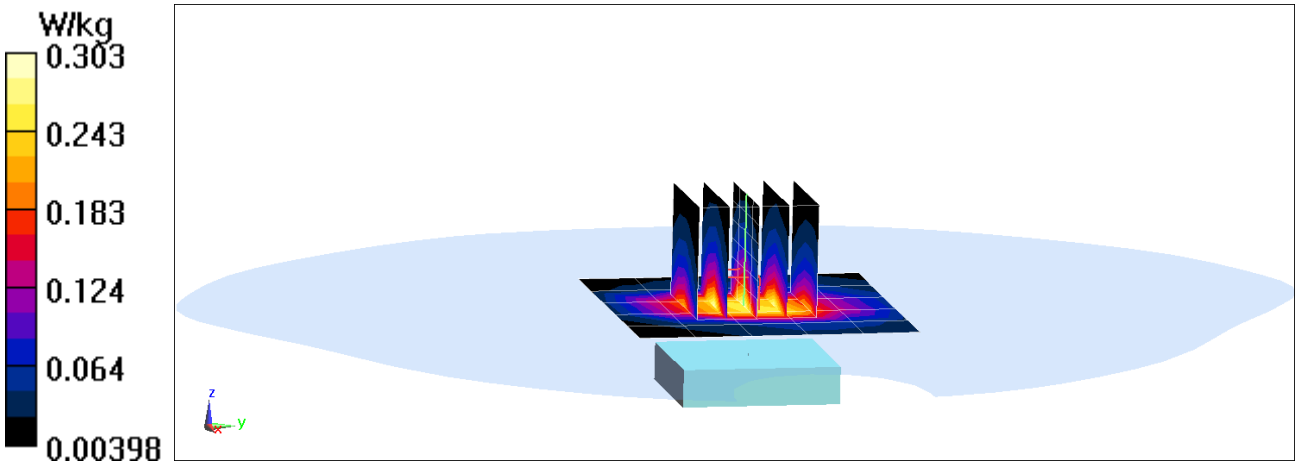
Communication System: UID 0, UMTS; Frequency: 1732.4 MHz; Duty Cycle: 1:1
Medium: 1750 MHz Head Medium parameters used (interpolated):
f = 1732.4 MHz; σ = 1.36 S/m; ε_r = 39.358; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-18-2019; Ambient Temp: 21.8°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN3837; ConvF(8.03, 8.03, 8.03) @ 1732.4 MHz; Calibrated: 1/28/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn793; Calibrated: 1/15/2019
Phantom: SAM Sub; Type: SAM 4.0; Serial: TP-1403
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: UMTS 1750, Head SAR, Front side, Mid.ch
Ceramic, 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 = 13.15 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.355 W/kg
SAR(1 g) = 0.222 W/kg



DUT: BCG-A2157; Type: Watch; Serial: D92YV01DMWFG

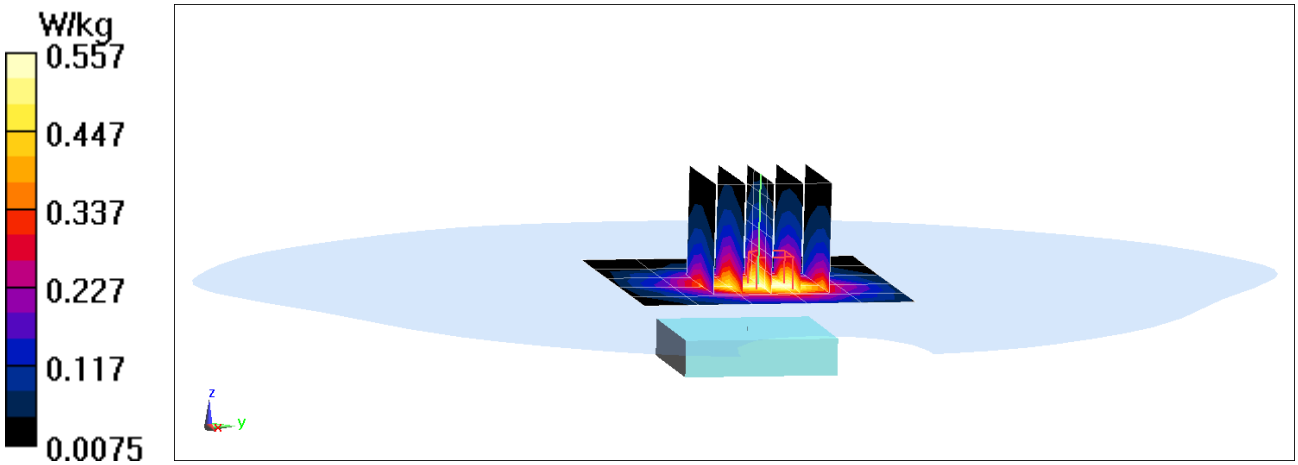
Communication System: UID 0, UMTS; Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Head Medium parameters used:
f = 1880 MHz; σ = 1.45 S/m; ε_r = 40.075; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-16-2019; Ambient Temp: 22.6°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN3837; ConvF(7.85, 7.85, 7.85) @ 1880 MHz; Calibrated: 1/28/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn793; Calibrated: 1/15/2019
Phantom: SAM Sub; Type: SAM 4.0; Serial: TP-1403
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: UMTS 1900, Head SAR, Front side, Mid.ch
Ceramic, 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 = 14.99 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.679 W/kg
SAR(1 g) = 0.421 W/kg



DUT: BCG-A2157; Type: Watch; Serial: D92YV00WMWDR

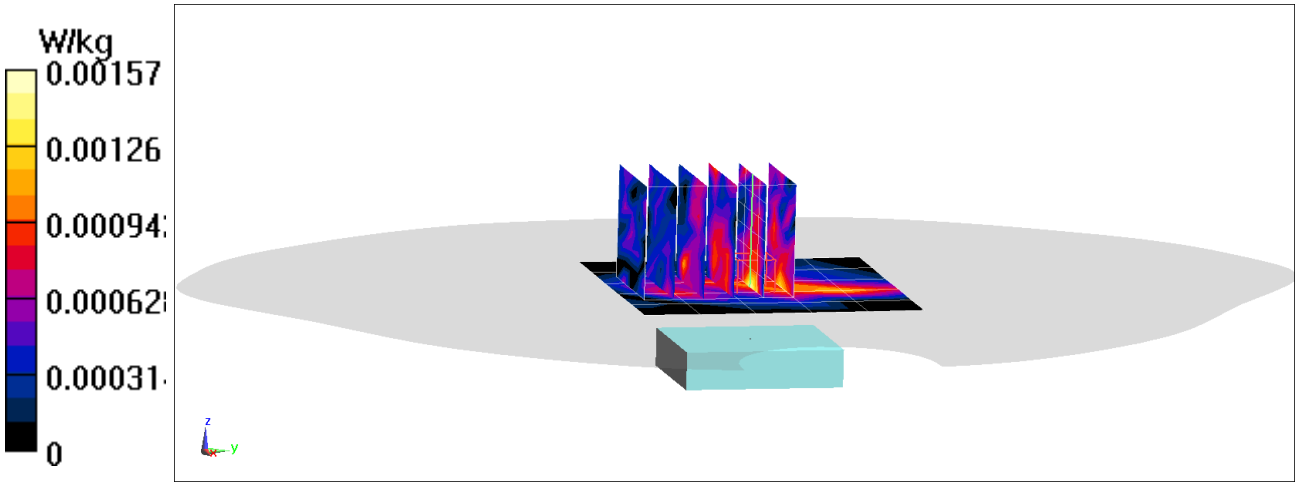
Communication System: UID 0, LTE Band 26; Frequency: 831.5 MHz; Duty Cycle: 1:1
Medium: 835 MHz Head Medium parameters used (interpolated):
$f = 831.5$ MHz; $\sigma = 0.903$ S/m; $\varepsilon_r = 41.547$; $\rho = 1000$ kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-15-2019; Ambient Temp: 23.1°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7532; ConvF(10.45, 10.45, 10.45) @ 831.5 MHz; Calibrated: 4/12/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn501; Calibrated: 4/17/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 26 (Cell.), Head SAR, Front side, Mid.ch,
10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset
Titanium, Sport Wrist Band

Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (6x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.9890 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.00182 W/kg
SAR(1 g) = 0.00101 W/kg



DUT: BCG-A2157; Type: Watch; Serial: D92YV00WMWDR

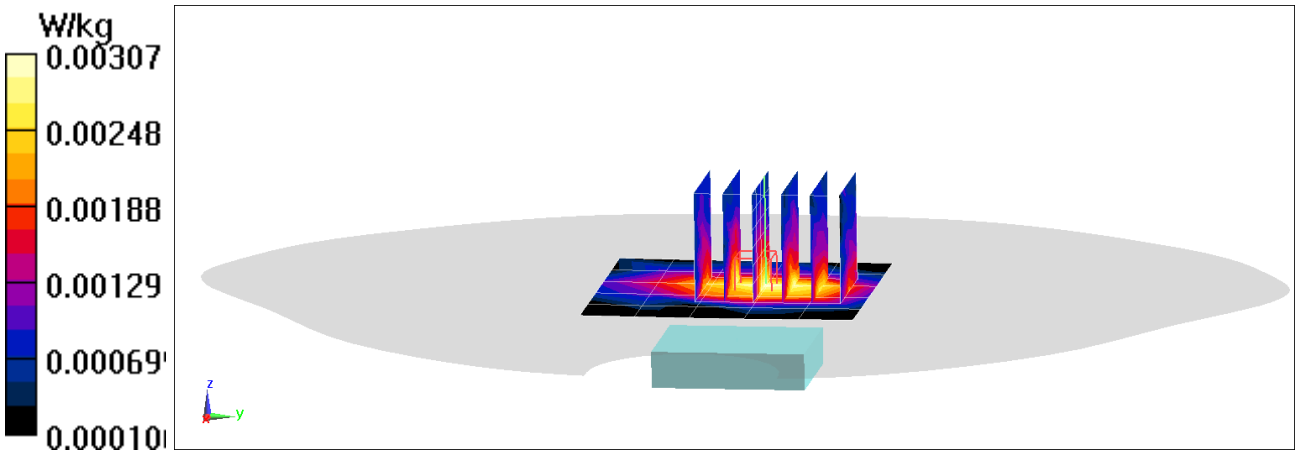
Communication System: UID 0, LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1
Medium: 835 MHz Head Medium parameters used (interpolated):
$f = 836.5$ MHz; $\sigma = 0.883$ S/m; $\varepsilon_r = 40.171$; $\rho = 1000$ kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-18-2019; Ambient Temp: 23.2°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7532; ConvF(10.45, 10.45, 10.45) @ 836.5 MHz; Calibrated: 4/12/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn501; Calibrated: 4/17/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 5 (Cell.), Head SAR, Front side, Mid.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 (5x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.740 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.00352 W/kg
SAR(1 g) = 0.00246 W/kg



DUT: BCG-A2157; Type: Watch; Serial: D92YT02AMWDK

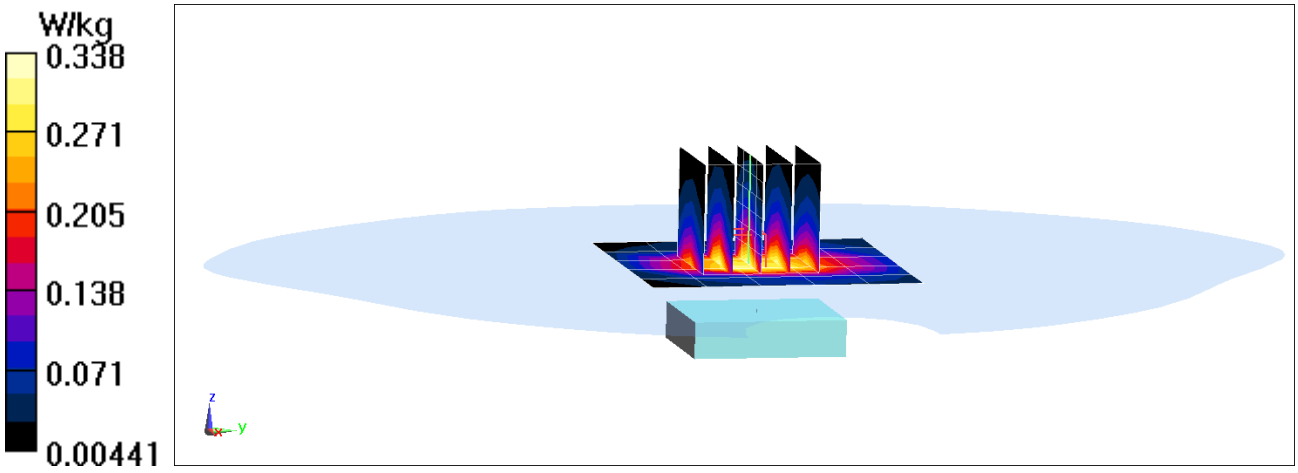
Communication System: UID 0, _LTE Band 66 (AWS); Frequency: 1770 MHz; Duty Cycle: 1:1
Medium: 1750 MHz Head Medium parameters used (interpolated):
$f = 1770$ MHz; $\sigma = 1.382$ S/m; $\varepsilon_r = 39.317$; $\rho = 1000$ kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-18-2019; Ambient Temp: 21.8°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN3837; ConvF(8.03, 8.03, 8.03) @ 1770 MHz; Calibrated: 1/28/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn793; Calibrated: 1/15/2019
Phantom: SAM Sub; Type: SAM 4.0; Serial: TP-1403
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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

Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.11 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.398 W/kg
SAR(1 g) = 0.253 W/kg



DUT: BCG-A2157; Type: Watch; Serial: D92YT024MWCX

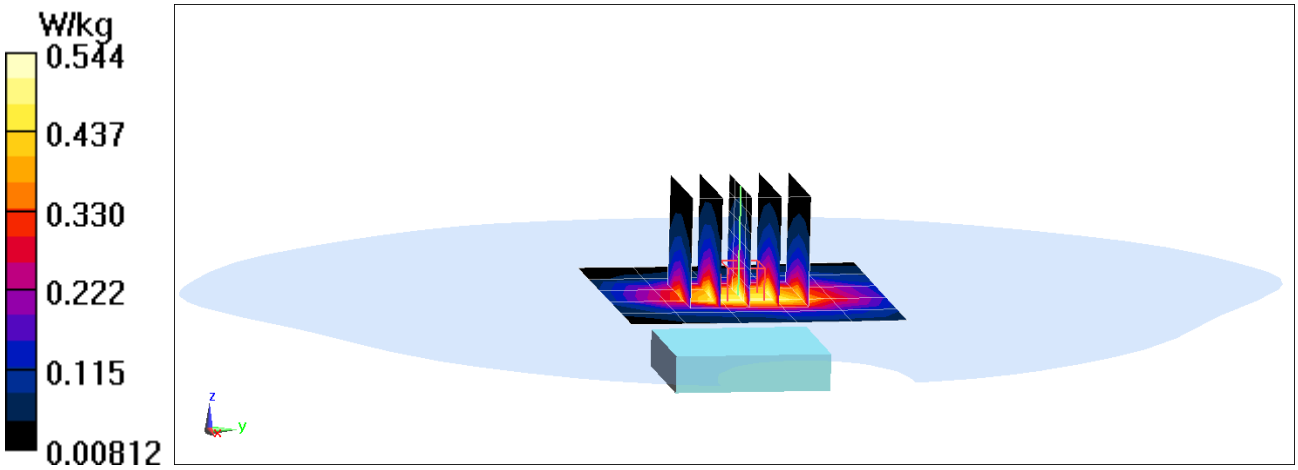
Communication System: UID 0, _LTE Band 25 (PCS); Frequency: 1905 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Medium parameters used (interpolated):
f = 1905 MHz; σ = 1.455 S/m; ε_r = 38.41; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-23-2019; Ambient Temp: 21.3°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7427; ConvF(8.18, 8.18, 8.18) @ 1905 MHz; Calibrated: 2/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1403; Calibrated: 2/13/2019
Phantom: SAM Main; Type: SAM 4.0; Serial: TP-1406
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 25 (PCS), Head SAR, Front side, High.ch,
20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset
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 = 16.95 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.643 W/kg
SAR(1 g) = 0.391 W/kg



DUT: BCG-A2157; Type: Watch; Serial: D92YV001MWDR

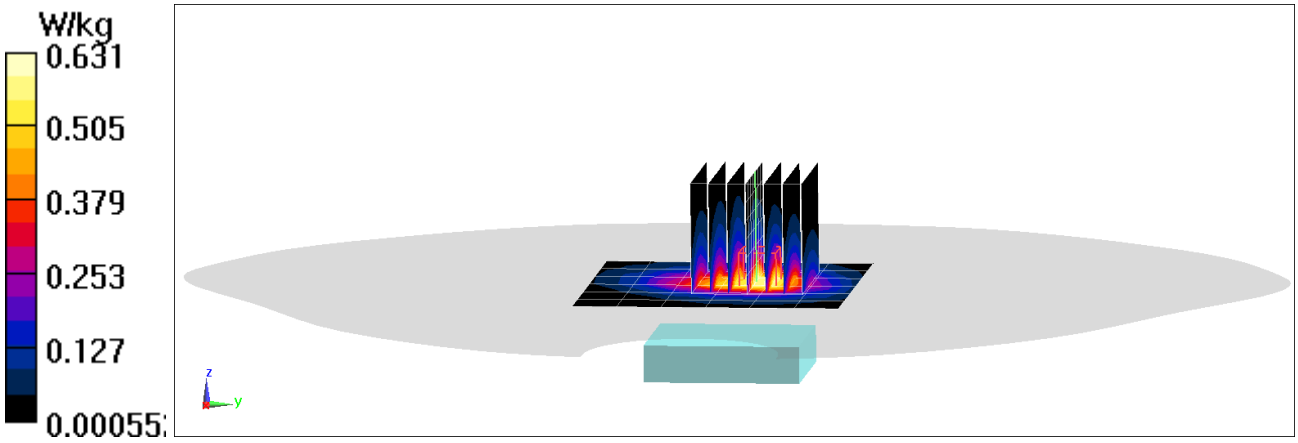
Communication System: UID 0, _LTE Band 7; Frequency: 2510 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Head Medium parameters used (interpolated):
$f = 2510$ MHz; $\sigma = 1.876$ S/m; $\varepsilon_r = 38.198$; $\rho = 1000$ kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-24-2019; Ambient Temp: 19.5°C; Tissue Temp: 20.1°C

Probe: EX3DV4 - SN7490; ConvF(7.74, 7.74, 7.74) @ 2510 MHz; Calibrated: 1/24/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1532; Calibrated: 1/15/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 7, Head SAR, Front side, Low.ch,
20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset
Titanium, Sport Wrist Band

Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Zoom Scan (8x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.85 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 0.782 W/kg
SAR(1 g) = 0.420 W/kg



PCTEST ENGINEERING LABORATORY, INC.

DUT: BCG-A2157; Type: Watch; Serial: D92YV001MWDR

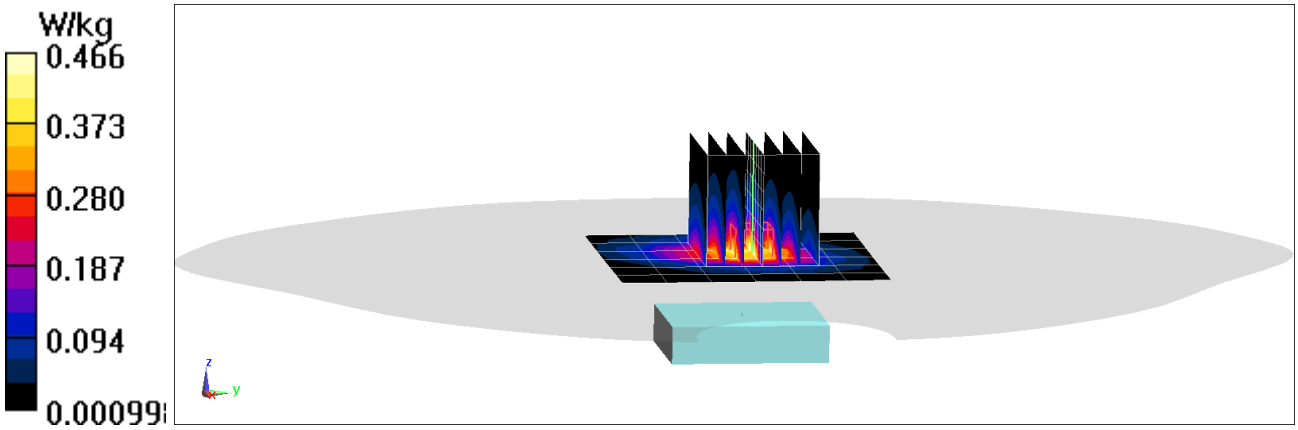
Communication System: UID 0, _LTE Band 41; Frequency: 2506 MHz; Duty Cycle: 1:1.58
Medium: 2450 MHz Head Medium parameters used (interpolated):
f = 2506 MHz; σ = 1.922 S/m; ε_r = 39.583; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-16-2019; Ambient Temp: 20.7°C; Tissue Temp: 20.9°C

Probe: ES3DV3 - SN3318; ConvF(4.59, 4.59, 4.59) @ 2506 MHz; Calibrated: 11/19/2018
Sensor-Surface: 3mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1408; Calibrated: 8/14/2018
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 41, Head SAR, Front side, Low.ch,
20 MHz Bandwidth, QPSK, 1 RB, 99 RB Offset
Titanium, Sport Wrist Band

Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Zoom Scan (8x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.18 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.694 W/kg
SAR(1 g) = 0.370 W/kg



DUT: BCG-A2157; Type: Watch; Serial: D92YT024MWCX

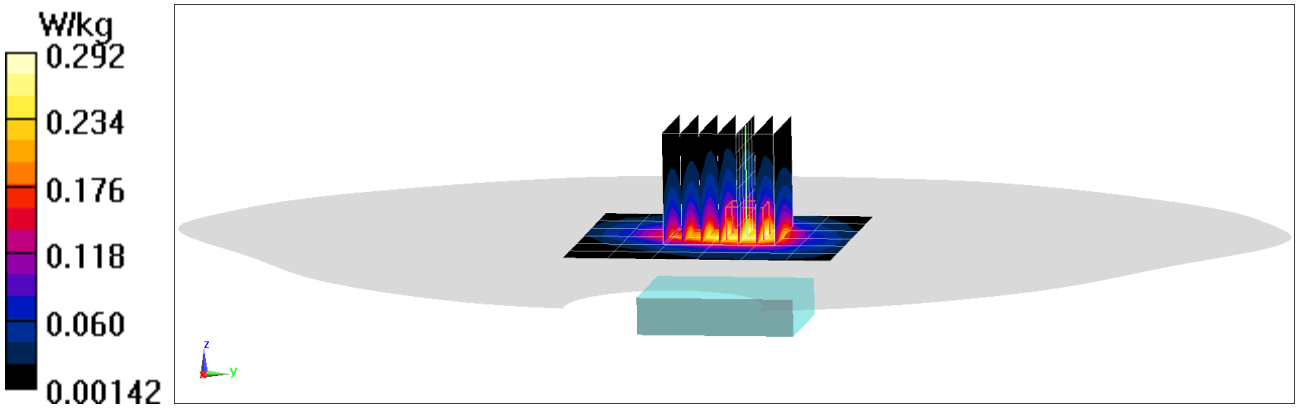
Communication System: UID 0, IEEE 802.11b; Frequency: 2437 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Head Medium parameters used (interpolated):
$f = 2437$ MHz; $\sigma = 1.795$ S/m; $\varepsilon_r = 37.881$; $\rho = 1000$ kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-20-2019; Ambient Temp: 22.9°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7490; ConvF(7.74, 7.74, 7.74) @ 2437 MHz; Calibrated: 1/24/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1532; Calibrated: 1/15/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: IEEE 802.11b, 22 MHz Bandwidth, Head SAR, Ch 6,
1 Mbps, Front Side Aluminum, Sport Wrist Band

Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.376 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.355 W/kg
SAR(1 g) = 0.196 W/kg



DUT: BCG-A2157; Type: Watch; Serial: D92YV01BMWFG

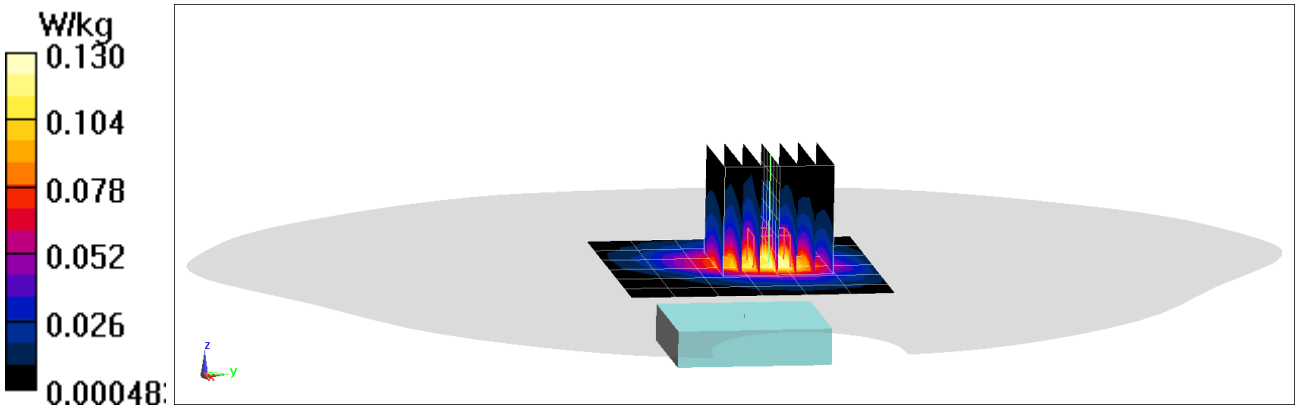
Communication System: UID 0, Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Head Medium parameters used (interpolated):
f = 2441 MHz; σ = 1.879 S/m; ε_r = 39.074; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-23-2019; Ambient Temp: 21.5°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7416; ConvF(7.4, 7.4, 7.4) @ 2441 MHz; Calibrated: 6/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn701; Calibrated: 6/14/2019
Phantom: Twin-SAM V8.0_Left; Type: QD 000 P41 AA; Serial: 1935
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: Bluetooth, Head SAR, Ch 39, 1 Mbps, Front Side
Ceramic, 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 = 7.261 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.155 W/kg
SAR(1 g) = 0.087 W/kg



DUT: BCG-A2157; Type: Watch; Serial: D92YT024MWCX

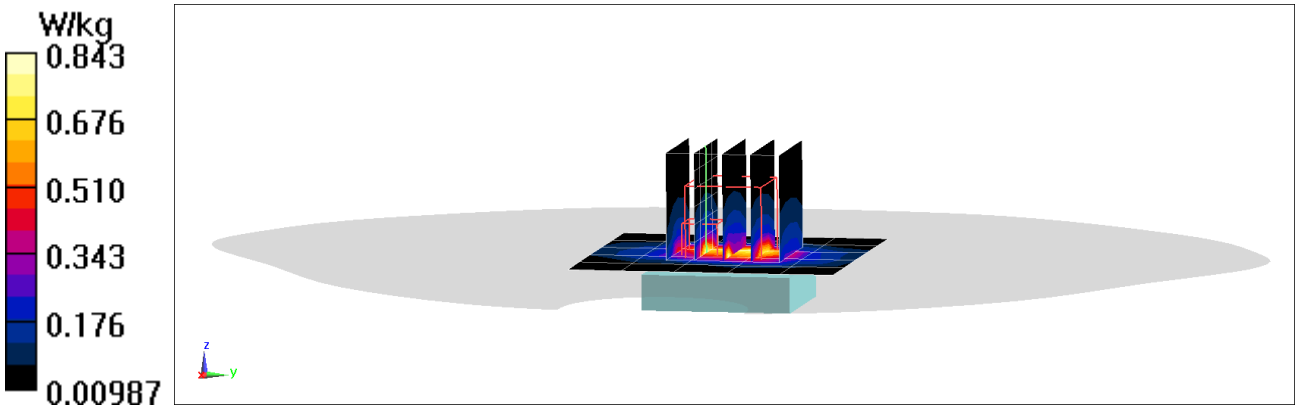
Communication System: UID 0, UMTS; Frequency: 836.6 MHz; Duty Cycle: 1:1
Medium: 835 MHz Body Medium parameters used (interpolated):
$f = 836.6$ MHz; $\sigma = 0.992$ S/m; $\varepsilon_r = 53.331$; $\rho = 1000$ kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-20-2019; Ambient Temp: 23.5°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7532; ConvF(10.14, 10.14, 10.14) @ 836.6 MHz; Calibrated: 4/12/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn501; Calibrated: 4/17/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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

Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.08 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 1.18 W/kg
SAR(10 g) = 0.212 W/kg



DUT: BCG-A2157; Type: Watch; Serial: D92YV019MWFG

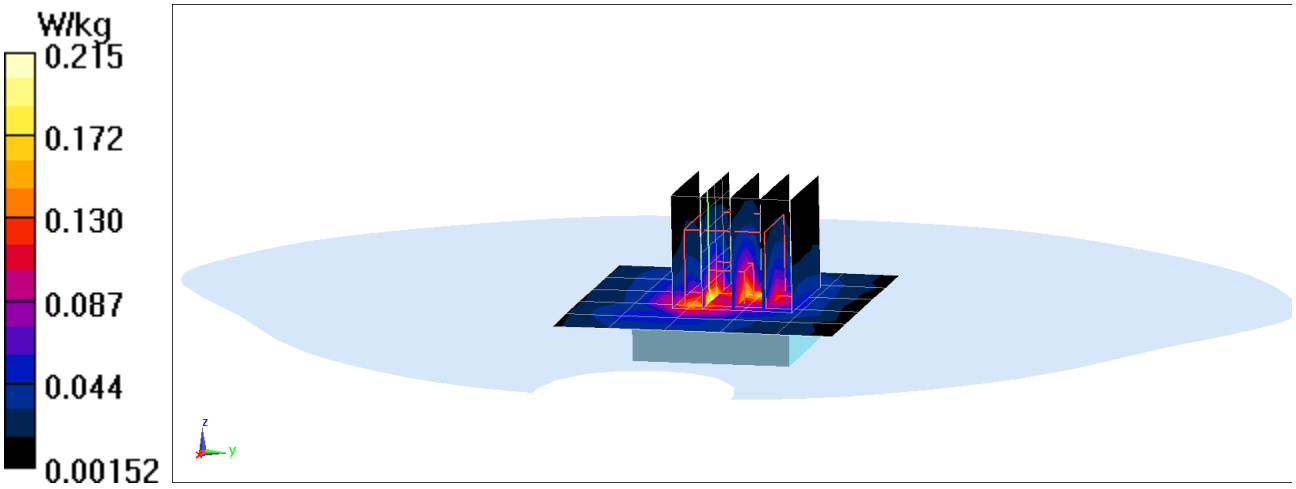
Communication System: UID 0, UMTS; Frequency: 1732.4 MHz; Duty Cycle: 1:1
Medium: 1750 MHz Body Medium parameters used (interpolated):
f = 1732.4 MHz; σ = 1.494 S/m; ε_r = 52.089; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-05-2019; Ambient Temp: 22.6°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN3837; ConvF(7.72, 7.72, 7.72) @ 1732.4 MHz; Calibrated: 1/28/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn793; Calibrated: 1/15/2019
Phantom: SAM Sub; Type: SAM 4.0; Serial: TP-1403
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: UMTS 1750, Extremity SAR, Back side, Mid.ch
Ceramic, 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 = 10.06 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 0.267 W/kg
SAR(10 g) = 0.070 W/kg



DUT: BCG-A2157; Type: Watch; Serial: D92YV01DMWFG

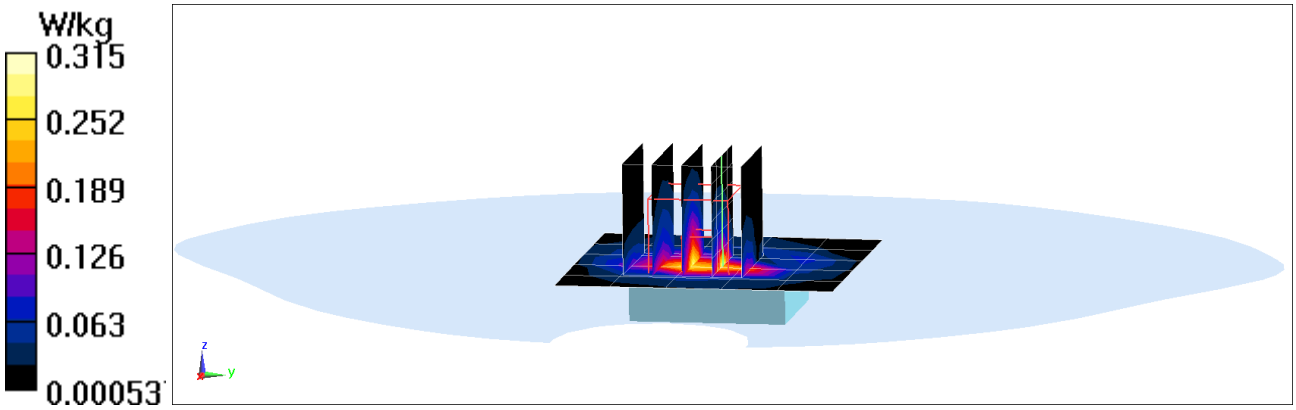
Communication System: UID 0, UMTS; Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Body Medium parameters used:
f = 1880 MHz; σ = 1.527 S/m; ε_r = 51.651; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-20-2019; Ambient Temp: 21.6°C; Tissue Temp: 20.4°C

Probe: EX3DV4 - SN3837; ConvF(7.54, 7.54, 7.54) @ 1880 MHz; Calibrated: 1/28/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn793; Calibrated: 1/15/2019
Phantom: SAM Sub; Type: SAM 4.0; Serial: TP-1403
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: UMTS 1900, Extremity SAR, Back side, Mid.ch
Ceramic, 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 = 12.68 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.439 W/kg
SAR(10 g) = 0.100 W/kg



DUT: BCG-A2157; Type: Watch; Serial: D92YT024MWCX

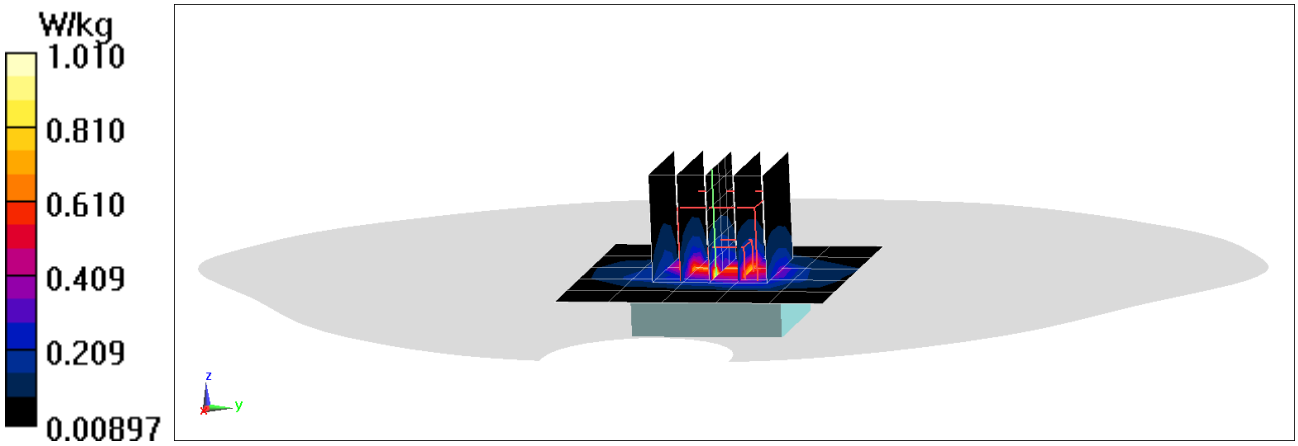
Communication System: UID 0, LTE Band 26; Frequency: 831.5 MHz; Duty Cycle: 1:1
Medium: 835 MHz Body Medium parameters used (interpolated):
f = 831.5 MHz; σ = 0.986 S/m; ε_r = 53.39; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-20-2019; Ambient Temp: 23.5°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7532; ConvF(10.14, 10.14, 10.14) @ 831.5 MHz; Calibrated: 4/12/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn501; Calibrated: 4/17/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 26 (Cell.), Extremity SAR, Back side, Mid.ch,
10 MHz Bandwidth, QPSK, 1 RB, 0 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 = 17.62 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.31 W/kg
SAR(10 g) = 0.205 W/kg



DUT: BCG-A2157; Type: Watch; Serial: D92YT024MWCX

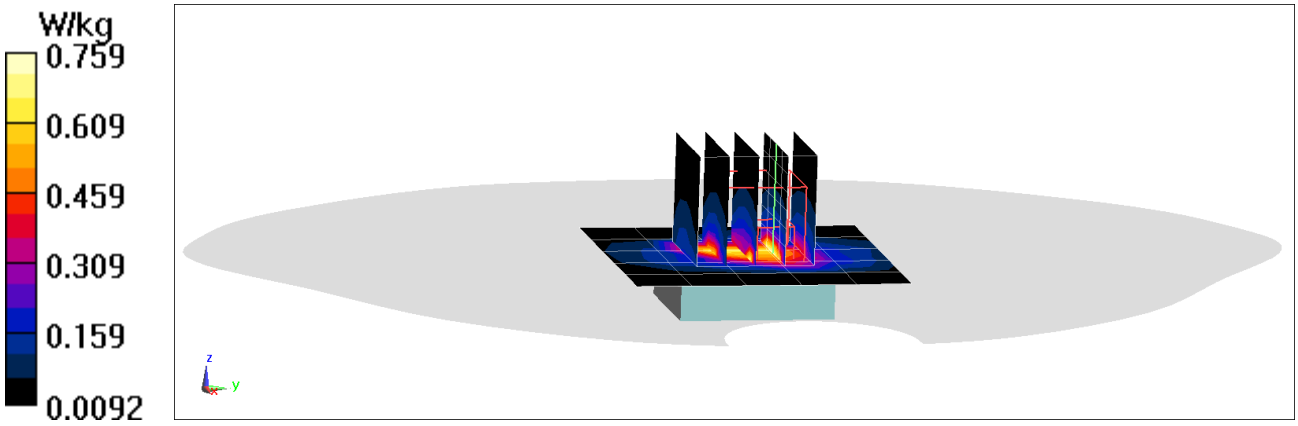
Communication System: UID 0, LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1
Medium: 835 MHz Body Medium parameters used (interpolated):
$f = 836.5$ MHz; $\sigma = 0.992$ S/m; $\varepsilon_r = 53.332$; $\rho = 1000$ kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-20-2019; Ambient Temp: 23.5°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7532; ConvF(10.14, 10.14, 10.14) @ 836.5 MHz; Calibrated: 4/12/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn501; Calibrated: 4/17/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 5 (Cell.), Extremity SAR, Back side, Mid.ch,
10 MHz Bandwidth, QPSK, 1 RB, 0 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 = 17.43 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 1.09 W/kg
SAR(10 g) = 0.200 W/kg



DUT: BCG-A2157; Type: Watch; Serial: D92YV01DMWFG

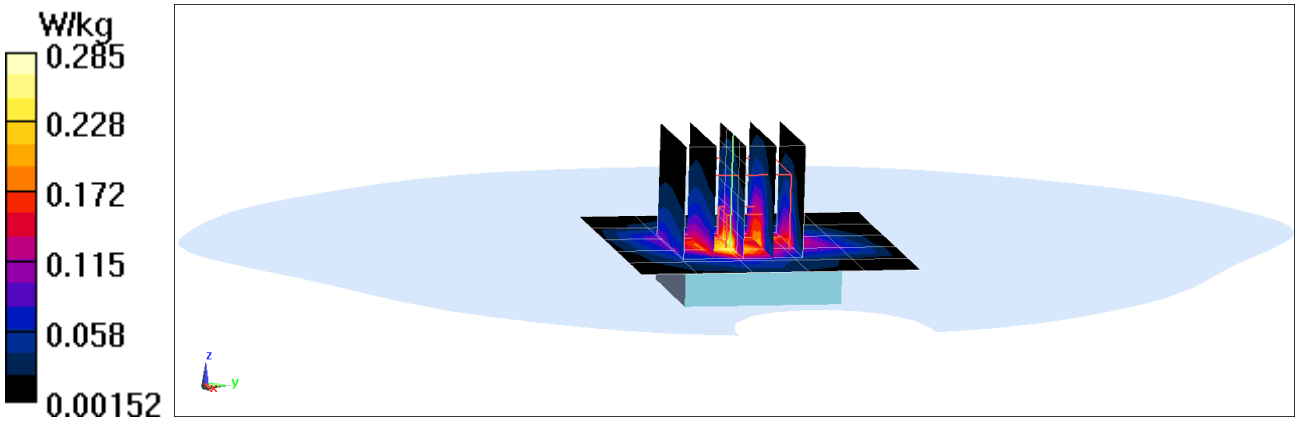
Communication System: UID 0, _LTE Band 66 (AWS); Frequency: 1770 MHz; Duty Cycle: 1:1
Medium: 1750 MHz Body Medium parameters used (interpolated):
f = 1770 MHz; σ = 1.52 S/m; ε_r = 52.038; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-05-2019; Ambient Temp: 22.6°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN3837; ConvF(7.72, 7.72, 7.72) @ 1770 MHz; Calibrated: 1/28/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn793; Calibrated: 1/15/2019
Phantom: SAM Sub; Type: SAM 4.0; Serial: TP-1403
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 66 (AWS), Extremity SAR, Back side, High.ch,
20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset
Ceramic, 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 = 11.11 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.337 W/kg
SAR(10 g) = 0.099 W/kg



DUT: BCG-A2157; Type: Watch; Serial: D92YV00DMWDR

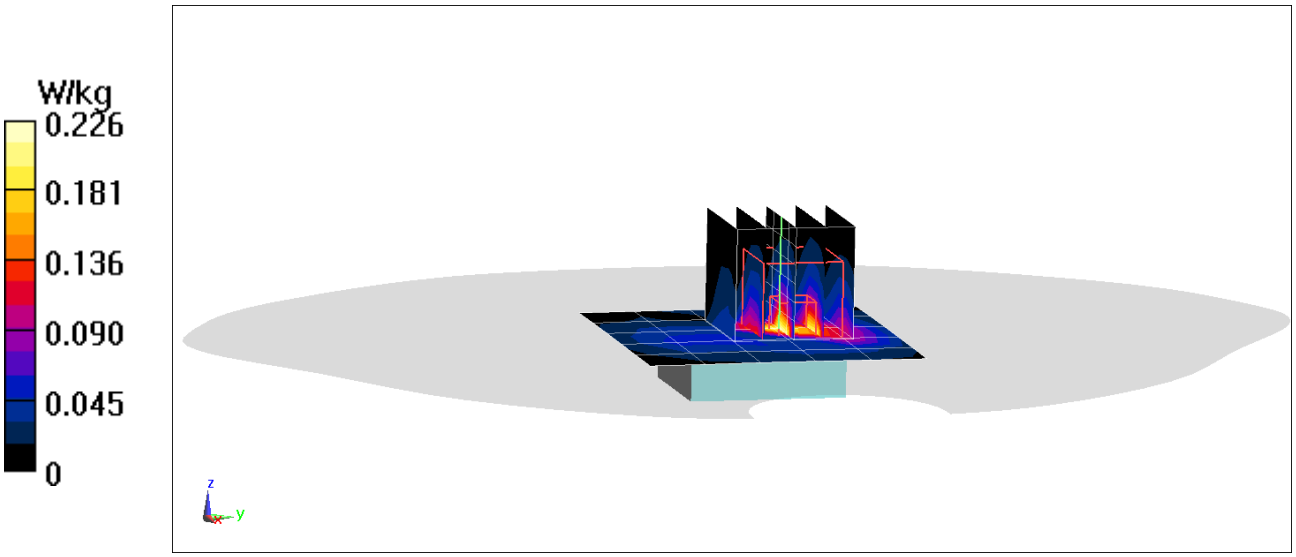
Communication System: UID 0, _LTE Band 25 (PCS); Frequency: 1905 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Body Medium parameters used (interpolated):
$f = 1905$ MHz; $\sigma = 1.589$ S/m; $\varepsilon_r = 51.717$; $\rho = 1000$ kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-05-2019; Ambient Temp: 22.7°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN7490; ConvF(8.13, 8.13, 8.13) @ 1905 MHz; Calibrated: 1/24/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1532; Calibrated: 1/15/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 25 (PCS), Extremity SAR, Back side, High.ch,
20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset
Titanium, 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 = 10.71 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.339 W/kg
SAR(10 g) = 0.080 W/kg



PCTEST ENGINEERING LABORATORY, INC.

DUT: BCG-A2157; Type: Watch; Serial: D92YV019MWFG

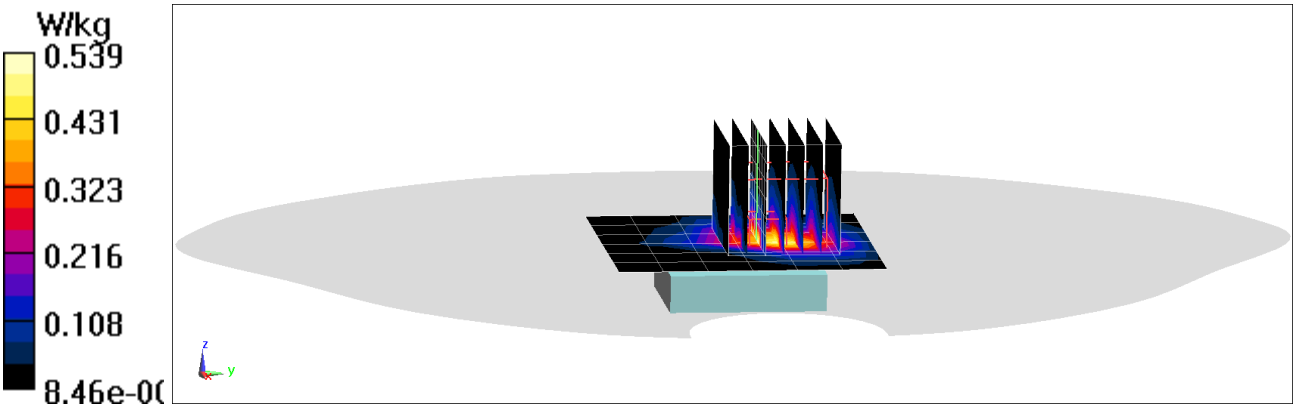
Communication System: UID 0, _LTE Band 7; Frequency: 2510 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Body Medium parameters used (interpolated):
f = 2510 MHz; σ = 2.059 S/m; ε_r = 50.947; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-18-2019; Ambient Temp: 22.9°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3318; ConvF(4.49, 4.49, 4.49) @ 2510 MHz; Calibrated: 11/19/2018
Sensor-Surface: 3mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1408; Calibrated: 8/14/2018
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 7, Extremity SAR, Back side, Low.ch,
20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset
Ceramic, Metal Links Wrist Band

Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Zoom Scan (8x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.34 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.22 W/kg
SAR(10 g) = 0.174 W/kg



PCTEST ENGINEERING LABORATORY, INC.

DUT: BCG-A2157; Type: Watch; Serial: D92YV019MWFG

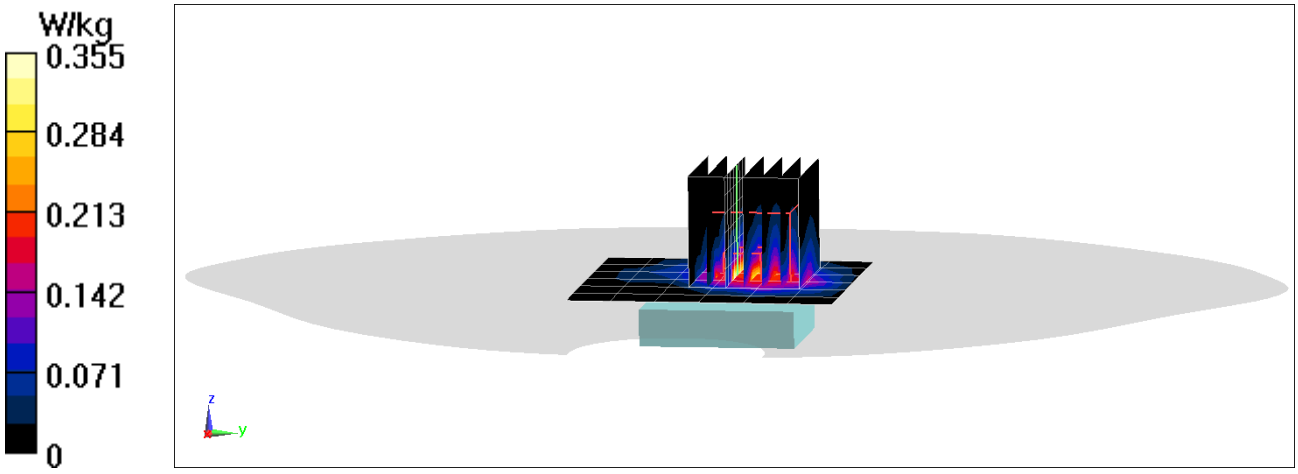
Communication System: UID 0, _LTE Band 41; Frequency: 2506 MHz; Duty Cycle: 1:1.58
Medium: 2450 MHz Body Medium parameters used (interpolated):
f = 2506 MHz; σ = 2.055 S/m; ε_r = 50.951; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-18-2019; Ambient Temp: 22.9°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3318; ConvF(4.49, 4.49, 4.49) @ 2506 MHz; Calibrated: 11/19/2018
Sensor-Surface: 3mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1408; Calibrated: 8/14/2018
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 41, Extremity SAR, Back side, Low.ch,
20 MHz Bandwidth, QPSK, 1 RB, 99 RB Offset
Ceramic, Metal Links Wrist Band

Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Zoom Scan (8x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.88 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.766 W/kg
SAR(10 g) = 0.110 W/kg



PCTEST ENGINEERING LABORATORY, INC.

DUT: BCG-A2157; Type: Watch; Serial: D92YV01BMWFG

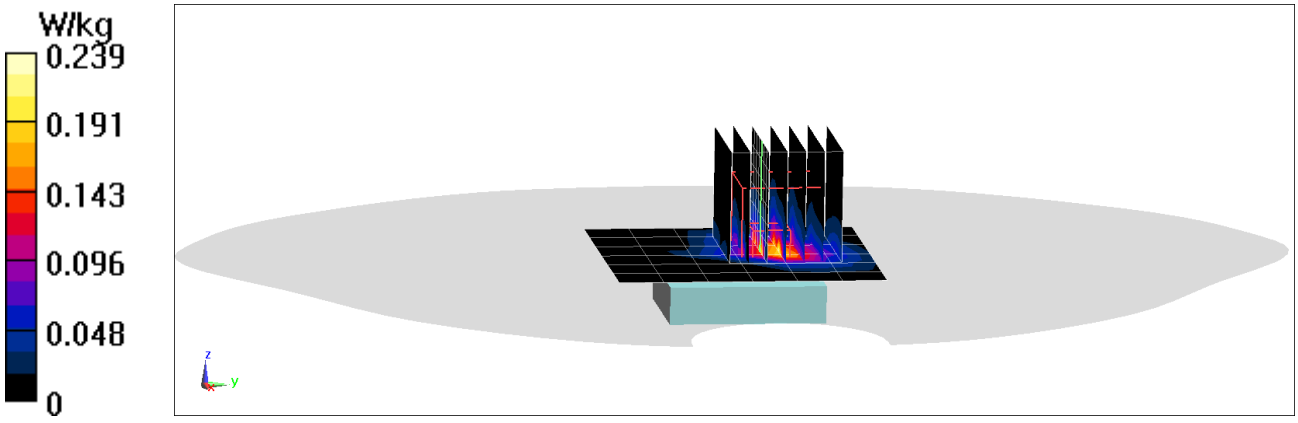
Communication System: UID 0, IEEE 802.11b; Frequency: 2437 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Body Medium parameters used (interpolated):
f = 2437 MHz; σ = 1.993 S/m; ε_r = 51.047; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-18-2019; Ambient Temp: 22.9°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3318; ConvF(4.49, 4.49, 4.49) @ 2437 MHz; Calibrated: 11/19/2018
Sensor-Surface: 3mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1408; Calibrated: 8/14/2018
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: IEEE 802.11b, 22 MHz Bandwidth, Extremity SAR, Ch 6, 1 Mbps, Back Side, Ceramic, Metal Loop Wrist Band

Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Zoom Scan (8x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.775 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.535 W/kg
SAR(10 g) = 0.060 W/kg



DUT: BCG-A2157; Type: Watch; Serial: D92YV019MWFG

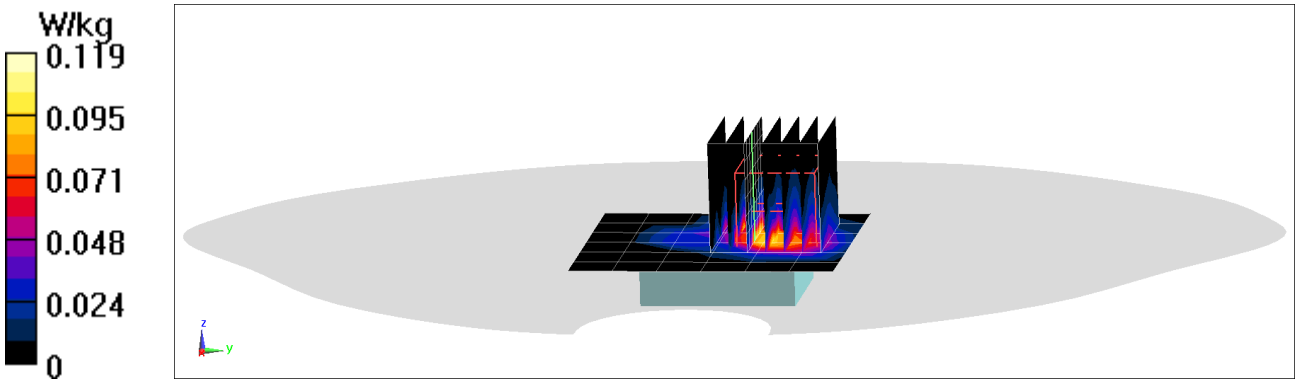
Communication System: UID 0, Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Body Medium parameters used (interpolated):
f = 2441 MHz; σ = 2.027 S/m; ε_r = 51.342; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-22-2019; Ambient Temp: 22.1°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN7421; ConvF(7.46, 7.46, 7.46) @ 2441 MHz; Calibrated: 3/18/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn604; Calibrated: 3/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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

Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Zoom Scan (8x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.340 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 0.176 W/kg
SAR(10 g) = 0.027 W/kg



APPENDIX B: SYSTEM VERIFICATION

PCTEST ENGINEERING LABORATORY, INC.

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d180

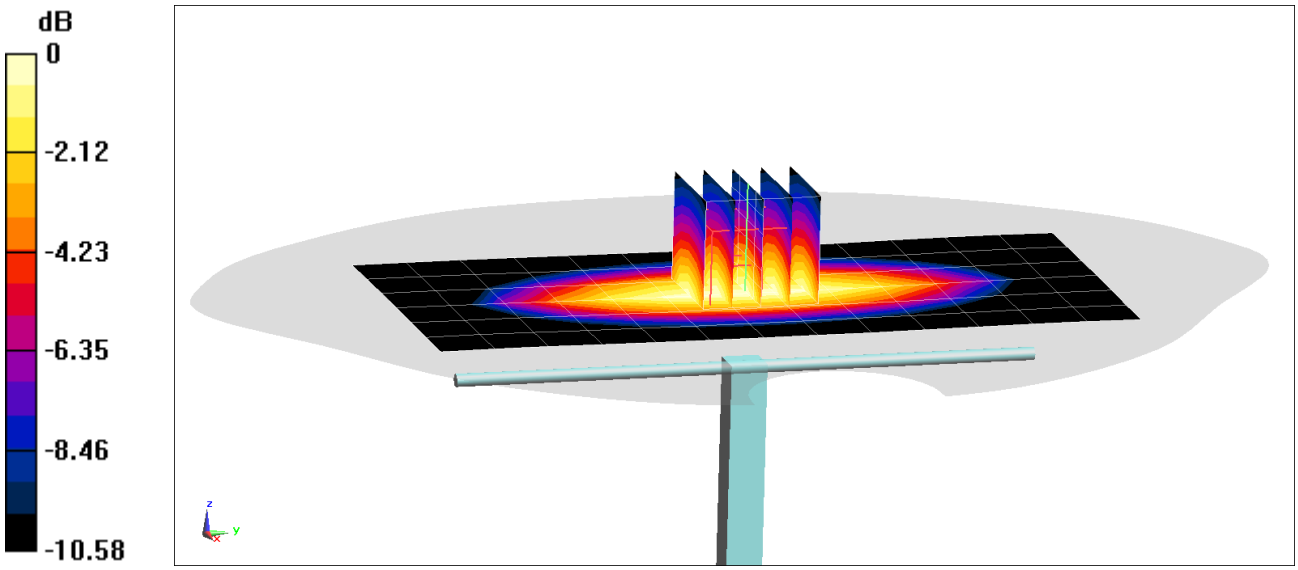
Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1
Medium: 835 MHz Head Medium parameters used:
f = 835 MHz; σ = 0.906 S/m; ε_r = 41.499; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 07-15-2019; Ambient Temp: 23.1°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7532; ConvF(10.45, 10.45, 10.45) @ 835 MHz; Calibrated: 4/12/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn501; Calibrated: 4/17/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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) = 2.73 W/kg
SAR(1 g) = 1.87 W/kg
Deviation(1 g) = -2.60%



0 dB = 2.46 W/kg = 3.91 dBW/kg

PCTEST ENGINEERING LABORATORY, INC.

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d180

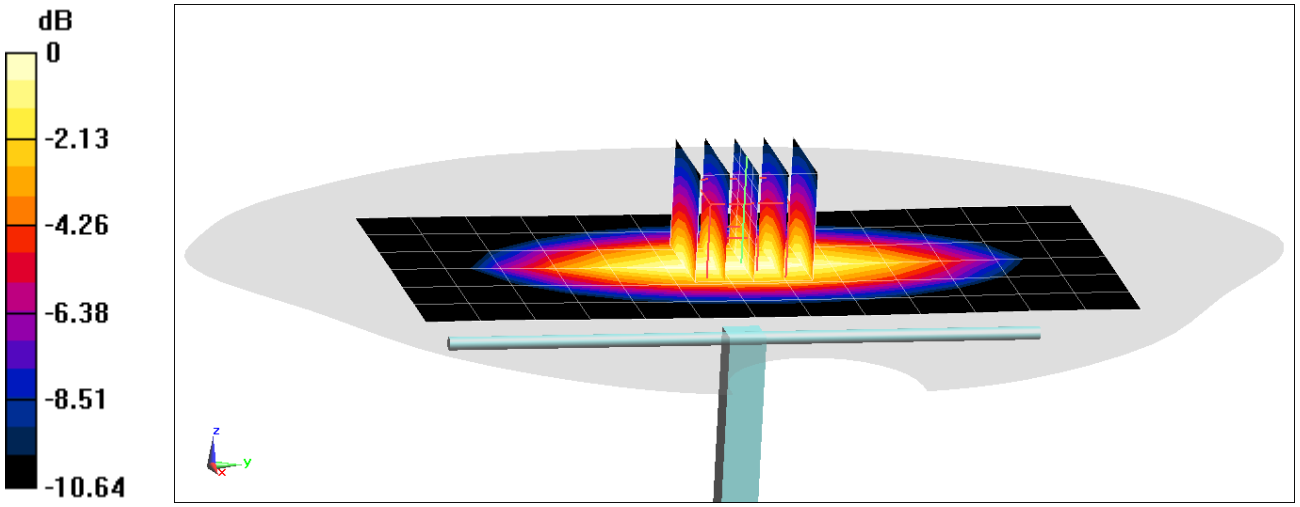
Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1
Medium: 835 MHz Head Medium parameters used:
f = 835 MHz; σ = 0.882 S/m; ε_r = 40.191; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 07-18-2019; Ambient Temp: 23.2°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7532; ConvF(10.45, 10.45, 10.45) @ 835 MHz; Calibrated: 4/12/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn501; Calibrated: 4/17/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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) = 2.82 W/kg
SAR(1 g) = 1.87 W/kg
Deviation(1 g) = -2.60%



0 dB = 2.50 W/kg = 3.98 dBW/kg

PCTEST ENGINEERING LABORATORY, INC.

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

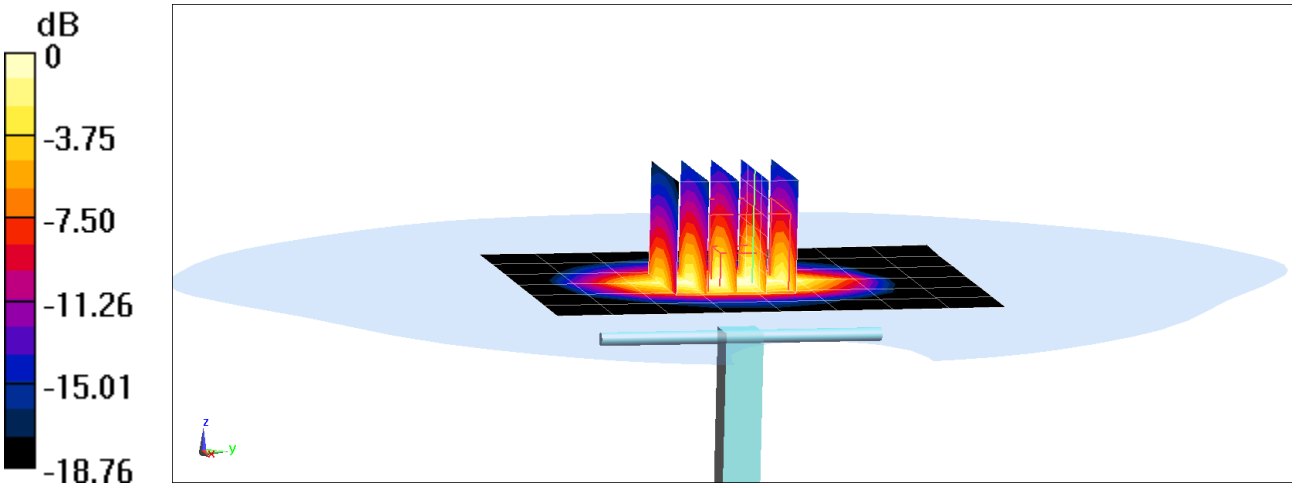
Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1
Medium: 1750 MHz Head Medium parameters used:
f = 1750 MHz; σ = 1.371 S/m; ε_r = 39.339; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-18-2019; Ambient Temp: 21.8°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN3837; ConvF(8.03, 8.03, 8.03) @ 1750 MHz; Calibrated: 1/28/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn793; Calibrated: 1/15/2019
Phantom: SAM Sub; Type: SAM 4.0; Serial: TP-1403
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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) = 7.24 W/kg
SAR(1 g) = 3.77 W/kg
Deviation(1 g) = 3.57%



0 dB = 5.67 W/kg = 7.54 dBW/kg

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d026

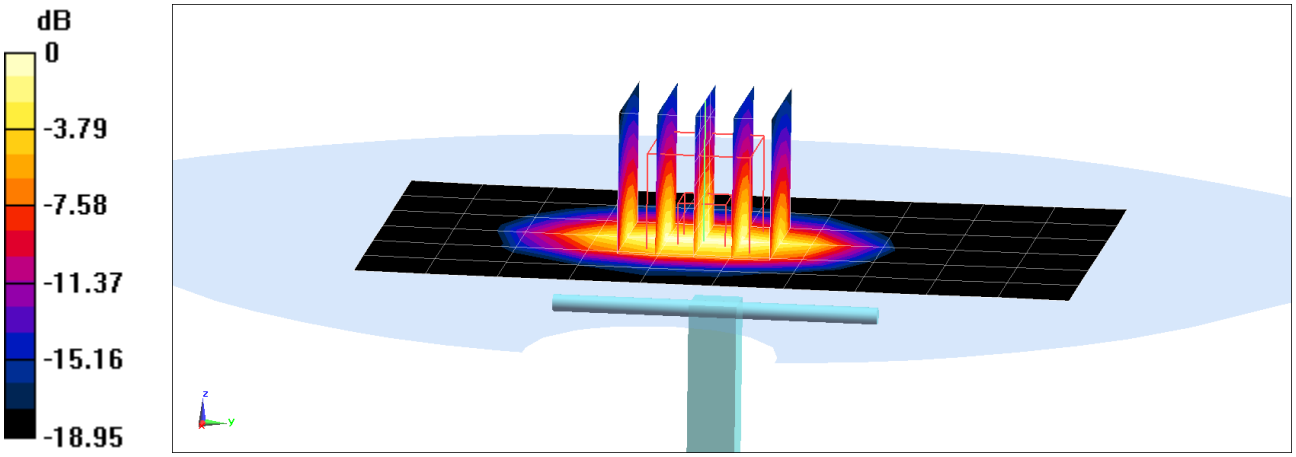
Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Head Medium parameters used (interpolated):
f = 1900 MHz; σ = 1.463 S/m; ε_r = 40.044; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-16-2019; Ambient Temp: 22.6°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN3837; ConvF(7.85, 7.85, 7.85) @ 1900 MHz; Calibrated: 1/28/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn793; Calibrated: 1/15/2019
Phantom: SAM Sub; Type: SAM 4.0; Serial: TP-1403
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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) = 7.82 W/kg
SAR(1 g) = 3.98 W/kg
Deviation(1 g) = -1.00%



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

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

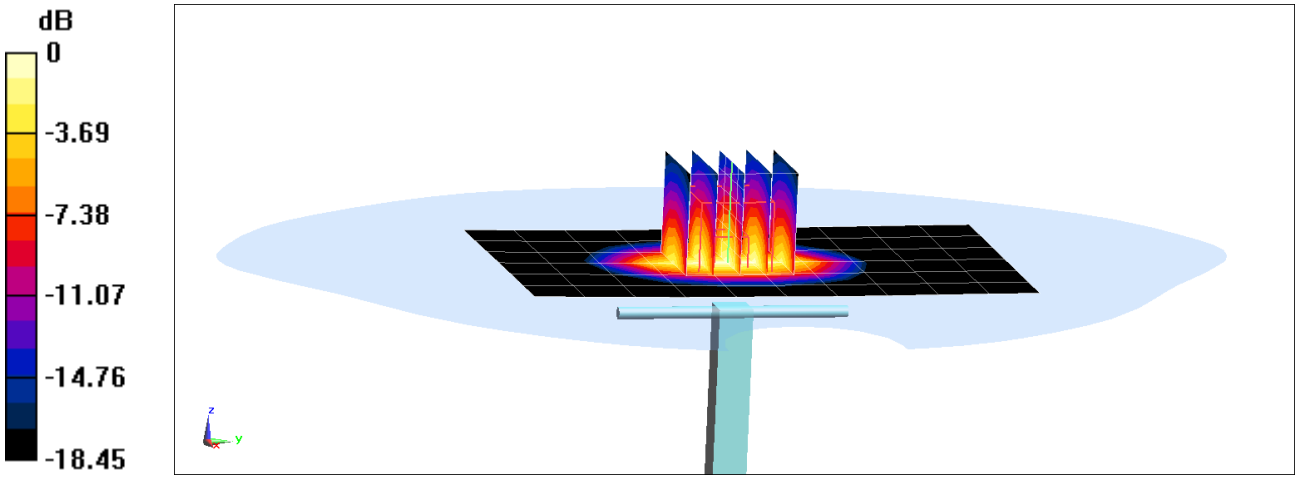
Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Head Medium parameters used (interpolated):
f = 1900 MHz; σ = 1.452 S/m; ε_r = 38.417; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-23-2019; Ambient Temp: 21.3°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7427; ConvF(8.18, 8.18, 8.18) @ 1900 MHz; Calibrated: 2/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1403; Calibrated: 2/13/2019
Phantom: SAM Main; Type: SAM 4.0; Serial: TP-1406
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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) = 7.41 W/kg
SAR(1 g) = 3.94 W/kg
Deviation(1 g) = -1.25%



0 dB = 6.20 W/kg = 7.92 dBW/kg

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

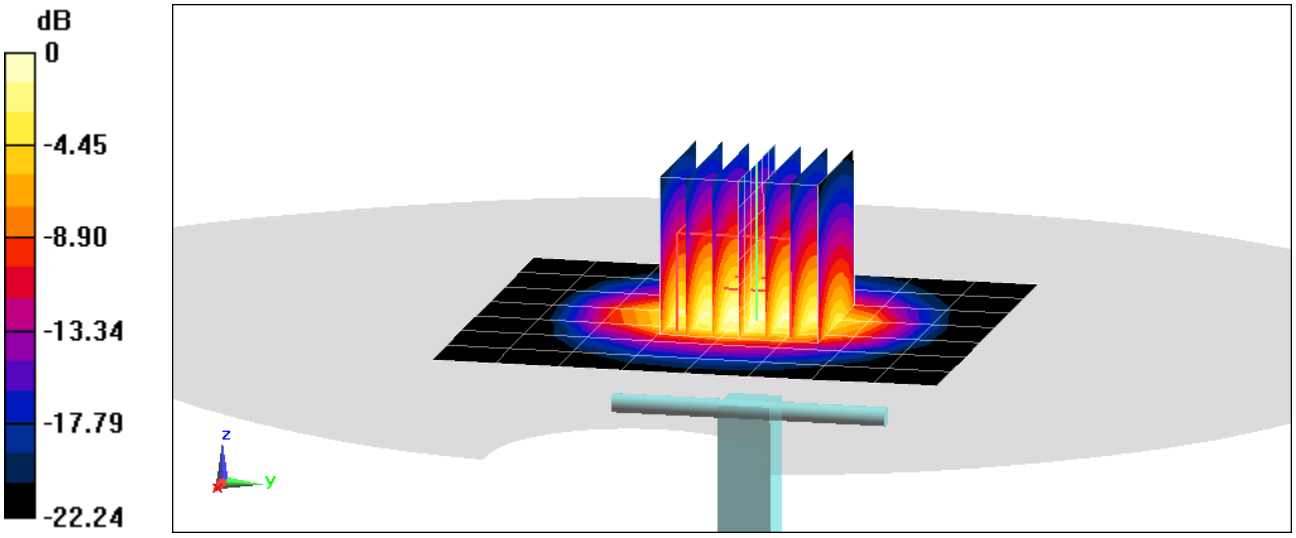
Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Head Medium parameters used:
f = 2450 MHz; σ = 1.875 S/m; ε_r = 39.689; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-16-2019; Ambient Temp: 20.7°C; Tissue Temp: 20.9°C

Probe: ES3DV3 - SN3318; ConvF(4.59, 4.59, 4.59) @ 2450 MHz; Calibrated: 11/19/2018
Sensor-Surface: 3mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1408; Calibrated: 8/14/2018
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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) = 11.0 W/kg
SAR(1 g) = 5.33 W/kg
Deviation(1 g) = 0.38%



0 dB = 7.04 W/kg = 8.48 dBW/kg

PCTEST ENGINEERING LABORATORY, INC.

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

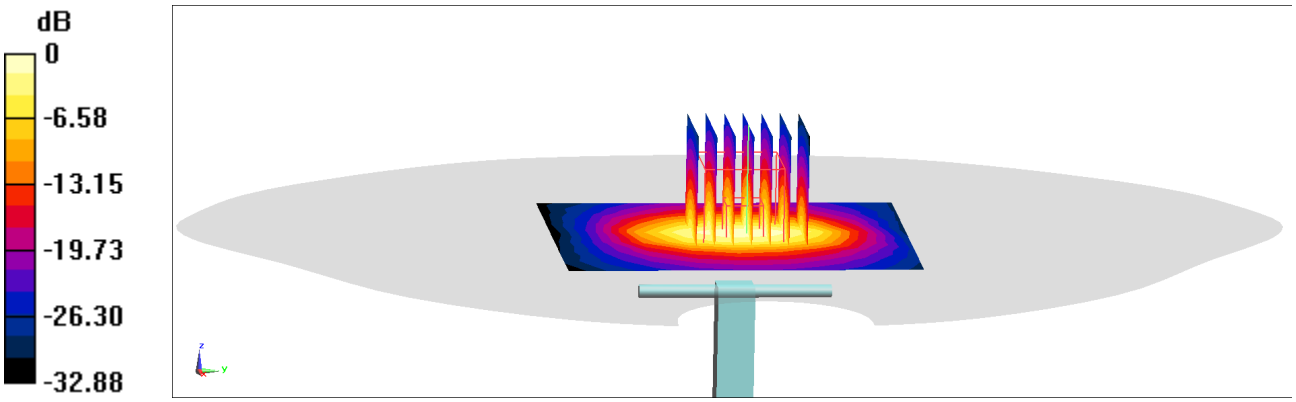
Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Head Medium parameters used:
f = 2450 MHz; σ = 1.805 S/m; ε_r = 37.862; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-20-2019; Ambient Temp: 22.9°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7490; ConvF(7.74, 7.74, 7.74) @ 2450 MHz; Calibrated: 1/24/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1532; Calibrated: 1/15/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

2450 MHz System Verification at 20.0 dBm (100 mW)

Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 11.3 W/kg
SAR(1 g) = 5.42 W/kg
Deviation(1 g) = 2.07%



0 dB = 8.82 W/kg = 9.45 dBW/kg

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

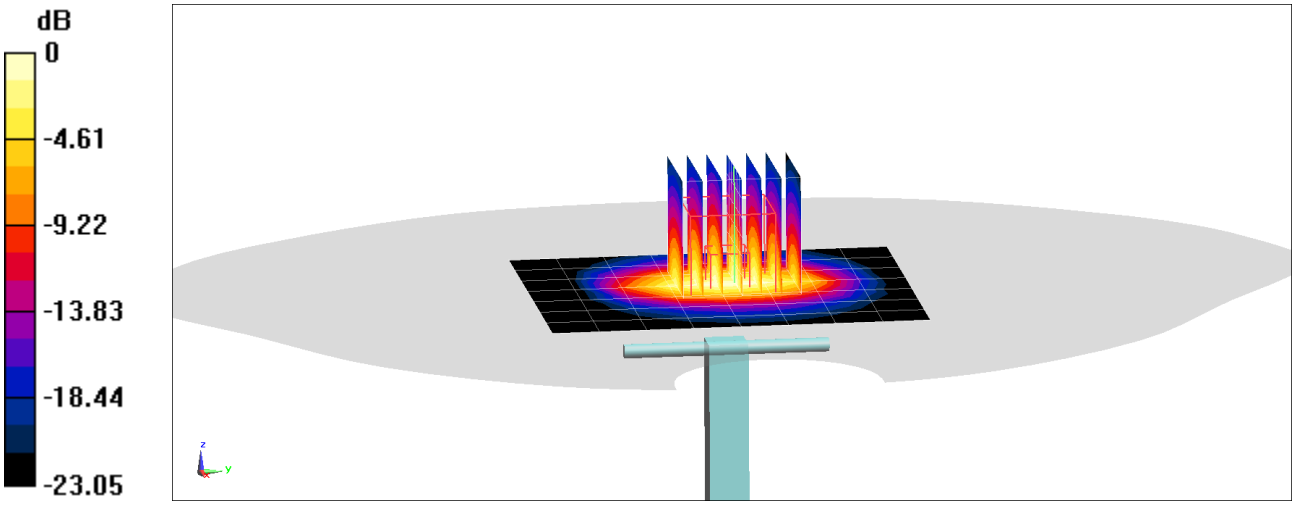
Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Head Medium parameters used:
f = 2450 MHz; σ = 1.888 S/m; ε_r = 39.042; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-23-2019; Ambient Temp: 21.5°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7416; ConvF(7.4, 7.4, 7.4) @ 2450 MHz; Calibrated: 6/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn701; Calibrated: 6/14/2019
Phantom: Twin-SAM V8.0_Left; Type: QD 000 P41 AA; Serial: 1935
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

2450 MHz System Verification at 20.0 dBm (100 mW)

Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 11.3 W/kg
SAR(1 g) = 5.41 W/kg
Deviation(1 g) = 1.88%



0 dB = 9.03 W/kg = 9.56 dBW/kg

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

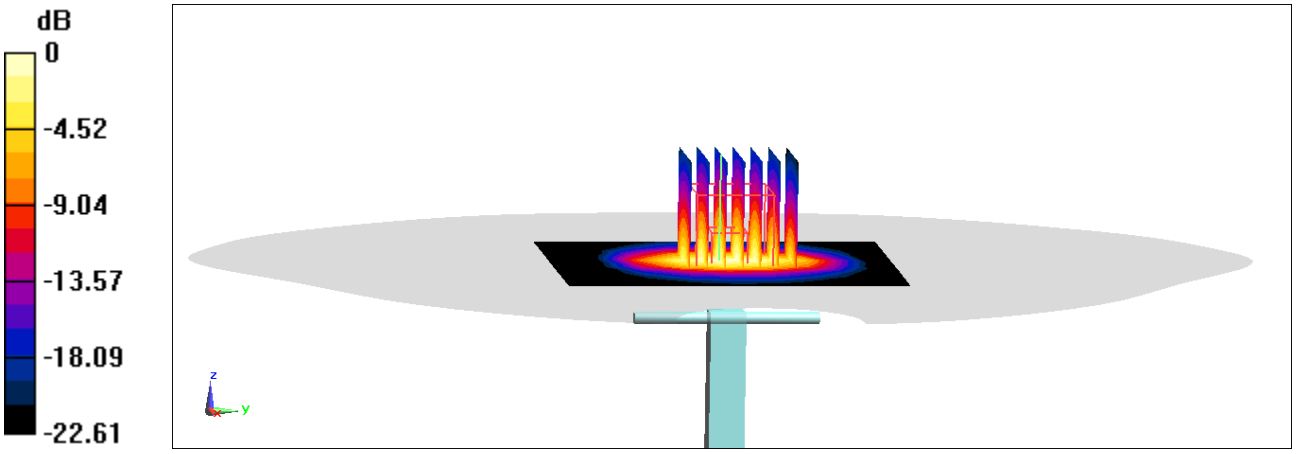
Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Head Medium parameters used:
f = 2450 MHz; σ = 1.827 S/m; ε_r = 38.304; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-24-2019; Ambient Temp: 19.5°C; Tissue Temp: 20.1°C

Probe: EX3DV4 - SN7490; ConvF(7.74, 7.74, 7.74) @ 2450 MHz; Calibrated: 1/24/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1532; Calibrated: 1/15/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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) = 5.47 W/kg
Deviation(1 g) = 3.01%



0 dB = 9.08 W/kg = 9.58 dBW/kg

PCTEST ENGINEERING LABORATORY, INC.

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

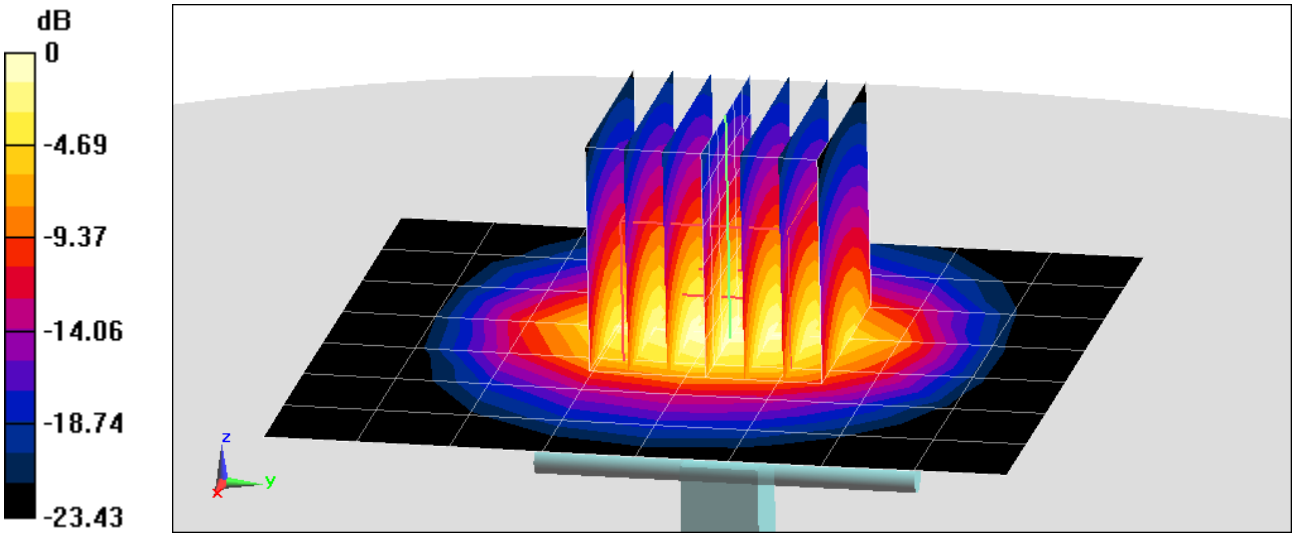
Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Head Medium parameters used:
f = 2600 MHz; σ = 1.999 S/m; ε_r = 39.416; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-16-2019; Ambient Temp: 20.7°C; Tissue Temp: 20.9°C

Probe: ES3DV3 - SN3318; ConvF(4.47, 4.47, 4.47) @ 2600 MHz; Calibrated: 11/19/2018
Sensor-Surface: 3mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1408; Calibrated: 8/14/2018
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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) = 13.2 W/kg
SAR(1 g) = 6.08 W/kg
Deviation(1 g) = 5.37%



0 dB = 8.09 W/kg = 9.08 dBW/kg

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

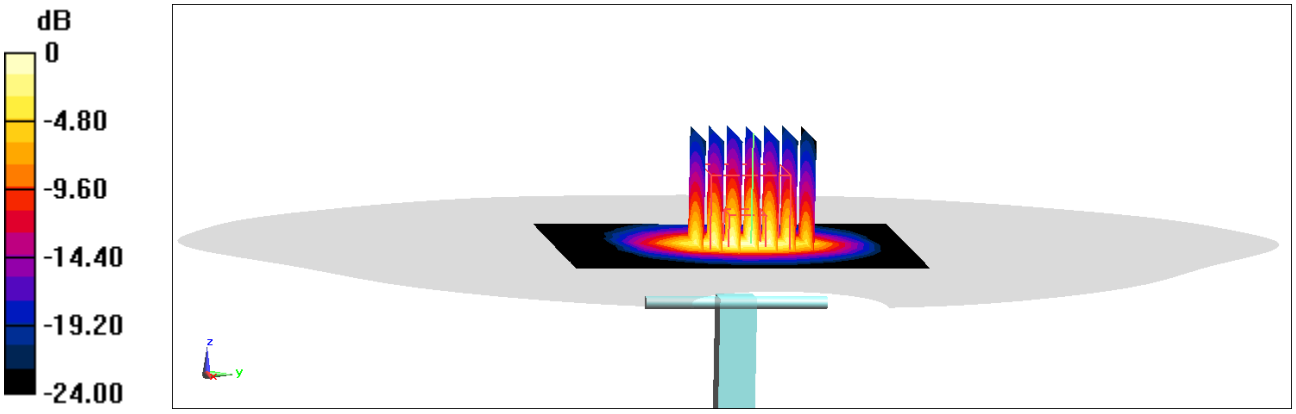
Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Head Medium parameters used:
f = 2600 MHz; σ = 1.952 S/m; ε_r = 38.025; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-24-2019; Ambient Temp: 19.5°C; Tissue Temp: 20.1°C

Probe: EX3DV4 - SN7490; ConvF(7.48, 7.48, 7.48) @ 2600 MHz; Calibrated: 1/24/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1532; Calibrated: 1/15/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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) = 13.0 W/kg
SAR(1 g) = 6.01 W/kg
Deviation(1 g) = 5.62%



0 dB = 10.3 W/kg = 10.13 dBW/kg

PCTEST ENGINEERING LABORATORY, INC.

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d180

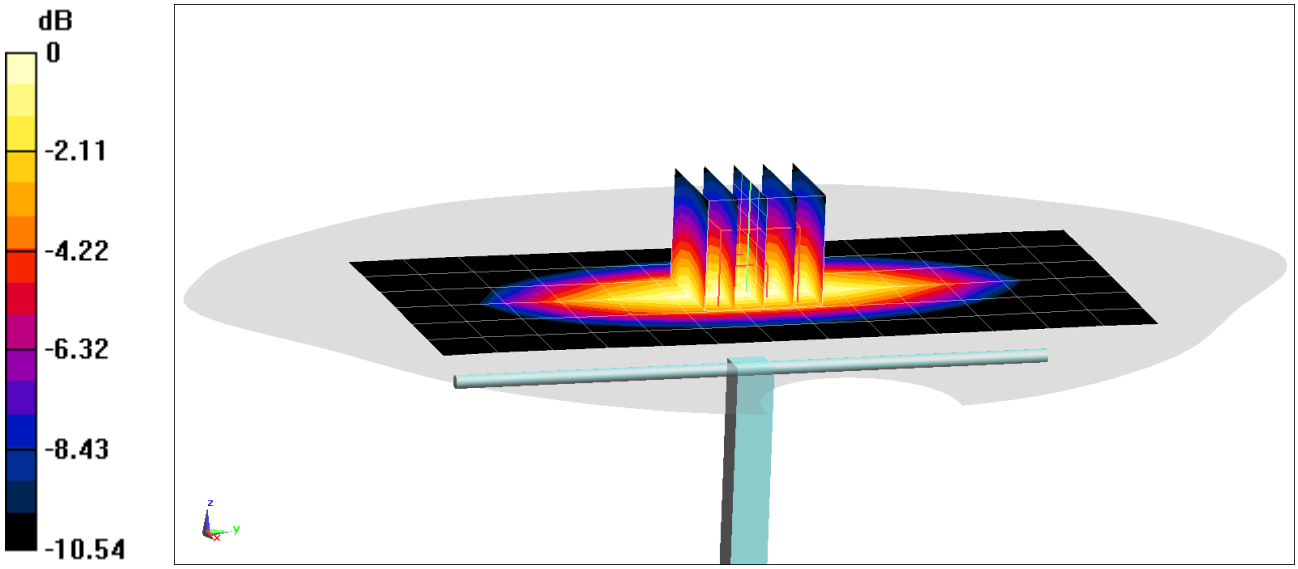
Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1
Medium: 835 MHz Body Medium parameters used:
f = 835 MHz; σ = 0.99 S/m; ε_r = 53.349; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 07-20-2019; Ambient Temp: 23.5°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7532; ConvF(10.14, 10.14, 10.14) @ 835 MHz; Calibrated: 4/12/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn501; Calibrated: 4/17/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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) = 3.07 W/kg
SAR(10 g) = 1.34 W/kg
Deviation(10 g) = 6.18%



0 dB = 2.73 W/kg = 4.36 dBW/kg

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

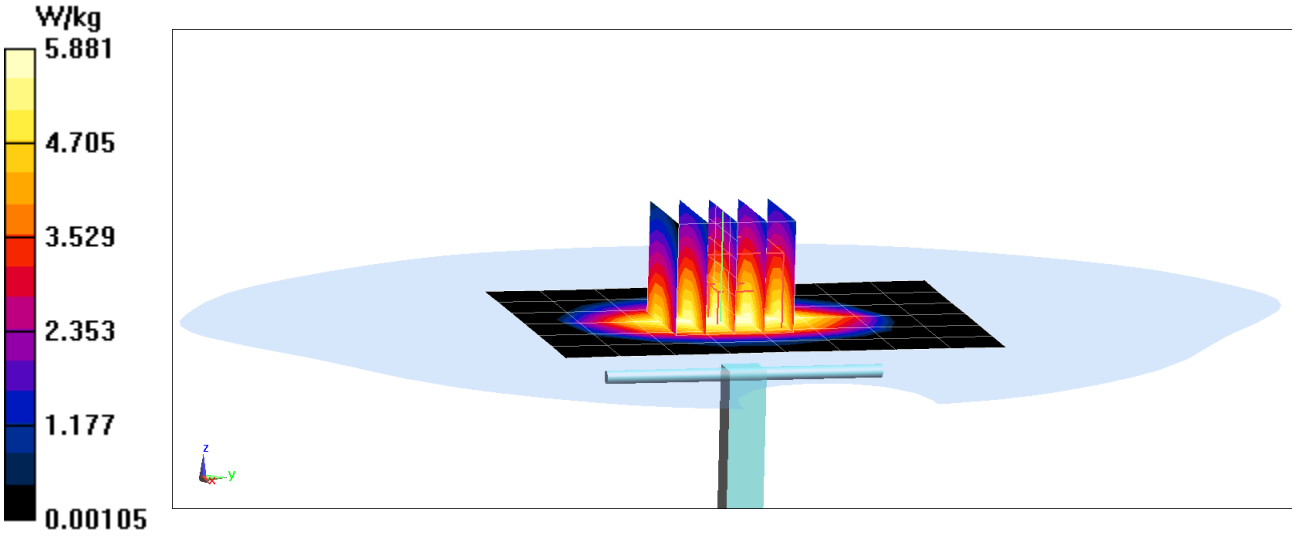
Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1
Medium: 1750 MHz Body Medium parameters used:
f = 1750 MHz; σ = 1.506 S/m; ε_r = 52.068; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-05-2019; Ambient Temp: 22.6°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN3837; ConvF(7.72, 7.72, 7.72) @ 1750 MHz; Calibrated: 1/28/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn793; Calibrated: 1/15/2019
Phantom: SAM Sub; Type: SAM 4.0; Serial: TP-1403
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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) = 6.66 W/kg
SAR(10 g) = 1.81 W/kg
Deviation(10 g) = -6.70%



DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d026

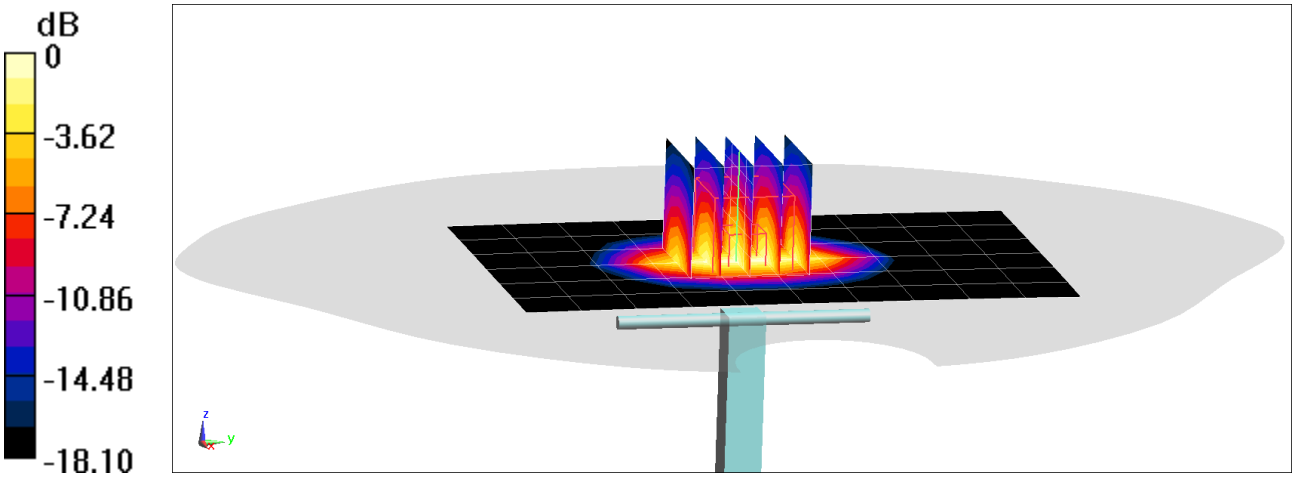
Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Body Medium parameters used (interpolated):
f = 1900 MHz; σ = 1.585 S/m; ε_r = 51.724; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-05-2019; Ambient Temp: 22.7°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN7490; ConvF(8.13, 8.13, 8.13) @ 1900 MHz; Calibrated: 1/24/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1532; Calibrated: 1/15/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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) = 7.34 W/kg
SAR(10 g) = 2.08 W/kg
Deviation(10 g) = -1.89%



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

PCTEST ENGINEERING LABORATORY, INC.

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

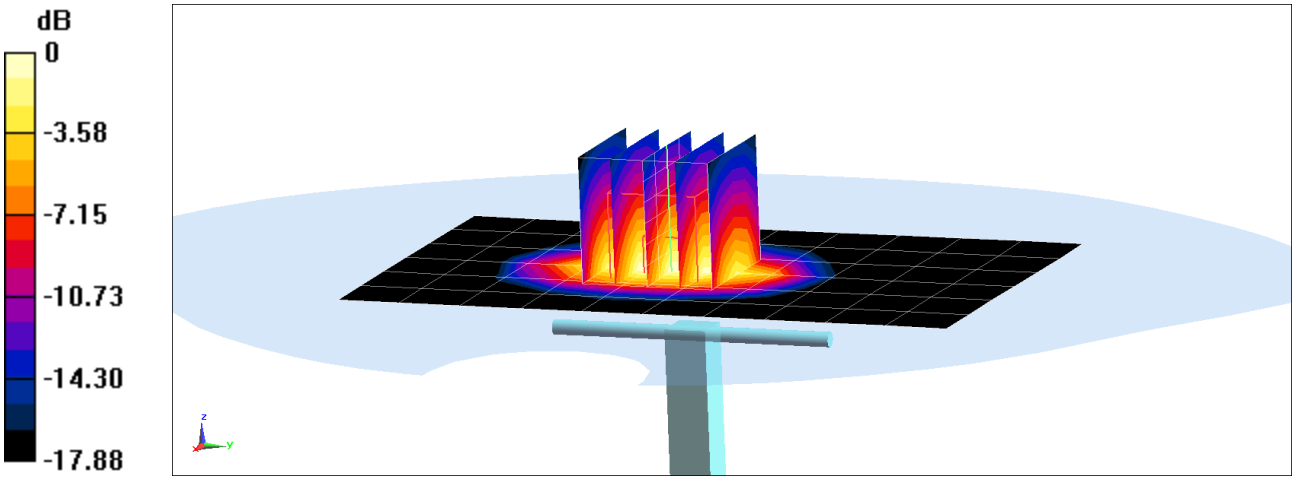
Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Body Medium parameters used (interpolated):
f = 1900 MHz; σ = 1.54 S/m; ε_r = 51.63; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-20-2019; Ambient Temp: 21.6°C; Tissue Temp: 20.4°C

Probe: EX3DV4 - SN3837; ConvF(7.54, 7.54, 7.54) @ 1900 MHz; Calibrated: 1/28/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn793; Calibrated: 1/15/2019
Phantom: SAM Sub; Type: SAM 4.0; Serial: TP-1403
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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) = 7.08 W/kg
SAR(10 g) = 1.96 W/kg
Deviation(10 g) = -6.22%



0 dB = 5.58 W/kg = 7.47 dBW/kg

PCTEST ENGINEERING LABORATORY, INC.

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

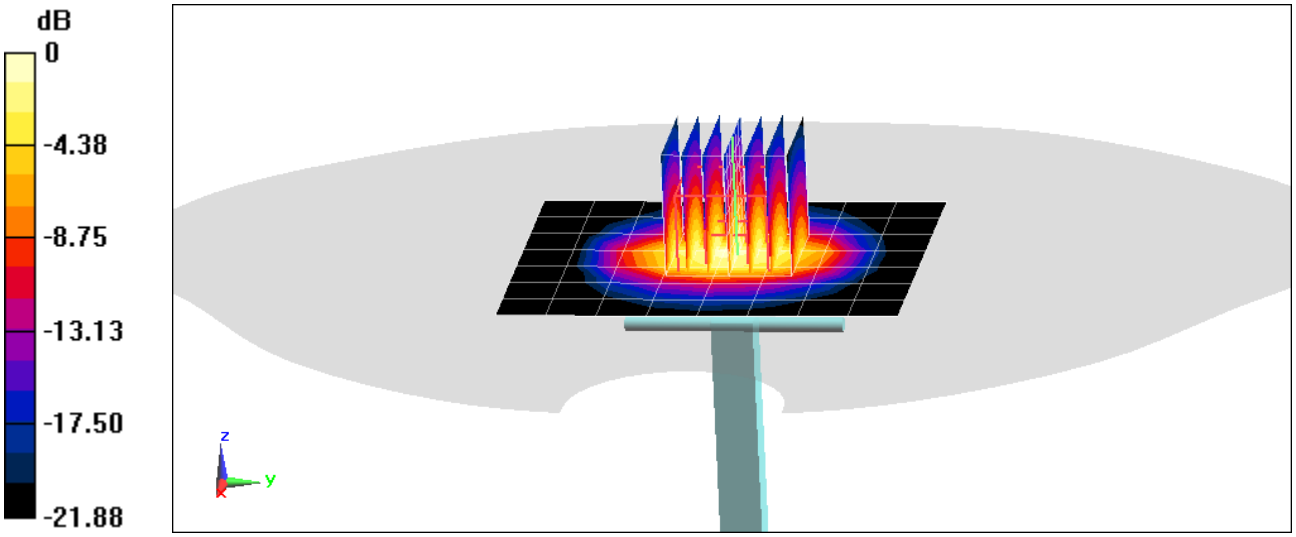
Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Body Medium parameters used:
f = 2450 MHz; σ = 2.004 S/m; ε_r = 51.032; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-18-2019; Ambient Temp: 22.9°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3318; ConvF(4.49, 4.49, 4.49) @ 2450 MHz; Calibrated: 11/19/2018
Sensor-Surface: 3mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1408; Calibrated: 8/14/2018
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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(10 g) = 2.44 W/kg
Deviation(10 g) = 1.24%



0 dB = 7.00 W/kg = 8.45 dBW/kg

PCTEST ENGINEERING LABORATORY, INC.

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

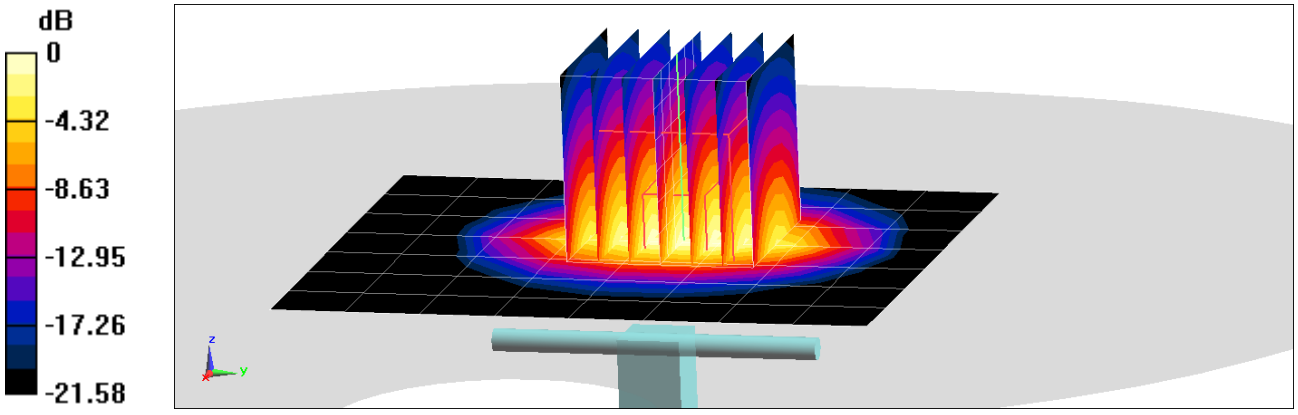
Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Body Medium parameters used:
f = 2450 MHz; σ = 2.035 S/m; ε_r = 51.328; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-22-2019; Ambient Temp: 22.1°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN7421; ConvF(7.46, 7.46, 7.46) @ 2450 MHz; Calibrated: 3/18/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn604; Calibrated: 3/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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(10 g) = 2.5 W/kg
Deviation(10 g) = 3.73%



0 dB = 9.04 W/kg = 9.56 dBW/kg

PCTEST ENGINEERING LABORATORY, INC.

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

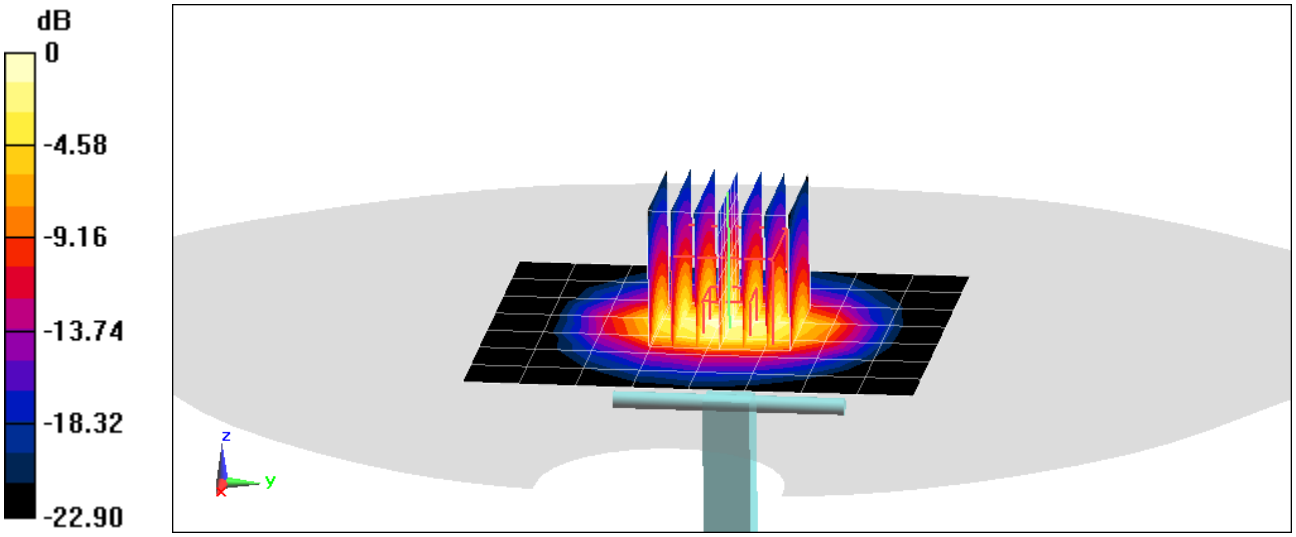
Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Body Medium parameters used:
f = 2600 MHz; σ = 2.143 S/m; ε_r = 50.818; ρ = 1000 kg/m^3
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-18-2019; Ambient Temp: 22.9°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3318; ConvF(4.32, 4.32, 4.32) @ 2600 MHz; Calibrated: 11/19/2018
Sensor-Surface: 3mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1408; Calibrated: 8/14/2018
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

2600 MHz System Verification at 20.0 dBm (100 mW)

Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 12.4 W/kg
SAR(10 g) = 2.5 W/kg
Deviation(10 g) = 0.40%



0 dB = 7.46 W/kg = 8.73 dBW/kg

APPENDIX C: PROBE CALIBRATION

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
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: EX3-7532_Apr19

CALIBRATION CERTIFICATE

4/22/19
✓
ATM

Object EX3DV4 - SN:7532

Calibration procedure(s) QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v7
Calibration procedure for dosimetric E-field probes

Calibration date: April 12, 2019

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	19-Dec-18 (No. DAE4-660_Dec18)	Dec-19
Reference Probe ES3DV2	SN: 3013	31-Dec-18 (No. ES3-3013_Dec18)	Dec-19
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-18)	In house check: Oct-19

	Name	Function	Signature
Calibrated by:	Jeton Kastrati	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: April 18, 2019

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., $\vartheta = 0$ 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 $\vartheta = 0$ ($f \le 900$ 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 $f \le 800$ 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 ($\mu V/(V/m)^2$)[A]	0.46	0.41	0.48	± 10.1 %
DCP (mV)[B]	95.9	99.2	101.2	

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	130.6	± 3.8 %	± 4.7 %
		Y	0.00	0.00	1.00		143.6		
		Z	0.00	0.00	1.00		134.6		
10352-AAA	Pulse Waveform (200Hz, 10%)	X	8.28	78.46	15.24	10.00	60.0	± 3.0 %	± 9.6 %
		Y	2.33	65.30	10.44		60.0		
		Z	6.14	75.22	14.10		60.0		
10353-AAA	Pulse Waveform (200Hz, 20%)	X	15.00	85.55	16.34	6.99	80.0	± 2.1 %	± 9.6 %
		Y	1.95	66.76	9.83		80.0		
		Z	15.00	84.94	16.01		80.0		
10354-AAA	Pulse Waveform (200Hz, 40%)	X	15.00	89.33	16.76	3.98	95.0	± 1.2 %	± 9.6 %
		Y	0.55	61.56	6.38		95.0		
		Z	15.00	88.27	16.22		95.0		
10355-AAA	Pulse Waveform (200Hz, 60%)	X	15.00	96.18	18.66	2.22	120.0	± 1.0 %	± 9.6 %
		Y	0.26	60.00	4.30		120.0		
		Z	15.00	93.58	17.48		120.0		
10387-AAA	QPSK Waveform, 1 MHz	X	0.48	60.00	6.53	0.00	150.0	± 3.1 %	± 9.6 %
		Y	0.47	60.00	5.61		150.0		
		Z	0.47	60.00	6.40		150.0		
10388-AAA	QPSK Waveform, 10 MHz	X	2.25	69.41	16.61	0.00	150.0	± 1.3 %	± 9.6 %
		Y	1.84	65.93	14.51		150.0		
		Z	2.21	69.11	16.38		150.0		
10396-AAA	64-QAM Waveform, 100 kHz	X	2.77	71.23	19.25	3.01	150.0	± 1.2 %	± 9.6 %
		Y	2.12	65.82	16.55		150.0		
		Z	2.88	72.11	19.54		150.0		
10399-AAA	64-QAM Waveform, 40 MHz	X	3.52	67.74	16.20	0.00	150.0	± 2.4 %	± 9.6 %
		Y	3.24	66.16	15.20		150.0		
		Z	3.48	67.65	16.08		150.0		
10414-AAA	WLAN CCDF, 64-QAM, 40MHz	X	4.78	66.13	15.86	0.00	150.0	± 4.3 %	± 9.6 %
		Y	4.55	65.17	15.25		150.0		
		Z	4.59	65.54	15.49		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	33.7	250.12	35.29	7.37	0.00	5.04	1.41	0.10	1.00
Y	32.5	247.13	36.50	4.60	0.24	5.02	0.00	0.31	1.01
Z	32.7	238.86	34.29	6.99	0.00	5.03	1.69	0.03	1.01

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	25
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	10.84	10.84	10.84	0.35	1.20	± 12.0 %
835	41.5	0.90	10.45	10.45	10.45	0.35	1.20	± 12.0 %
1750	40.1	1.37	8.46	8.46	8.46	0.34	0.88	± 12.0 %
1900	40.0	1.40	8.17	8.17	8.17	0.36	0.90	± 12.0 %
2300	39.5	1.67	7.89	7.89	7.89	0.30	0.90	± 12.0 %
2450	39.2	1.80	7.55	7.55	7.55	0.28	1.20	± 12.0 %
2600	39.0	1.96	7.33	7.33	7.33	0.40	0.90	± 12.0 %

[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.

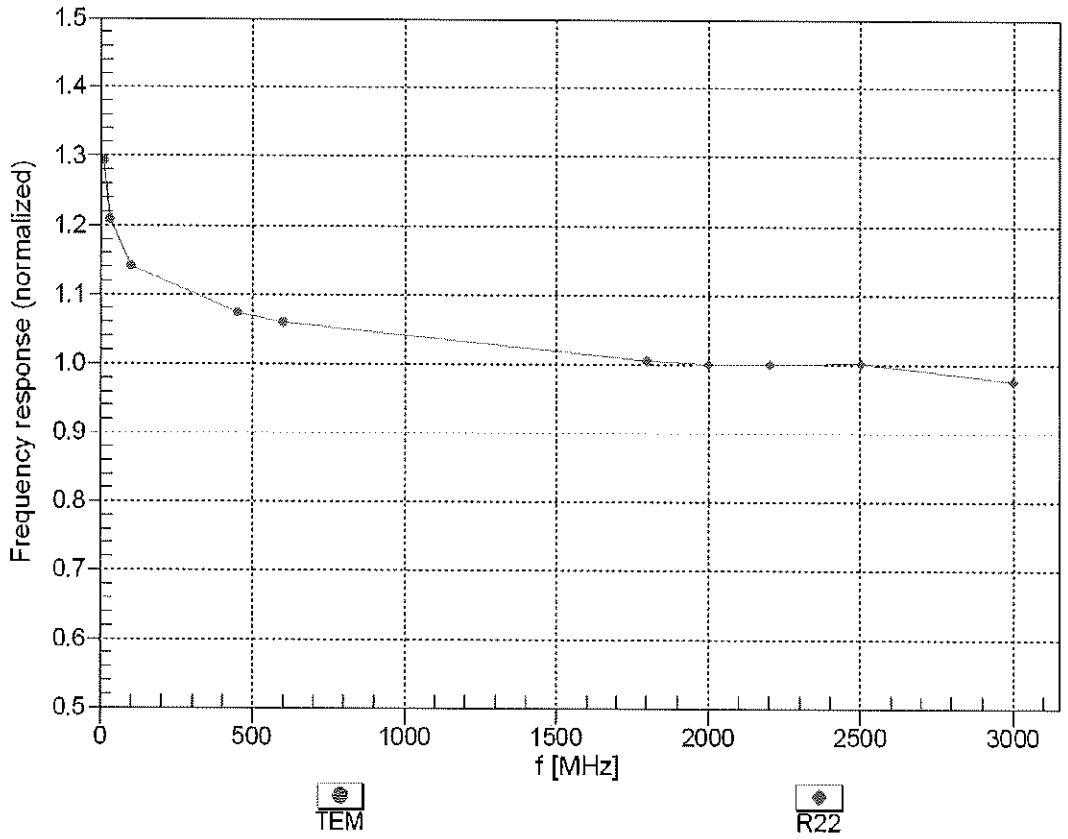
DASY/EASY - Parameters of Probe: EX3DV4 - SN:7532

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	10.60	10.60	10.60	0.39	0.95	± 12.0 %
835	55.2	0.97	10.14	10.14	10.14	0.46	0.80	± 12.0 %
1750	53.4	1.49	8.44	8.44	8.44	0.40	0.85	± 12.0 %
1900	53.3	1.52	8.03	8.03	8.03	0.40	0.86	± 12.0 %
2300	52.9	1.81	7.93	7.93	7.93	0.45	0.80	± 12.0 %
2450	52.7	1.95	7.66	7.66	7.66	0.35	0.95	± 12.0 %
2600	52.5	2.16	7.47	7.47	7.47	0.22	1.00	± 12.0 %

[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.

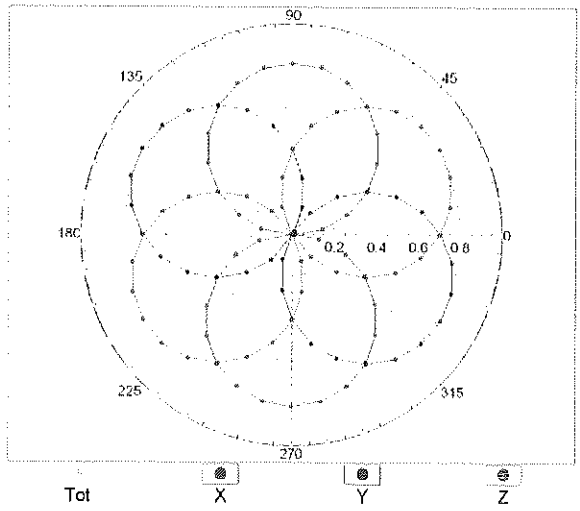
Frequency Response of E-Field
(TEM-Cell:ifi110 EXX, Waveguide: R22)



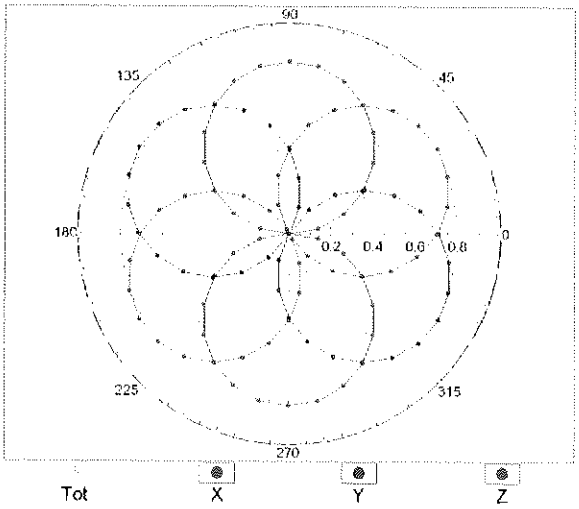
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

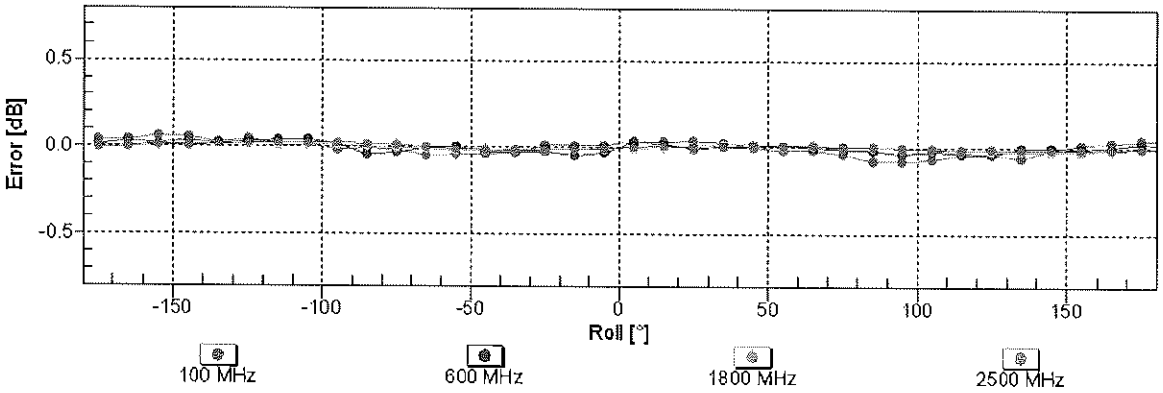
Receiving Pattern (ϕ), ϑ = 0°

f=600 MHz,TEM



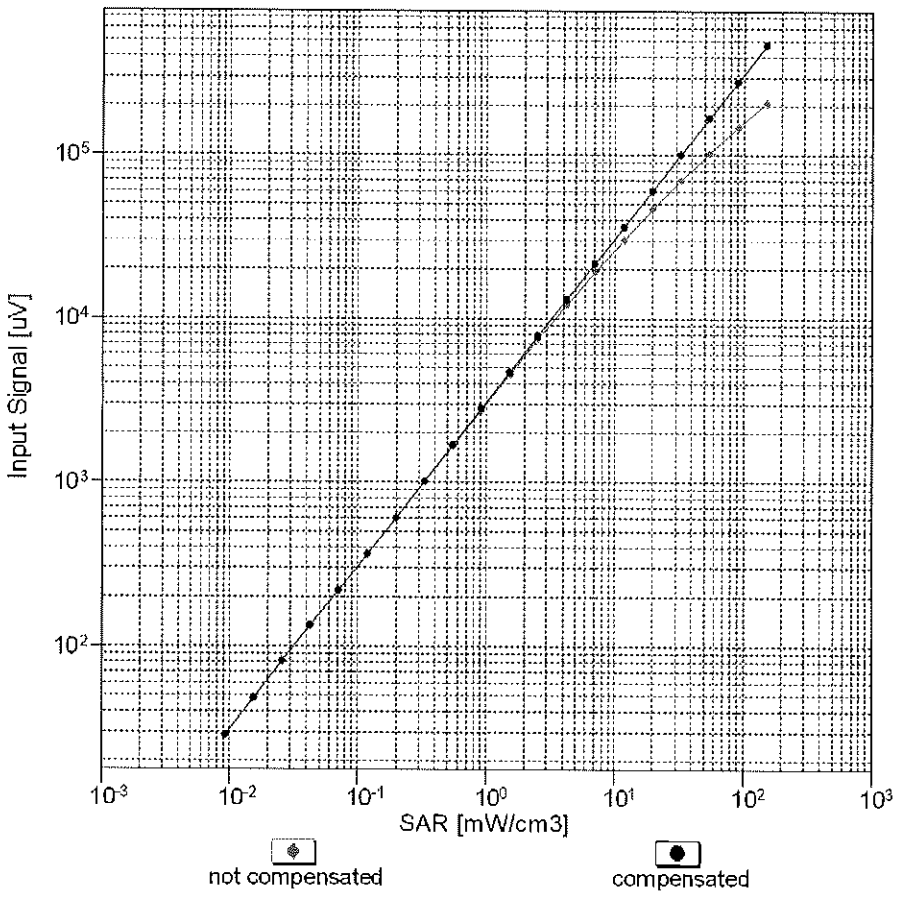
f=1800 MHz,R22

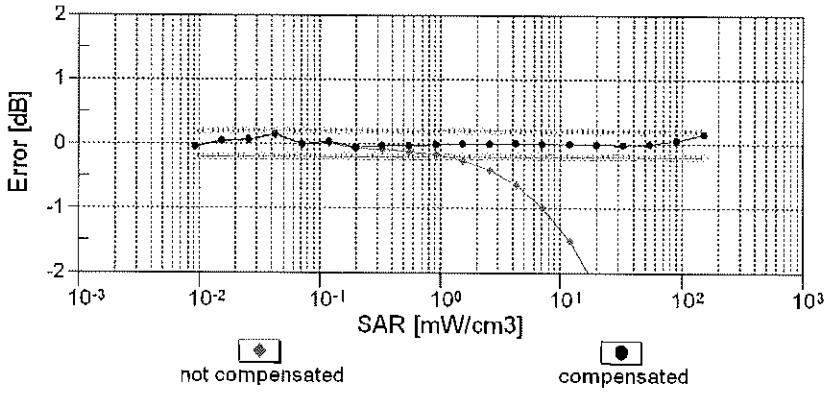




Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

Dynamic Range f(SAR_{head})
(TEM cell , f_{eval}= 1900 MHz)

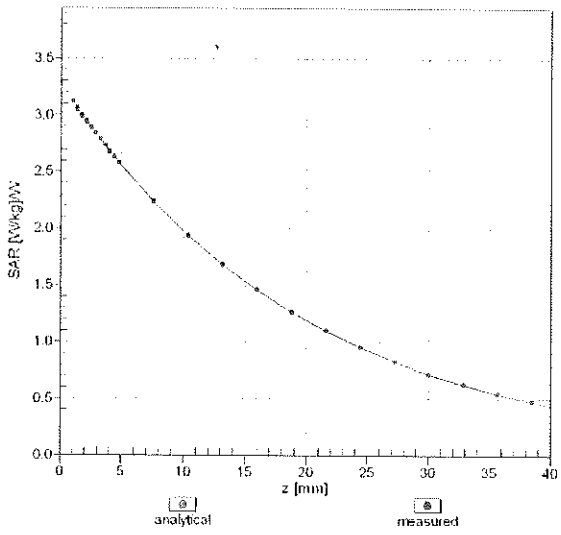




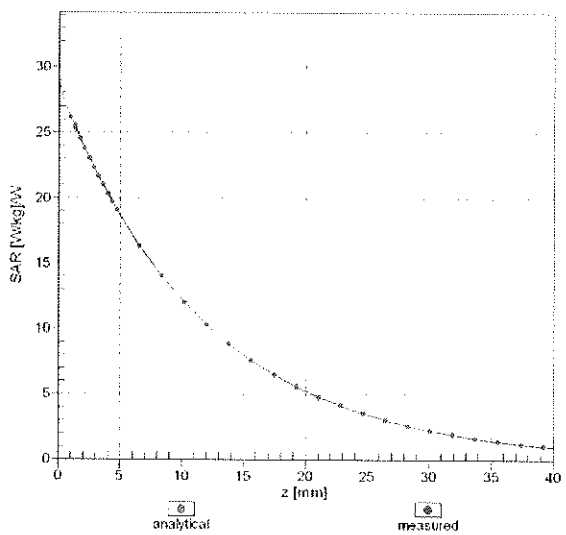
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment

f = 835 MHz,WGLS R9 (H_convF)

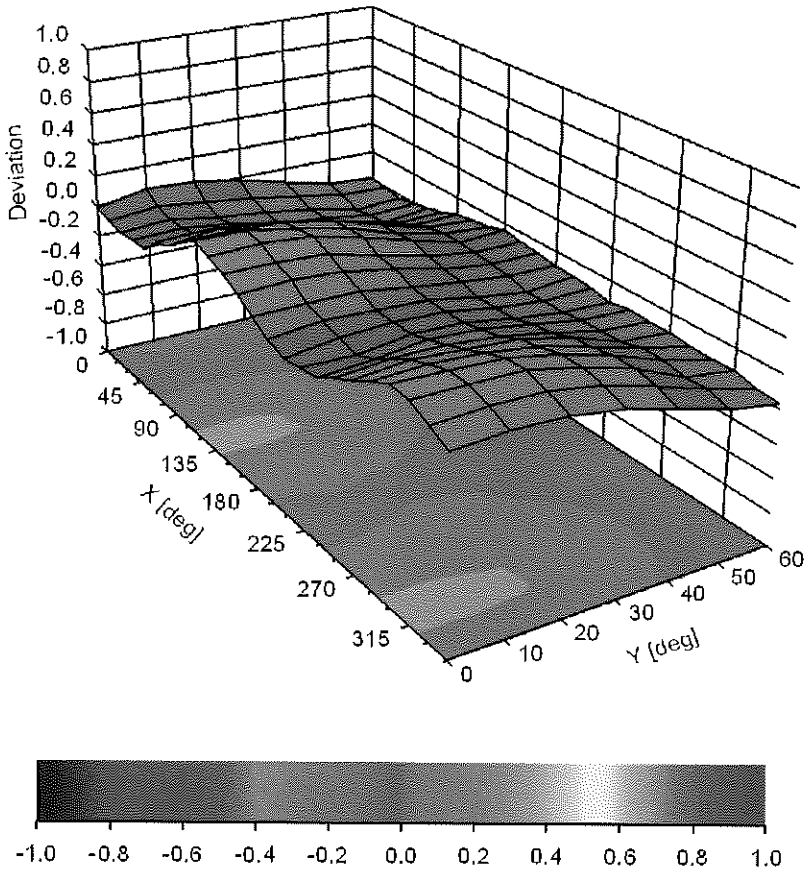


f = 1900 MHz,WGLS R22 (H_convF)



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	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	± 9.6 %
10227	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	± 9.6 %
10228	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	± 9.6 %
10229	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10230	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10231	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	± 9.6 %
10232	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10233	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10234	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10235	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10236	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10237	CAF	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	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	± 9.6 %
10242	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	± 9.6 %
10243	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	± 9.6 %
10244	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	± 9.6 %
10245	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	± 9.6 %
10246	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	± 9.6 %
10247	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	± 9.6 %
10248	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	± 9.6 %
10249	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10250	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	± 9.6 %
10251	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	± 9.6 %
10252	CAF	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	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	± 9.6 %
10257	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	± 9.6 %
10258	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	± 9.6 %
10259	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	± 9.6 %
10260	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	± 9.6 %
10261	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	± 9.6 %
10262	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	± 9.6 %
10263	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	± 9.6 %
10264	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	± 9.6 %
10265	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10266	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	± 9.6 %
10267	CAF	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	AAF	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 %
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	AAA	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	AAA	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	AAA	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	AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10465	AAB	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	AAB	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	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10468	AAE	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	AAE	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	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10471	AAE	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	AAE	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	AAA	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	AAA	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	AAA	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	AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.71	± 9.6 %
10483	AAB	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	AAB	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	AAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.59	± 9.6 %
10486	AAE	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	AAE	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	AAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.70	± 9.6 %
10489	AAE	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	AAE	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	AAA	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	AAA	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	AAA	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	AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	± 9.6 %
10501	AAB	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	AAB	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	AAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.72	± 9.6 %
10504	AAE	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	AAE	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	AAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10507	AAE	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	AAE	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	AAF	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	AAD	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	± 9.6 %
10653	AAD	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 %

[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
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Accreditation No.: SCS 0108

Client PC Test

Certificate No: EX3-3837_Jan19

CALIBRATION CERTIFICATE

Object: EX3DV4 - SN:3837

2/2/19 SC

Calibration procedure(s): QA CAL-01.v9, QA CAL-12.v9, QA CAL-14.v5, QA CAL-23.v5, QA CAL-25.v7
Calibration procedure for dosimetric E-field probes

Calibration date: January 28, 2019

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	04-Apr-18 (No. 217-02672/02673)	Apr-19
Power sensor NRP-Z91	SN: 103244	04-Apr-18 (No. 217-02672)	Apr-19
Power sensor NRP-Z91	SN: 103245	04-Apr-18 (No. 217-02673)	Apr-19
Reference 20 dB Attenuator	SN: S5277 (20x)	04-Apr-18 (No. 217-02682)	Apr-19
DAE4	SN: 660	19-Dec-18 (No. DAE4-660_Dec18)	Dec-19
Reference Probe ES3DV2	SN: 3013	31-Dec-18 (No. ES3-3013_Dec18)	Dec-19
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-18)	In house check: Oct-19

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

Issued: January 29, 2019

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:3837

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu V/(V/m)^2$)[A]	0.46	0.46	0.24	± 10.1 %
DCP (mV)[B]	102.6	99.2	95.3	

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	176.7	± 2.5 %	± 4.7 %
		Y	0.00	0.00	1.00		176.1		
		Z	0.00	0.00	1.00		157.1		
10352-AAA	Pulse Waveform (200Hz, 10%)	X	15.00	86.29	18.71	10.00	60.0	± 3.0 %	± 9.6 %
		Y	15.00	85.64	18.61		60.0		
		Z	6.24	74.93	14.96		60.0		
10353-AAA	Pulse Waveform (200Hz, 20%)	X	15.00	88.29	18.44	6.99	80.0	± 2.0 %	± 9.6 %
		Y	15.00	86.66	17.62		80.0		
		Z	11.76	83.10	16.24		80.0		
10354-AAA	Pulse Waveform (200Hz, 40%)	X	15.00	93.75	19.65	3.98	95.0	± 1.4 %	± 9.6 %
		Y	15.00	85.77	15.40		95.0		
		Z	15.00	84.99	14.89		95.0		
10355-AAA	Pulse Waveform (200Hz, 60%)	X	15.00	107.13	24.50	2.22	120.0	± 1.4 %	± 9.6 %
		Y	0.43	61.63	5.73		120.0		
		Z	1.15	67.54	8.07		120.0		
10387-AAA	QPSK Waveform, 1 MHz	X	0.91	65.48	11.18	0.00	150.0	± 2.9 %	± 9.6 %
		Y	0.64	61.06	8.38		150.0		
		Z	1.01	66.00	12.05		150.0		
10388-AAA	QPSK Waveform, 10 MHz	X	2.61	71.44	17.69	0.00	150.0	± 1.1 %	± 9.6 %
		Y	2.24	68.30	15.76		150.0		
		Z	2.66	71.19	17.42		150.0		
10396-AAA	64-QAM Waveform, 100 kHz	X	3.51	74.06	20.43	3.01	150.0	± 0.7 %	± 9.6 %
		Y	3.05	70.30	18.79		150.0		
		Z	2.96	70.35	18.83		150.0		
10399-AAA	64-QAM Waveform, 40 MHz	X	3.69	68.44	16.65	0.00	150.0	± 2.2 %	± 9.6 %
		Y	3.53	67.24	15.89		150.0		
		Z	3.74	68.37	16.62		150.0		
10414-AAA	WLAN CCDF, 64-QAM, 40MHz	X	4.80	65.79	15.77	0.00	150.0	± 4.2 %	± 9.6 %
		Y	4.95	65.81	15.76		150.0		
		Z	4.93	65.72	15.81		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:3837

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	43.0	318.33	35.21	9.84	0.30	5.04	1.44	0.26	1.01
Y	49.1	384.74	38.65	8.82	0.54	5.08	0.00	0.61	1.01
Z	53.7	413.46	37.69	6.35	0.68	5.02	0.00	0.54	1.01

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	75.1
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:3837

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)
30	55.0	0.75	14.07	14.07	14.07	0.00	1.00	± 13.3 %
64	54.2	0.75	12.22	12.22	12.22	0.00	1.00	± 13.3 %
750	41.9	0.89	9.71	9.71	9.71	0.51	0.83	± 12.0 %
835	41.5	0.90	9.37	9.37	9.37	0.52	0.80	± 12.0 %
1750	40.1	1.37	8.03	8.03	8.03	0.38	0.80	± 12.0 %
1900	40.0	1.40	7.85	7.85	7.85	0.35	0.80	± 12.0 %
2300	39.5	1.67	7.47	7.47	7.47	0.28	0.85	± 12.0 %
2450	39.2	1.80	7.15	7.15	7.15	0.38	0.85	± 12.0 %
2600	39.0	1.96	6.93	6.93	6.93	0.44	0.84	± 12.0 %
5250	35.9	4.71	5.36	5.36	5.36	0.40	1.80	± 13.1 %
5600	35.5	5.07	4.79	4.79	4.79	0.40	1.80	± 13.1 %
5750	35.4	5.22	5.05	5.05	5.05	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.

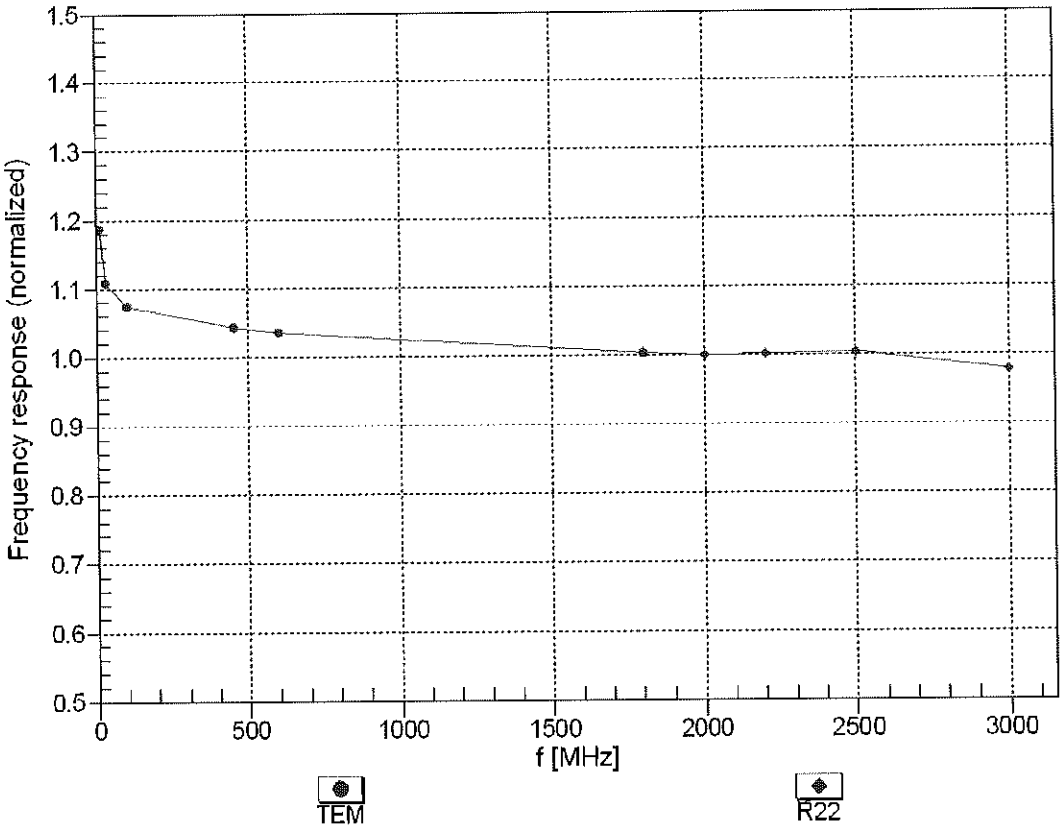
DASY/EASY - Parameters of Probe: EX3DV4 - SN:3837

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	9.20	9.20	9.20	0.36	0.92	± 12.0 %
835	55.2	0.97	9.08	9.08	9.08	0.51	0.80	± 12.0 %
1750	53.4	1.49	7.72	7.72	7.72	0.47	0.80	± 12.0 %
1900	53.3	1.52	7.54	7.54	7.54	0.35	0.84	± 12.0 %
2300	52.9	1.81	7.44	7.44	7.44	0.36	0.88	± 12.0 %
2450	52.7	1.95	7.35	7.35	7.35	0.32	0.90	± 12.0 %
2600	52.5	2.16	7.17	7.17	7.17	0.29	0.92	± 12.0 %
5250	48.9	5.36	4.77	4.77	4.77	0.50	1.90	± 13.1 %
5600	48.5	5.77	4.08	4.08	4.08	0.50	1.90	± 13.1 %
5750	48.3	5.94	4.34	4.34	4.34	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.

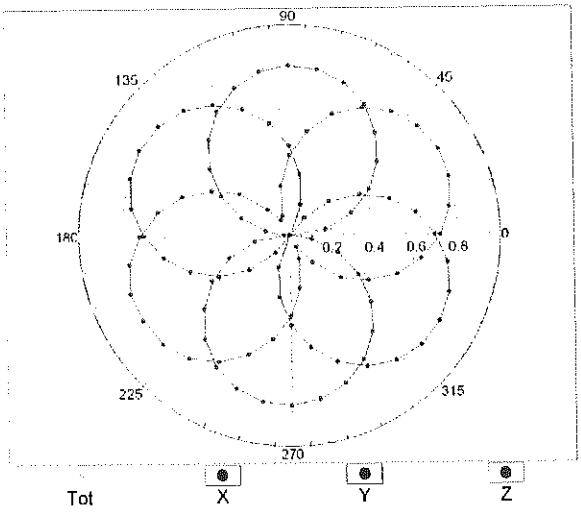
Frequency Response of E-Field
(TEM-Cell:ifi110 EXX, Waveguide: R22)



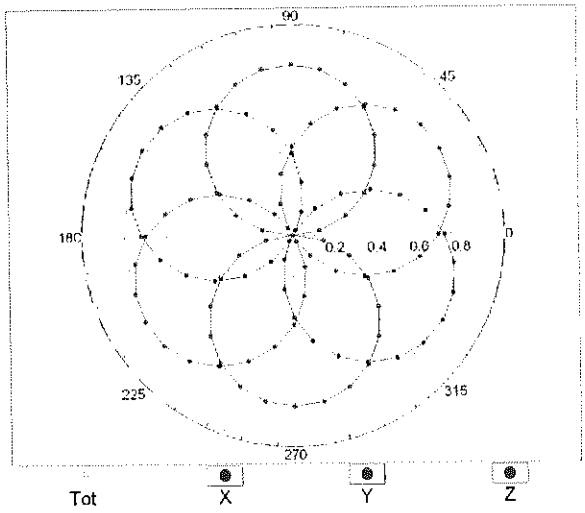
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

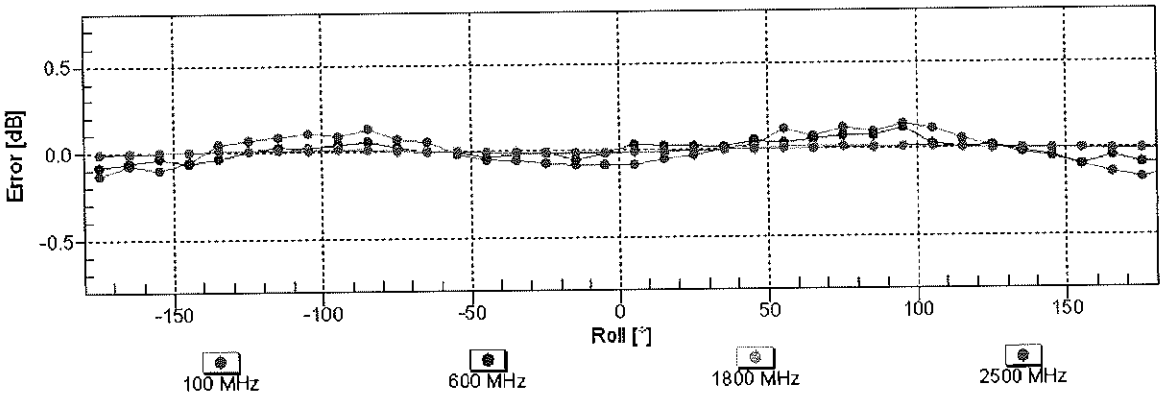
Receiving Pattern (ϕ), ϑ = 0°

f=600 MHz,TEM



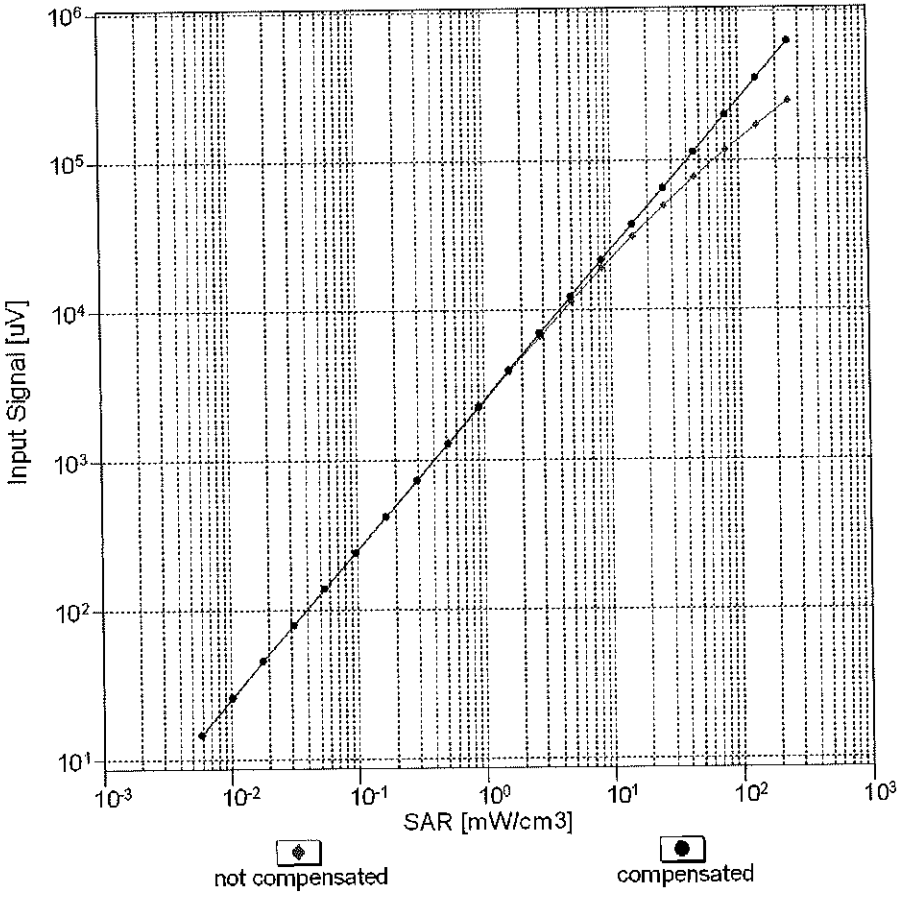
f=1800 MHz,R22

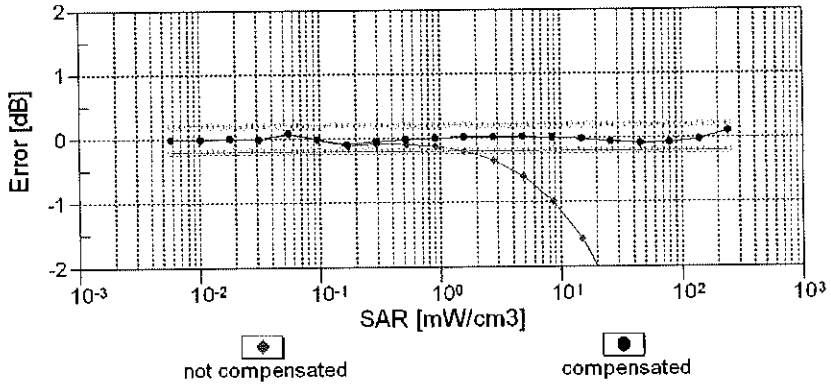




Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

Dynamic Range f(SAR_{head})
(TEM cell , f_{eval}= 1900 MHz)

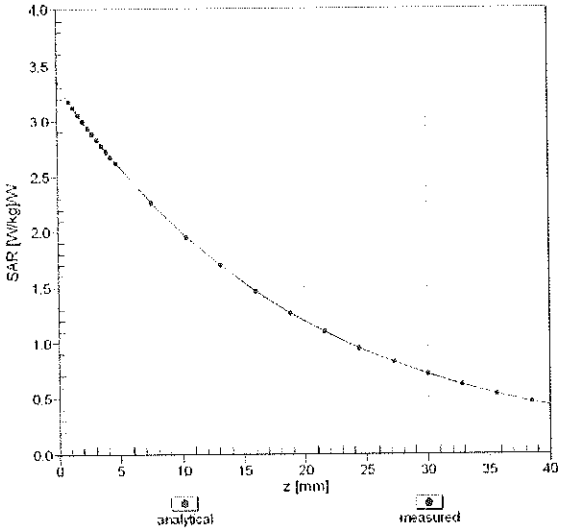




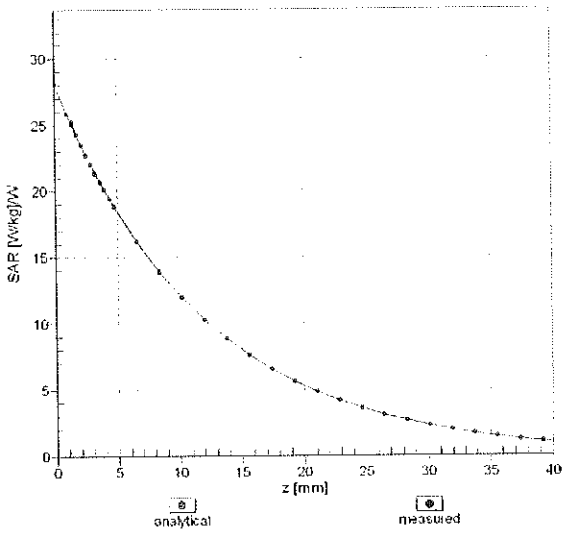
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment

f = 835 MHz,WGLS R9 (H_convF)

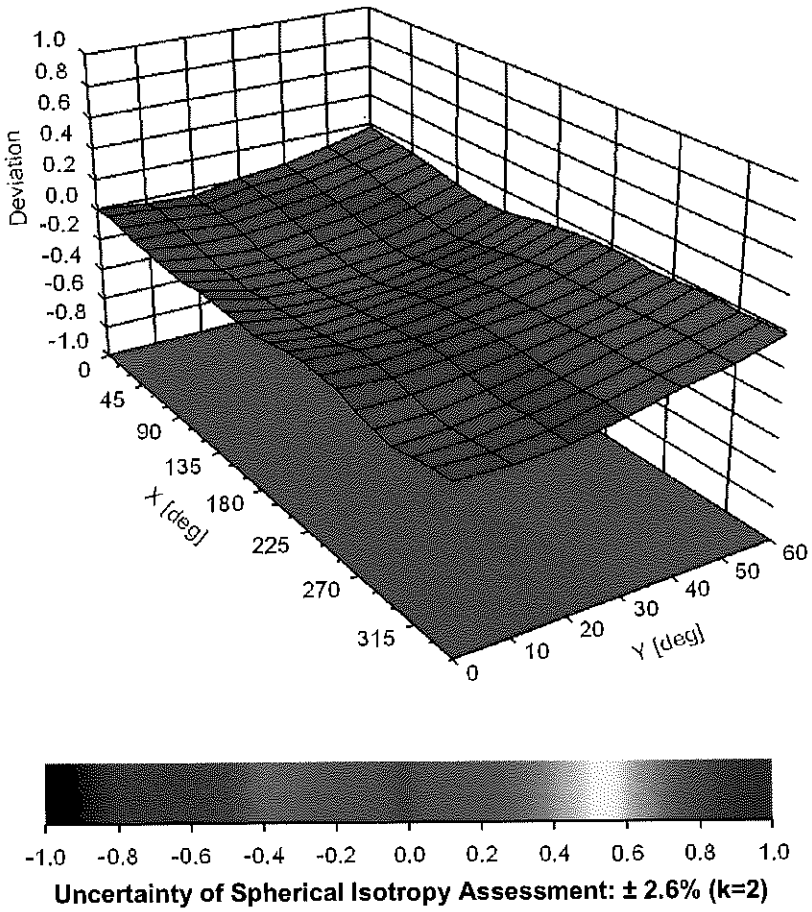


f = 1900 MHz,WGLS R22 (H_convF)



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	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	± 9.6 %
10227	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	± 9.6 %
10228	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	± 9.6 %
10229	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10230	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10231	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	± 9.6 %
10232	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10233	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10234	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10235	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10236	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10237	CAF	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	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	± 9.6 %
10242	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	± 9.6 %
10243	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	± 9.6 %
10244	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	± 9.6 %
10245	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	± 9.6 %
10246	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	± 9.6 %
10247	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	± 9.6 %
10248	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	± 9.6 %
10249	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10250	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	± 9.6 %
10251	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	± 9.6 %
10252	CAF	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	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	± 9.6 %
10257	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	± 9.6 %
10258	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	± 9.6 %
10259	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	± 9.6 %
10260	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	± 9.6 %
10261	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	± 9.6 %
10262	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	± 9.6 %
10263	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	± 9.6 %
10264	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	± 9.6 %
10265	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10266	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	± 9.6 %
10267	CAF	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	AAF	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 %
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	AAA	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	AAA	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	AAA	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	AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10465	AAB	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	AAB	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	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10468	AAE	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	AAE	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	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10471	AAE	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	AAE	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	AAA	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	AAA	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	AAA	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	AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.71	± 9.6 %
10483	AAB	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	AAB	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	AAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.59	± 9.6 %
10486	AAE	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	AAE	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	AAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.70	± 9.6 %
10489	AAE	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	AAE	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	AAA	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	AAA	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	AAA	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	AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	± 9.6 %
10501	AAB	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	AAB	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	AAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.72	± 9.6 %
10504	AAE	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	AAE	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	AAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10507	AAE	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	AAE	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	AAF	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	AAD	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	± 9.6 %
10653	AAD	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 %

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

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Accreditation No.: **SCS 0108**

Client **PC Test**

Certificate No: EX3-7427_Feb19

CALIBRATION CERTIFICATE

Object: EX3DV4 - SN:7427

Calibration procedure(s): QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v7
Calibration procedure for dosimetric E-field probes

3/12/19 SC ✓

Calibration date: February 19, 2019

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	04-Apr-18 (No. 217-02672/02673)	Apr-19
Power sensor NRP-Z91	SN: 103244	04-Apr-18 (No. 217-02672)	Apr-19
Power sensor NRP-Z91	SN: 103245	04-Apr-18 (No. 217-02673)	Apr-19
Reference 20 dB Attenuator	SN: S5277 (20x)	04-Apr-18 (No. 217-02682)	Apr-19
DAE4	SN: 660	19-Dec-18 (No. DAE4-660_Dec18)	Dec-19
Reference Probe ES3DV2	SN: 3013	31-Dec-18 (No. ES3-3013_Dec18)	Dec-19
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-18)	In house check: Oct-19

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

Issued: February 20, 2019

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]	0.56	0.42	0.56	± 10.1 %
DCP (mV)[B]	97.9	94.9	96.2	

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	133.0	± 3.5 %	± 4.7 %
		Y	0.00	0.00	1.00		141.7		
		Z	0.00	0.00	1.00		148.8		
10352-AAA	Pulse Waveform (200Hz, 10%)	X	15.00	87.84	19.22	10.00	60.0	± 3.4 %	± 9.6 %
		Y	1.77	62.84	8.98		60.0		
		Z	15.00	88.84	19.88		60.0		
10353-AAA	Pulse Waveform (200Hz, 20%)	X	15.00	91.36	19.89	6.99	80.0	± 2.3 %	± 9.6 %
		Y	1.31	63.69	8.05		80.0		
		Z	15.00	94.19	21.48		80.0		
10354-AAA	Pulse Waveform (200Hz, 40%)	X	15.00	99.87	22.69	3.98	95.0	± 1.2 %	± 9.6 %
		Y	0.41	60.00	4.84		95.0		
		Z	15.00	106.95	26.23		95.0		
10355-AAA	Pulse Waveform (200Hz, 60%)	X	15.00	114.72	28.20	2.22	120.0	± 1.2 %	± 9.6 %
		Y	0.32	60.00	3.11		120.0		
		Z	15.00	131.03	35.59		120.0		
10387-AAA	QPSK Waveform, 1 MHz	X	0.83	64.07	10.41	0.00	150.0	± 3.4 %	± 9.6 %
		Y	0.45	60.00	4.95		150.0		
		Z	0.85	64.33	10.70		150.0		
10388-AAA	QPSK Waveform, 10 MHz	X	2.53	70.61	17.25	0.00	150.0	± 1.1 %	± 9.6 %
		Y	1.88	66.70	15.04		150.0		
		Z	2.54	70.70	17.28		150.0		
10396-AAA	64-QAM Waveform, 100 kHz	X	3.01	71.18	19.27	3.01	150.0	± 1.5 %	± 9.6 %
		Y	2.05	66.24	17.18		150.0		
		Z	3.37	73.47	20.28		150.0		
10399-AAA	64-QAM Waveform, 40 MHz	X	3.57	67.64	16.25	0.00	150.0	± 2.3 %	± 9.6 %
		Y	3.27	66.45	15.47		150.0		
		Z	3.67	68.15	16.49		150.0		
10414-AAA	WLAN CCDF, 64-QAM, 40MHz	X	4.83	65.73	15.74	0.00	150.0	± 4.2 %	± 9.6 %
		Y	4.71	65.96	15.77		150.0		
		Z	4.97	66.21	15.99		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	43.0	322.40	35.95	10.31	0.00	5.08	0.69	0.34	1.00
Y	31.0	240.14	37.80	3.42	0.15	5.03	0.00	0.25	1.01
Z	45.0	337.68	36.03	10.29	0.00	5.10	1.39	0.25	1.01

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	-31.9
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	10.11	10.11	10.11	0.62	0.84	± 12.0 %
835	41.5	0.90	9.92	9.92	9.92	0.48	0.91	± 12.0 %
1750	40.1	1.37	8.58	8.58	8.58	0.37	0.85	± 12.0 %
1900	40.0	1.40	8.18	8.18	8.18	0.37	0.85	± 12.0 %
2300	39.5	1.67	7.82	7.82	7.82	0.31	0.85	± 12.0 %
2450	39.2	1.80	7.42	7.42	7.42	0.32	0.97	± 12.0 %
2600	39.0	1.96	7.14	7.14	7.14	0.44	0.90	± 12.0 %

[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

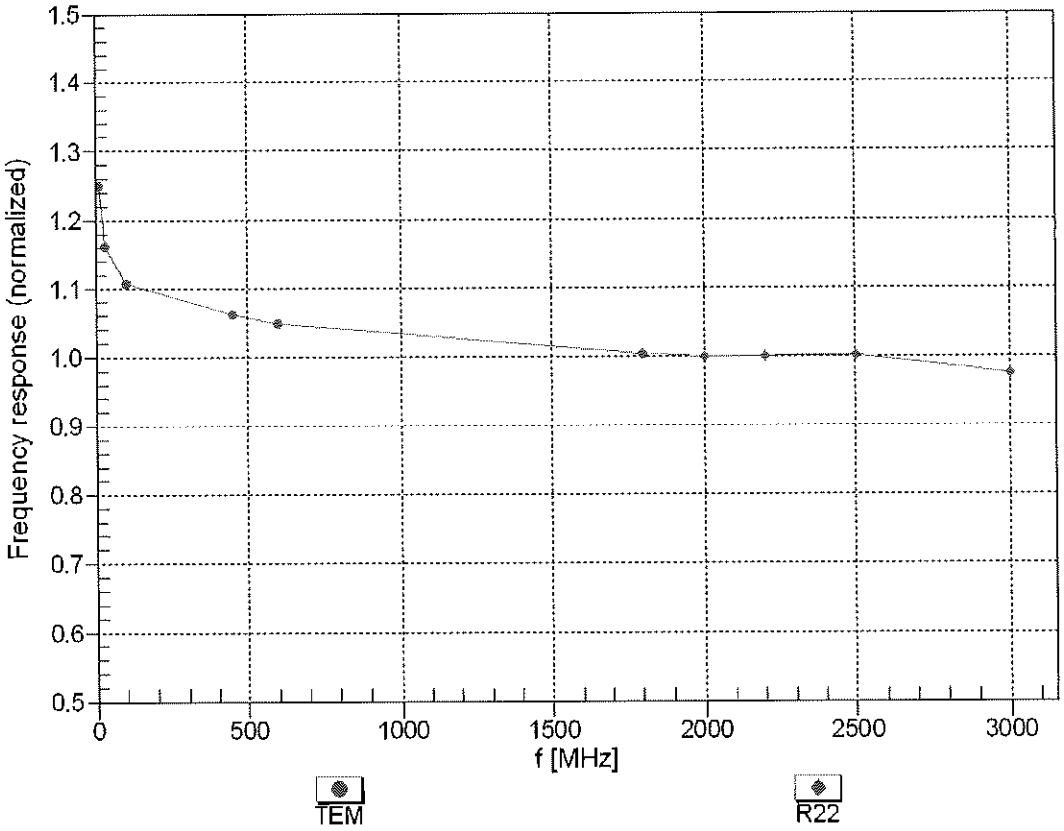
f (MHz) [C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha [G]	Depth [G] (mm)	Unc (k=2)
750	55.5	0.96	10.34	10.34	10.34	0.50	0.83	± 12.0 %
835	55.2	0.97	10.18	10.18	10.18	0.48	0.84	± 12.0 %
1750	53.4	1.49	8.14	8.14	8.14	0.44	0.84	± 12.0 %
1900	53.3	1.52	7.75	7.75	7.75	0.28	0.98	± 12.0 %
2300	52.9	1.81	7.56	7.56	7.56	0.39	0.86	± 12.0 %
2450	52.7	1.95	7.47	7.47	7.47	0.25	0.97	± 12.0 %
2600	52.5	2.16	7.35	7.35	7.35	0.21	1.10	± 12.0 %

[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.

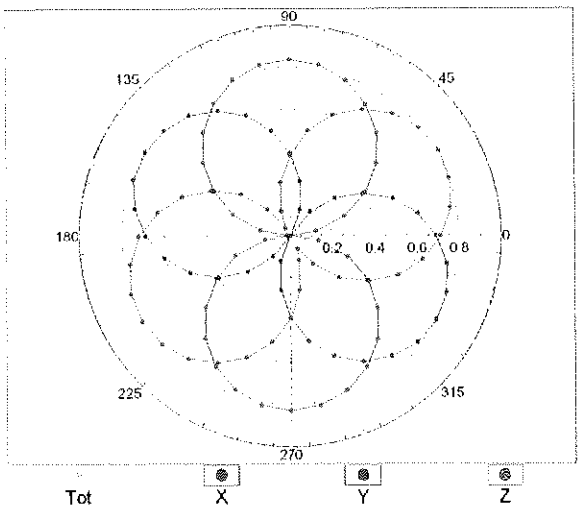
Frequency Response of E-Field
(TEM-Cell:ifi110 EXX, Waveguide: R22)



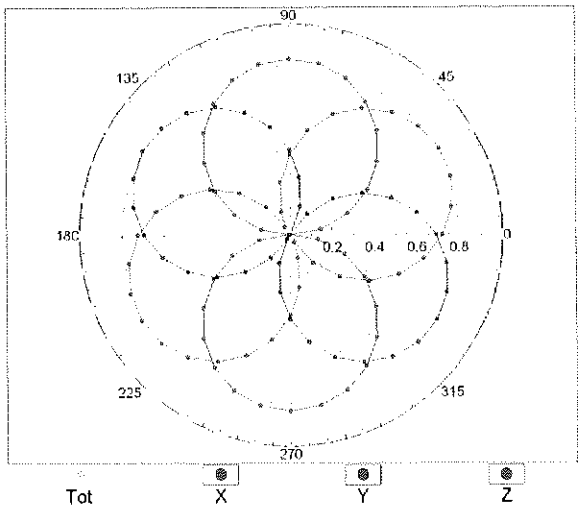
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

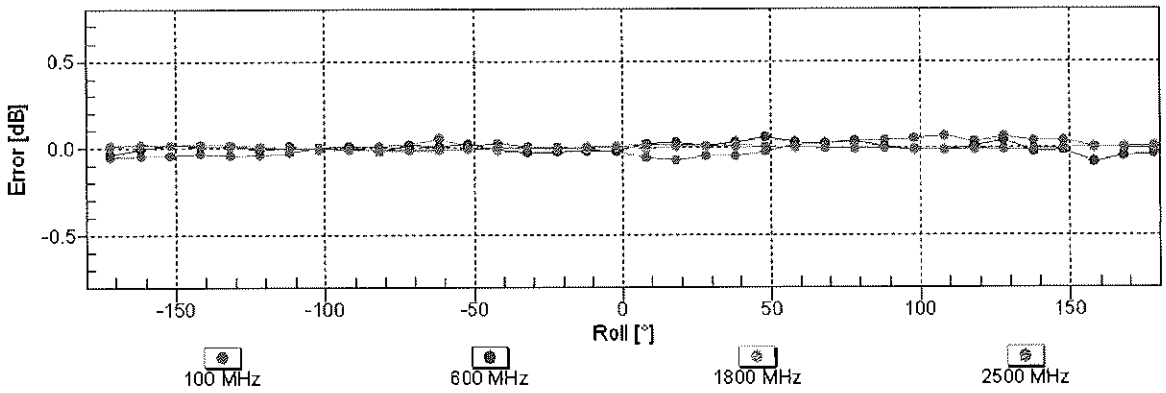
Receiving Pattern (ϕ), ϑ = 0°

f=600 MHz,TEM



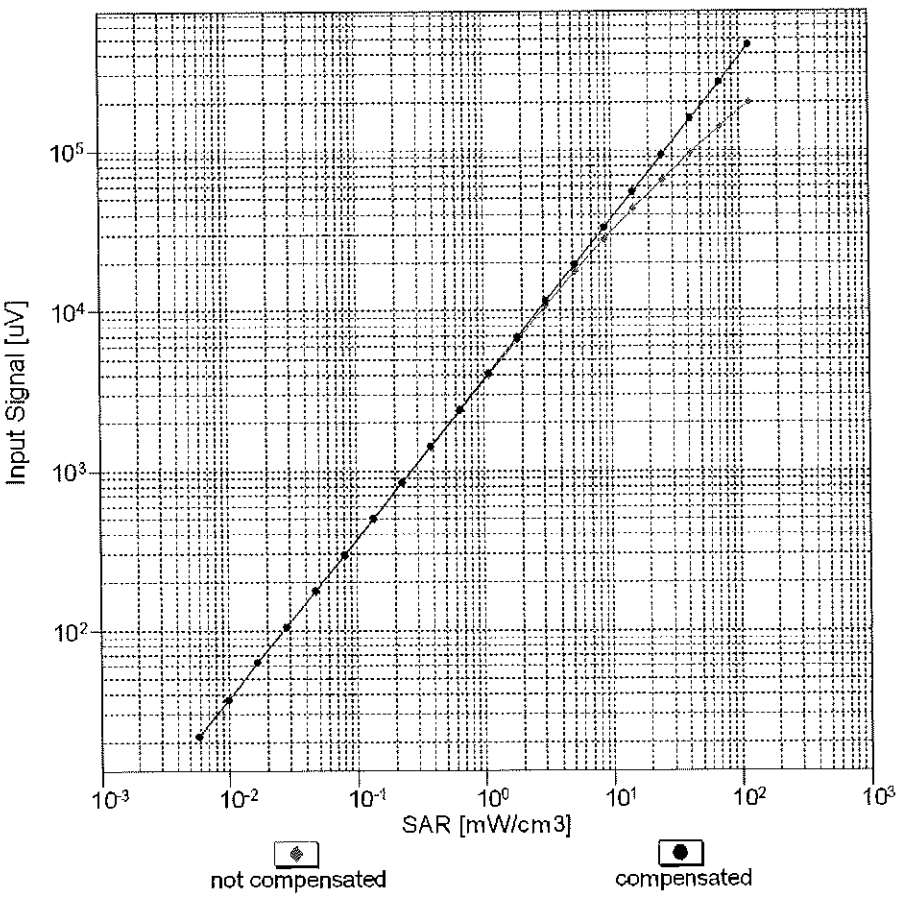
f=1800 MHz,R22

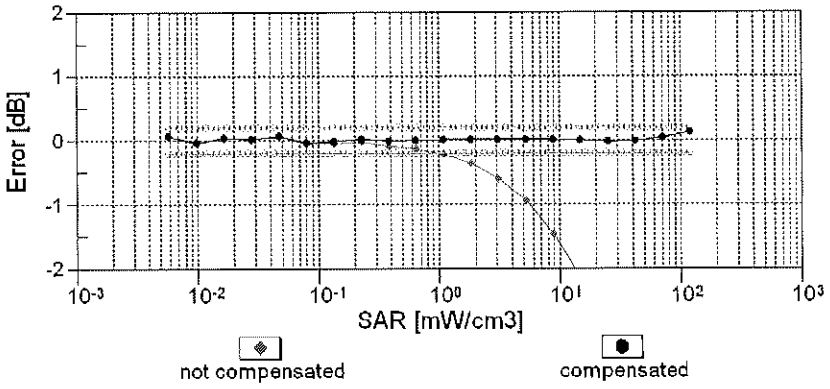




Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

Dynamic Range f(SAR_{head})
(TEM cell , f_{eval}= 1900 MHz)

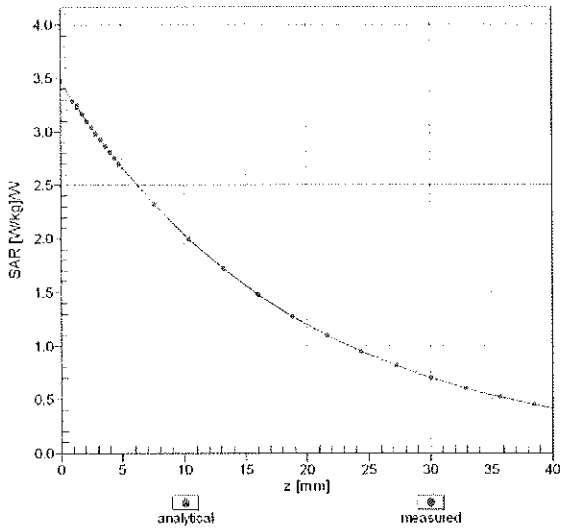




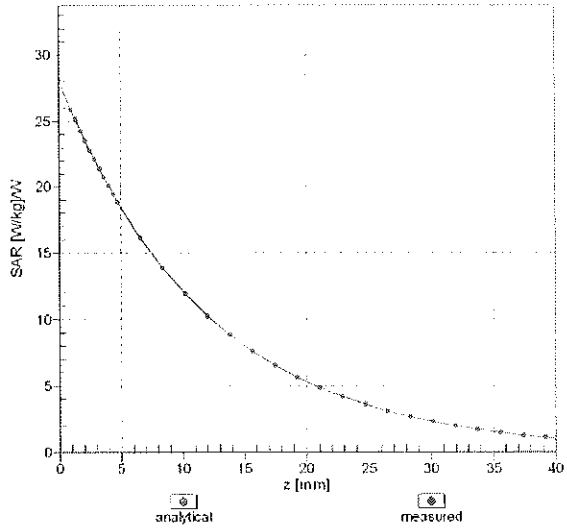
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment

f = 835 MHz,WGLS R9 (H_convF)

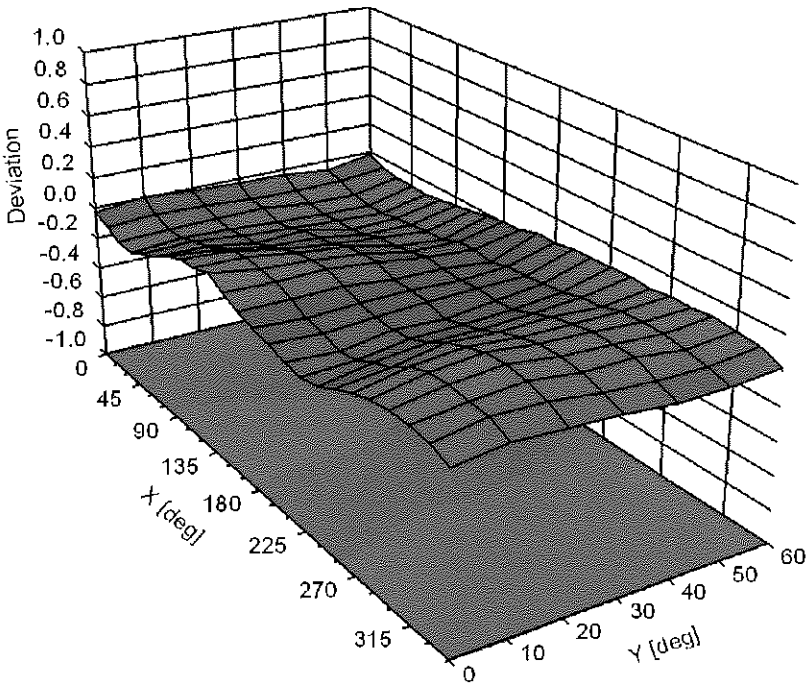


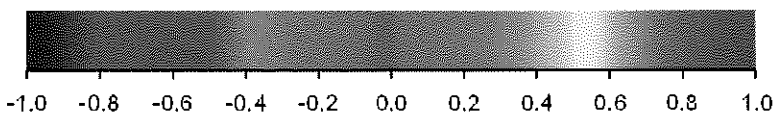
f = 1900 MHz,WGLS R22 (H_convF)



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	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	± 9.6 %
10227	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	± 9.6 %
10228	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	± 9.6 %
10229	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10230	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10231	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	± 9.6 %
10232	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10233	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10234	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10235	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10236	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10237	CAF	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	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	± 9.6 %
10242	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	± 9.6 %
10243	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	± 9.6 %
10244	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	± 9.6 %
10245	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	± 9.6 %
10246	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	± 9.6 %
10247	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	± 9.6 %
10248	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	± 9.6 %
10249	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10250	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	± 9.6 %
10251	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	± 9.6 %
10252	CAF	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	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	± 9.6 %
10257	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	± 9.6 %
10258	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	± 9.6 %
10259	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	± 9.6 %
10260	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	± 9.6 %
10261	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	± 9.6 %
10262	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	± 9.6 %
10263	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	± 9.6 %
10264	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	± 9.6 %
10265	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10266	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	± 9.6 %
10267	CAF	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	AAF	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 %
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	AAA	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	AAA	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	AAA	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	AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10465	AAB	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	AAB	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	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10468	AAE	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	AAE	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	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10471	AAE	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	AAE	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	AAA	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	AAA	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	AAA	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	AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.71	± 9.6 %
10483	AAB	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	AAB	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	AAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.59	± 9.6 %
10486	AAE	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	AAE	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	AAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.70	± 9.6 %
10489	AAE	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	AAE	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	AAA	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	AAA	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	AAA	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	AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	± 9.6 %
10501	AAB	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	AAB	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	AAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.72	± 9.6 %
10504	AAE	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	AAE	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	AAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10507	AAE	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	AAE	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	AAF	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	AAD	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	± 9.6 %
10653	AAD	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 %

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

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S Schweizerischer Kalibrierdienst
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Accreditation No.: SCS 0108

Client PC Test

Certificate No: ES3-3318_Nov18

CALIBRATION CERTIFICATE

Object: ES3DV3 - SN:3318

Calibration procedure(s): QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v8
Calibration procedure for dosimetric E-field probes

SCV 12/4/2018

Calibration date: November 19, 2018

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	04-Apr-18 (No. 217-02672/02673)	Apr-19
Power sensor NRP-Z91	SN: 103244	04-Apr-18 (No. 217-02672)	Apr-19
Power sensor NRP-Z91	SN: 103245	04-Apr-18 (No. 217-02673)	Apr-19
Reference 20 dB Attenuator	SN: S5277 (20x)	04-Apr-18 (No. 217-02682)	Apr-19
Reference Probe ES3DV2	SN: 3013	30-Dec-17 (No. ES3-3013_Dec17)	Dec-18
DAE4	SN: 660	21-Dec-17 (No. DAE4-660_Dec17)	Dec-18
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-18)	In house check: Oct-19

	Name	Function	Signature
Calibrated by:	Jeton Kastrati	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: November 20, 2018

Calibration Laboratory of
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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) **Accreditation No.: SCS 0108**
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

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., $\vartheta = 0$ 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 $\vartheta = 0$ ($f \leq 900$ 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 $f \leq 800$ 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).

Probe ES3DV3

SN:3318

Manufactured: January 10, 2012
Calibrated: November 19, 2018

Calibrated for DASY/EASY Systems
(Note: non-compatible with DASY2 system!)

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3318

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu V/(V/m)^2$)[A]	1.02	1.12	0.98	± 10.1 %
DCP (mV)[B]	104.9	104.4	104.3	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	C	D dB	VR mV	Unc[E] (k=2)
0	CW	X	0.0	0.0	1.0	0.00	194.2	±3.5 %
		Y	0.0	0.0	1.0		175.2	
		Z	0.0	0.0	1.0		192.9	

Note: For details on UID parameters see Appendix.

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	41.51	291.4	34.35	21.91	0.724	5.100	1.817	0.070	1.010
Y	42.53	303.7	35.05	24.14	0.798	5.100	0.849	0.253	1.009
Z	42.33	295.7	33.75	22.26	0.830	5.098	2.000	0.039	1.011

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: ES3DV3 - SN:3318

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	6.60	6.60	6.60	0.80	1.17	± 12.0 %
835	41.5	0.90	6.32	6.32	6.32	0.62	1.35	± 12.0 %
1750	40.1	1.37	5.39	5.39	5.39	0.80	1.18	± 12.0 %
1900	40.0	1.40	5.19	5.19	5.19	0.80	1.19	± 12.0 %
2300	39.5	1.67	4.87	4.87	4.87	0.80	1.21	± 12.0 %
2450	39.2	1.80	4.59	4.59	4.59	0.80	1.29	± 12.0 %
2600	39.0	1.96	4.47	4.47	4.47	0.74	1.24	± 12.0 %

[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. 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: ES3DV3 - SN:3318

Calibration Parameter Determined in Body Tissue Simulating Media

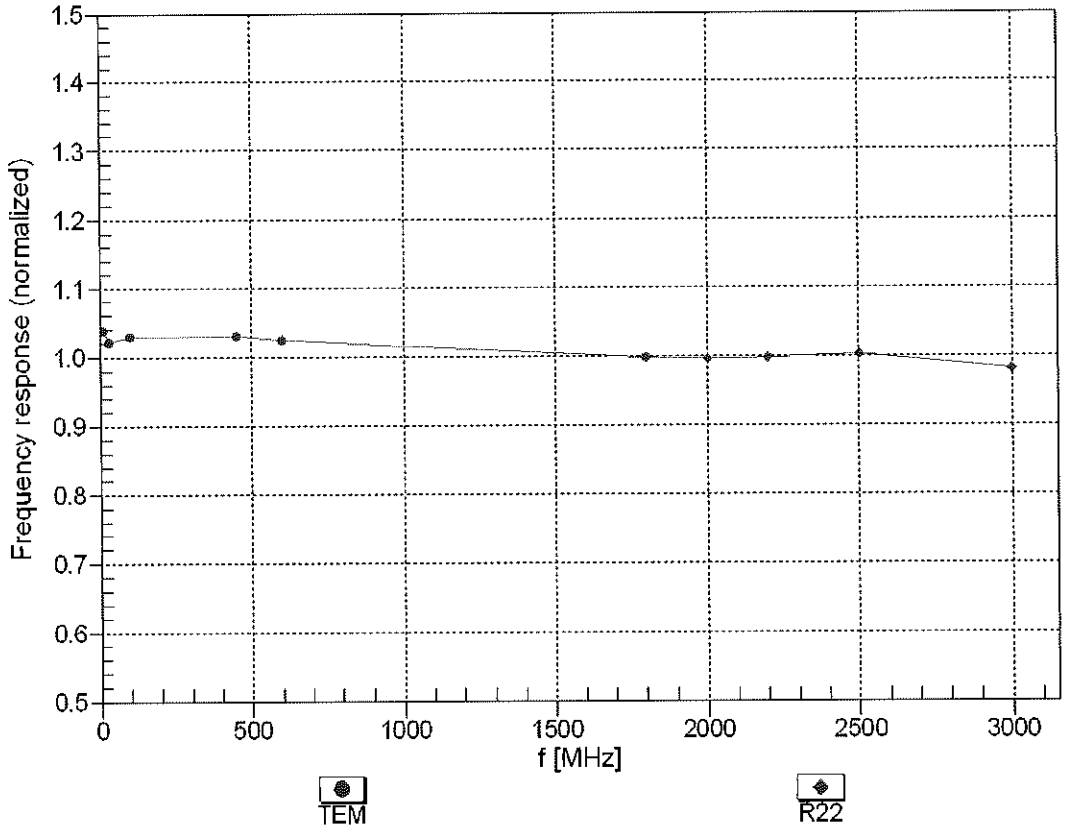
f (MHz) [C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha [G]	Depth [G] (mm)	Unc (k=2)
750	55.5	0.96	6.35	6.35	6.35	0.80	1.15	± 12.0 %
835	55.2	0.97	6.21	6.21	6.21	0.80	1.17	± 12.0 %
1750	53.4	1.49	5.05	5.05	5.05	0.39	1.79	± 12.0 %
1900	53.3	1.52	4.79	4.79	4.79	0.48	1.65	± 12.0 %
2300	52.9	1.81	4.65	4.65	4.65	0.80	1.27	± 12.0 %
2450	52.7	1.95	4.49	4.49	4.49	0.80	1.08	± 12.0 %
2600	52.5	2.16	4.32	4.32	4.32	0.80	1.10	± 12.0 %

[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. 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.

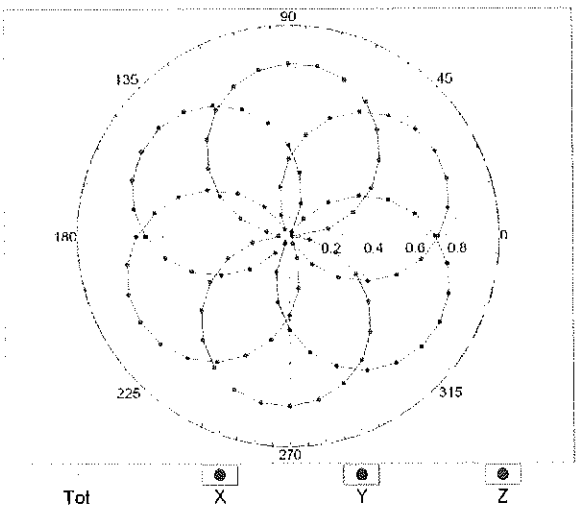
Frequency Response of E-Field
(TEM-Cell:ifi110 EXX, Waveguide: R22)



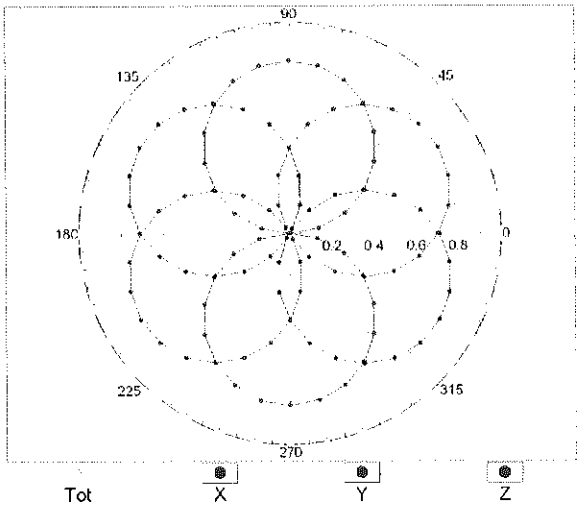
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

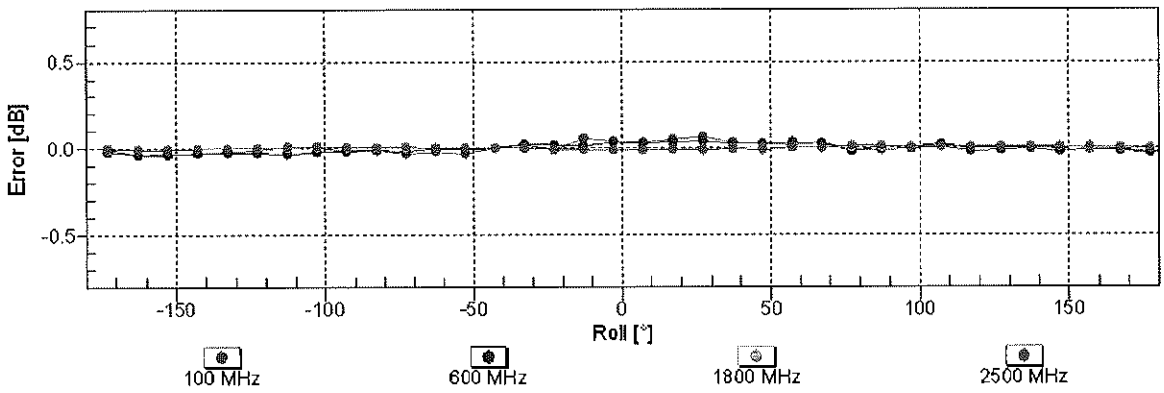
Receiving Pattern (ϕ), ϑ = 0°

f=600 MHz,TEM



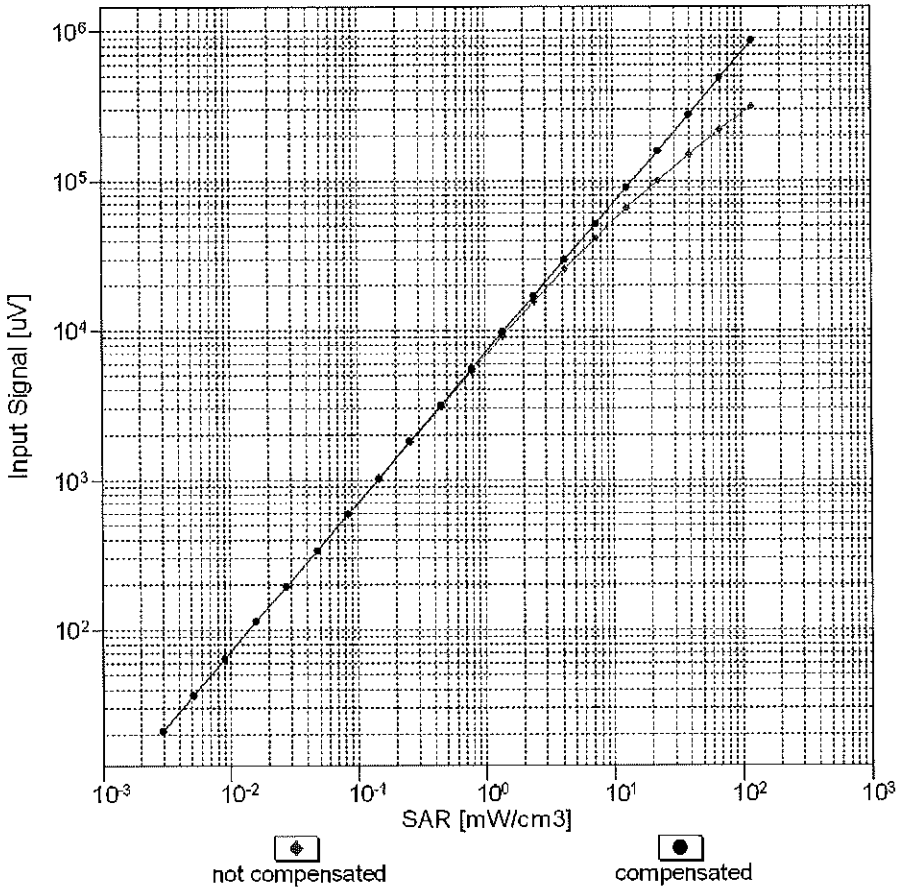
f=1800 MHz,R22

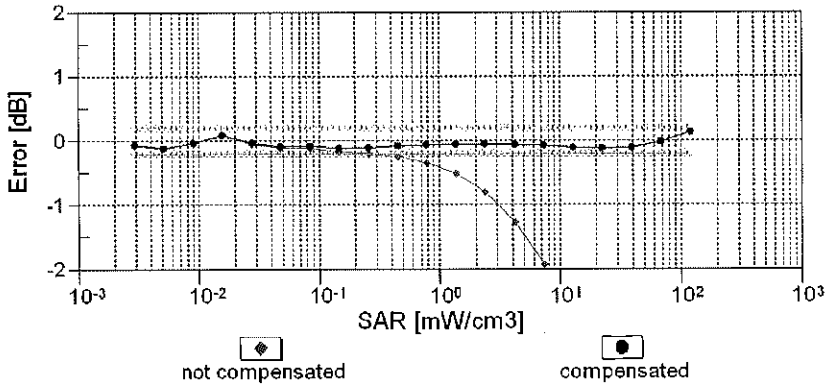




Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

Dynamic Range f(SAR_{head})
(TEM cell , f_{eval}= 1900 MHz)

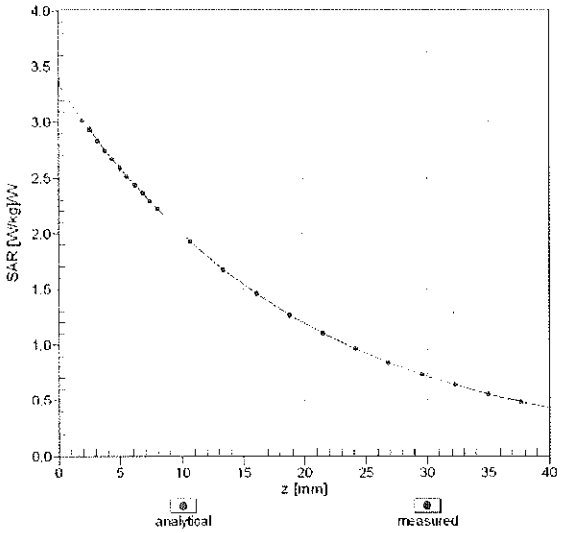




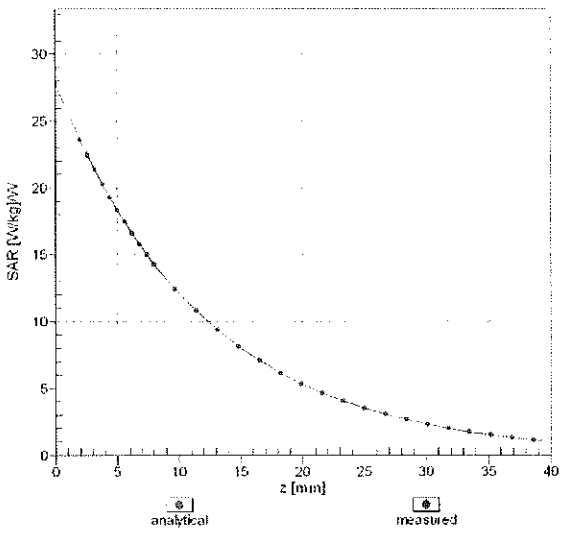
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment

f = 835 MHz,WGLS R9 (H_convF)

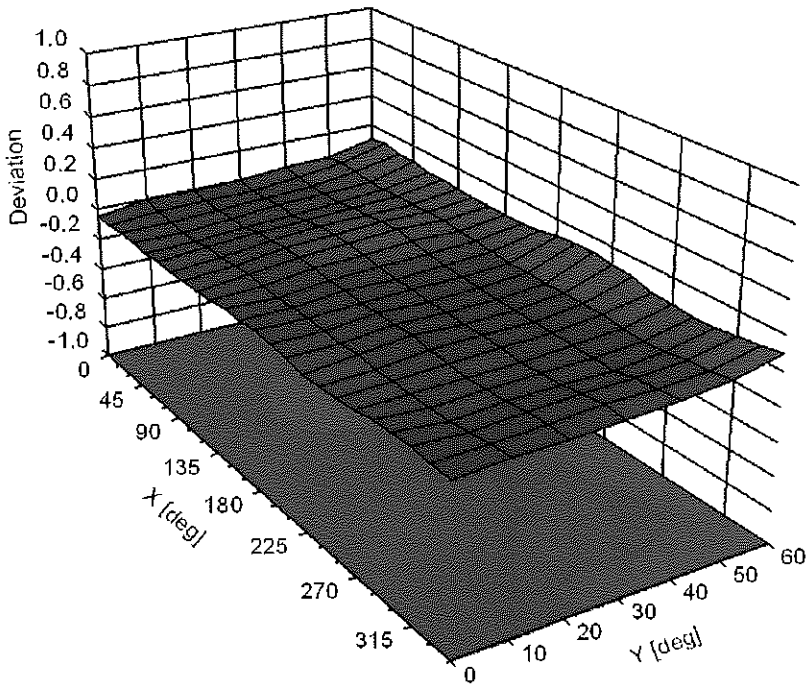


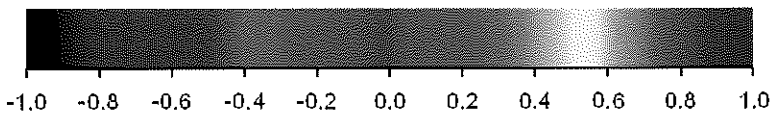
f = 1900 MHz,WGLS R22 (H_convF)



Deviation from Isotropy in Liquid

Error (ϕ, ϑ), f = 900 MHz





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

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3318

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	77.3
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

Appendix: Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	C	D dB	VR mV	Max Unc^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	194.2	± 3.5 %
		Y	0.00	0.00	1.00		175.2	
		Z	0.00	0.00	1.00		192.9	
10010-CAA	SAR Validation (Square, 100ms, 10ms)	X	25.14	93.58	21.09	10.00	25.0	± 9.6 %
		Y	6.71	77.31	15.93		25.0	
		Z	11.01	83.97	18.50		25.0	
10011-CAB	UMTS-FDD (WCDMA)	X	1.70	77.88	20.80	0.00	150.0	± 9.6 %
		Y	0.93	66.26	14.24		150.0	
		Z	0.98	66.88	14.71		150.0	
10012-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	1.35	67.34	17.74	0.41	150.0	± 9.6 %
		Y	1.20	64.38	15.20		150.0	
		Z	1.23	64.61	15.37		150.0	
10013-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	X	4.95	67.73	17.78	1.46	150.0	± 9.6 %
		Y	4.89	67.17	17.26		150.0	
		Z	4.90	67.26	17.26		150.0	
10021-DAC	GSM-FDD (TDMA, GMSK)	X	100.00	118.94	30.25	9.39	50.0	± 9.6 %
		Y	100.00	116.95	29.43		50.0	
		Z	100.00	118.59	30.23		50.0	
10023-DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X	100.00	118.62	30.14	9.57	50.0	± 9.6 %
		Y	100.00	116.74	29.37		50.0	
		Z	100.00	118.37	30.17		50.0	
10024-DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	100.00	117.67	28.75	6.56	60.0	± 9.6 %
		Y	100.00	114.18	27.23		60.0	
		Z	100.00	116.19	28.18		60.0	
10025-DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	41.71	144.97	55.95	12.57	50.0	± 9.6 %
		Y	16.55	111.05	43.74		50.0	
		Z	21.43	120.58	47.56		50.0	
10026-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	47.51	134.96	47.05	9.56	60.0	± 9.6 %
		Y	24.48	114.70	40.17		60.0	
		Z	27.79	118.85	41.76		60.0	
10027-DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	119.04	28.64	4.80	80.0	± 9.6 %
		Y	100.00	113.51	26.21		80.0	
		Z	100.00	116.02	27.37		80.0	
10028-DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	122.36	29.40	3.55	100.0	± 9.6 %
		Y	100.00	113.82	25.69		100.0	
		Z	100.00	117.04	27.14		100.0	
10029-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	15.07	104.34	36.32	7.80	80.0	± 9.6 %
		Y	11.60	95.84	32.61		80.0	
		Z	11.90	96.99	33.23		80.0	
10030-CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	100.00	116.64	27.83	5.30	70.0	± 9.6 %
		Y	100.00	112.33	25.95		70.0	
		Z	100.00	114.55	26.98		70.0	
10031-CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	129.47	30.89	1.88	100.0	± 9.6 %
		Y	100.00	111.70	23.43		100.0	
		Z	100.00	117.01	25.74		100.0	

10032-CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	100.00	149.50	37.83	1.17	100.0	± 9.6 %
		Y	100.00	113.14	23.09		100.0	
		Z	100.00	121.62	26.66		100.0	
10033-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	100.00	126.91	34.03	5.30	70.0	± 9.6 %
		Y	100.00	123.60	32.52		70.0	
		Z	99.51	124.84	33.14		70.0	
10034-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	100.00	125.49	31.64	1.88	100.0	± 9.6 %
		Y	7.75	87.11	20.74		100.0	
		Z	8.52	89.08	21.65		100.0	
10035-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	100.00	126.12	31.42	1.17	100.0	± 9.6 %
		Y	3.37	77.61	17.24		100.0	
		Z	3.75	79.45	18.18		100.0	
10036-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	100.00	127.26	34.19	5.30	70.0	± 9.6 %
		Y	100.00	123.91	32.66		70.0	
		Z	100.00	125.23	33.30		70.0	
10037-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	100.00	125.53	31.62	1.88	100.0	± 9.6 %
		Y	6.81	85.49	20.21		100.0	
		Z	7.47	87.41	21.11		100.0	
10038-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	100.00	127.01	31.82	1.17	100.0	± 9.6 %
		Y	3.47	78.26	17.58		100.0	
		Z	3.82	80.01	18.49		100.0	
10039-CAB	CDMA2000 (1xRTT, RC1)	X	22.47	107.52	26.72	0.00	150.0	± 9.6 %
		Y	1.34	68.41	13.18		150.0	
		Z	1.48	69.76	14.03		150.0	
10042-CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	X	100.00	114.76	27.57	7.78	50.0	± 9.6 %
		Y	100.00	112.20	26.48		50.0	
		Z	100.00	114.09	27.39		50.0	
10044-CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.06	125.39	16.77	0.00	150.0	± 9.6 %
		Y	0.00	105.97	9.83		150.0	
		Z	0.00	94.84	0.74		150.0	
10048-CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	100.00	120.62	32.21	13.80	25.0	± 9.6 %
		Y	100.00	119.01	31.60		25.0	
		Z	100.00	120.66	32.46		25.0	
10049-CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	100.00	118.21	30.20	10.79	40.0	± 9.6 %
		Y	100.00	116.81	29.66		40.0	
		Z	100.00	118.37	30.45		40.0	
10056-CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	100.00	124.87	34.27	9.03	50.0	± 9.6 %
		Y	73.36	117.96	32.21		50.0	
		Z	78.14	120.09	33.04		50.0	
10058-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	8.96	92.01	31.15	6.55	100.0	± 9.6 %
		Y	7.73	86.89	28.51		100.0	
		Z	7.73	87.23	28.78		100.0	
10059-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	X	1.53	70.10	19.13	0.61	110.0	± 9.6 %
		Y	1.32	66.19	16.15		110.0	
		Z	1.34	66.37	16.30		110.0	
10060-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	100.00	143.54	38.54	1.30	110.0	± 9.6 %
		Y	100.00	131.45	33.20		110.0	
		Z	100.00	133.71	34.25		110.0	

10061-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	100.00	143.94	40.68	2.04	110.0	± 9.6 %
		Y	9.36	97.35	27.31		110.0	
		Z	8.48	96.24	27.19		110.0	
10062-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.71	67.60	17.12	0.49	100.0	± 9.6 %
		Y	4.63	66.94	16.54		100.0	
		Z	4.65	67.05	16.55		100.0	
10063-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.74	67.74	17.25	0.72	100.0	± 9.6 %
		Y	4.66	67.08	16.67		100.0	
		Z	4.68	67.19	16.68		100.0	
10064-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	5.01	67.95	17.45	0.86	100.0	± 9.6 %
		Y	4.94	67.35	16.91		100.0	
		Z	4.95	67.44	16.92		100.0	
10065-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	4.90	67.93	17.61	1.21	100.0	± 9.6 %
		Y	4.83	67.33	17.07		100.0	
		Z	4.85	67.42	17.07		100.0	
10066-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	4.93	67.99	17.81	1.46	100.0	± 9.6 %
		Y	4.87	67.41	17.28		100.0	
		Z	4.88	67.50	17.28		100.0	
10067-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.24	68.26	18.31	2.04	100.0	± 9.6 %
		Y	5.19	67.72	17.81		100.0	
		Z	5.20	67.81	17.81		100.0	
10068-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.30	68.30	18.54	2.55	100.0	± 9.6 %
		Y	5.26	67.80	18.06		100.0	
		Z	5.27	67.89	18.07		100.0	
10069-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.38	68.33	18.75	2.67	100.0	± 9.6 %
		Y	5.34	67.84	18.28		100.0	
		Z	5.35	67.93	18.28		100.0	
10071-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	5.06	67.87	18.13	1.99	100.0	± 9.6 %
		Y	5.01	67.35	17.63		100.0	
		Z	5.02	67.44	17.63		100.0	
10072-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	5.07	68.32	18.43	2.30	100.0	± 9.6 %
		Y	5.02	67.76	17.91		100.0	
		Z	5.03	67.85	17.91		100.0	
10073-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.17	68.62	18.84	2.83	100.0	± 9.6 %
		Y	5.12	68.08	18.33		100.0	
		Z	5.13	68.16	18.33		100.0	
10074-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.19	68.62	19.04	3.30	100.0	± 9.6 %
		Y	5.14	68.10	18.54		100.0	
		Z	5.16	68.18	18.55		100.0	
10075-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.25	68.82	19.42	3.82	90.0	± 9.6 %
		Y	5.22	68.33	18.93		90.0	
		Z	5.23	68.41	18.94		90.0	
10076-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.28	68.67	19.58	4.15	90.0	± 9.6 %
		Y	5.25	68.20	19.10		90.0	
		Z	5.27	68.29	19.12		90.0	
10077-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.32	68.77	19.69	4.30	90.0	± 9.6 %
		Y	5.29	68.30	19.22		90.0	
		Z	5.30	68.40	19.23		90.0	

10081-CAB	CDMA2000 (1xRTT, RC3)	X	3.59	87.01	20.70	0.00	150.0	± 9.6 %
		Y	0.67	63.86	10.45		150.0	
		Z	0.73	64.73	11.22		150.0	
10082-CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	X	1.13	60.99	5.92	4.77	80.0	± 9.6 %
		Y	1.16	60.60	5.66		80.0	
		Z	1.19	61.07	6.06		80.0	
10090-DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	117.72	28.79	6.56	60.0	± 9.6 %
		Y	100.00	114.25	27.28		60.0	
		Z	100.00	116.24	28.22		60.0	
10097-CAB	UMTS-FDD (HSDPA)	X	2.26	72.68	18.34	0.00	150.0	± 9.6 %
		Y	1.73	67.23	15.04		150.0	
		Z	1.78	67.63	15.30		150.0	
10098-CAB	UMTS-FDD (HSUPA, Subtest 2)	X	2.23	72.74	18.38	0.00	150.0	± 9.6 %
		Y	1.69	67.17	15.00		150.0	
		Z	1.74	67.58	15.27		150.0	
10099-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	47.96	135.14	47.09	9.56	60.0	± 9.6 %
		Y	24.63	114.80	40.19		60.0	
		Z	27.96	118.94	41.78		60.0	
10100-CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	3.57	73.61	18.56	0.00	150.0	± 9.6 %
		Y	2.95	69.65	16.23		150.0	
		Z	3.01	70.04	16.43		150.0	
10101-CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.37	69.07	16.96	0.00	150.0	± 9.6 %
		Y	3.13	67.28	15.66		150.0	
		Z	3.16	67.51	15.76		150.0	
10102-CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.45	68.93	16.98	0.00	150.0	± 9.6 %
		Y	3.24	67.28	15.77		150.0	
		Z	3.27	67.49	15.85		150.0	
10103-CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	9.47	83.08	23.62	3.98	65.0	± 9.6 %
		Y	8.35	79.92	22.04		65.0	
		Z	8.56	80.47	22.27		65.0	
10104-CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	8.19	78.95	22.85	3.98	65.0	± 9.6 %
		Y	7.81	77.25	21.80		65.0	
		Z	7.77	77.28	21.83		65.0	
10105-CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	7.45	76.98	22.31	3.98	65.0	± 9.6 %
		Y	7.29	75.86	21.52		65.0	
		Z	7.68	77.03	22.04		65.0	
10108-CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	3.11	73.03	18.52	0.00	150.0	± 9.6 %
		Y	2.56	68.95	16.05		150.0	
		Z	2.61	69.30	16.24		150.0	
10109-CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	3.03	69.26	17.02	0.00	150.0	± 9.6 %
		Y	2.77	67.12	15.50		150.0	
		Z	2.81	67.35	15.61		150.0	
10110-CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.59	72.86	18.47	0.00	150.0	± 9.6 %
		Y	2.06	68.06	15.56		150.0	
		Z	2.11	68.43	15.79		150.0	
10111-CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.87	71.18	17.73	0.00	150.0	± 9.6 %
		Y	2.47	67.85	15.61		150.0	
		Z	2.51	68.11	15.76		150.0	

10112-CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.15	69.16	17.00	0.00	150.0	± 9.6 %
		Y	2.90	67.16	15.58		150.0	
		Z	2.93	67.38	15.68		150.0	
10113-CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	3.01	71.16	17.76	0.00	150.0	± 9.6 %
		Y	2.62	68.05	15.77		150.0	
		Z	2.66	68.27	15.90		150.0	
10114-CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	5.14	67.90	16.93	0.00	150.0	± 9.6 %
		Y	5.05	67.29	16.39		150.0	
		Z	5.06	67.39	16.39		150.0	
10115-CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.38	67.92	16.93	0.00	150.0	± 9.6 %
		Y	5.31	67.37	16.44		150.0	
		Z	5.32	67.45	16.43		150.0	
10116-CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.23	68.10	16.95	0.00	150.0	± 9.6 %
		Y	5.14	67.47	16.41		150.0	
		Z	5.14	67.56	16.40		150.0	
10117-CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.10	67.77	16.88	0.00	150.0	± 9.6 %
		Y	5.02	67.15	16.33		150.0	
		Z	5.03	67.26	16.34		150.0	
10118-CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	X	5.47	68.14	17.05	0.00	150.0	± 9.6 %
		Y	5.40	67.59	16.56		150.0	
		Z	5.39	67.65	16.54		150.0	
10119-CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	X	5.21	68.06	16.95	0.00	150.0	± 9.6 %
		Y	5.13	67.44	16.40		150.0	
		Z	5.13	67.52	16.39		150.0	
10140-CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.49	68.96	16.90	0.00	150.0	± 9.6 %
		Y	3.26	67.29	15.68		150.0	
		Z	3.30	67.51	15.78		150.0	
10141-CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.60	69.00	17.03	0.00	150.0	± 9.6 %
		Y	3.39	67.43	15.87		150.0	
		Z	3.42	67.62	15.95		150.0	
10142-CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	2.52	74.23	18.60	0.00	150.0	± 9.6 %
		Y	1.81	67.84	14.96		150.0	
		Z	1.87	68.30	15.27		150.0	
10143-CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.98	73.43	17.90	0.00	150.0	± 9.6 %
		Y	2.27	68.21	14.96		150.0	
		Z	2.33	68.59	15.21		150.0	
10144-CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.47	69.52	15.56	0.00	150.0	± 9.6 %
		Y	2.05	65.97	13.34		150.0	
		Z	2.10	66.36	13.60		150.0	
10145-CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	1.51	69.20	13.30	0.00	150.0	± 9.6 %
		Y	0.96	62.90	9.62		150.0	
		Z	1.02	63.58	10.20		150.0	
10146-CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	3.09	72.32	13.66	0.00	150.0	± 9.6 %
		Y	1.49	63.89	9.60		150.0	
		Z	1.86	66.13	10.79		150.0	
10147-CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	7.36	82.04	17.21	0.00	150.0	± 9.6 %
		Y	1.65	65.00	10.28		150.0	
		Z	2.24	68.17	11.85		150.0	

10149-CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	3.05	69.34	17.07	0.00	150.0	± 9.6 %
		Y	2.78	67.17	15.54		150.0	
		Z	2.82	67.40	15.66		150.0	
10150-CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.16	69.22	17.05	0.00	150.0	± 9.6 %
		Y	2.91	67.21	15.62		150.0	
		Z	2.94	67.43	15.72		150.0	
10151-CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	11.68	88.59	25.70	3.98	65.0	± 9.6 %
		Y	9.54	83.77	23.53		65.0	
		Z	9.43	83.68	23.53		65.0	
10152-CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	7.98	79.75	22.81	3.98	65.0	± 9.6 %
		Y	7.44	77.55	21.56		65.0	
		Z	7.40	77.60	21.61		65.0	
10153-CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	8.48	80.83	23.60	3.98	65.0	± 9.6 %
		Y	7.94	78.72	22.40		65.0	
		Z	7.87	78.64	22.39		65.0	
10154-CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.66	73.38	18.76	0.00	150.0	± 9.6 %
		Y	2.09	68.40	15.78		150.0	
		Z	2.14	68.76	16.00		150.0	
10155-CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.88	71.22	17.76	0.00	150.0	± 9.6 %
		Y	2.47	67.88	15.64		150.0	
		Z	2.51	68.13	15.78		150.0	
10156-CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	2.51	75.56	18.82	0.00	150.0	± 9.6 %
		Y	1.63	67.62	14.50		150.0	
		Z	1.69	68.15	14.87		150.0	
10157-CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.46	71.18	16.01	0.00	150.0	± 9.6 %
		Y	1.86	66.20	13.11		150.0	
		Z	1.92	66.68	13.45		150.0	
10158-CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	3.02	71.25	17.82	0.00	150.0	± 9.6 %
		Y	2.63	68.11	15.82		150.0	
		Z	2.66	68.34	15.95		150.0	
10159-CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.60	71.71	16.29	0.00	150.0	± 9.6 %
		Y	1.94	66.55	13.34		150.0	
		Z	2.01	67.04	13.68		150.0	
10160-CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	3.04	71.68	18.06	0.00	150.0	± 9.6 %
		Y	2.62	68.40	15.97		150.0	
		Z	2.65	68.60	16.09		150.0	
10161-CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	3.06	69.29	17.02	0.00	150.0	± 9.6 %
		Y	2.80	67.15	15.51		150.0	
		Z	2.83	67.37	15.62		150.0	
10162-CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.17	69.44	17.11	0.00	150.0	± 9.6 %
		Y	2.91	67.34	15.65		150.0	
		Z	2.94	67.55	15.75		150.0	
10166-CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	3.84	72.82	21.21	3.01	150.0	± 9.6 %
		Y	3.43	69.75	19.23		150.0	
		Z	3.67	71.20	19.99		150.0	
10167-CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	5.47	79.00	22.86	3.01	150.0	± 9.6 %
		Y	4.19	72.97	19.81		150.0	
		Z	4.94	76.18	21.22		150.0	

10168-CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	6.54	82.93	24.78	3.01	150.0	± 9.6 %
		Y	4.72	75.59	21.31		150.0	
		Z	5.72	79.32	22.86		150.0	
10169-CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	3.27	73.03	21.49	3.01	150.0	± 9.6 %
		Y	2.77	68.70	18.82		150.0	
		Z	3.12	71.30	20.13		150.0	
10170-CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	6.50	87.24	26.83	3.01	150.0	± 9.6 %
		Y	3.78	75.16	21.45		150.0	
		Z	5.43	82.38	24.34		150.0	
10171-AAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	4.58	79.37	22.73	3.01	150.0	± 9.6 %
		Y	3.08	70.83	18.54		150.0	
		Z	4.02	75.94	20.73		150.0	
10172-CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	100.00	147.26	45.54	6.02	65.0	± 9.6 %
		Y	20.32	109.42	34.52		65.0	
		Z	100.00	143.11	43.56		65.0	
10173-CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	100.00	135.40	39.37	6.02	65.0	± 9.6 %
		Y	100.00	132.72	38.18		65.0	
		Z	100.00	132.76	38.10		65.0	
10174-CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	100.00	134.09	38.58	6.02	65.0	± 9.6 %
		Y	48.71	117.84	33.86		65.0	
		Z	100.00	130.48	36.88		65.0	
10175-CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	3.22	72.65	21.22	3.01	150.0	± 9.6 %
		Y	2.74	68.42	18.58		150.0	
		Z	3.08	70.97	19.87		150.0	
10176-CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	6.52	87.29	26.84	3.01	150.0	± 9.6 %
		Y	3.79	75.18	21.47		150.0	
		Z	5.44	82.42	24.36		150.0	
10177-CAI	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	3.25	72.83	21.31	3.01	150.0	± 9.6 %
		Y	2.76	68.55	18.67		150.0	
		Z	3.10	71.13	19.97		150.0	
10178-CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	6.41	86.92	26.69	3.01	150.0	± 9.6 %
		Y	3.75	74.99	21.36		150.0	
		Z	5.37	82.13	24.22		150.0	
10179-CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	5.47	83.22	24.67	3.01	150.0	± 9.6 %
		Y	3.40	72.89	19.87		150.0	
		Z	4.66	79.00	22.39		150.0	
10180-CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	X	4.56	79.27	22.67	3.01	150.0	± 9.6 %
		Y	3.07	70.78	18.49		150.0	
		Z	4.01	75.86	20.68		150.0	
10181-CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	3.25	72.81	21.31	3.01	150.0	± 9.6 %
		Y	2.76	68.54	18.66		150.0	
		Z	3.10	71.11	19.96		150.0	
10182-CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	6.40	86.88	26.67	3.01	150.0	± 9.6 %
		Y	3.75	74.96	21.35		150.0	
		Z	5.35	82.09	24.21		150.0	
10183-AAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	4.55	79.22	22.65	3.01	150.0	± 9.6 %
		Y	3.07	70.75	18.48		150.0	
		Z	4.00	75.82	20.67		150.0	

10184-CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	3.26	72.86	21.33	3.01	150.0	± 9.6 %
		Y	2.77	68.58	18.68		150.0	
		Z	3.11	71.15	19.98		150.0	
10185-CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	6.44	87.01	26.72	3.01	150.0	± 9.6 %
		Y	3.77	75.04	21.39		150.0	
		Z	5.39	82.20	24.26		150.0	
10186-AAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	4.59	79.34	22.70	3.01	150.0	± 9.6 %
		Y	3.08	70.82	18.52		150.0	
		Z	4.03	75.92	20.71		150.0	
10187-CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	3.27	72.94	21.41	3.01	150.0	± 9.6 %
		Y	2.78	68.64	18.75		150.0	
		Z	3.12	71.23	20.06		150.0	
10188-CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	6.82	88.28	27.29	3.01	150.0	± 9.6 %
		Y	3.89	75.71	21.77		150.0	
		Z	5.65	83.21	24.74		150.0	
10189-AAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	4.76	80.11	23.10	3.01	150.0	± 9.6 %
		Y	3.15	71.25	18.80		150.0	
		Z	4.15	76.54	21.06		150.0	
10193-CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.53	67.46	16.67	0.00	150.0	± 9.6 %
		Y	4.43	66.72	16.03		150.0	
		Z	4.45	66.85	16.06		150.0	
10194-CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.69	67.74	16.80	0.00	150.0	± 9.6 %
		Y	4.59	67.01	16.17		150.0	
		Z	4.61	67.14	16.19		150.0	
10195-CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.73	67.77	16.81	0.00	150.0	± 9.6 %
		Y	4.63	67.04	16.19		150.0	
		Z	4.65	67.17	16.21		150.0	
10196-CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.52	67.50	16.68	0.00	150.0	± 9.6 %
		Y	4.43	66.76	16.04		150.0	
		Z	4.45	66.89	16.07		150.0	
10197-CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	X	4.70	67.76	16.80	0.00	150.0	± 9.6 %
		Y	4.60	67.02	16.18		150.0	
		Z	4.62	67.15	16.20		150.0	
10198-CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	X	4.72	67.78	16.82	0.00	150.0	± 9.6 %
		Y	4.63	67.05	16.20		150.0	
		Z	4.65	67.18	16.22		150.0	
10219-CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.48	67.54	16.65	0.00	150.0	± 9.6 %
		Y	4.38	66.77	16.00		150.0	
		Z	4.40	66.90	16.03		150.0	
10220-CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	X	4.69	67.72	16.79	0.00	150.0	± 9.6 %
		Y	4.59	66.99	16.17		150.0	
		Z	4.61	67.12	16.19		150.0	
10221-CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	X	4.73	67.70	16.80	0.00	150.0	± 9.6 %
		Y	4.64	66.99	16.18		150.0	
		Z	4.66	67.11	16.21		150.0	
10222-CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.08	67.77	16.87	0.00	150.0	± 9.6 %
		Y	4.99	67.15	16.32		150.0	
		Z	5.00	67.26	16.33		150.0	

10223-CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	X	5.37	67.97	16.98	0.00	150.0	± 9.6 %
		Y	5.29	67.41	16.48		150.0	
		Z	5.30	67.50	16.48		150.0	
10224-CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	X	5.12	67.89	16.86	0.00	150.0	± 9.6 %
		Y	5.03	67.25	16.30		150.0	
		Z	5.04	67.36	16.31		150.0	
10225-CAB	UMTS-FDD (HSPA+)	X	2.88	67.77	16.20	0.00	150.0	± 9.6 %
		Y	2.69	66.02	14.90		150.0	
		Z	2.72	66.23	15.01		150.0	
10226-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	100.00	135.64	39.51	6.02	65.0	± 9.6 %
		Y	100.00	132.97	38.33		65.0	
		Z	100.00	133.00	38.25		65.0	
10227-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	100.00	132.62	37.95	6.02	65.0	± 9.6 %
		Y	100.00	130.22	36.90		65.0	
		Z	100.00	130.15	36.77		65.0	
10228-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	100.00	146.46	45.19	6.02	65.0	± 9.6 %
		Y	34.13	120.03	37.51		65.0	
		Z	100.00	143.35	43.69		65.0	
10229-CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	100.00	135.38	39.36	6.02	65.0	± 9.6 %
		Y	100.00	132.71	38.18		65.0	
		Z	100.00	132.74	38.10		65.0	
10230-CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	100.00	132.48	37.85	6.02	65.0	± 9.6 %
		Y	88.08	127.82	36.25		65.0	
		Z	100.00	130.00	36.66		65.0	
10231-CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	100.00	146.29	45.07	6.02	65.0	± 9.6 %
		Y	30.78	117.76	36.81		65.0	
		Z	87.84	140.44	42.91		65.0	
10232-CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	100.00	135.40	39.37	6.02	65.0	± 9.6 %
		Y	100.00	132.72	38.19		65.0	
		Z	100.00	132.76	38.11		65.0	
10233-CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	X	100.00	132.50	37.86	6.02	65.0	± 9.6 %
		Y	87.85	127.79	36.24		65.0	
		Z	100.00	130.02	36.67		65.0	
10234-CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	100.00	145.92	44.85	6.02	65.0	± 9.6 %
		Y	28.28	115.76	36.13		65.0	
		Z	76.88	137.31	42.02		65.0	
10235-CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	100.00	135.42	39.38	6.02	65.0	± 9.6 %
		Y	100.00	132.74	38.19		65.0	
		Z	100.00	132.77	38.11		65.0	
10236-CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	100.00	132.43	37.83	6.02	65.0	± 9.6 %
		Y	90.27	128.21	36.33		65.0	
		Z	100.00	129.96	36.64		65.0	
10237-CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	100.00	146.34	45.09	6.02	65.0	± 9.6 %
		Y	31.12	118.02	36.89		65.0	
		Z	89.92	140.98	43.04		65.0	
10238-CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	100.00	135.42	39.38	6.02	65.0	± 9.6 %
		Y	100.00	132.74	38.19		65.0	
		Z	100.00	132.77	38.11		65.0	

10239-CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	100.00	132.53	37.87	6.02	65.0	± 9.6 %
		Y	87.64	127.77	36.24		65.0	
		Z	100.00	130.05	36.68		65.0	
10240-CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	100.00	146.36	45.09	6.02	65.0	± 9.6 %
		Y	30.99	117.95	36.86		65.0	
		Z	89.43	140.87	43.02		65.0	
10241-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	16.27	98.51	32.39	6.98	65.0	± 9.6 %
		Y	11.41	89.10	28.53		65.0	
		Z	13.94	94.00	30.44		65.0	
10242-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	12.63	92.92	30.37	6.98	65.0	± 9.6 %
		Y	9.96	86.21	27.37		65.0	
		Z	13.43	93.24	30.11		65.0	
10243-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	8.45	85.33	28.58	6.98	65.0	± 9.6 %
		Y	7.60	81.57	26.50		65.0	
		Z	9.13	86.24	28.59		65.0	
10244-CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	13.35	87.93	22.65	3.98	65.0	± 9.6 %
		Y	8.15	79.46	19.37		65.0	
		Z	9.47	81.97	20.42		65.0	
10245-CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	11.89	85.85	21.89	3.98	65.0	± 9.6 %
		Y	7.71	78.38	18.91		65.0	
		Z	8.86	80.71	19.89		65.0	
10246-CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	18.16	96.05	25.52	3.98	65.0	± 9.6 %
		Y	9.12	84.14	21.26		65.0	
		Z	9.13	84.46	21.53		65.0	
10247-CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	8.08	81.25	21.31	3.98	65.0	± 9.6 %
		Y	6.75	77.40	19.50		65.0	
		Z	6.72	77.49	19.63		65.0	
10248-CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	7.62	79.85	20.76	3.98	65.0	± 9.6 %
		Y	6.56	76.50	19.13		65.0	
		Z	6.54	76.64	19.27		65.0	
10249-CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	24.82	103.11	28.87	3.98	65.0	± 9.6 %
		Y	12.27	89.83	24.30		65.0	
		Z	11.93	89.67	24.36		65.0	
10250-CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	9.24	84.44	24.47	3.98	65.0	± 9.6 %
		Y	8.13	81.08	22.80		65.0	
		Z	7.98	80.84	22.75		65.0	
10251-CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	8.11	80.73	22.67	3.98	65.0	± 9.6 %
		Y	7.36	78.06	21.25		65.0	
		Z	7.31	78.07	21.31		65.0	
10252-CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	17.12	97.60	28.54	3.98	65.0	± 9.6 %
		Y	11.48	88.93	25.20		65.0	
		Z	11.18	88.66	25.18		65.0	
10253-CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	7.75	79.05	22.48	3.98	65.0	± 9.6 %
		Y	7.26	76.97	21.27		65.0	
		Z	7.23	77.02	21.33		65.0	
10254-CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	8.21	80.04	23.18	3.98	65.0	± 9.6 %
		Y	7.72	78.02	22.02		65.0	
		Z	7.65	77.97	22.01		65.0	

10255-CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	10.91	87.66	25.57	3.98	65.0	± 9.6 %
		Y	9.08	83.14	23.49		65.0	
		Z	8.97	83.05	23.49		65.0	
10256-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	8.22	79.40	18.39	3.98	65.0	± 9.6 %
		Y	5.65	73.45	15.85		65.0	
		Z	6.51	75.65	16.87		65.0	
10257-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	7.20	77.18	17.44	3.98	65.0	± 9.6 %
		Y	5.32	72.29	15.26		65.0	
		Z	6.03	74.24	16.20		65.0	
10258-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	9.18	84.04	20.54	3.98	65.0	± 9.6 %
		Y	5.78	76.46	17.46		65.0	
		Z	5.96	77.19	17.90		65.0	
10259-CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	8.60	82.56	22.49	3.98	65.0	± 9.6 %
		Y	7.32	78.85	20.73		65.0	
		Z	7.24	78.81	20.78		65.0	
10260-CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	8.36	81.74	22.18	3.98	65.0	± 9.6 %
		Y	7.24	78.34	20.53		65.0	
		Z	7.16	78.31	20.58		65.0	
10261-CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	18.36	98.44	28.04	3.98	65.0	± 9.6 %
		Y	11.05	88.23	24.26		65.0	
		Z	10.78	88.05	24.30		65.0	
10262-CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	9.20	84.35	24.41	3.98	65.0	± 9.6 %
		Y	8.11	80.99	22.75		65.0	
		Z	7.96	80.76	22.70		65.0	
10263-CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	8.09	80.70	22.66	3.98	65.0	± 9.6 %
		Y	7.34	78.03	21.25		65.0	
		Z	7.30	78.05	21.30		65.0	
10264-CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	16.79	97.20	28.40	3.98	65.0	± 9.6 %
		Y	11.31	88.64	25.08		65.0	
		Z	11.04	88.40	25.06		65.0	
10265-CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	7.98	79.75	22.82	3.98	65.0	± 9.6 %
		Y	7.43	77.56	21.56		65.0	
		Z	7.40	77.60	21.61		65.0	
10266-CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	8.48	80.82	23.59	3.98	65.0	± 9.6 %
		Y	7.94	78.70	22.39		65.0	
		Z	7.87	78.63	22.38		65.0	
10267-CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	11.64	88.51	25.67	3.98	65.0	± 9.6 %
		Y	9.52	83.71	23.50		65.0	
		Z	9.41	83.63	23.51		65.0	
10268-CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	8.24	78.53	22.77	3.98	65.0	± 9.6 %
		Y	7.91	77.00	21.81		65.0	
		Z	7.87	77.01	21.82		65.0	
10269-CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	8.11	77.91	22.56	3.98	65.0	± 9.6 %
		Y	7.83	76.51	21.65		65.0	
		Z	7.79	76.52	21.67		65.0	
10270-CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	9.23	82.14	23.50	3.98	65.0	± 9.6 %
		Y	8.41	79.54	22.12		65.0	
		Z	8.35	79.50	22.12		65.0	

10274-CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.76	68.76	16.46	0.00	150.0	± 9.6 %
		Y	2.49	66.41	14.83		150.0	
		Z	2.53	66.67	14.98		150.0	
10275-CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	2.12	74.09	18.86	0.00	150.0	± 9.6 %
		Y	1.49	67.15	14.79		150.0	
		Z	1.54	67.64	15.12		150.0	
10277-CAA	PHS (QPSK)	X	2.88	63.80	8.79	9.03	50.0	± 9.6 %
		Y	3.01	63.78	8.83		50.0	
		Z	3.05	64.19	9.19		50.0	
10278-CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	8.26	79.76	18.67	9.03	50.0	± 9.6 %
		Y	6.73	76.11	17.16		50.0	
		Z	7.17	77.48	17.92		50.0	
10279-CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	8.42	80.01	18.83	9.03	50.0	± 9.6 %
		Y	6.87	76.37	17.31		50.0	
		Z	7.31	77.72	18.06		50.0	
10290-AAB	CDMA2000, RC1, SO55, Full Rate	X	4.48	85.27	20.06	0.00	150.0	± 9.6 %
		Y	1.10	65.94	11.72		150.0	
		Z	1.20	66.94	12.44		150.0	
10291-AAB	CDMA2000, RC3, SO55, Full Rate	X	3.17	85.37	20.15	0.00	150.0	± 9.6 %
		Y	0.66	63.70	10.35		150.0	
		Z	0.71	64.55	11.10		150.0	
10292-AAB	CDMA2000, RC3, SO32, Full Rate	X	100.00	135.14	33.47	0.00	150.0	± 9.6 %
		Y	0.79	66.62	12.22		150.0	
		Z	0.89	68.13	13.28		150.0	
10293-AAB	CDMA2000, RC3, SO3, Full Rate	X	100.00	139.96	35.72	0.00	150.0	± 9.6 %
		Y	1.17	71.61	14.96		150.0	
		Z	1.38	73.91	16.26		150.0	
10295-AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	35.08	108.12	31.08	9.03	50.0	± 9.6 %
		Y	20.38	97.32	27.58		50.0	
		Z	17.64	95.44	27.23		50.0	
10297-AAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	3.13	73.17	18.60	0.00	150.0	± 9.6 %
		Y	2.57	69.04	16.12		150.0	
		Z	2.62	69.39	16.31		150.0	
10298-AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	2.35	75.19	17.28	0.00	150.0	± 9.6 %
		Y	1.28	65.68	12.31		150.0	
		Z	1.36	66.38	12.83		150.0	
10299-AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	8.70	86.10	19.99	0.00	150.0	± 9.6 %
		Y	2.22	68.10	12.86		150.0	
		Z	3.06	71.91	14.57		150.0	
10300-AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	2.38	68.58	12.60	0.00	150.0	± 9.6 %
		Y	1.65	63.94	10.07		150.0	
		Z	1.93	65.55	10.93		150.0	
10301-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	5.25	68.38	18.89	4.17	80.0	± 9.6 %
		Y	5.02	66.92	17.88		80.0	
		Z	5.12	67.49	18.20		80.0	
10302-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	5.61	68.44	19.34	4.96	80.0	± 9.6 %
		Y	5.46	67.42	18.57		80.0	
		Z	5.54	67.86	18.81		80.0	

10303-AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	5.39	68.25	19.24	4.96	80.0	± 9.6 %
		Y	5.24	67.20	18.45		80.0	
		Z	5.33	67.66	18.71		80.0	
10304-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	5.16	67.97	18.64	4.17	80.0	± 9.6 %
		Y	5.01	66.89	17.84		80.0	
		Z	5.08	67.29	18.05		80.0	
10305-AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	5.81	74.53	22.78	6.02	50.0	± 9.6 %
		Y	5.47	72.49	21.48		50.0	
		Z	5.66	73.42	22.02		50.0	
10306-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	5.37	69.80	20.53	6.02	50.0	± 9.6 %
		Y	5.32	69.74	20.44		50.0	
		Z	5.31	69.10	19.95		50.0	
10307-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	5.31	70.07	20.52	6.02	50.0	± 9.6 %
		Y	5.29	70.16	20.50		50.0	
		Z	5.24	69.32	19.92		50.0	
10308-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	5.34	70.48	20.75	6.02	50.0	± 9.6 %
		Y	5.32	70.58	20.74		50.0	
		Z	5.26	69.68	20.12		50.0	
10309-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	5.42	70.01	20.68	6.02	50.0	± 9.6 %
		Y	5.38	69.94	20.58		50.0	
		Z	5.36	69.30	20.10		50.0	
10310-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	5.35	69.95	20.54	6.02	50.0	± 9.6 %
		Y	5.31	69.95	20.48		50.0	
		Z	5.28	69.22	19.95		50.0	
10311-AAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.50	71.98	17.99	0.00	150.0	± 9.6 %
		Y	2.92	68.34	15.81		150.0	
		Z	2.98	68.69	15.98		150.0	
10313-AAA	iDEN 1:3	X	24.72	98.44	24.84	6.99	70.0	± 9.6 %
		Y	8.44	82.02	19.36		70.0	
		Z	9.04	83.60	20.13		70.0	
10314-AAA	iDEN 1:6	X	100.00	129.19	36.01	10.00	30.0	± 9.6 %
		Y	18.20	98.60	27.51		30.0	
		Z	15.61	97.02	27.37		30.0	
10315-AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.22	67.10	17.65	0.17	150.0	± 9.6 %
		Y	1.08	63.94	14.91		150.0	
		Z	1.11	64.20	15.09		150.0	
10316-AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	X	4.60	67.58	16.88	0.17	150.0	± 9.6 %
		Y	4.51	66.87	16.26		150.0	
		Z	4.53	66.99	16.28		150.0	
10317-AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.60	67.58	16.88	0.17	150.0	± 9.6 %
		Y	4.51	66.87	16.26		150.0	
		Z	4.53	66.99	16.28		150.0	
10400-AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.67	67.82	16.81	0.00	150.0	± 9.6 %
		Y	4.57	67.06	16.16		150.0	
		Z	4.59	67.19	16.20		150.0	
10401-AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.39	67.87	16.91	0.00	150.0	± 9.6 %
		Y	5.33	67.37	16.43		150.0	
		Z	5.31	67.36	16.38		150.0	

10402-AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.63	68.05	16.85	0.00	150.0	± 9.6 %
		Y	5.55	67.51	16.37		150.0	
		Z	5.56	67.62	16.37		150.0	
10403-AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	4.48	85.27	20.06	0.00	115.0	± 9.6 %
		Y	1.10	65.94	11.72		115.0	
		Z	1.20	66.94	12.44		115.0	
10404-AAB	CDMA2000 (1xEV-DO, Rev. A)	X	4.48	85.27	20.06	0.00	115.0	± 9.6 %
		Y	1.10	65.94	11.72		115.0	
		Z	1.20	66.94	12.44		115.0	
10406-AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	100.00	120.98	29.52	0.00	100.0	± 9.6 %
		Y	100.00	120.29	29.15		100.0	
		Z	100.00	115.60	27.07		100.0	
10410-AAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	X	100.00	128.17	33.13	3.23	80.0	± 9.6 %
		Y	100.00	122.84	30.72		80.0	
		Z	100.00	123.34	30.96		80.0	
10415-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	1.09	65.52	16.73	0.00	150.0	± 9.6 %
		Y	0.97	62.71	14.12		150.0	
		Z	1.00	63.02	14.33		150.0	
10416-AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	X	4.53	67.49	16.74	0.00	150.0	± 9.6 %
		Y	4.43	66.75	16.11		150.0	
		Z	4.45	66.88	16.14		150.0	
10417-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.53	67.49	16.74	0.00	150.0	± 9.6 %
		Y	4.43	66.75	16.11		150.0	
		Z	4.45	66.88	16.14		150.0	
10418-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.53	67.70	16.80	0.00	150.0	± 9.6 %
		Y	4.42	66.92	16.14		150.0	
		Z	4.44	67.05	16.17		150.0	
10419-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.54	67.63	16.79	0.00	150.0	± 9.6 %
		Y	4.44	66.87	16.14		150.0	
		Z	4.46	67.00	16.16		150.0	
10422-AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.65	67.58	16.78	0.00	150.0	± 9.6 %
		Y	4.56	66.86	16.16		150.0	
		Z	4.57	66.99	16.18		150.0	
10423-AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	4.80	67.87	16.87	0.00	150.0	± 9.6 %
		Y	4.70	67.15	16.26		150.0	
		Z	4.72	67.28	16.28		150.0	
10424-AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.72	67.84	16.86	0.00	150.0	± 9.6 %
		Y	4.63	67.10	16.23		150.0	
		Z	4.65	67.23	16.26		150.0	
10425-AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.33	67.99	16.97	0.00	150.0	± 9.6 %
		Y	5.25	67.41	16.45		150.0	
		Z	5.25	67.49	16.44		150.0	
10426-AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.36	68.10	17.02	0.00	150.0	± 9.6 %
		Y	5.28	67.52	16.50		150.0	
		Z	5.27	67.56	16.48		150.0	

10427-AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.34	67.96	16.95	0.00	150.0	± 9.6 %
		Y	5.27	67.41	16.44		150.0	
		Z	5.27	67.48	16.43		150.0	
10430-AAD	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.46	73.02	19.14	0.00	150.0	± 9.6 %
		Y	4.09	70.89	17.83		150.0	
		Z	4.08	70.81	17.76		150.0	
10431-AAD	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.21	68.30	16.82	0.00	150.0	± 9.6 %
		Y	4.07	67.26	16.01		150.0	
		Z	4.09	67.40	16.06		150.0	
10432-AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.50	68.00	16.85	0.00	150.0	± 9.6 %
		Y	4.39	67.15	16.15		150.0	
		Z	4.41	67.28	16.18		150.0	
10433-AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	4.74	67.87	16.88	0.00	150.0	± 9.6 %
		Y	4.64	67.13	16.25		150.0	
		Z	4.66	67.26	16.28		150.0	
10434-AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.69	74.39	19.24	0.00	150.0	± 9.6 %
		Y	4.15	71.62	17.66		150.0	
		Z	4.14	71.55	17.61		150.0	
10435-AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	127.90	33.00	3.23	80.0	± 9.6 %
		Y	100.00	122.60	30.61		80.0	
		Z	100.00	123.10	30.85		80.0	
10447-AAD	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.55	68.74	16.21	0.00	150.0	± 9.6 %
		Y	3.32	67.06	15.04		150.0	
		Z	3.36	67.27	15.15		150.0	
10448-AAD	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	4.06	68.11	16.71	0.00	150.0	± 9.6 %
		Y	3.92	67.04	15.87		150.0	
		Z	3.95	67.19	15.92		150.0	
10449-AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.33	67.85	16.77	0.00	150.0	± 9.6 %
		Y	4.21	66.97	16.04		150.0	
		Z	4.23	67.10	16.08		150.0	
10450-AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.52	67.67	16.75	0.00	150.0	± 9.6 %
		Y	4.42	66.89	16.10		150.0	
		Z	4.44	67.03	16.13		150.0	
10451-AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.45	68.98	15.77	0.00	150.0	± 9.6 %
		Y	3.16	67.01	14.46		150.0	
		Z	3.20	67.26	14.61		150.0	
10456-AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.26	68.57	17.12	0.00	150.0	± 9.6 %
		Y	6.18	68.07	16.68		150.0	
		Z	6.17	68.13	16.66		150.0	
10457-AAA	UMTS-FDD (DC-HSDPA)	X	3.81	66.13	16.47	0.00	150.0	± 9.6 %
		Y	3.74	65.42	15.81		150.0	
		Z	3.75	65.56	15.84		150.0	
10458-AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	4.31	73.65	18.51	0.00	150.0	± 9.6 %
		Y	3.75	70.62	16.79		150.0	
		Z	3.77	70.71	16.85		150.0	
10459-AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	5.06	69.53	18.49	0.00	150.0	± 9.6 %
		Y	4.88	68.49	17.80		150.0	
		Z	4.89	68.50	17.75		150.0	

10460-AAA	UMTS-FDD (WCDMA, AMR)	X	1.79	82.82	23.49	0.00	150.0	± 9.6 %
		Y	0.80	66.75	14.86		150.0	
		Z	0.85	67.43	15.39		150.0	
10461-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	139.92	38.40	3.29	80.0	± 9.6 %
		Y	100.00	128.97	33.56		80.0	
		Z	100.00	131.32	34.60		80.0	
10462-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	112.90	25.69	3.23	80.0	± 9.6 %
		Y	100.00	106.15	22.85		80.0	
		Z	100.00	106.59	22.96		80.0	
10463-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	106.70	22.85	3.23	80.0	± 9.6 %
		Y	3.25	71.44	12.92		80.0	
		Z	68.67	98.24	19.92		80.0	
10464-AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	137.68	37.15	3.23	80.0	± 9.6 %
		Y	100.00	126.27	32.14		80.0	
		Z	100.00	128.76	33.25		80.0	
10465-AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	111.97	25.26	3.23	80.0	± 9.6 %
		Y	31.42	94.43	20.07		80.0	
		Z	100.00	105.83	22.60		80.0	
10466-AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	105.87	22.48	3.23	80.0	± 9.6 %
		Y	2.40	68.58	11.83		80.0	
		Z	12.16	82.88	16.14		80.0	
10467-AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	138.08	37.33	3.23	80.0	± 9.6 %
		Y	100.00	126.59	32.28		80.0	
		Z	100.00	129.09	33.39		80.0	
10468-AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	112.31	25.41	3.23	80.0	± 9.6 %
		Y	53.66	99.74	21.34		80.0	
		Z	100.00	106.08	22.72		80.0	
10469-AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	105.91	22.49	3.23	80.0	± 9.6 %
		Y	2.42	68.68	11.86		80.0	
		Z	12.90	83.40	16.28		80.0	
10470-AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	138.16	37.35	3.23	80.0	± 9.6 %
		Y	100.00	126.63	32.29		80.0	
		Z	100.00	129.14	33.40		80.0	
10471-AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	112.22	25.37	3.23	80.0	± 9.6 %
		Y	51.21	99.22	21.20		80.0	
		Z	100.00	106.00	22.68		80.0	
10472-AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	105.80	22.44	3.23	80.0	± 9.6 %
		Y	2.39	68.55	11.80		80.0	
		Z	12.36	82.98	16.14		80.0	
10473-AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	138.13	37.34	3.23	80.0	± 9.6 %
		Y	100.00	126.59	32.27		80.0	
		Z	100.00	129.10	33.39		80.0	
10474-AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	112.23	25.37	3.23	80.0	± 9.6 %
		Y	49.67	98.93	21.14		80.0	
		Z	100.00	106.00	22.67		80.0	
10475-AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	105.82	22.45	3.23	80.0	± 9.6 %
		Y	2.37	68.49	11.78		80.0	
		Z	12.04	82.77	16.09		80.0	

10477-AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	111.93	25.23	3.23	80.0	± 9.6 %
		Y	33.07	94.87	20.15		80.0	
		Z	100.00	105.75	22.56		80.0	
10478-AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	105.71	22.40	3.23	80.0	± 9.6 %
		Y	2.34	68.36	11.72		80.0	
		Z	11.36	82.22	15.93		80.0	
10479-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	130.84	35.89	3.23	80.0	± 9.6 %
		Y	60.80	117.61	31.49		80.0	
		Z	100.00	126.40	33.86		80.0	
10480-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	117.92	29.69	3.23	80.0	± 9.6 %
		Y	41.60	102.80	25.25		80.0	
		Z	100.00	114.58	28.17		80.0	
10481-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	115.37	28.42	3.23	80.0	± 9.6 %
		Y	19.43	91.87	21.88		80.0	
		Z	100.00	112.23	27.01		80.0	
10482-AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	40.52	108.24	27.79	2.23	80.0	± 9.6 %
		Y	4.25	75.83	17.60		80.0	
		Z	4.42	76.58	18.04		80.0	
10483-AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	115.06	28.63	2.23	80.0	± 9.6 %
		Y	6.47	77.91	17.87		80.0	
		Z	9.56	83.29	19.85		80.0	
10484-AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	85.92	112.69	28.04	2.23	80.0	± 9.6 %
		Y	5.56	75.79	17.11		80.0	
		Z	7.75	80.38	18.90		80.0	
10485-AAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	19.76	101.41	27.69	2.23	80.0	± 9.6 %
		Y	5.05	78.87	19.93		80.0	
		Z	5.01	78.91	20.06		80.0	
10486-AAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.97	81.23	20.60	2.23	80.0	± 9.6 %
		Y	3.90	71.80	16.61		80.0	
		Z	3.95	72.12	16.83		80.0	
10487-AAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	6.39	79.59	20.00	2.23	80.0	± 9.6 %
		Y	3.82	71.17	16.33		80.0	
		Z	3.87	71.50	16.55		80.0	
10488-AAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	8.20	87.03	24.46	2.23	80.0	± 9.6 %
		Y	4.80	76.79	20.15		80.0	
		Z	4.76	76.76	20.19		80.0	
10489-AAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.19	76.32	20.47	2.23	80.0	± 9.6 %
		Y	4.15	71.71	18.11		80.0	
		Z	4.14	71.71	18.13		80.0	
10490-AAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.15	75.62	20.19	2.23	80.0	± 9.6 %
		Y	4.21	71.41	18.00		80.0	
		Z	4.20	71.42	18.02		80.0	
10491-AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.21	79.96	22.14	2.23	80.0	± 9.6 %
		Y	4.67	74.12	19.33		80.0	
		Z	4.66	74.16	19.37		80.0	
10492-AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.95	73.35	19.65	2.23	80.0	± 9.6 %
		Y	4.37	70.48	18.00		80.0	
		Z	4.37	70.50	18.01		80.0	

10493-AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.96	72.97	19.49	2.23	80.0	± 9.6 %
		Y	4.42	70.28	17.92		80.0	
		Z	4.42	70.31	17.93		80.0	
10494-AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.46	83.10	23.12	2.23	80.0	± 9.6 %
		Y	5.17	75.85	19.87		80.0	
		Z	5.16	75.90	19.91		80.0	
10495-AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.04	73.86	19.93	2.23	80.0	± 9.6 %
		Y	4.43	70.87	18.22		80.0	
		Z	4.42	70.89	18.23		80.0	
10496-AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.01	73.19	19.67	2.23	80.0	± 9.6 %
		Y	4.48	70.51	18.11		80.0	
		Z	4.47	70.52	18.11		80.0	
10497-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	18.61	93.71	22.25	2.23	80.0	± 9.6 %
		Y	2.45	68.31	13.45		80.0	
		Z	2.72	69.77	14.23		80.0	
10498-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.09	64.80	11.03	2.23	80.0	± 9.6 %
		Y	1.58	61.28	9.05		80.0	
		Z	1.67	61.97	9.56		80.0	
10499-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.86	63.35	10.18	2.23	80.0	± 9.6 %
		Y	1.52	60.71	8.61		80.0	
		Z	1.60	61.32	9.07		80.0	
10500-AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	11.58	93.03	25.75	2.23	80.0	± 9.6 %
		Y	4.82	77.65	19.90		80.0	
		Z	4.78	77.66	19.99		80.0	
10501-AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.07	79.10	20.50	2.23	80.0	± 9.6 %
		Y	4.06	71.97	17.26		80.0	
		Z	4.07	72.11	17.38		80.0	
10502-AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.97	78.41	20.16	2.23	80.0	± 9.6 %
		Y	4.08	71.66	17.07		80.0	
		Z	4.10	71.82	17.20		80.0	
10503-AAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	8.02	86.64	24.31	2.23	80.0	± 9.6 %
		Y	4.72	76.54	20.04		80.0	
		Z	4.70	76.53	20.08		80.0	
10504-AAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.16	76.18	20.40	2.23	80.0	± 9.6 %
		Y	4.13	71.59	18.04		80.0	
		Z	4.12	71.61	18.07		80.0	
10505-AAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.12	75.50	20.12	2.23	80.0	± 9.6 %
		Y	4.19	71.30	17.93		80.0	
		Z	4.18	71.32	17.96		80.0	
10506-AAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.36	82.85	23.02	2.23	80.0	± 9.6 %
		Y	5.12	75.68	19.79		80.0	
		Z	5.11	75.74	19.83		80.0	
10507-AAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.02	73.79	19.89	2.23	80.0	± 9.6 %
		Y	4.41	70.80	18.18		80.0	
		Z	4.40	70.83	18.19		80.0	

10508-AAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.99	73.10	19.63	2.23	80.0	± 9.6 %
		Y	4.46	70.43	18.06		80.0	
		Z	4.45	70.45	18.07		80.0	
10509-AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.45	78.02	21.23	2.23	80.0	± 9.6 %
		Y	5.21	73.57	19.00		80.0	
		Z	5.21	73.66	19.04		80.0	
10510-AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.25	72.27	19.36	2.23	80.0	± 9.6 %
		Y	4.83	70.16	18.06		80.0	
		Z	4.83	70.21	18.07		80.0	
10511-AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.25	71.79	19.19	2.23	80.0	± 9.6 %
		Y	4.87	69.87	17.98		80.0	
		Z	4.86	69.92	17.98		80.0	
10512-AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.59	81.45	22.34	2.23	80.0	± 9.6 %
		Y	5.59	75.41	19.56		80.0	
		Z	5.60	75.54	19.63		80.0	
10513-AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.21	72.82	19.60	2.23	80.0	± 9.6 %
		Y	4.74	70.48	18.19		80.0	
		Z	4.74	70.53	18.20		80.0	
10514-AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.14	72.06	19.33	2.23	80.0	± 9.6 %
		Y	4.73	69.99	18.04		80.0	
		Z	4.73	70.04	18.05		80.0	
10515-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	1.06	65.96	16.97	0.00	150.0	± 9.6 %
		Y	0.93	62.85	14.14		150.0	
		Z	0.96	63.17	14.37		150.0	
10516-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	15.96	138.00	41.02	0.00	150.0	± 9.6 %
		Y	0.51	67.83	15.27		150.0	
		Z	0.56	68.75	16.08		150.0	
10517-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	1.02	71.00	19.36	0.00	150.0	± 9.6 %
		Y	0.77	64.31	14.46		150.0	
		Z	0.80	64.76	14.81		150.0	
10518-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.52	67.59	16.74	0.00	150.0	± 9.6 %
		Y	4.42	66.83	16.09		150.0	
		Z	4.44	66.96	16.12		150.0	
10519-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.68	67.77	16.83	0.00	150.0	± 9.6 %
		Y	4.59	67.03	16.20		150.0	
		Z	4.61	67.16	16.22		150.0	
10520-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.54	67.75	16.77	0.00	150.0	± 9.6 %
		Y	4.44	66.97	16.11		150.0	
		Z	4.46	67.10	16.14		150.0	
10521-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	4.48	67.75	16.76	0.00	150.0	± 9.6 %
		Y	4.37	66.95	16.09		150.0	
		Z	4.39	67.08	16.12		150.0	
10522-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.54	67.89	16.87	0.00	150.0	± 9.6 %
		Y	4.43	67.08	16.19		150.0	
		Z	4.45	67.21	16.22		150.0	

10523-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.45	67.82	16.76	0.00	150.0	± 9.6 %
		Y	4.33	66.98	16.06		150.0	
		Z	4.35	67.12	16.09		150.0	
10524-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.48	67.81	16.84	0.00	150.0	± 9.6 %
		Y	4.38	67.00	16.16		150.0	
		Z	4.40	67.13	16.19		150.0	
10525-AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.50	66.88	16.44	0.00	150.0	± 9.6 %
		Y	4.39	66.07	15.76		150.0	
		Z	4.41	66.21	15.79		150.0	
10526-AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.65	67.22	16.57	0.00	150.0	± 9.6 %
		Y	4.53	66.39	15.90		150.0	
		Z	4.55	66.53	15.93		150.0	
10527-AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.58	67.20	16.52	0.00	150.0	± 9.6 %
		Y	4.45	66.35	15.83		150.0	
		Z	4.48	66.49	15.86		150.0	
10528-AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.59	67.21	16.55	0.00	150.0	± 9.6 %
		Y	4.47	66.37	15.86		150.0	
		Z	4.49	66.51	15.89		150.0	
10529-AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.59	67.21	16.55	0.00	150.0	± 9.6 %
		Y	4.47	66.37	15.86		150.0	
		Z	4.49	66.51	15.89		150.0	
10531-AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.57	67.29	16.56	0.00	150.0	± 9.6 %
		Y	4.45	66.43	15.86		150.0	
		Z	4.47	66.57	15.89		150.0	
10532-AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.44	67.16	16.50	0.00	150.0	± 9.6 %
		Y	4.32	66.28	15.78		150.0	
		Z	4.34	66.42	15.82		150.0	
10533-AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.60	67.29	16.56	0.00	150.0	± 9.6 %
		Y	4.48	66.43	15.86		150.0	
		Z	4.50	66.57	15.89		150.0	
10534-AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	5.13	67.13	16.52	0.00	150.0	± 9.6 %
		Y	5.03	66.47	15.96		150.0	
		Z	5.04	66.59	15.97		150.0	
10535-AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.19	67.31	16.61	0.00	150.0	± 9.6 %
		Y	5.09	66.65	16.05		150.0	
		Z	5.10	66.76	16.05		150.0	
10536-AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	5.07	67.31	16.59	0.00	150.0	± 9.6 %
		Y	4.97	66.61	16.00		150.0	
		Z	4.98	66.72	16.01		150.0	
10537-AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.12	67.24	16.56	0.00	150.0	± 9.6 %
		Y	5.02	66.57	15.99		150.0	
		Z	5.03	66.68	16.00		150.0	
10538-AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.20	67.22	16.58	0.00	150.0	± 9.6 %
		Y	5.10	66.57	16.03		150.0	
		Z	5.11	66.68	16.04		150.0	
10540-AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	5.13	67.21	16.60	0.00	150.0	± 9.6 %
		Y	5.03	66.56	16.04		150.0	
		Z	5.04	66.66	16.05		150.0	

10541-AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	5.11	67.09	16.53	0.00	150.0	± 9.6 %
		Y	5.01	66.44	15.97		150.0	
		Z	5.02	66.56	15.98		150.0	
10542-AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.26	67.17	16.58	0.00	150.0	± 9.6 %
		Y	5.17	66.54	16.04		150.0	
		Z	5.18	66.66	16.05		150.0	
10543-AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.32	67.17	16.60	0.00	150.0	± 9.6 %
		Y	5.23	66.56	16.07		150.0	
		Z	5.24	66.67	16.08		150.0	
10544-AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.45	67.16	16.47	0.00	150.0	± 9.6 %
		Y	5.36	66.58	15.96		150.0	
		Z	5.37	66.70	15.97		150.0	
10545-AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	5.65	67.64	16.67	0.00	150.0	± 9.6 %
		Y	5.55	67.04	16.15		150.0	
		Z	5.55	67.11	16.14		150.0	
10546-AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.50	67.33	16.52	0.00	150.0	± 9.6 %
		Y	5.40	66.73	16.01		150.0	
		Z	5.41	66.85	16.02		150.0	
10547-AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	X	5.57	67.40	16.55	0.00	150.0	± 9.6 %
		Y	5.48	66.81	16.04		150.0	
		Z	5.49	66.91	16.05		150.0	
10548-AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	5.80	68.28	16.97	0.00	150.0	± 9.6 %
		Y	5.70	67.67	16.45		150.0	
		Z	5.67	67.67	16.40		150.0	
10550-AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.55	67.47	16.61	0.00	150.0	± 9.6 %
		Y	5.46	66.86	16.09		150.0	
		Z	5.45	66.94	16.08		150.0	
10551-AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.52	67.37	16.52	0.00	150.0	± 9.6 %
		Y	5.43	66.79	16.01		150.0	
		Z	5.44	66.89	16.02		150.0	
10552-AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.46	67.26	16.47	0.00	150.0	± 9.6 %
		Y	5.37	66.65	15.94		150.0	
		Z	5.38	66.78	15.96		150.0	
10553-AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.53	67.23	16.48	0.00	150.0	± 9.6 %
		Y	5.43	66.65	15.98		150.0	
		Z	5.45	66.78	15.99		150.0	
10554-AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.87	67.48	16.53	0.00	150.0	± 9.6 %
		Y	5.78	66.94	16.06		150.0	
		Z	5.78	67.05	16.06		150.0	
10555-AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	5.99	67.78	16.66	0.00	150.0	± 9.6 %
		Y	5.90	67.23	16.19		150.0	
		Z	5.89	67.32	16.18		150.0	
10556-AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	6.02	67.86	16.69	0.00	150.0	± 9.6 %
		Y	5.93	67.30	16.21		150.0	
		Z	5.92	67.39	16.21		150.0	
10557-AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	5.97	67.72	16.64	0.00	150.0	± 9.6 %
		Y	5.88	67.16	16.17		150.0	
		Z	5.88	67.27	16.17		150.0	

10558-AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	6.01	67.87	16.73	0.00	150.0	± 9.6 %
		Y	5.92	67.31	16.26		150.0	
		Z	5.92	67.42	16.26		150.0	
10560-AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	6.00	67.71	16.69	0.00	150.0	± 9.6 %
		Y	5.91	67.17	16.22		150.0	
		Z	5.92	67.28	16.23		150.0	
10561-AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	5.94	67.72	16.73	0.00	150.0	± 9.6 %
		Y	5.85	67.17	16.26		150.0	
		Z	5.85	67.26	16.25		150.0	
10562-AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.02	67.98	16.86	0.00	150.0	± 9.6 %
		Y	5.93	67.43	16.39		150.0	
		Z	5.93	67.53	16.39		150.0	
10563-AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	6.11	67.87	16.77	0.00	150.0	± 9.6 %
		Y	6.03	67.36	16.32		150.0	
		Z	6.01	67.42	16.30		150.0	
10564-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)	X	4.84	67.60	16.86	0.46	150.0	± 9.6 %
		Y	4.76	66.94	16.28		150.0	
		Z	4.77	67.07	16.31		150.0	
10565-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle)	X	5.05	68.00	17.15	0.46	150.0	± 9.6 %
		Y	4.96	67.35	16.59		150.0	
		Z	4.98	67.47	16.60		150.0	
10566-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle)	X	4.89	67.87	16.99	0.46	150.0	± 9.6 %
		Y	4.80	67.18	16.40		150.0	
		Z	4.82	67.31	16.42		150.0	
10567-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle)	X	4.92	68.26	17.34	0.46	150.0	± 9.6 %
		Y	4.83	67.55	16.75		150.0	
		Z	4.84	67.66	16.76		150.0	
10568-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle)	X	4.81	67.69	16.79	0.46	150.0	± 9.6 %
		Y	4.72	67.00	16.19		150.0	
		Z	4.74	67.13	16.23		150.0	
10569-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle)	X	4.90	68.45	17.47	0.46	150.0	± 9.6 %
		Y	4.80	67.71	16.85		150.0	
		Z	4.82	67.82	16.85		150.0	
10570-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle)	X	4.91	68.26	17.37	0.46	150.0	± 9.6 %
		Y	4.82	67.54	16.77		150.0	
		Z	4.84	67.65	16.78		150.0	
10571-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.39	68.54	18.34	0.46	130.0	± 9.6 %
		Y	1.22	65.10	15.55		130.0	
		Z	1.24	65.31	15.71		130.0	
10572-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.43	69.55	18.91	0.46	130.0	± 9.6 %
		Y	1.24	65.69	15.90		130.0	
		Z	1.26	65.89	16.05		130.0	
10573-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	100.00	159.88	44.36	0.46	130.0	± 9.6 %
		Y	2.62	87.08	22.76		130.0	
		Z	2.75	88.34	23.60		130.0	
10574-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	2.30	83.33	25.10	0.46	130.0	± 9.6 %
		Y	1.38	71.49	18.69		130.0	
		Z	1.40	71.55	18.82		130.0	

10575-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)	X	4.65	67.47	16.97	0.46	130.0	± 9.6 %
		Y	4.56	66.80	16.37		130.0	
		Z	4.58	66.92	16.39		130.0	
10576-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	X	4.68	67.67	17.04	0.46	130.0	± 9.6 %
		Y	4.59	66.98	16.44		130.0	
		Z	4.61	67.09	16.46		130.0	
10577-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	X	4.85	67.90	17.18	0.46	130.0	± 9.6 %
		Y	4.77	67.23	16.59		130.0	
		Z	4.79	67.34	16.61		130.0	
10578-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	X	4.76	68.08	17.30	0.46	130.0	± 9.6 %
		Y	4.67	67.37	16.69		130.0	
		Z	4.69	67.47	16.70		130.0	
10579-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	X	4.52	67.37	16.63	0.46	130.0	± 9.6 %
		Y	4.44	66.66	16.00		130.0	
		Z	4.46	66.79	16.04		130.0	
10580-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	X	4.57	67.45	16.67	0.46	130.0	± 9.6 %
		Y	4.48	66.73	16.04		130.0	
		Z	4.51	66.87	16.08		130.0	
10581-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	X	4.68	68.20	17.30	0.46	130.0	± 9.6 %
		Y	4.58	67.44	16.65		130.0	
		Z	4.59	67.55	16.66		130.0	
10582-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	X	4.46	67.16	16.43	0.46	130.0	± 9.6 %
		Y	4.38	66.43	15.80		130.0	
		Z	4.40	66.59	15.85		130.0	
10583-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.65	67.47	16.97	0.46	130.0	± 9.6 %
		Y	4.56	66.80	16.37		130.0	
		Z	4.58	66.92	16.39		130.0	
10584-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.68	67.67	17.04	0.46	130.0	± 9.6 %
		Y	4.59	66.98	16.44		130.0	
		Z	4.61	67.09	16.46		130.0	
10585-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	4.85	67.90	17.18	0.46	130.0	± 9.6 %
		Y	4.77	67.23	16.59		130.0	
		Z	4.79	67.34	16.61		130.0	
10586-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.76	68.08	17.30	0.46	130.0	± 9.6 %
		Y	4.67	67.37	16.69		130.0	
		Z	4.69	67.47	16.70		130.0	
10587-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.52	67.37	16.63	0.46	130.0	± 9.6 %
		Y	4.44	66.66	16.00		130.0	
		Z	4.46	66.79	16.04		130.0	
10588-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.57	67.45	16.67	0.46	130.0	± 9.6 %
		Y	4.48	66.73	16.04		130.0	
		Z	4.51	66.87	16.08		130.0	
10589-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.68	68.20	17.30	0.46	130.0	± 9.6 %
		Y	4.58	67.44	16.65		130.0	
		Z	4.59	67.55	16.66		130.0	
10590-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.46	67.16	16.43	0.46	130.0	± 9.6 %
		Y	4.38	66.43	15.80		130.0	
		Z	4.40	66.59	15.85		130.0	

10591-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.79	67.49	17.04	0.46	130.0	± 9.6 %
		Y	4.72	66.87	16.48		130.0	
		Z	4.73	66.98	16.49		130.0	
10592-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	4.93	67.82	17.17	0.46	130.0	± 9.6 %
		Y	4.85	67.18	16.61		130.0	
		Z	4.87	67.29	16.62		130.0	
10593-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	4.85	67.72	17.05	0.46	130.0	± 9.6 %
		Y	4.77	67.07	16.48		130.0	
		Z	4.79	67.19	16.50		130.0	
10594-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	4.91	67.89	17.21	0.46	130.0	± 9.6 %
		Y	4.83	67.24	16.64		130.0	
		Z	4.84	67.35	16.65		130.0	
10595-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	4.88	67.89	17.13	0.46	130.0	± 9.6 %
		Y	4.79	67.21	16.54		130.0	
		Z	4.81	67.33	16.56		130.0	
10596-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	4.81	67.89	17.14	0.46	130.0	± 9.6 %
		Y	4.73	67.20	16.54		130.0	
		Z	4.75	67.32	16.56		130.0	
10597-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	4.76	67.77	17.01	0.46	130.0	± 9.6 %
		Y	4.68	67.08	16.41		130.0	
		Z	4.70	67.20	16.43		130.0	
10598-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.75	67.99	17.26	0.46	130.0	± 9.6 %
		Y	4.66	67.29	16.66		130.0	
		Z	4.68	67.40	16.67		130.0	
10599-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.46	67.90	17.20	0.46	130.0	± 9.6 %
		Y	5.39	67.38	16.72		130.0	
		Z	5.39	67.43	16.70		130.0	
10600-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.60	68.37	17.41	0.46	130.0	± 9.6 %
		Y	5.53	67.84	16.93		130.0	
		Z	5.51	67.83	16.88		130.0	
10601-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.48	68.09	17.29	0.46	130.0	± 9.6 %
		Y	5.41	67.56	16.80		130.0	
		Z	5.41	67.60	16.78		130.0	
10602-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.61	68.27	17.30	0.46	130.0	± 9.6 %
		Y	5.54	67.71	16.80		130.0	
		Z	5.54	67.78	16.79		130.0	
10603-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.68	68.53	17.56	0.46	130.0	± 9.6 %
		Y	5.60	67.96	17.06		130.0	
		Z	5.59	68.00	17.03		130.0	
10604-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.56	68.19	17.38	0.46	130.0	± 9.6 %
		Y	5.48	67.64	16.88		130.0	
		Z	5.47	67.67	16.85		130.0	
10605-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.59	68.28	17.42	0.46	130.0	± 9.6 %
		Y	5.53	67.75	16.94		130.0	
		Z	5.51	67.78	16.90		130.0	
10606-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.33	67.56	16.92	0.46	130.0	± 9.6 %
		Y	5.26	67.02	16.42		130.0	
		Z	5.26	67.10	16.42		130.0	

10607-AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.65	66.90	16.72	0.46	130.0	± 9.6 %
		Y	4.55	66.17	16.10		130.0	
		Z	4.57	66.30	16.12		130.0	
10608-AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.82	67.28	16.88	0.46	130.0	± 9.6 %
		Y	4.71	66.54	16.26		130.0	
		Z	4.73	66.66	16.27		130.0	
10609-AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.71	67.14	16.72	0.46	130.0	± 9.6 %
		Y	4.61	66.38	16.09		130.0	
		Z	4.63	66.51	16.11		130.0	
10610-AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.76	67.30	16.88	0.46	130.0	± 9.6 %
		Y	4.66	66.54	16.25		130.0	
		Z	4.67	66.66	16.27		130.0	
10611-AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.68	67.11	16.74	0.46	130.0	± 9.6 %
		Y	4.57	66.35	16.10		130.0	
		Z	4.59	66.48	16.12		130.0	
10612-AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	4.69	67.30	16.81	0.46	130.0	± 9.6 %
		Y	4.58	66.50	16.15		130.0	
		Z	4.60	66.63	16.17		130.0	
10613-AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.68	67.12	16.65	0.46	130.0	± 9.6 %
		Y	4.57	66.35	16.01		130.0	
		Z	4.59	66.48	16.04		130.0	
10614-AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.64	67.32	16.89	0.46	130.0	± 9.6 %
		Y	4.53	66.53	16.24		130.0	
		Z	4.54	66.65	16.25		130.0	
10615-AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.68	66.97	16.53	0.46	130.0	± 9.6 %
		Y	4.57	66.20	15.88		130.0	
		Z	4.59	66.34	15.92		130.0	
10616-AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.28	67.16	16.82	0.46	130.0	± 9.6 %
		Y	5.20	66.58	16.30		130.0	
		Z	5.21	66.68	16.30		130.0	
10617-AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.36	67.40	16.91	0.46	130.0	± 9.6 %
		Y	5.28	66.80	16.39		130.0	
		Z	5.28	66.87	16.38		130.0	
10618-AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.26	67.44	16.95	0.46	130.0	± 9.6 %
		Y	5.17	66.81	16.40		130.0	
		Z	5.17	66.89	16.40		130.0	
10619-AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.26	67.20	16.77	0.46	130.0	± 9.6 %
		Y	5.17	66.59	16.23		130.0	
		Z	5.18	66.68	16.23		130.0	
10620-AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.34	67.21	16.81	0.46	130.0	± 9.6 %
		Y	5.26	66.62	16.30		130.0	
		Z	5.26	66.71	16.30		130.0	
10621-AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.34	67.32	16.98	0.46	130.0	± 9.6 %
		Y	5.26	66.75	16.48		130.0	
		Z	5.27	66.83	16.47		130.0	
10622-AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	5.35	67.46	17.05	0.46	130.0	± 9.6 %
		Y	5.28	66.93	16.56		130.0	
		Z	5.27	66.98	16.53		130.0	

10623-AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	5.23	66.99	16.69	0.46	130.0	± 9.6 %
		Y	5.15	66.41	16.18		130.0	
		Z	5.16	66.53	16.18		130.0	
10624-AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.42	67.20	16.85	0.46	130.0	± 9.6 %
		Y	5.34	66.64	16.35		130.0	
		Z	5.35	66.73	16.35		130.0	
10625-AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	5.63	67.73	17.17	0.46	130.0	± 9.6 %
		Y	5.58	67.24	16.71		130.0	
		Z	5.57	67.31	16.69		130.0	
10626-AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.60	67.16	16.74	0.46	130.0	± 9.6 %
		Y	5.52	66.64	16.27		130.0	
		Z	5.52	66.74	16.27		130.0	
10627-AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	5.85	67.83	17.04	0.46	130.0	± 9.6 %
		Y	5.77	67.28	16.56		130.0	
		Z	5.75	67.31	16.52		130.0	
10628-AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.61	67.20	16.66	0.46	130.0	± 9.6 %
		Y	5.53	66.67	16.19		130.0	
		Z	5.54	66.78	16.19		130.0	
10629-AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.70	67.32	16.71	0.46	130.0	± 9.6 %
		Y	5.62	66.78	16.24		130.0	
		Z	5.62	66.87	16.23		130.0	
10630-AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.07	68.67	17.39	0.46	130.0	± 9.6 %
		Y	6.00	68.13	16.92		130.0	
		Z	5.94	68.05	16.83		130.0	
10631-AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	5.97	68.45	17.46	0.46	130.0	± 9.6 %
		Y	5.89	67.90	16.98		130.0	
		Z	5.88	67.93	16.94		130.0	
10632-AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.82	67.90	17.21	0.46	130.0	± 9.6 %
		Y	5.74	67.35	16.73		130.0	
		Z	5.72	67.37	16.68		130.0	
10633-AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.68	67.41	16.80	0.46	130.0	± 9.6 %
		Y	5.60	66.87	16.32		130.0	
		Z	5.60	66.97	16.31		130.0	
10634-AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.66	67.41	16.85	0.46	130.0	± 9.6 %
		Y	5.57	66.87	16.37		130.0	
		Z	5.58	66.98	16.37		130.0	
10635-AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.53	66.73	16.25	0.46	130.0	± 9.6 %
		Y	5.45	66.20	15.78		130.0	
		Z	5.46	66.34	15.80		130.0	
10636-AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	6.03	67.50	16.80	0.46	130.0	± 9.6 %
		Y	5.95	67.01	16.37		130.0	
		Z	5.95	67.10	16.36		130.0	
10637-AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.18	67.89	16.98	0.46	130.0	± 9.6 %
		Y	6.10	67.40	16.55		130.0	
		Z	6.09	67.46	16.52		130.0	
10638-AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.18	67.87	16.95	0.46	130.0	± 9.6 %
		Y	6.10	67.37	16.51		130.0	
		Z	6.09	67.44	16.49		130.0	

10639-AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	6.14	67.77	16.94	0.46	130.0	± 9.6 %
		Y	6.06	67.27	16.50		130.0	
		Z	6.06	67.36	16.49		130.0	
10640-AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	6.14	67.79	16.90	0.46	130.0	± 9.6 %
		Y	6.06	67.28	16.45		130.0	
		Z	6.06	67.37	16.45		130.0	
10641-AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.21	67.77	16.91	0.46	130.0	± 9.6 %
		Y	6.13	67.28	16.47		130.0	
		Z	6.12	67.34	16.45		130.0	
10642-AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.22	67.93	17.15	0.46	130.0	± 9.6 %
		Y	6.15	67.45	16.72		130.0	
		Z	6.14	67.53	16.70		130.0	
10643-AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	6.08	67.68	16.93	0.46	130.0	± 9.6 %
		Y	6.00	67.18	16.48		130.0	
		Z	6.00	67.26	16.47		130.0	
10644-AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.18	67.98	17.10	0.46	130.0	± 9.6 %
		Y	6.10	67.49	16.66		130.0	
		Z	6.10	67.58	16.65		130.0	
10645-AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.32	68.06	17.10	0.46	130.0	± 9.6 %
		Y	6.25	67.59	16.68		130.0	
		Z	6.22	67.60	16.62		130.0	
10646-AAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	100.00	154.11	50.71	9.30	60.0	± 9.6 %
		Y	85.82	146.30	47.76		60.0	
		Z	100.00	151.52	49.47		60.0	
10647-AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	100.00	155.63	51.38	9.30	60.0	± 9.6 %
		Y	67.85	141.83	46.85		60.0	
		Z	100.00	152.93	50.09		60.0	
10648-AAA	CDMA2000 (1x Advanced)	X	1.06	70.77	14.07	0.00	150.0	± 9.6 %
		Y	0.56	62.00	8.87		150.0	
		Z	0.60	62.58	9.50		150.0	
10652-AAD	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	4.36	70.70	18.37	2.23	80.0	± 9.6 %
		Y	3.96	68.40	16.96		80.0	
		Z	3.96	68.48	17.00		80.0	
10653-AAD	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	4.65	68.82	18.04	2.23	80.0	± 9.6 %
		Y	4.44	67.50	17.11		80.0	
		Z	4.44	67.58	17.12		80.0	
10654-AAD	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	4.59	68.27	17.98	2.23	80.0	± 9.6 %
		Y	4.42	67.11	17.12		80.0	
		Z	4.42	67.19	17.13		80.0	
10655-AAE	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.64	68.14	17.98	2.23	80.0	± 9.6 %
		Y	4.48	67.05	17.15		80.0	
		Z	4.49	67.14	17.17		80.0	
10658-AAA	Pulse Waveform (200Hz, 10%)	X	100.00	116.19	29.17	10.00	50.0	± 9.6 %
		Y	100.00	114.83	28.64		50.0	
		Z	100.00	116.26	29.35		50.0	
10659-AAA	Pulse Waveform (200Hz, 20%)	X	100.00	114.21	27.33	6.99	60.0	± 9.6 %
		Y	100.00	111.64	26.23		60.0	
		Z	100.00	113.42	27.07		60.0	

10660-AAA	Pulse Waveform (200Hz, 40%)	X	100.00	115.66	26.72	3.98	80.0	± 9.6 %
		Y	100.00	109.80	24.16		80.0	
		Z	100.00	112.50	25.39		80.0	
10661-AAA	Pulse Waveform (200Hz, 60%)	X	100.00	122.78	28.50	2.22	100.0	± 9.6 %
		Y	100.00	109.73	22.95		100.0	
		Z	100.00	114.21	24.92		100.0	
10662-AAA	Pulse Waveform (200Hz, 80%)	X	100.00	153.24	38.77	0.97	120.0	± 9.6 %
		Y	100.00	108.44	20.84		120.0	
		Z	100.00	118.57	25.05		120.0	
10670-AAA	Bluetooth Low Energy	X	100.00	122.74	28.87	2.19	100.0	± 9.6 %
		Y	100.00	111.53	24.06		100.0	
		Z	100.00	115.23	25.69		100.0	

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

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Accreditation No.: SCS 0108

Client PC Test

Certificate No: EX3-7490_Jan19

CALIBRATION CERTIFICATE

Object: EX3DV4 - SN:7490

2/2/19 SCV

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: January 24, 2019

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	04-Apr-18 (No. 217-02672/02673)	Apr-19
Power sensor NRP-Z91	SN: 103244	04-Apr-18 (No. 217-02672)	Apr-19
Power sensor NRP-Z91	SN: 103245	04-Apr-18 (No. 217-02673)	Apr-19
Reference 20 dB Attenuator	SN: S5277 (20x)	04-Apr-18 (No. 217-02682)	Apr-19
DAE4	SN: 660	19-Dec-18 (No. DAE4-660_Dec18)	Dec-19
Reference Probe ES3DV2	SN: 3013	31-Dec-18 (No. ES3-3013_Dec18)	Dec-19
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-18)	In house check: Oct-19

	Name	Function	Signature
Calibrated by:	Jeton Kastrati	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: January 29, 2019

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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:7490

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu V/(V/m)^2$)[A]	0.39	0.44	0.51	± 10.1 %
DCP (mV)[B]	102.2	98.6	100.2	

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	161.4	± 3.0 %	± 4.7 %
		Y	0.00	0.00	1.00		170.7		
		Z	0.00	0.00	1.00		166.0		
10352-AAA	Pulse Waveform (200Hz, 10%)	X	3.07	67.96	11.05	10.00	60.0	± 3.2 %	± 9.6 %
		Y	1.87	63.48	9.21		60.0		
		Z	15.00	85.29	17.64		60.0		
10353-AAA	Pulse Waveform (200Hz, 20%)	X	2.60	69.45	10.67	6.99	80.0	± 2.2 %	± 9.6 %
		Y	1.20	63.36	7.95		80.0		
		Z	15.00	87.25	17.34		80.0		
10354-AAA	Pulse Waveform (200Hz, 40%)	X	15.00	84.46	14.04	3.98	95.0	± 1.3 %	± 9.6 %
		Y	0.38	60.00	5.02		95.0		
		Z	15.00	94.75	19.51		95.0		
10355-AAA	Pulse Waveform (200Hz, 60%)	X	15.00	90.97	15.90	2.22	120.0	± 1.0 %	± 9.6 %
		Y	0.25	60.00	3.48		120.0		
		Z	15.00	107.30	23.83		120.0		
10387-AAA	QPSK Waveform, 1 MHz	X	0.47	60.00	6.52	0.00	150.0	± 3.3 %	± 9.6 %
		Y	0.45	60.00	5.15		150.0		
		Z	0.51	60.00	6.98		150.0		
10388-AAA	QPSK Waveform, 10 MHz	X	2.15	68.64	16.29	0.00	150.0	± 1.3 %	± 9.6 %
		Y	1.87	66.32	14.77		150.0		
		Z	2.18	68.48	16.14		150.0		
10396-AAA	64-QAM Waveform, 100 kHz	X	2.27	67.74	17.61	3.01	150.0	± 2.4 %	± 9.6 %
		Y	2.00	66.07	17.36		150.0		
		Z	2.26	66.81	17.22		150.0		
10399-AAA	64-QAM Waveform, 40 MHz	X	3.43	67.30	15.99	0.00	150.0	± 2.5 %	± 9.6 %
		Y	3.28	66.35	15.36		150.0		
		Z	3.46	67.25	15.95		150.0		
10414-AAA	WLAN CCDF, 64-QAM, 40MHz	X	4.67	65.77	15.67	0.00	150.0	± 4.2 %	± 9.6 %
		Y	4.57	65.31	15.38		150.0		
		Z	4.73	65.70	15.65		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:7490

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	32.3	239.01	35.01	5.10	0.00	5.00	0.90	0.13	1.00
Y	30.8	237.62	37.54	3.07	0.07	5.03	0.00	0.18	1.01
Z	35.7	267.89	35.83	7.37	0.00	5.05	0.00	0.32	1.00

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	-27.3
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:7490

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	10.29	10.29	10.29	0.47	0.83	± 12.0 %
835	41.5	0.90	9.96	9.96	9.96	0.40	0.90	± 12.0 %
1750	40.1	1.37	8.79	8.79	8.79	0.35	0.84	± 12.0 %
1900	40.0	1.40	8.27	8.27	8.27	0.40	0.85	± 12.0 %
2300	39.5	1.67	8.24	8.24	8.24	0.33	0.90	± 12.0 %
2450	39.2	1.80	7.74	7.74	7.74	0.36	0.90	± 12.0 %
2600	39.0	1.96	7.48	7.48	7.48	0.42	0.88	± 12.0 %
3500	37.9	2.91	7.19	7.19	7.19	0.23	1.20	± 13.1 %
3700	37.7	3.12	6.86	6.86	6.86	0.20	1.20	± 13.1 %
5250	35.9	4.71	5.18	5.18	5.18	0.40	1.80	± 13.1 %
5600	35.5	5.07	4.62	4.62	4.62	0.40	1.80	± 13.1 %
5750	35.4	5.22	4.85	4.85	4.85	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.

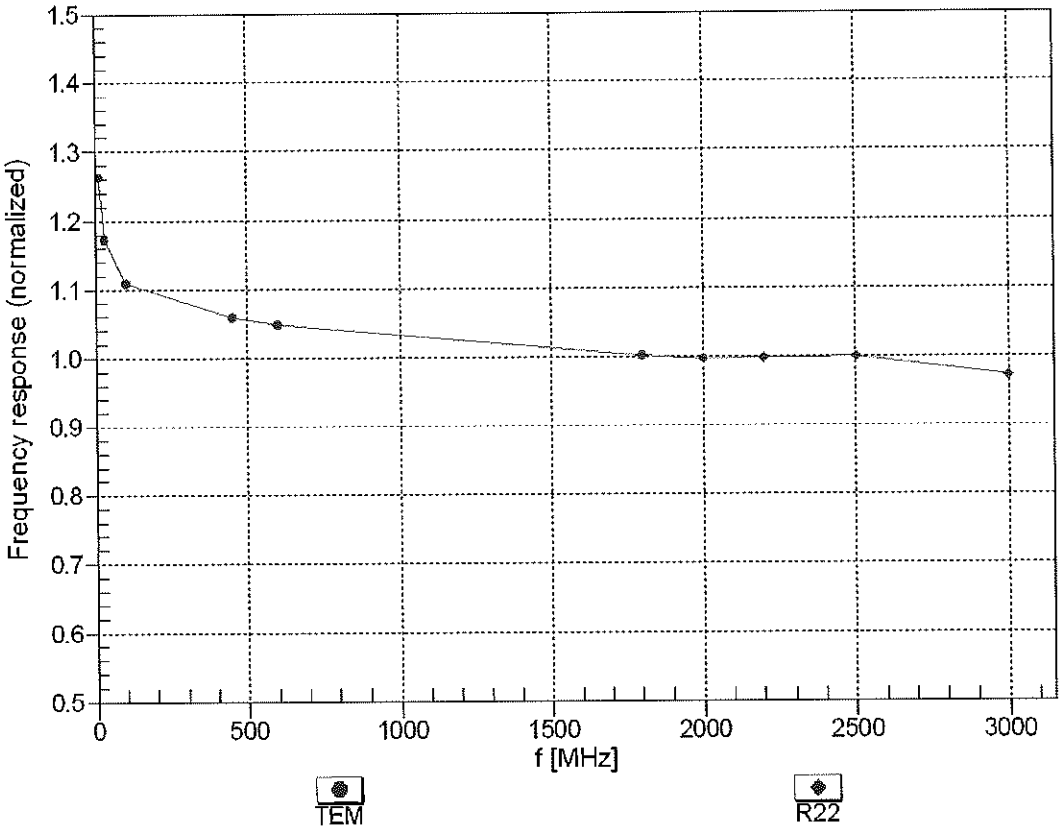
DASY/EASY - Parameters of Probe: EX3DV4 - SN:7490

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	10.49	10.49	10.49	0.43	0.86	± 12.0 %
835	55.2	0.97	10.17	10.17	10.17	0.37	0.89	± 12.0 %
1750	53.4	1.49	8.60	8.60	8.60	0.26	1.00	± 12.0 %
1900	53.3	1.52	8.13	8.13	8.13	0.41	0.85	± 12.0 %
2300	52.9	1.81	8.00	8.00	8.00	0.36	0.88	± 12.0 %
2450	52.7	1.95	7.87	7.87	7.87	0.30	0.93	± 12.0 %
2600	52.5	2.16	7.57	7.57	7.57	0.25	0.98	± 12.0 %
3500	51.3	3.31	6.85	6.85	6.85	0.23	1.25	± 13.1 %
3700	51.0	3.55	6.75	6.75	6.75	0.23	1.25	± 13.1 %
5250	48.9	5.36	4.68	4.68	4.68	0.50	1.90	± 13.1 %
5600	48.5	5.77	3.96	3.96	3.96	0.50	1.90	± 13.1 %
5750	48.3	5.94	4.24	4.24	4.24	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.

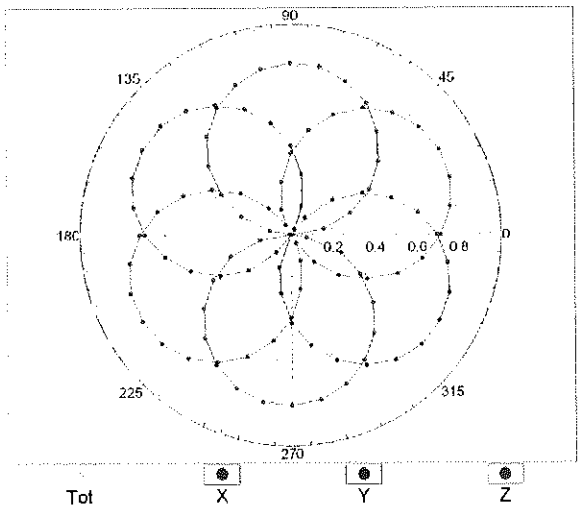
Frequency Response of E-Field
(TEM-Cell:ifi110 EXX, Waveguide: R22)



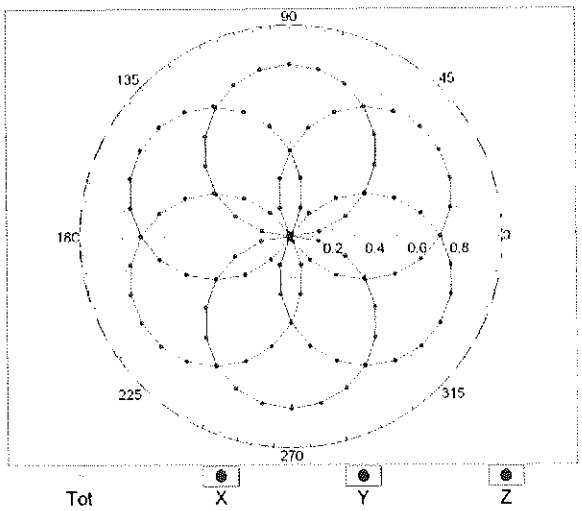
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

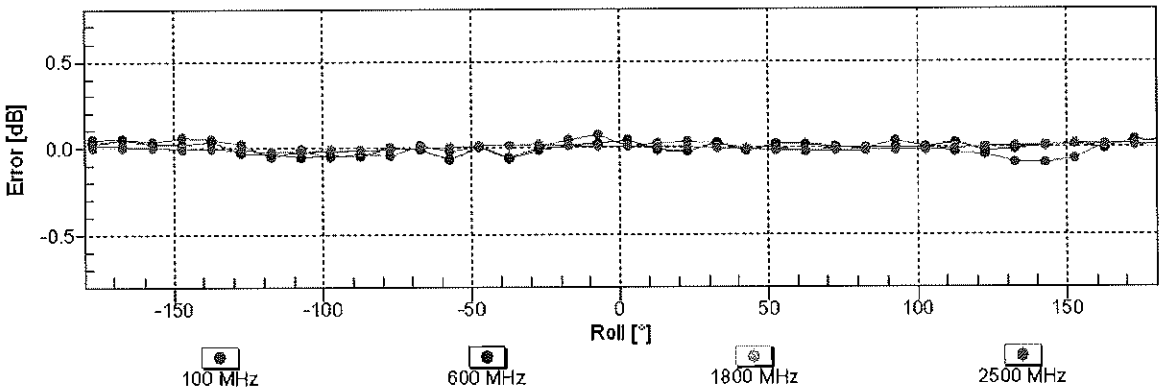
Receiving Pattern (ϕ), ϑ = 0°

f=600 MHz,TEM



f=1800 MHz,R22

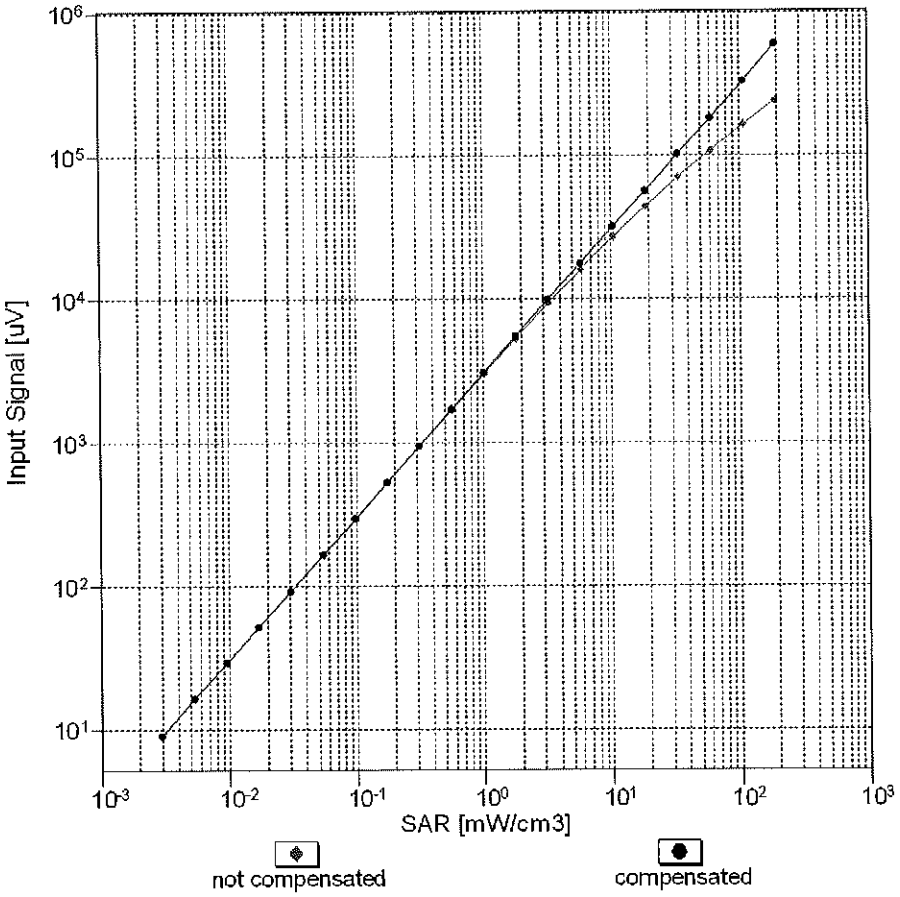


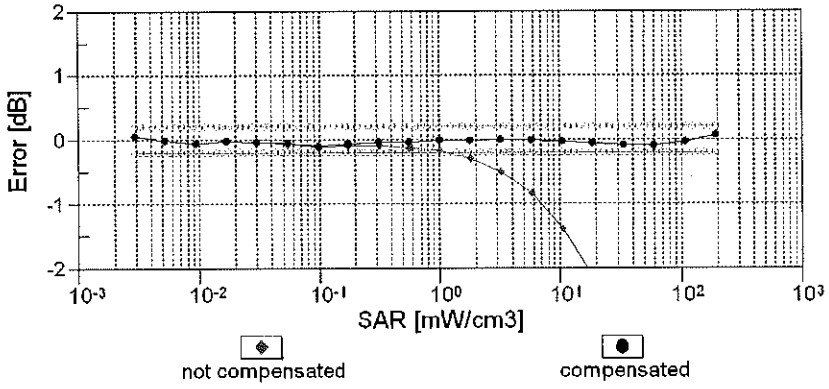


Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

Dynamic Range f(SAR_{head})

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

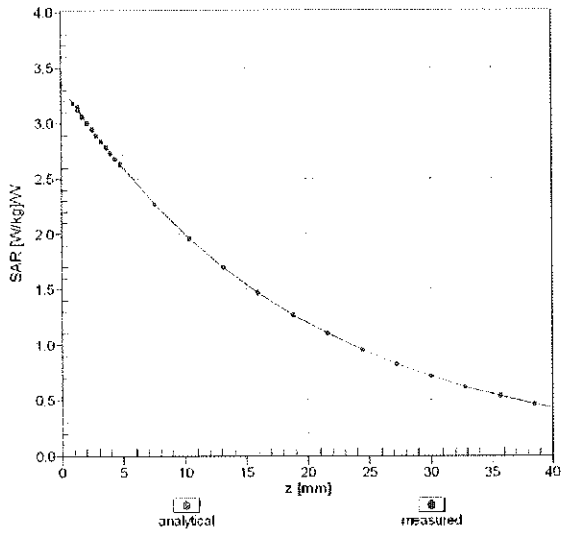




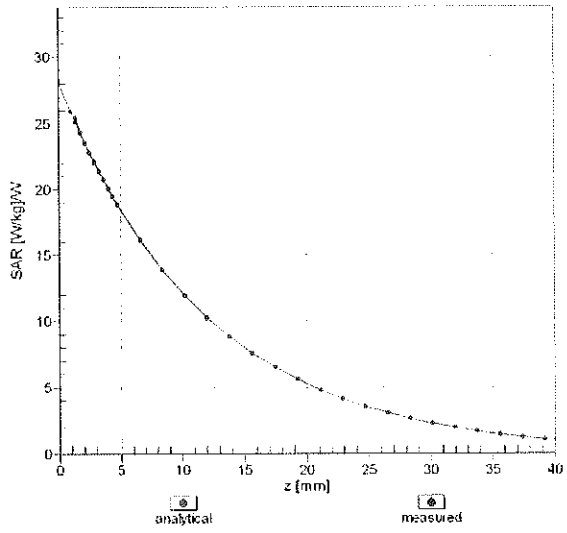
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment

f = 835 MHz,WGLS R9 (H_convF)

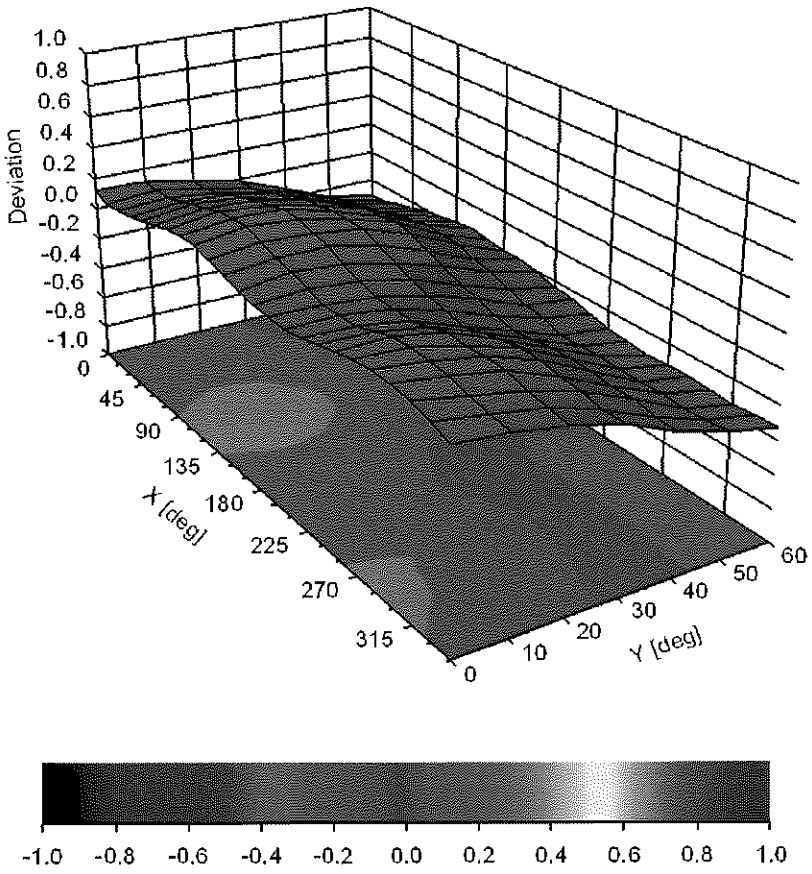


f = 1900 MHz,WGLS R22 (H_convF)



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	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	± 9.6 %
10227	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	± 9.6 %
10228	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	± 9.6 %
10229	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10230	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10231	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	± 9.6 %
10232	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10233	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10234	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10235	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10236	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10237	CAF	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	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	± 9.6 %
10242	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	± 9.6 %
10243	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	± 9.6 %
10244	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	± 9.6 %
10245	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	± 9.6 %
10246	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	± 9.6 %
10247	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	± 9.6 %
10248	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	± 9.6 %
10249	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10250	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	± 9.6 %
10251	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	± 9.6 %
10252	CAF	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	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	± 9.6 %
10257	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	± 9.6 %
10258	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	± 9.6 %
10259	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	± 9.6 %
10260	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	± 9.6 %
10261	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	± 9.6 %
10262	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	± 9.6 %
10263	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	± 9.6 %
10264	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	± 9.6 %
10265	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10266	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	± 9.6 %
10267	CAF	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 %