SAR TEST REPORT

Applicant	HMD Global Oy
FCC ID	2AJOTTA-1399
Product	Smart Phone
Brand	Nokia
Model	TA-1399
Report No.	R2107A0659-S1V2
Issue Date	September 22, 2021

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **IEEE 1528- 2013, ANSI C95.1: 1992, IEEE C95.1: 1991.** The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Yurui Zhao — *Prepared by: Yurui Zhao*

Guangchang Fan — *Approved by: Guangchang Fan*

TA Technology (Shanghai) Co., Ltd.

No.145, Jintang Rd, Tangzhen Industry Park, Pudong Shanghai, China

TEL: +86-021-50791141/2/3

FAX: +86-021-50791141/2/3-8000

Table of Contents

Version	Revision description	Issue Date
Rev.0	Initial issue of report.	September 10, 2021
Rev.1	Update description.	September 18, 2021
Rev.2	Update description in Page 44.	September 22, 2021
Note: This revised report (Report No. R2107A0659-S1V2) supersedes and replaces the previously issued report (Report No. R2107A0659-S1V1). Please discard or destroy the previously issued report and dispose of it accordingly.		

1 Test Laboratory

1.1 Notes of the Test Report

This report shall not be reproduced in full or partial, without the written approval of **TA technology (shanghai) co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein .Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2 Test facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform measurements.

A2LA (Certificate Number: 3857.01)

TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform measurement.

1.3 Testing Location

Company:	TA Technology (Shanghai) Co., Ltd.
Address:	No.145, Jintang Rd, Tangzhen Industry Park, Pudong Shanghai, China
City:	Shanghai
Post code:	201201
Country:	P. R. China
Contact:	Fan Guangchang
Telephone:	+86-021-50791141/2/3
Fax:	+86-021-50791141/2/3-8000
Website:	http://www.ta-shanghai.com
E-mail:	fanguangchang@ta-shanghai.com

1.4 Laboratory Environment

Temperature	Min. = 18°C, Max. = 25 °C
Relative humidity	Min. = 30%, Max. = 70%
Ground system resistance	< 0.5 Ω
Ambient noise is checked and found very low and in compliance with requirement of standards. Reflection of surrounding objects is minimized and in compliance with requirement of standards.	

2 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for the EUT are as follows:

Table 1: Highest Reported SAR

Mode		Highest Reported SAR (W/kg)			
		1g SAR Head	1g SAR Body-worn (Separation 15mm)	1g SAR Hotspot (Separation 10mm)	Product Specific 10-g SAR (Separation 0mm)
GSM 850		0.86	0.35	0.40	NA
GSM 1900		1.06	0.64	0.83	NA
WCDMA Band II		1.41	0.78	1.09	**3.50**
WCDMA Band IV		1.25	0.42	0.94	2.43
WCDMA Band V		0.98	0.26	0.50	NA
LTE FDD 2		1.40	0.80	1.02	3.15
LTE FDD 5		0.55	0.24	0.24	NA
LTE FDD 7		0.24	**1.06**	0.83	3.12
LTE FDD 12		0.78	0.19	0.30	NA
LTE FDD 13		0.78	0.20	0.33	NA
LTE FDD 25		**1.43**	0.80	1.03	3.12
LTE FDD 26		0.85	0.28	0.51	NA
LTE TDD 38		0.17	0.39	0.71	NA
LTE TDD 41		0.15	0.39	0.93	NA
LTE FDD 66		1.33	0.72	0.60	NA
LTE FDD 71		0.76	0.13	0.27	NA
NR n25		1.34	0.86	1.32	2.85
NR n41		0.39	0.66	0.79	3.14
NR n66		1.34	0.78	1.05	3.09
NR n71		0.64	0.18	0.29	NA
EN-DC	LTE FDD 2	0.09	0.79	**1.37**	2.50
	LTE FDD 66	0.06	0.54	0.71	3.50
Wi-Fi (2.4G)		1.08	0.28	0.58	NA
Wi-Fi (5G)		0.83	0.45	0.97	1.34
BT		0.29	0.00	0.09	NA

Date of Testing: July 28, 2021 ~ August 31, 2021
Date of Sample Received: July 27, 2021

Note: 1. The device is in compliance with SAR for Uncontrolled Environment /General Population exposure limits (1.6 W/kg and 4.0 W/kg) specified in ANSI C95.1: 1992/IEEE C95.1: 1991, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013.
2. According to TCB workshop October, 2014 RF Exposure Prcedures Update (Overlappong LTE Bands):
1) Main Antenna SAR for LTE Band 17 (Frequency range: 704-716 MHz) is covered by LTE Band 12 (Frequency range 699-716 MHz) due to similar frequency range, same maximum tune up limit and same channel bandwidth.
2) Main Antenna SAR for LTE Band 4 (Frequency range: 1710 -1755MHz) is covered by LTE Band 66 (Frequency range1710 -1780MHz) due to similar frequency range, same maximum tune up limit and same channel bandwidth.
3. All indications of Pass/Fail in this report are opinions expressed by TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.

Table 2: Highest Simultaneous Transmission SAR

Exposure Configuration	1g SAR Head	1g SAR Body-worn (Separation 15mm)	1g SAR Hotspot (Separation 10mm)	Product Specific 10-g SAR (Separation 0mm)
Highest Simultaneous Transmission SAR (W/kg)	1.436	1.351	1.439	3.581
Note: The detail for simultaneous transmission consideration is described in chapter 10.3.				

3 Description of Equipment under Test

Client Information

Applicant	HMD Global Oy
Applicant address	Bertel Jungin aukio 9, 02600 Espoo, Finland
Manufacturer	HMD Global Oy
Manufacturer address	Bertel Jungin aukio 9, 02600 Espoo, Finland

General Technologies

Application Purpose	Original Grant
EUT Stage	Identical Prototype
Model	TA-1399
IMEI	354773220011880
Hardware Version	V1.0
Software Version	04US_0_033
Antenna Type	Internal Antenna
Device Class	B
Wi-Fi Hotspot	Wi-Fi 2.4G Wi-Fi 5G U-NII-1&U-NII-3
Power Class	GSM 850: 4 GSM 1900: 1 UMTS Band II/IV/V: 3 LTE FDD 2/4/5/7/12/13/17/25/26/66/71/CA_41C/CA_66C: 3 LTE TDD 38: 3 NR n25/66/71: 3 LTE FDD 41/NR n41:2
Power Level	GSM 850: level 5 GSM 1900: level 0 UMTS Band II/IV/V: all up bits LTE FDD 2/4/5/7/12/13/17/25/26/66/71/CA_41C/CA_66C: max power LTE TDD 38/41: max power NR n25/41/66/71: max power
Note: The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.	

Wireless Technology and Frequency Range

Wireless Technology		Modulation	Operating mode	Tx (MHz)
GSM	850	Voice(GMSK) GPRS(GMSK) EGPRS(GMSK,8PSK)	☐Multi-slot Class:8-1UP ☐Multi-slot Class:10-2UP ☐Multi-slot Class:12-4UP ☒Multi-slot Class:33-4UP	824 ~ 849
	1900			1850 ~ 1910
	Does this device support DTM (Dual Transfer Mode)? ☐Yes ☒No			
UMTS	Band II	QPSK, 16QAM	HSDPA UE Category:24 HSUPA UE Category:6	1850 ~ 1910
	Band IV			1710 ~ 1755
	Band V			824 ~ 849
LTE	FDD 2	QPSK, 16QAM, 64QAM, 256QAM	Rel.11 /Category 12	1850 ~ 1910
	FDD 4			1710 ~ 1755
	FDD 5			824 ~ 849
	FDD 7			2500 ~ 2570
	FDD 12			699 ~ 716
	FDD 13			777 ~ 787
	FDD 17			704 ~ 716
	FDD 25			1850 ~ 1915
	FDD 26			814 ~ 849
	TDD 38			2570 ~ 2620
	TDD 41			2496 ~ 2690
	FDD 66			1710 ~ 1780
	FDD 71			663 ~ 698
	Does this device support Carrier Aggregation (CA) ☒Yes ☐No			
	Does this device support SV-LTE (1xRTT-LTE)? ☐Yes ☒No			
NR	FDD n25	CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM; DFT-s OFDM: PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	/	1850 ~ 1915
	TDD n41			2496 ~ 2690
	FDD n66			1710 ~ 1780
	FDD n71			663 ~ 698
EN-DC	DC_2A_n41A, DC_66A_n41A, DC_2A-2A_n41A, DC_2C_n41A, DC_12A_n41A, DC_12A_n66A, DC_2A_n66A, DC_2A-12A_n66A, DC_2A_n71A, DC_66A_n71A, DC_2A-2A_n71A, DC_2A-66A_n71A, DC_2A-71A_n71A, DC_2C_n71A, DC_66A-66A_n71A, DC_66A-71A_n71A, DC_66C_n71A, DC_12A_n25A, DC_66A_n25A, DC_12A-66A_n25A, DC_2A-66A_n25A			

BT	2.4G	Version 5.1 LE		2402 ~2480
Wi-Fi	2.4G	DSSS, OFDM	802.11b/g/n HT20	2412 ~ 2462
		OFDM	802.11n HT40	2422 ~ 2452
	5G	OFDM	802.11a/n HT20/ HT40/ ac VHT20/ VHT40/ VHT80	5150 ~ 5250 5250 ~ 5350 5470 ~ 5725 5725 ~ 5850
	Does this device support MIMO ☒Yes(2TX, 2RX) ☐No			
NFC	13.56MHz			

4 Test Specification, Methods and Procedures

The tests documented in this report were performed in accordance with FCC 47 CFR § 2.1093, IEEE 1528- 2013, ANSI C95.1: 1992, IEEE C95.1: 1991, the following FCC Published RF exposure KDB procedures:

IEC 62209-1

Reference Standards

KDB 248227 D01 802.11Wi-Fi SAR v02r02
KDB 447498 D01 General RF Exposure Guidance v06
KDB 648474 D04 Handset SAR v01r03
KDB 690783 D01 SAR Listings on Grants v01r03
KDB 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04
KDB 865664 D02 RF Exposure Reporting v01r02
KDB 941225 D01 3G SAR Procedures v03r01
KDB 941225 D05 SAR for LTE Devices v02r05
KDB 941225 D05A LTE Rel.10 KDB Inquiry Sheet v01r02
KDB 941225 D06 Hotspot Mode v02r01

5 Operational Conditions during Test

5.1 Test Positions

5.1.1 Against Phantom Head

Measurements were made in “cheek” and “tilt” positions on both the left hand and right hand sides of the phantom.

The positions used in the measurements were according to IEEE 1528 - 2013 "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques".

5.1.2 Body Worn Configuration

Body-worn operating configurations should be tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in normal use configurations.

Per FCC KDB Publication 648474 D04, Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB Publication 447498 D01 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for a body-worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

Accessories for Body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are tested with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

Body-worn accessories may not always be supplied or available as options for some devices intended to be authorized for body-worn use. In this case, a test configuration with a separation distance between the back of the device and the flat phantom is used. Test position spacing was documented. Transmitters that are designed to operate in front of a person’s face, as in push-to-talk configurations, are tested for SAR compliance with the front of the device positioned to face the flat phantom in head fluid. For devices that are carried next to the body such as a shoulder, waist or chest-worn transmitters, SAR compliance is tested with the accessories, including headsets and microphones, attached to the device and positioned against a flat phantom in a normal use configuration.

5.1.3 Phablet SAR test considerations

For smart phones, with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, that can provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets and support voice calls next to the ear, unless it is confirmed otherwise through KDB inquiries, the following phablet procedures should be applied to evaluate SAR compliance for each applicable wireless modes and frequency band. Devices marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance.

a) The normally required head and body-worn accessory SAR test procedures for handsets, including hotspot mode, must be applied.

b) The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for product specific 10-g SAR according to the body-equivalent tissue dielectric parameters in KDB Publication 865664 D01 to address interactive hand use exposure conditions. The 1-g SAR at 5 mm for UMPC mini-tablets is not required. When hotspot mode applies, product specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold. The normal tablet procedures in KDB Publication 616217 are required when the overall diagonal dimension of the device is > 20.0 cm. Hotspot mode SAR is not required when normal tablet procedures are applied. Product specific 10-g SAR is also not required for the front (top) surface of larger form factor full size tablets. The more conservative normal tablet SAR results can be used to support phablet mode product specific 10-g SAR.

c) The simultaneous transmission operating configurations applicable to voice and data transmissions for both phone and mini-tablet modes must be taken into consideration separately for 1-g and 10-g SAR to determine the simultaneous transmission SAR test exclusion and measurement requirements for the relevant wireless modes and exposure conditions.

5.2 Measurement Variability

Per FCC KDB Publication 865664 D01, SAR measurement variability was assessed for each frequency band, which was determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media were required for SAR measurements in a frequency band, the variability measurement procedures were applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. These additional measurements were repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device was returned to ambient conditions (normal room temperature) with the battery fully charged before it was re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement Variability was assessed using the following procedures for each frequency band:
1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

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

5.3 Test Configuration

5.3.1 GSM Test Configuration

According to specification 3GPP TS 51.010, the maximum power of the GSM can do the power reduction for the multi-slot. The allowed power reduction in the multi-slot configuration is as following:

Output power of reductions:

Table 3: The allowed power reduction in the multi-slot configuration

Number of timeslots in uplink assignment	Permissible nominal reduction of maximum output power (dB)
1	0
2	0 to 3,0
3	1,8 to 4,8
4	3,0 to 6,0

SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested. GSM voice and GPRS data use GMSK, which is a constant amplitude modulation with minimal peak to average power difference within the time-slot burst. For EDGE, GMSK is used for MCS 1 – MCS 4 and 8-PSK is used for MCS 5 – MCS 9; where 8-PSK has an inherently higher peak-to-average power ratio. The GMSK and 8-PSK EDGE configurations are considered separately for SAR compliance. The GMSK EDGE configurations are grouped with GPRS and considered with respect to time-averaged maximum output power to determine compliance. The 3G SAR test reduction procedure is applied to 8-PSK EDGE with GMSK GPRS/EDGE as the primary mode.

5.3.2 UMTS Test Configuration

5.3.2.1 3G SAR Test Reduction Procedure

The default test configuration is to measure SAR with an established radio link between the EUT and a communication test set using a 12.2 kbps RMC (reference measurement channel) configured in Test Loop Mode 1. SAR is selectively confirmed for other physical channel configurations modes according to output power, exposure conditions and device operating capabilities. Maximum output power is verified by applying the applicable versions of 3GPP TS 34.121.

5.3.2.2 Head SAR

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

5.3.2.3 Body-worn accessory SAR

SAR for body-worn accessory configurations is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”. The 3G SAR test reduction procedure is applied to other spreading codes and multiple DPDCHn configurations supported by the EUT with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured using an applicable RMC configuration with the corresponding spreading code or DPDCHn, for the highest reported body-worn accessory exposure SAR configuration in 12.2 kbps RMC. When more than 2 DPDCHn are supported by the EUT, it may be necessary to configure additional DPDCHn using FTM (Factory Test Mode) or other chipset based test approaches with parameters similar to those used in 384 kbps and 768 kbps RMC

5.3.2.4 Release 5 HSDPA Test Configuration

The 3G SAR test reduction procedure is applied to HSDPA body-worn accessory configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSDPA using the HSDPA body SAR procedures in the “Release 5 HSDPA Data Devices” section of this document, for the highest SAR body-worn accessory exposure configuration in 12.2 kbps RMC. EUT with both HSDPA and HSUPA are tested according to Release 6 HSPA test procedures.

HSDPA should be configured according to the UE category of a test device. The number of HSDSCH/HS-PDSCHs, HARQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission conditions, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4 ms with a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. DPCCH and DPDCH gain factors (βc, βd), and HS-DPCCH power offset parameters (ΔACK, ΔNACK, ΔCQI) should be set according to values indicated in the Table below. The CQI value is determined by the UE category, transport block size, number of HS-PDSCHs and modulation used in the H-set.

Table 4: Subtests for UMTS Release 5 HSDPA

Sub-set	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs} (note 1, note 2)	CM(dB) (note 3)	MPR(dB)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (note 4)	15/15 (note 4)	64	12/15 (note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI}= 8⇔A_{hs} = β_{hs}/β_c=30/15⇔β_{hs}=30/15*β_c

Note 2: CM=1 for β_c/β_d =12/15, β_{hs}/β_c=24/15.

Note 3: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TFC1, TF1) to β_c=11/15 and β_d=15/15.

5.3.2.5 Release 6 HSUPA Test Configuration

The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body-worn accessory configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSPA using the HSPA body SAR procedures in the “Release 6 HSPA Data Devices” section of this document, for the highest body-worn accessory exposure SAR configuration in 12.2 kbps RMC. When VOIP is applicable for next to the ear head exposure in HSPA, the 3G SAR test reduction procedure is applied to HSPA with 12.2 kbps RMC as the primary mode; otherwise, the same HSPA configuration used for body-worn accessory measurements is tested for next to the ear head exposure.

Due to inner loop power control requirements in HSPA, a communication test set is required for output power and SAR tests. The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSPA are configured according to the β values indicated in Table 2 and other applicable procedures described in the ‘WCDMA EUT’ and ‘Release 5 HSDPA Data Devices’ sections of this document

Table 5: Sub-Test 5 Setup for Release 6 HSUPA

Sub-set	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs} (1)	β_{ec}	β_{ed}	β_{ed} (SF)	β_{ed} (codes)	CM (2) (dB)	MPR (dB)	AG (4) Index	E-TFCI
1	11/15 (3)	15/15 (3)	64	11/15 (3)	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed1}:47/15 β_{ed2}:47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15 (4)	15/15 (4)	64	15/15 (4)	30/15	24/15	134/15	4	1	1.0	0.0	21	81

Note 1: Δ_{ACK}, ΔNACK and Δ_{CQI} = 8 ⇔ $A_{hs} = \beta_{hs}/\beta_c$ = 30/15 ⇔β_{hs}= 30/15 *β_c.
Note 2: CM = 1 for β_c/β_d =12/15, β_{hs}/β_c =24/15. For all other combinations of DPDCH, DPCCH, HS- DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.
Note 3: For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to β_c = 10/15 and β_d = 15/15.
Note 4: For subtest 5 the β_c/β_d ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to β_c = 14/15 and β_d = 15/15.
Note 5: Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Figure 5.1g.
Note 6: β_{ed} cannot be set directly; it is set by Absolute Grant Value.

Table 6: HSUPA UE category

UE E-DCH Category	Maximum E-DCH Codes Transmitted	Number of HARQ Processes	E-DCHTTI (ms)	Minimum Spreading Factor	Maximum E-DCH Transport Block Bits	Max Rate (Mbps)
1	1	4	10	4	7110	0.7296
2	2	8	2	4	2798	1.4592
	2	4	10	4	14484	
3	2	4	10	4	14484	1.4592

4	2	8	2	2	5772	2.9185
	2	4	10	2	20000	2.00
5	2	4	10	2	20000	2.00
6 (No DPDCH)	4	8	2	2 SF2 & 2 SF4	11484	5.76
	4	4	10		20000	2.00
7 (No DPDCH)	4	8	2	2 SF2 & 2 SF4	22996	?
	4	4	10		20000	?
NOTE: When 4 codes are transmitted in parallel, two codes shall be transmitted with SF2 and two with SF4. UE Categories 1 to 6 supports QPSK only. UE Category 7 supports QPSK and 16QAM. (TS25.306-7.3.0)						

5.3.2.6 HSPA and DC-HSDPA Test Configuration

SAR test exclusion may apply to 3GPP Rel. 6 HSPA and Rel. 8 DC-HSDPA. When SAR measurement is required for HSPA or DC-HSDPA, a KDB inquiry is required to confirm that the wireless mode configurations in the test setup have remained stable throughout the SAR measurements. Without prior KDB confirmation to determine the SAR results are acceptable, a PAG is required for equipment approval.

SAR test exclusion for HSPA and DC-HSDPA is determined according to the following:

1) The HSPA procedures are applied to configure 3GPP Rel. 6 HSPA devices in the required sub-test mode(s) to determine SAR test exclusion.

2) SAR is required for Rel. 8 DC-HSDPA when SAR is required for Rel. 5 HSDPA; otherwise, the 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

3) Regardless of whether a PBA is required, the following information must be verified and included in the SAR report for devices supporting HSPA or DC-HSDPA:

a) The output power measurement results and applicable release version(s) of 3GPP TS 34.121. Power measurement difficulties due to test equipment setup or availability must be resolved between the grantee and its test lab.

b) The power measurement results are in agreement with the individual device implementation and specifications. When Enhanced MPR (E-MPR) applies, the normal MPR targets may be modified according to the Cubic Metric (CM) measured by the device, which must be taken into consideration.

c) The UE category, operating parameters, such as the β and Δ values used to configure the device for testing, power setback procedures described in 3GPP TS 34.121 for the power measurements, and HSPA channel conditions (active and stable) for the entire duration of the measurement according to the required E-TFCI and AG index values.

4) When SAR measurement is required, the test configurations, procedures and power measurement results must be clearly described to confirm that the required test parameters are used, including E-TFCI and AG index stability and output power conditions.

Table 7: HS-DSCH UE category

HS-DSCH category	Maximum number of HS-DSCH codes received	Minimum inter-TTI interval	Maximum number of bits of an HS-DSCH transport block received within an HS-DSCH TTI NOTE 1	Total number of soft channel bits	Supported modulations without MIMO operation or dual cell operation	Supported modulations with MIMO operation and without dual cell operation	Supported modulations with dual cell operation
Category 1	5	3	7298	19200	QPSK, 16QAM	Not applicable (MIMO not supported)	Not applicable (dual cell operation not supported)
Category 2	5	3	7298	28800			
Category 3	5	2	7298	28800			
Category 4	5	2	7298	38400			
Category 5	5	1	7298	57600			
Category 6	5	1	7298	67200			
Category 7	10	1	14411	115200			
Category 8	10	1	14411	134400			
Category 9	15	1	20251	172800			
Category 10	15	1	27952	172800			
Category 11	5	2	3630	14400	QPSK		
Category 12	5	1	3630	28800			
Category 13	15	1	35280	259200	QPSK, 16QAM, 64QAM		
Category 14	15	1	42192	259200			
Category 15	15	1	23370	345600	QPSK, 16QAM		
Category 16	15	1	27952	345600			
Category 17 NOTE 2	15	1	35280	259200	QPSK, 16QAM, 64QAM	–	
			23370	345600	–	QPSK, 16QAM	
Category 18 NOTE 3	15	1	42192	259200	QPSK, 16QAM, 64QAM	–	
			27952	345600	–	QPSK, 16QAM	
Category 19	15	1	35280	518400	QPSK, 16QAM, 64QAM		
Category 20	15	1	42192	518400			
Category 21	15	1	23370	345600	-	-	QPSK, 16QAM
Category 22	15	1	27952	345600			
Category 23	15	1	35280	518400			QPSK, 16QAM, 64QAM
Category 24	15	1	42192	518400			

5.3.3 LTE Test Configuration

LTE modes were tested according to FCC KDB 941225 D05 publication. Please see notes after the tabulated SAR data for required test configurations. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR. The R&S CMW500 was used for LTE output power measurements and SAR testing. Max power control was used so the UE transmits with maximum output power during SAR testing. SAR must be measured with the maximum TTI (transmit time interval) supported by the device in each LTE configuration.

A) 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.

B) 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.

C) A-MPR

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

D) Largest channel bandwidth standalone SAR test requirements

1) QPSK with 1 RB allocation

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.

2) QPSK with 50% RB allocation

The procedures required for 1 RB allocation in 1) are applied to measure the SAR for QPSK with 50% RB allocation.

3) QPSK with 100% RB allocation

For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100% RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation in 1) and 2) are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.

4) Higher order modulations

For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in above sections to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is > ½ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

E) Other channel bandwidth standalone SAR test requirements

For the other channel bandwidths used by the device in a frequency band, apply all the procedures required for the largest channel bandwidth in section A) to determine the channels and RB configurations that need SAR testing and only measure SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is > ½ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.

5.3.4 Additional requirements for TDD LTE specification

For Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.

TDD LTE Band supports 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table: Uplink-downlink configurations for uplink-downlink configurations and Table: Configuration of special subframe (lengths of DwPTS/GP/UpPTS) for Special subframe configurations.

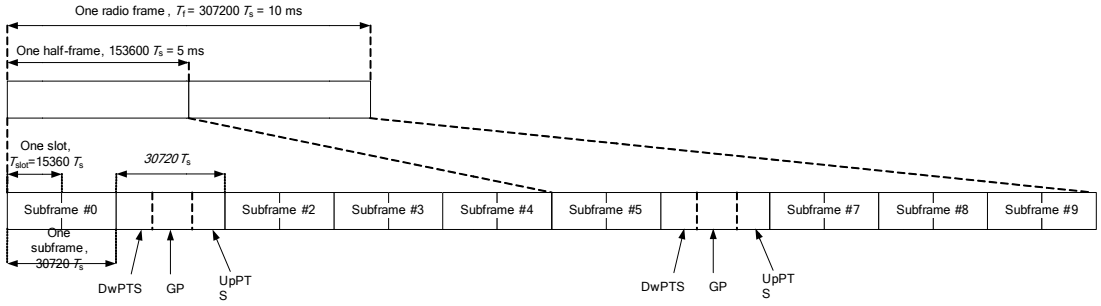


Figure 1: Frame structure type 2

Table 8: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$			$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-	-	-
9	$13168 \cdot T_s$			-	-	-

Table 9: Uplink-downlink configurations

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number									
		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U	U	D	S	U	U	D

According to Figure 1, one radio frame is configured by 10 subframes, which consist of Uplink-subframe, Downlink-subframe and Special subframe. For TDD-LTE, the Duty Cycle should be calculated on Uplink-subframes and Special subframes, due to Special subframe containing both Uplink transmissions. So for one radio frame, Duty Cycle can be calculated with formula as below. The count of Uplink subframes are according to Table: Uplink-downlink configurations:

Duty cycle = (30720Ts*Ups + Uplink Component*Specials)/(307200Ts)

About the uplink component of Special subframes, we can figure out by Table: Configuration of special subframe (lengths of DwPTS/GP/UpPTS):

Uplink Component = UpPTS

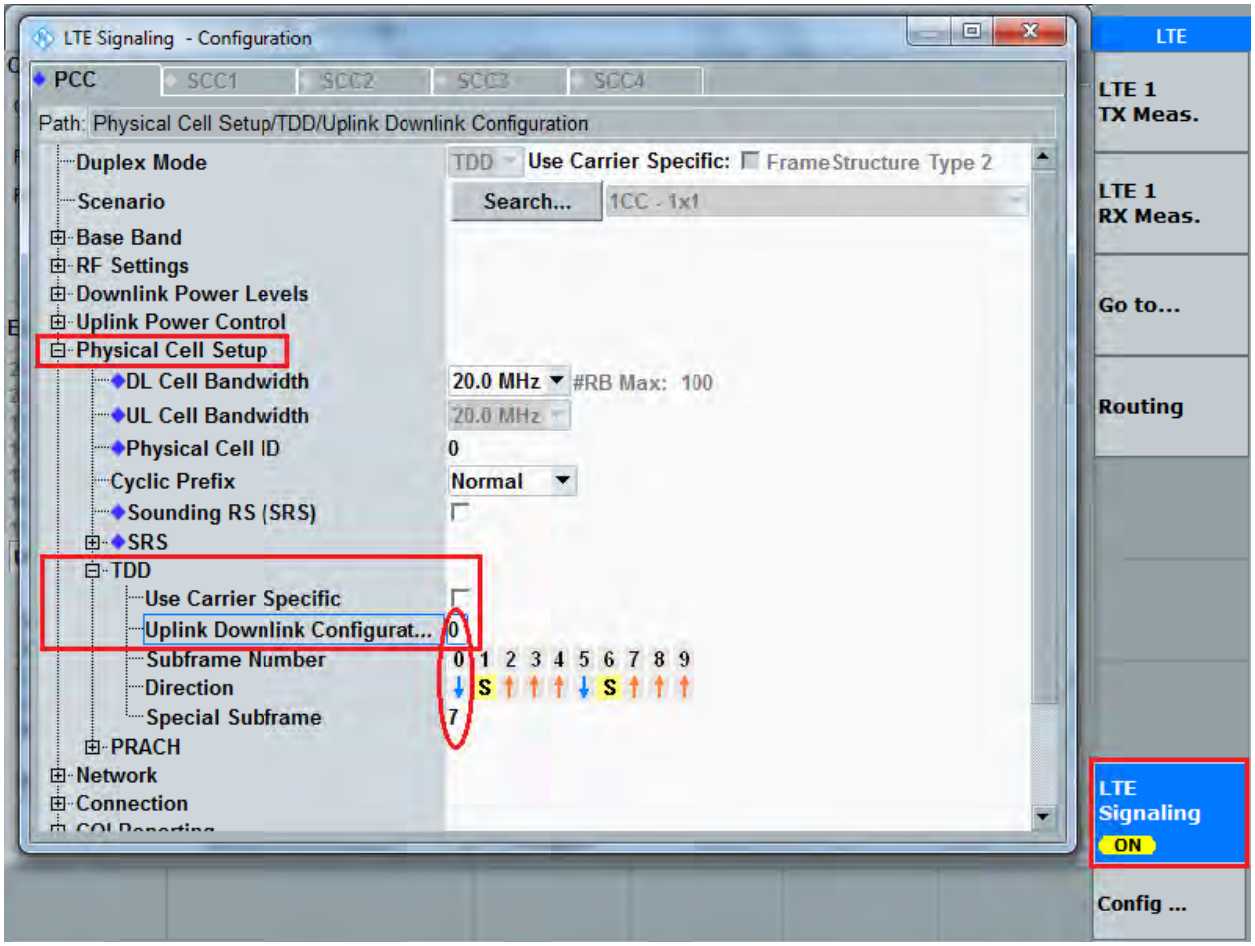
In conclusion, for the TDD LTE Band, Duty Cycle can be calculated with formula as below. All these sets are ok when we test, or we can set as below.

Duty cycle = [(30720Ts*Ups) + UpPTS *Specials]/(307200Ts)

And we can get different Duty cycles under different configurations:

Uplink-downlink configuration	Subframe number			Configuration of special subframe							
				Normal cyclic prefix in downlink				Extended cyclic prefix in downlink			
				Normal cyclic prefix in uplink		Extended cyclic prefix in uplink		Normal cyclic prefix in uplink		Extended cyclic prefix in uplink	
	D	S	U	configuration 0~4	configuration 5~9	configuration 0~4	configuration 5~9	configuration 0~3	configuration 4~7	configuration 0~3	configuration 4~7
0	2	2	6	61.43%	62.85%	61.67%	63.33%	61.43%	62.85%	61.67%	63.33%
1	4	2	4	41.43%	42.85%	41.67%	43.33%	41.43%	42.85%	41.67%	43.33%
2	6	2	2	21.43%	22.85%	21.67%	23.33%	21.43%	22.85%	21.67%	23.33%
3	6	1	3	30.71%	31.43%	30.83%	31.67%	30.71%	31.43%	30.83%	31.67%
4	7	1	2	20.71%	21.43%	20.83%	21.67%	20.71%	21.43%	20.83%	21.67%
5	8	1	1	10.71%	11.43%	10.83%	11.67%	10.71%	11.43%	10.83%	11.67%
6	3	2	5	51.43%	52.85%	51.67%	53.33%	51.43%	52.85%	51.67%	53.33%

SAR test Plan: For TDD LTE, SAR should be tested with the highest transmission duty factor (63.33%) using Uplink-downlink configuration 0 and Special subframe configuration 7 for Frame structure type



5.3.5 5G NR Test Configuration

For 5G NR SAR testing, due to test setup limitations, SAR testing for NR was performed using factory test mode software to establish the connection and perform SAR with 100% transmission.

The DFT-s-OFDM and CP-OFDM waveforms were investigated, and DFT-s-OFDM was found to be the worst case.

The worst-case scenario for all measurements is based on an engineering evaluation and QPSK was observed as the worst one and set for all conducted and radiated. Output power measurements were measured on QPSK, 1 6QAM, 64QAM, 256QAM, and BPSK, modulations.

5.3.6 Wi-Fi Test Configuration

SAR test reduction for 802.11 Wi-Fi transmission mode configurations are considered separately for DSSS and OFDM. An initial test position is determined to reduce the number of tests required for certain exposure configurations with multiple test positions. An initial test configuration is determined for each frequency band and aggregated band according to maximum output power, channel bandwidth, wireless mode configurations and other operating parameters to streamline the measurement requirements. For 2.4 GHz DSSS, either the initial test position or DSSS procedure is applied to reduce the number of SAR tests; These are mutually exclusive. For OFDM, an initial test position is only applicable to next to the ear, UMPC mini-tablet and hotspot mode configurations, which is tested using the initial test configuration to facilitate test reduction. For other exposure conditions with a fixed test position, SAR test reduction is determined using only the initial test configuration.

The multiple test positions require SAR measurements in head, hotspot mode or UMPC mini-tablet configurations may be reduced according to the highest reported SAR determined using the *initial test position(s)* by applying the DSSS or OFDM SAR measurement procedures in the required wireless mode test configuration(s). The *initial test position(s)* is measured using the highest measured maximum output power channel in the required wireless mode test configuration(s). When the *reported* SAR for the *initial test position* is:

- ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and wireless mode combination within the frequency band or aggregated band. DSSS and OFDM configurations are considered separately according to the required SAR procedures.
- 0.4 W/kg, SAR is repeated using the same wireless mode test configuration tested in the *initial test position* to measure the subsequent next closet/smallest test separation distance and maximum coupling test position, on the highest maximum output power channel, until the *reported* SAR is ≤ 0.8 W/kg or all required test positions are tested.
    - ✧ For subsequent test positions with equivalent test separation distance or when exposure is dominated by coupling conditions, the position for maximum coupling condition should be tested.
    - ✧ When it is unclear, all equivalent conditions must be tested.
- For all positions/configurations tested using the *initial test position* and subsequent test positions, when the *reported* SAR is > 0.8 W/kg, measure the SAR for these positions/configurations on the subsequent next highest measured output power channel(s) until the *reported* SAR is ≤ 1.2 W/kg or all required test channels are considered.
    - ✧ The additional power measurements required for this step should be limited to those necessary for identifying subsequent highest output power channels to apply the test reduction.

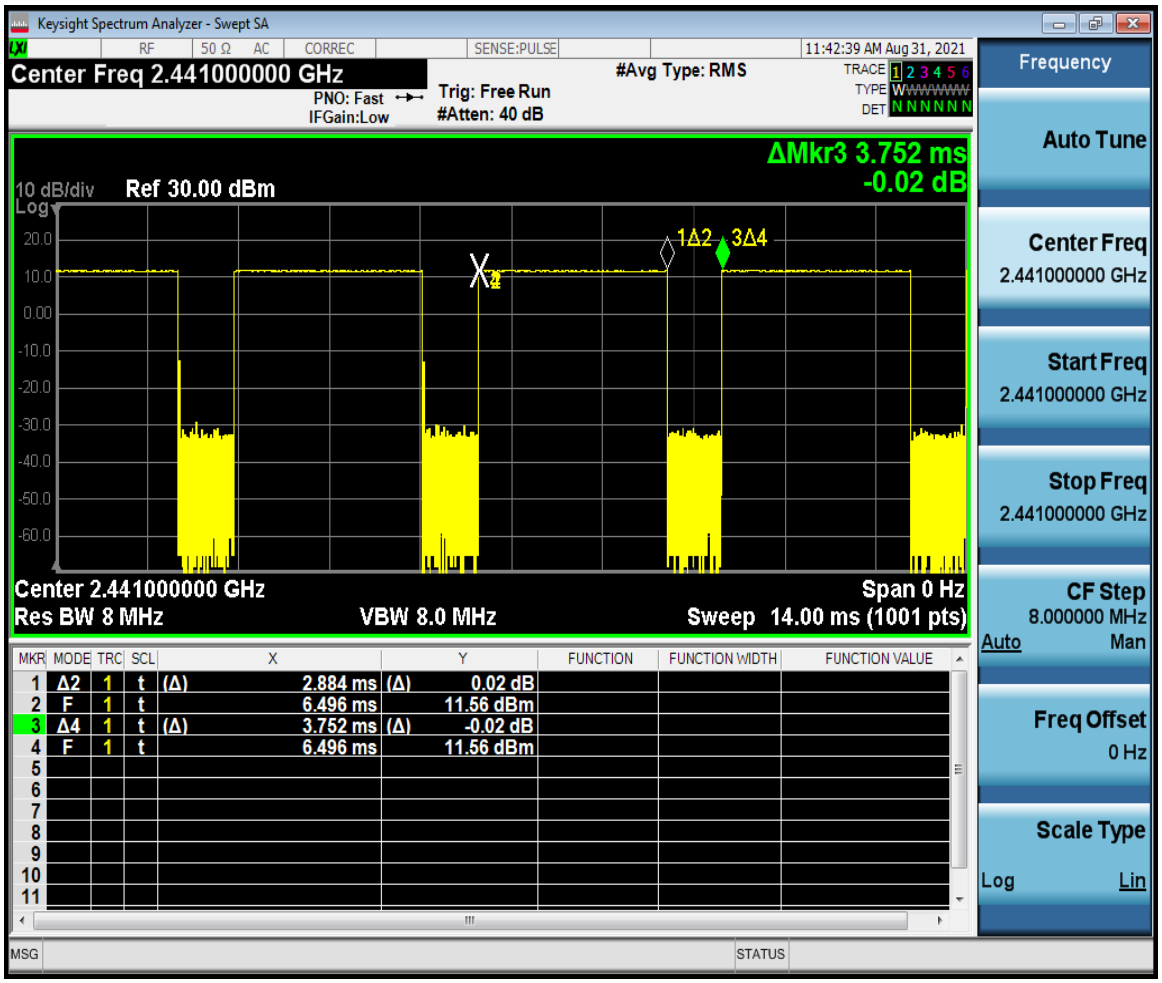
To determine the initial test position, Area Scans were performed to determine the position with the Maximum Value of SAR (measured). The position that produced the highest Maximum Value of SAR is considered the worst case position; thus used as the initial test position.

A Wi-Fi device must be 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 for SAR measurement.

5.3.7 BT Test Configuration

For BT SAR testing, BT engineering testing software installed on the EUT can provide continuous transmitting RF signal with maximum output power. And the CBT control the EUT operating with hoping off and data rate set for DH5.

The SAR measurement takes full account of the BT duty cycle and is reflected in the report, and the duty factor of the device is as follow:



Note: Duty factor= Ton (ms)/ T(on+off) (ms)=2.884/3.752=77%

5.3.8 LTE CA specification

The device supports LTE advanced Rel. 11, Carrier Aggregation (CA) on downlink for Intra band and inter-band. Uplink CA is supported for Intra band only, more details information is provided in tables below:

1) CA Intra band contiguous

E-UTRA CA configuration / Bandwidth combination set								
E-UTRA CA configuration	Uplink CA configurations (NOTE 3)	Component carriers in order of increasing carrier frequency					Maximum aggregated bandwidth [MHz]	Bandwidth combination set
		Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]		
CA_41C	CA_41C	10	20				40	0
		15	15, 20					
		20	10, 15, 20					
		5, 10	20				40	1
		15	15, 20					
		20	5, 10, 15, 20					
		10	15, 20				40	2
		15	10, 15, 20					
		20	10, 15, 20					
		10	20				40	3
		20	20					
CA_66C	-	5	20				40	0
		10	15, 20					
		15	10, 15, 20					
		20	5, 10, 15, 20					

NOTE 1: The CA configuration refers to an operating band and a CA bandwidth class specified in Table 5.6A-1 (the indexing letter). Absence of a CA bandwidth class for an operating band implies support of all classes.

NOTE 2: For the supported CC bandwidth combinations, the CC downlink and uplink bandwidths are equal.

NOTE 3: Uplink CA configurations are the configurations supported by the present release of specifications.

NOTE 4: Restricted to E-UTRA operation when inter-band carrier aggregation is configured. The downlink operating band is paired with the uplink operating band (external) of the carrier aggregation configuration that is supporting the configured Pcell.

5.3.9 Power Reduction Configuration

Overview of power reduction scenarios

The mobile phone device meets SAR requirements by accurately reducing the power of various scenes. Mainly the following scenarios:

1) Head SAR is mainly determined by whether the Receiver on or Receiver on+ Wi-Fi on.

2) Body SAR is mainly determined by whether the Receiver off or Receiver off+ sensor on/off or Receiver off+ sensor off + Wi-Fi on + Hotspot on.

Description of power reduction scenarios

The mobile phone device supports the receiver detection mechanism. This device uses the receiver to indicate whether the user is making a call in head or body.

When there is a voice call (including VOIP) and the audio is actively routed through the earpiece receiver, which indicating the head exposure condition it will trigger the head exposure reduced the power.

When there is a voice call (including VOIP), and the audio is actively routed through the headset or speaker, which indicating the body exposure conditions will trigger the body exposure reduced the power.

When this device used data mode only, and the receiver will not work too, the reduced the power are same as body exposure.

WWAN Reduced power level table

WWAN Reduced power level table						
Antenna	**Position**	**Reduced level**	**Receiver**	**Hotspot**	**Sensor**	**Transmitting conditions**
ANT1	Head SAR	Level 1	On	N/A	N/A	WWAN Only
		Level 4	On	N/A	N/A	WWAN+WLAN2.4G
						WWAN+WLAN5G
	Body-worn SAR&Specific SAR	Level 2	Off	N/A	N/A	WWAN Only
						WWAN+WLAN2.4G
						WWAN+WLAN5G
	Hotspot SAR	Level 3	Off	On	N/A	WWAN Only
		Level 5	Off	On	N/A	WWAN+WLAN2.4G
						WWAN+WLAN5G
	Body-worn SAR& Specific SAR	Level 6-D1	Off	N/A	On	WWAN Only
		Level 7-D1	Off	N/A	On	WWAN+WLAN2.4G
						WWAN+WLAN5G
		Level 6-D2	Off	N/A	Off	WWAN Only
						WWAN+WLAN2.4G
						WWAN+WLAN5G
ANT3	Head SAR	Level 1	On	N/A	N/A	WWAN Only
		Level 4	On	N/A	N/A	WWAN+WLAN2.4G
						WWAN+WLAN5G
	Body-worn SAR& Specific SAR	Level 2	Off	N/A	N/A	WWAN Only
						WWAN+WLAN2.4G

						WWAN+WLAN5G
	Hotspot SAR	Level 3	Off	On	N/A	WWAN Only
		Level 5	Off	On	N/A	WWAN+WLAN2.4G
						WWAN+WLAN5G
	Body-worn SAR& Specific SAR	Level 6-D1	Off	N/A	On	WWAN Only
		Level 7-D1	Off	N/A	On	WWAN+WLAN2.4G
						WWAN+WLAN5G
		Level 6-D2	Off	N/A	Off	WWAN Only
						WWAN+WLAN2.4G
						WWAN+WLAN5G
ANT4	Head SAR	Level 1	On	N/A	N/A	WWAN Only
		Level 4	On	N/A	N/A	WWAN+WLAN2.4G
						WWAN+WLAN5G
	Body-worn SAR& Specific SAR	Level 2	Off	N/A	N/A	WWAN Only
						WWAN+WLAN2.4G
						WWAN+WLAN5G
	Hotspot SAR	Level 3	Off	On	N/A	WWAN Only
		Level 5	Off	On	N/A	WWAN+WLAN2.4G
						WWAN+WLAN5G
ANT6	Head SAR	Level 1	On	N/A	N/A	WWAN Only
		Level 4	On	N/A	N/A	WWAN+WLAN2.4G
						WWAN+WLAN5G
	Body-worn SAR& Specific SAR	Level 2	Off	N/A	N/A	WWAN Only
						WWAN+WLAN2.4G
						WWAN+WLAN5G
	Hotspot SAR	Level 3	Off	On	N/A	WWAN Only
		Level 5	Off	On	N/A	WWAN+WLAN2.4G
						WWAN+WLAN5G
ANT7	Head SAR	Level 1	On	N/A	N/A	WWAN Only
		Level 4	On	N/A	N/A	WWAN+WLAN2.4G
						WWAN+WLAN5G
	Body-worn SAR& Specific SAR	Level 2	Off	N/A	N/A	WWAN Only
						WWAN+WLAN2.4G
						WWAN+WLAN5G
	Hotspot SAR	Level 3	Off	On	N/A	WWAN Only
		Level 5	Off	On	N/A	WWAN+WLAN2.4G
						WWAN+WLAN5G
	Body-worn SAR& Specific SAR	Level 6-D1	Off	N/A	On	WWAN Only
		Level 7-D1	Off	N/A	On	WWAN+WLAN2.4G
						WWAN+WLAN5G
		Level 6-D2	Off	N/A	Off	WWAN Only
						WWAN+WLAN2.4G
						WWAN+WLAN5G

WLAN Reduced power level table				
Antenna	**Position**	**Reduced level**	**Receiver**	**Transmitting conditions**
ANT8	Head SAR	Level 1	On	WWAN Only
				WWAN+WLAN2.4G
				WWAN+WLAN5G
	Body-worn SAR & Specific SAR	Level 2	Off	WWAN Only
				WWAN+WLAN2.4G
				WWAN+WLAN5G
	Hotspot SAR	Level 3	Off	WWAN Only
				WWAN+WLAN2.4G
				WWAN+WLAN5G
ANT9	Head SAR	Level 1	On	WWAN Only
				WWAN+WLAN2.4G
				WWAN+WLAN5G
	Body-worn SAR&Specific SAR	Level 2	Off	WWAN Only
				WWAN+WLAN2.4G
				WWAN+WLAN5G
	Hotspot SAR	Level 3	Off	WWAN Only
				WWAN+WLAN2.4G
				WWAN+WLAN5G
ANT10	Head SAR	Level 1	On	WWAN Only
				WWAN+WLAN2.4G
				WWAN+WLAN5G
	Body-worn SAR&Specific SAR	Level 2	Off	WWAN Only
				WWAN+WLAN2.4G
				WWAN+WLAN5G
	Hotspot SAR	Level 3	Off	WWAN Only
				WWAN+WLAN2.4G
				WWAN+WLAN5G

WWAN Reduced power level table

Mode		Full power (Tune up)	Antenna	Head(Receiver on)			Body wron/Product Specific (Receiver off&Receiver off+Sensor off)			Hotspot (Receiver off+Hotspot on)			Body wron/Product Specific (Receiver off+Sensor on)		
				Standalone	Simultaneous transmission		Standalone	Simultaneous transmission		Standalone	Simultaneous transmission		Standalone	Simultaneous transmission	
					WWAN+2.4G WLAN	WWAN+5G WLAN		WWAN+2.4G WLAN	WWAN+5G WLAN		WWAN+2.4G WLAN	WWAN+5G WLAN		WWAN+2.4G WLAN	WWAN+5G WLAN
GSM 850	GSM(CS)	33.5	Ant.6	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	/	/	/
GSM 1900	GSM(CS)	30.5	Ant.7	5.0	6.5	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WCDMA B2	12.2kbps RMC	24.5	Ant.7	6.0	8.0	8.0	0.0	0.0	0.0	3.0	4.5	4.5	0.0	1.5	1.5
WCDMA B4	12.2kbps RMC	24.5	Ant.7	4.0	5.5	5.5	0.0	0.0	0.0	1.5	3.0	3.0	0.0	0.0	0.0
WCDMA B5	12.2kbps RMC	24.5	Ant.6	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	/	/	/
LTE Bands	LTE B2	24.0	Ant.1	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5	2.5	2.5
		24.7	Ant.7	5.7	7.7	7.7	0.0	0.0	0.0	3.2	5.2	5.2	0.7	2.2	2.2
	LTE B4	24.6	Ant.7	4.6	6.6	6.6	0.0	0.0	0.0	3.0	3.0	3.0	0.0	0.0	0.0
	LTE B5	24.8	Ant.6	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	/	/	/
	LTE B7	24.7	Ant.3	0.0	0.0	0.0	0.0	3.2	3.2	2.2	2.2	2.2	1.0	3.2	3.2
	LTE B12	25.0	Ant.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	/	/	/
	LTE B13	25.0	Ant.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	/	/	/
	LTE B17	25.0	Ant.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	/	/	/
	LTE B25	24.8	Ant.7	5.8	7.8	7.8	0.0	0.0	0.0	3.5	5.0	5.0	0.8	1.3	1.3
	LTE B26	24.8	Ant.6	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	/	/	/
	LTE B66	24.0	Ant.1	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	0.0	0.0	0.0
		24.6	Ant.7	4.6	6.6	6.6	0.0	0.0	0.0	3.0	3.0	3.0	0.0	0.0	0.0
	LTE B38	24.8	Ant.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	LTE B41	27.2	Ant.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	LTE B71	24.8	Ant.6	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	/	/	/
SA Bands	n25	24.8	Ant.7	4.5	7.3	7.3	2.8	2.8	2.8	2.8	4.5	4.5	2.8	2.8	2.8
	n41	27.5	Ant.3	0.0	0.0	0.0	3.5	3.5	3.5	4.5	4.5	4.5	3.5	4.5	4.5
	n66	24.9	Ant.7	4.4	6.4	6.4	0.0	0.0	0.0	1.4	1.9	1.9	0.0	0.0	0.0
	n71	25.0	Ant.6	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	/	/	/
EN-DC (B12+N25)	LTE B12	25.0	Ant.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	/	/	/
	n25	24.4	Ant.1	0.0	0.0	0.0	2.0	2.0	2.0	6.5	6.5	6.5	2.0	3.0	3.0
EN-DC (B66+N25)	LTE B66	24.6	Ant.7	4.6	6.6	6.6	0.0	0.0	0.0	3.0	3.0	3.0	0.0	0.0	0.0
	n25	24.4	Ant.1	0.0	0.0	0.0	2.0	2.0	2.0	6.5	6.5	6.5	2.0	3.0	3.0
EN-DC	LTE B2	24.7	Ant.7	5.7	7.7	7.7	0.0	0.0	0.0	3.2	5.2	5.2	0.7	2.2	2.2

(B2+N41)	n41	27.5	Ant.3	0.0	0.0	0.0	3.5	3.5	3.5	4.5	4.5	4.5	3.5	4.5	4.5
EN-DC	LTE B66	24.6	Ant.7	4.6	6.6	6.6	0.0	0.0	0.0	3.0	3.0	3.0	0.0	0.0	0.0
(B66+N41)	n41	27.5	Ant.3	0.0	0.0	0.0	3.5	3.5	3.5	4.5	4.5	4.5	3.5	4.5	4.5
EN-DC	LTE B12	25.0	Ant.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	/	/	/
(B12+N41)	n41	27.5	Ant.3	0.0	0.0	0.0	3.5	3.5	3.5	4.5	4.5	4.5	3.5	4.5	4.5
EN-DC	LTE B12	25.0	Ant.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	/	/	/
(B12+N66)	n66	24.7	Ant.1	0.0	0.0	0.0	0.0	0.0	0.0	4.7	4.7	4.7	2.0	2.0	2.0
EN-DC	LTE B2	24.7	Ant.7	5.7	7.7	7.7	0.0	0.0	0.0	3.2	5.2	5.2	0.7	2.2	2.2
(B2+N66)	n66	24.7	Ant.1	0.0	0.0	0.0	0.0	0.0	0.0	4.7	4.7	4.7	2.0	2.0	2.0
EN-DC	LTE B2	24.0	Ant.1	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5	2.5	2.5
(B2+N71)	n71	25.0	Ant.6	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	/	/	/
EN-DC	LTE B66	24.0	Ant.1	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	0.0	0.0	0.0
(B66+N71)	n71	25.0	Ant.6	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	/	/	/

WLAN Reduced power level table

WLAN Max Reduced power level table

Mode	Band	Full power (Tune up)	Antenna	Head(Receiver on)			Body wron/Product Specific(Receiver off)			Hotspot(Receiver off+Hotspot on)		
				Simultaneous transmission			Simultaneous transmission			Simultaneous transmission		
				Standalone	WWAN+ 2.4 WLAN	WWAN+ 5G WLAN	Standalone	WWAN+ 2.4 WLAN	WWAN+ 5G WLAN	Standalone	WWAN+ 2.4 WLAN	WWAN+ 5G WLAN
2.4G	802.11b CH1-11	18.5	ANT 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11g CH1-11	17.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT20 CH1-11	16.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT40 CH3-9	15.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.4G	802.11b CH1-11	18.5	ANT 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11g CH1-11	17.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT20 CH1-11	16.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT40 CH3-9	15.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.4G	802.11b CH1-11	20.5	MIMO (ANT 8+9)	6.0	6.0	6.0	0.0	0.0	0.0	1.5	1.5	1.5
	802.11g CH1-11	19.5		5.5	5.5	5.5	0.0	0.0	0.0	0.5	0.5	0.5
	802.11nHT20 CH1-11	19.0		5.0	5.0	5.0	0.0	0.0	0.0	0.5	0.5	0.5
	802.11nHT40 CH3-9	18.0		4.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
5G U-NII-1	802.11a CH36-48	17.5	ANT 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT20 CH36-48	17.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT40 CH38-46	17.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT20 CH36-48	17.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT40 CH38-46	16.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT80 CH42	15.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5G U-NII-1	802.11a CH36-48	17.5	ANT 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT20 CH36-48	17.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	802.11nHT40 CH38-46	17.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT20 CH36-48	17.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT40 CH38-46	16.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT80 CH42	15.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5G U-NII-1	802.11a CH36-48	21.0	MIMO (ANT 9+10)	4.5	4.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT20 CH36-48	20.5		4.5	4.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT40 CH38-46	19.5		3.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT20 CH36-48	19.5		3.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT40 CH38-46	19.5		3.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT80 CH42	18.0		2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
5G U-NII-2A	802.11a CH52-64	17.5	ANT 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT20 CH52-64	17.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT40 CH54-62	17.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT20 CH52-64	17.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT40 CH54-62	16.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT80 CH58	15.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5G U-NII-2A	802.11a CH52-64	17.5	ANT 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT20 CH52-64	17.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT40 CH54-62	17.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT20 CH52-64	17.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT40 CH54-62	16.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT80 CH58	15.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5G U-NII-2A	802.11a CH52-64	21.0	MIMO (ANT 9+10)	4.5	4.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT20 CH52-64	20.5		4.5	4.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT40 CH54-62	19.5		3.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT20 CH52-64	19.5		3.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT40 CH54-62	19.5		3.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT80 CH58	18.0		2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
5G U-NII-2C	802.11a CH100-144	17.5	ANT 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT20 CH100-140	17.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT40 CH102-142	17.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT20 CH100-144	17.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT40 CH102-142	16.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT80 CH106-122	15.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5G U-NII-2C	802.11a CH100-144	17.5	ANT 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT20 CH100-140	17.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT40 CH102-142	17.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT20 CH100-144	17.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT40 CH102-142	16.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT80 CH106-122	15.5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5G U-NII-2C	802.11a CH100-144	21.0	MIMO (ANT 9+10)	4.5	4.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT20 CH100-140	20.5		4.5	4.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT40 CH102-142	19.5		3.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0

	802.11acVHT20 CH100-144	19.5		3.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT40 CH102-142	19.5		3.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT80 CH106-122	18.0		2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
5G U-NII-3	802.11a CH149-165	17.5	ANT 9	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT20 CH149-165	17.5		2.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT40 CH151-159	17.0		2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT20 CH149-165	17.0		2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT40 CH151-159	16.5		1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT80 CH155	15.5		0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
5G U-NII-3	802.11a CH149-165	17.5	ANT 10	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT20 CH149-165	17.5		2.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT40 CH151-159	17.0		2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT20 CH149-165	17.0		2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT40 CH151-159	16.5		1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT80 CH155	15.5		0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
5G U-NII-3	802.11a CH149-165	21.0	MIMO (ANT 9+10)	4.5	4.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT20 CH149-165	20.5		4.5	4.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11nHT40 CH151-159	19.5		3.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT20 CH149-165	19.5		3.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT40 CH151-159	19.5		3.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
	802.11acVHT80 CH155	18.0		2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0

5.3.10 Proximity sensor Configuration

Due to the operating configurations and exposure conditions required by the device, the proximity sensor is used to indicate when the device is held close to a user's body exposure condition. It utilizes the proximity sensor to reduce the output power in specific wireless and operating modes of Antenna 2 to ensure SAR compliance. It is also set an output power Leveled to the lowest one to make sure that in any case of SAR sensor hardware failure, the SAR requirements can still be satisfied.

The following tables summarize the key power reduction information for proximity sensor. The test procedures be applied to determine proximity sensor triggering distances, and sensor coverage for normal and tilt positions. To ensure all production units are compliant, it is generally necessary to reduce the triggering distance determined from the triggering tests by 1 mm, or more if it is necessary, and use the smallest distance for movements to and from the phantom, minus 1 mm, as the sensor triggering distance for determining the SAR measurement distance.

Antenna 1				
Band	Test position	Sensor Trigger Distance range (DUT to Phantom)	Max Power reduction amount(dB)	Power level
LTE B2	Back side	0mm≤distance≤20mm	2.5	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2

	Front side	0mm≤distance≤20mm	2.5	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Left edge	ALL	0.0	LEVEL6-D2
	Right edge	ALL	0.0	LEVEL6-D2
	Top edge	ALL	0.0	LEVEL6-D2
	Bottom Edge	0mm≤distance≤20mm	2.5	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
EN-DC n25	Back side	0mm≤distance≤20mm	3.0	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Front side	0mm≤distance≤20mm	3.0	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Left edge	ALL	0.0	LEVEL6-D2
	Right edge	ALL	0.0	LEVEL6-D2
	Top edge	ALL	0.0	LEVEL6-D2
	Bottom Edge	0mm≤distance≤20mm	3.0	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
EN-DC n66	Back side	0mm≤distance≤20mm	2.0	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Front side	0mm≤distance≤20mm	2.0	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Left edge	ALL	0.0	LEVEL6-D2
	Right edge	ALL	0.0	LEVEL6-D2
	Top edge	ALL	0.0	LEVEL6-D2
	Bottom Edge	0mm≤distance≤20mm	2.0	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
Antenna 3				
Band	Test position	Sensor Trigger Distance range (DUT to Phantom)	Max Power reduction amount(dB)	Power level
LTE B7	Back side	0mm≤distance≤20mm	3.2	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Front side	0mm≤distance≤20mm	3.2	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Left edge	ALL	0.0	LEVEL6-D2
	Right edge	ALL	0.0	LEVEL6-D2
	Top edge	ALL	0.0	LEVEL6-D2
	Bottom Edge	0mm≤distance≤20mm	3.2	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2

SA n41	Back side	0mm≤distance≤20mm	4.5	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Front side	0mm≤distance≤20mm	4.5	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Left edge	ALL	0.0	LEVEL6-D2
	Right edge	ALL	0.0	LEVEL6-D2
	Top edge	ALL	0.0	LEVEL6-D2
	Bottom Edge	0mm≤distance≤20mm	4.5	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
EN-DC n41	Back side	0mm≤distance≤20mm	4.5	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Front side	0mm≤distance≤20mm	4.5	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Left edge	ALL	0.0	LEVEL6-D2
	Right edge	ALL	0.0	LEVEL6-D2
	Top edge	ALL	0.0	LEVEL6-D2
	Bottom Edge	0mm≤distance≤20mm	4.5	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
Antenna 7				
Band	Test position	Sensor Trigger Distance range (DUT to Phantom)	Max Power reduction amount(dB)	Power level
WCDMA B2	Back side	0mm≤distance≤20mm	1.5	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Front side	0mm≤distance≤20mm	1.5	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Left edge	ALL	0.0	LEVEL6-D2
	Right edge	ALL	0.0	LEVEL6-D2
	Top edge	0mm≤distance≤20mm	1.5	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Bottom Edge	ALL	0.0	LEVEL6-D2
LTE B2	Back side	0mm≤distance≤20mm	2.2	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Front side	0mm≤distance≤20mm	2.2	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Left edge	ALL	0.0	LEVEL6-D2
	Right edge	ALL	0.0	LEVEL6-D2
	Top edge	0mm≤distance≤20mm	2.2	LEVEL6-D1&LEVEL7-D1

		20mm<distance	0.0	LEVEL6-D2
	Bottom Edge	ALL	0.0	LEVEL6-D2
LTE B25	Back side	0mm≤distance≤20mm	1.3	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Front side	0mm≤distance≤20mm	1.3	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Left edge	ALL	0.0	LEVEL6-D2
	Right edge	ALL	0.0	LEVEL6-D2
	Top edge	0mm≤distance≤20mm	1.3	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Bottom Edge	ALL	0.0	LEVEL6-D2
SA n25	Back side	0mm≤distance≤20mm	2.8	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Front side	0mm≤distance≤20mm	2.8	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Left edge	ALL	0.0	LEVEL6-D2
	Right edge	ALL	0.0	LEVEL6-D2
	Top edge	0mm≤distance≤20mm	2.8	LEVEL6-D1&LEVEL7-D1
		20mm<distance	0.0	LEVEL6-D2
	Bottom Edge	ALL	0.0	LEVEL6-D2

Note:

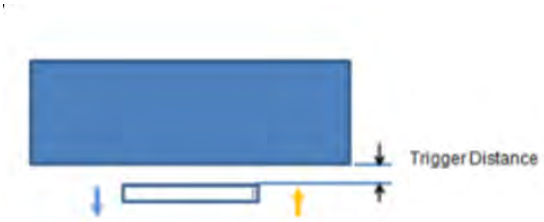
To ensure all production units are compliant, the smallest separation distance determined by the sensor triggering and sensor coverage for normal and tit positions for all usage conditions and applicable sides, minus 1 mm, must be used as the test separation distance for additional SAR testing of each higher power stage.

For the other sides or other frequency bands of the device, SAR is still tested at the maximum full power level with sensor off.

2.Procedures for determining proximity sensor triggering distances

The device was tested by the test lab to determine the proximity sensor triggering distances for the front side, back side and bottom side of the device. To ensure all production units are compliant, the smallest separation distance determined by the sensor triggering minus 1 mm, must be used as the test separation distance for SAR testing.

The Proximity sensor triggering distance measurement method are as below:



Picture: Proximity sensor triggering distances assessment (Front/Back side)

Picture: Proximity sensor triggering distances assessmect(Bottom edge)

Picture: Proximity sensor triggering distances assessment (Top edge)

Table: Antenna 1&3 For Summary of Trigger Distances

Band	Trigger distance-Back Side		Trigger distance-Front Side		Trigger distance-Bottom Edge	
	Moving toward Phantom	Moving away from Phantom	Moving toward Phantom	Moving away from Phantom	Moving toward Phantom	Moving away from Phantom
LTE B2	20mm	20mm	20mm	20mm	20mm	20mm
LTE B7	20mm	20mm	20mm	20mm	20mm	20mm
SA n41	20mm	20mm	20mm	20mm	20mm	20mm
EN-DC n25	20mm	20mm	20mm	20mm	20mm	20mm
EN-DC n41	20mm	20mm	20mm	20mm	20mm	20mm
EN-DC n66	20mm	20mm	20mm	20mm	20mm	20mm

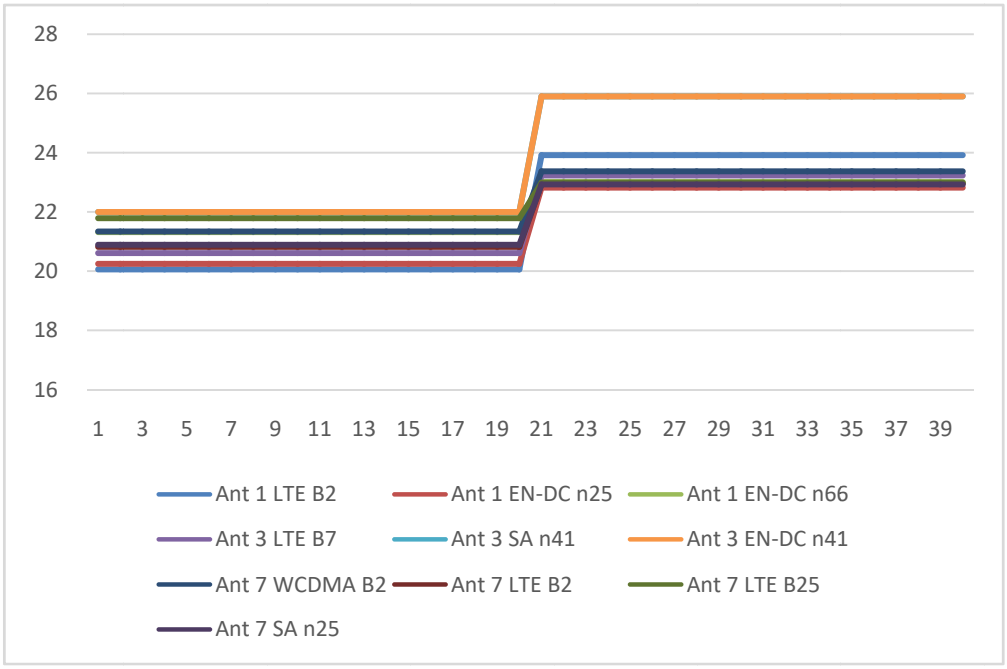
Table: Antenna 7 For Summary of Trigger Distances

Band	Trigger distance-Back Side		Trigger distance-Front Side		Trigger distance-Top Edge	
	Moving toward Phantom	Moving away from Phantom	Moving toward Phantom	Moving away from Phantom	Moving toward Phantom	Moving away from Phantom
WCDMA B2	20mm	20mm	20mm	20mm	20mm	20mm
LTE B2	20mm	20mm	20mm	20mm	20mm	20mm
LTE B25	20mm	20mm	20mm	20mm	20mm	20mm
SA n25	20mm	20mm	20mm	20mm	20mm	20mm

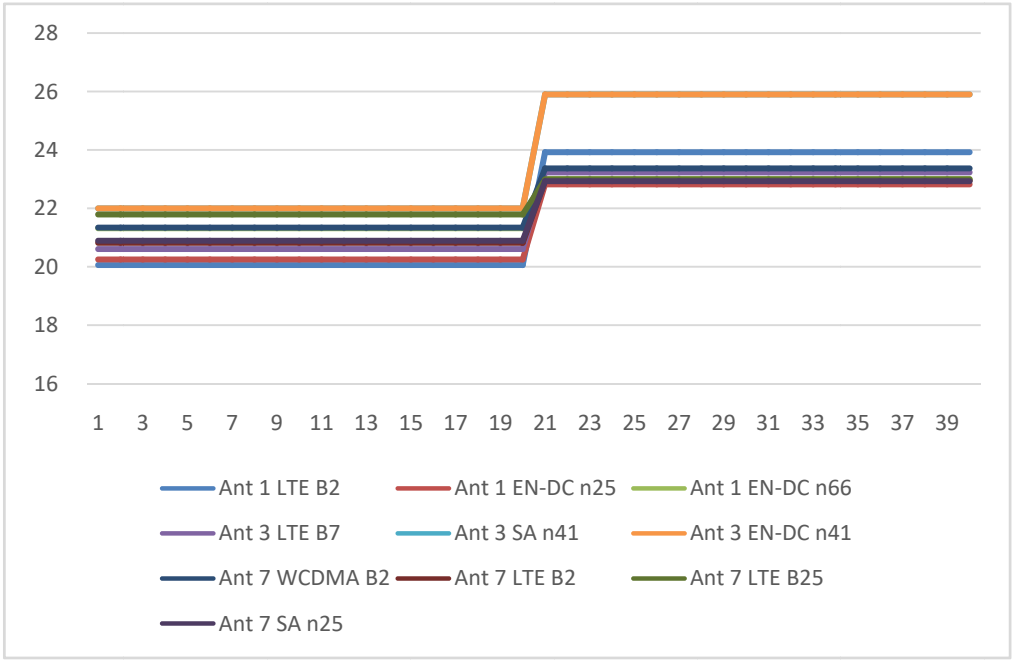
Conclusion: It can be ensured that the proximity sensor can be valid triggered for the body exposure condition(LTE Band 2,EN-DC NSA n25/66 with Antenna1;LTEBand 7,NR SA n41,EN-DC NSA n41 with Antenna3;UMTS B2,LTEBand 2/25, NR SA n25 with Antenna7).

The detailed conducted power measurement data to determine the triggering distances is as below:

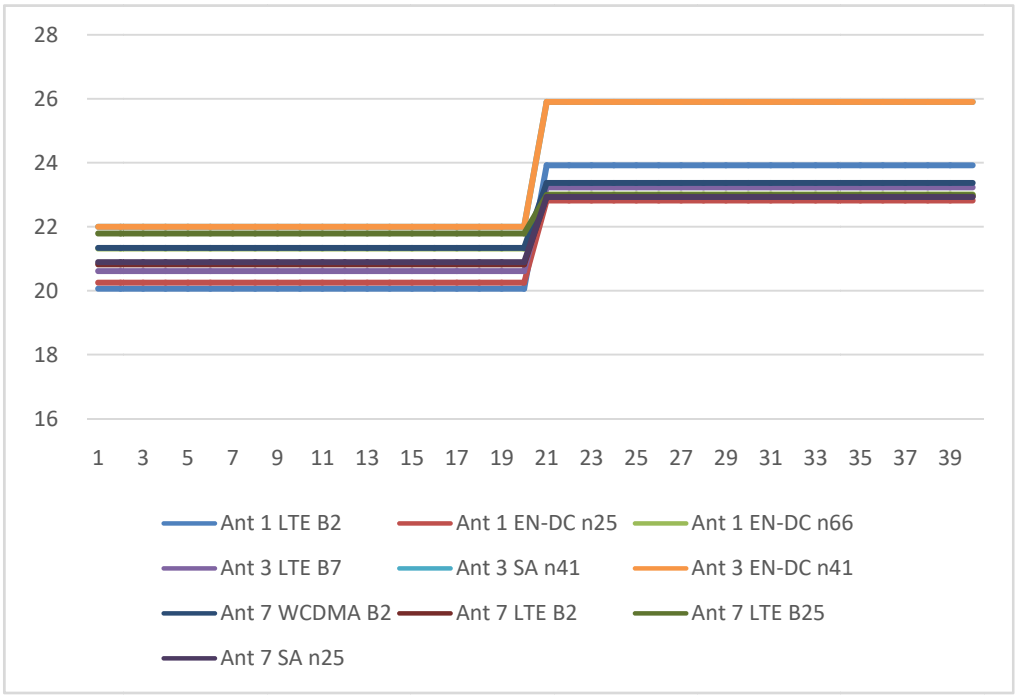
The DUT (Back side) is moved away from the flat phantom:



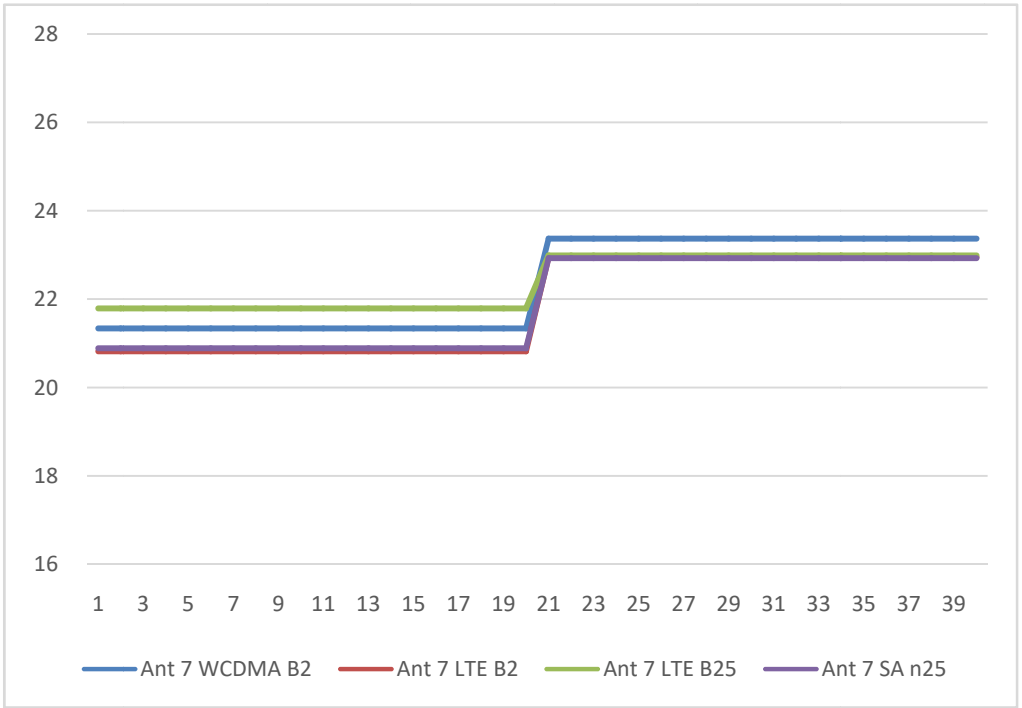
The DUT (Front side) is moved away from the flat phantom:



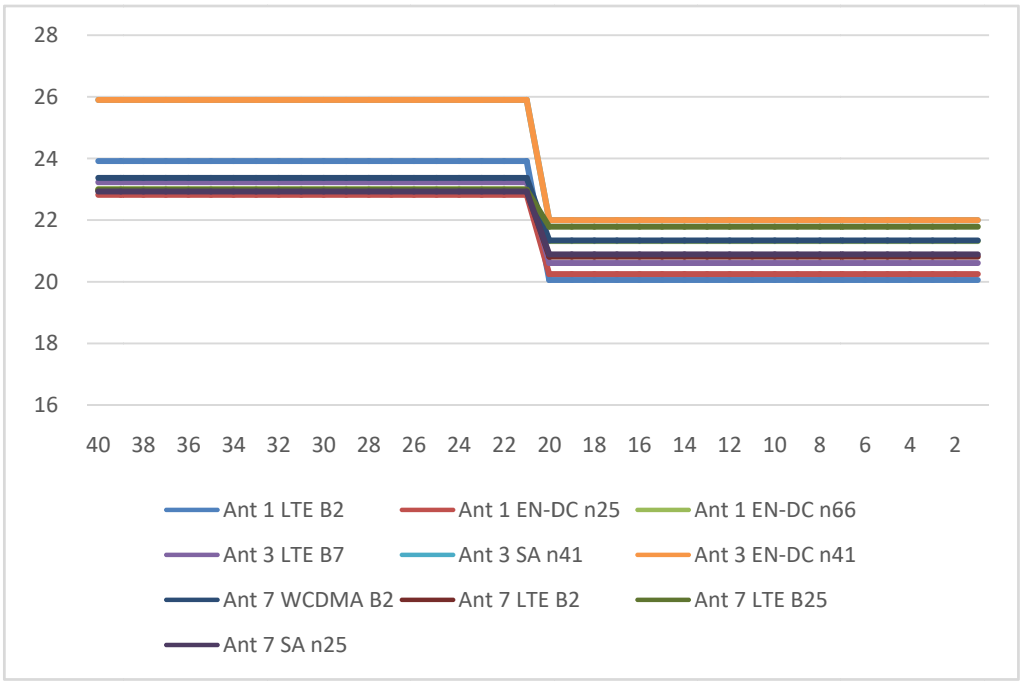
The DUT (Bottom edge) is moved away from the flat phantom:



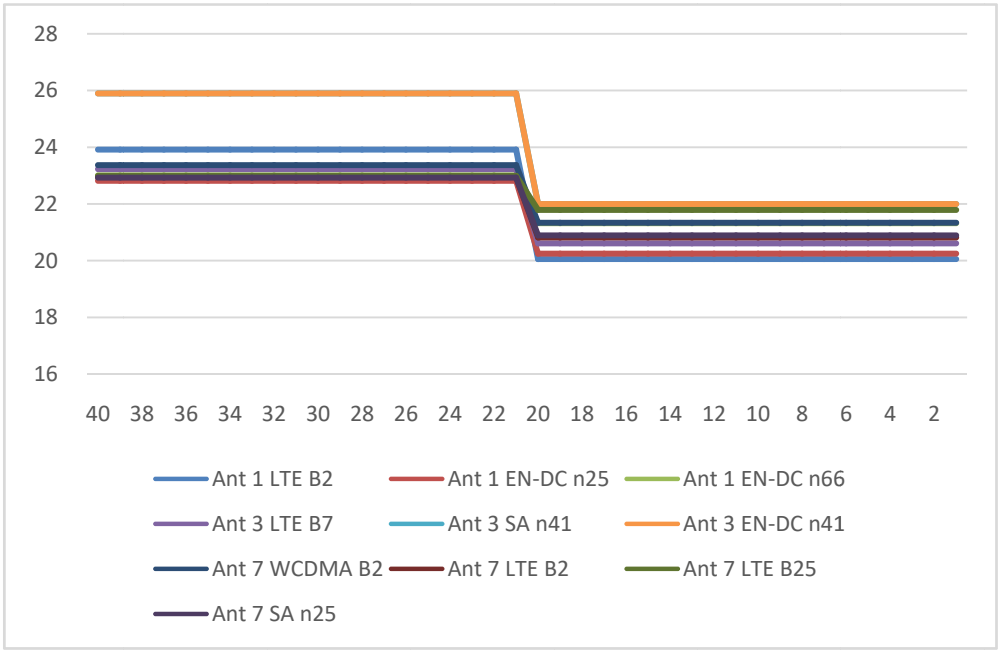
The DUT (Top edge) is moved away from the flat phantom:



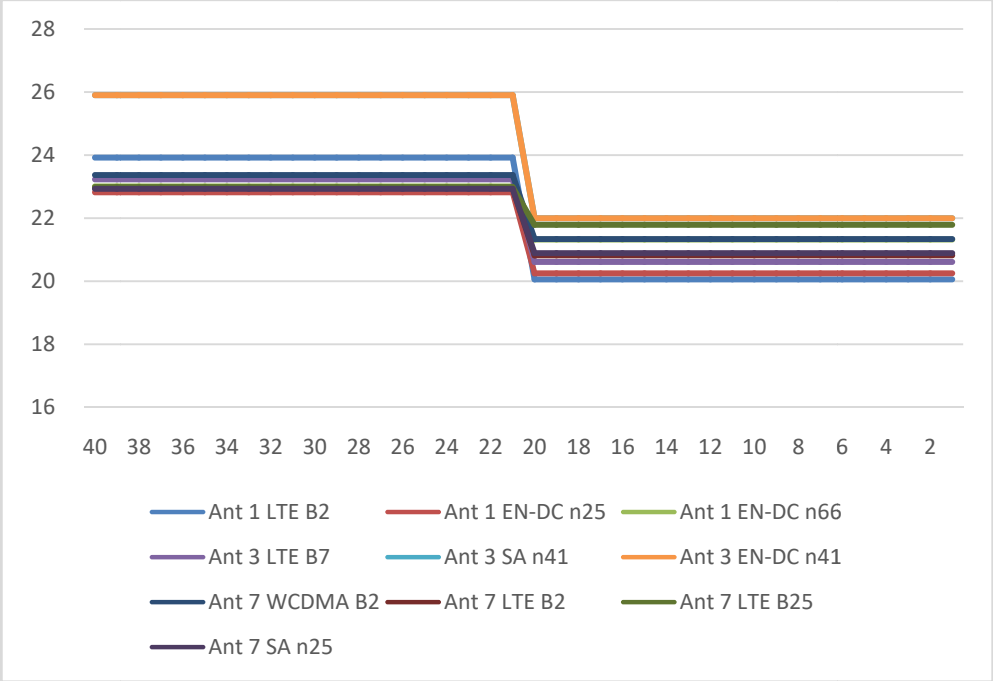
The DUT (Back side) is moved towards the flat phantom:



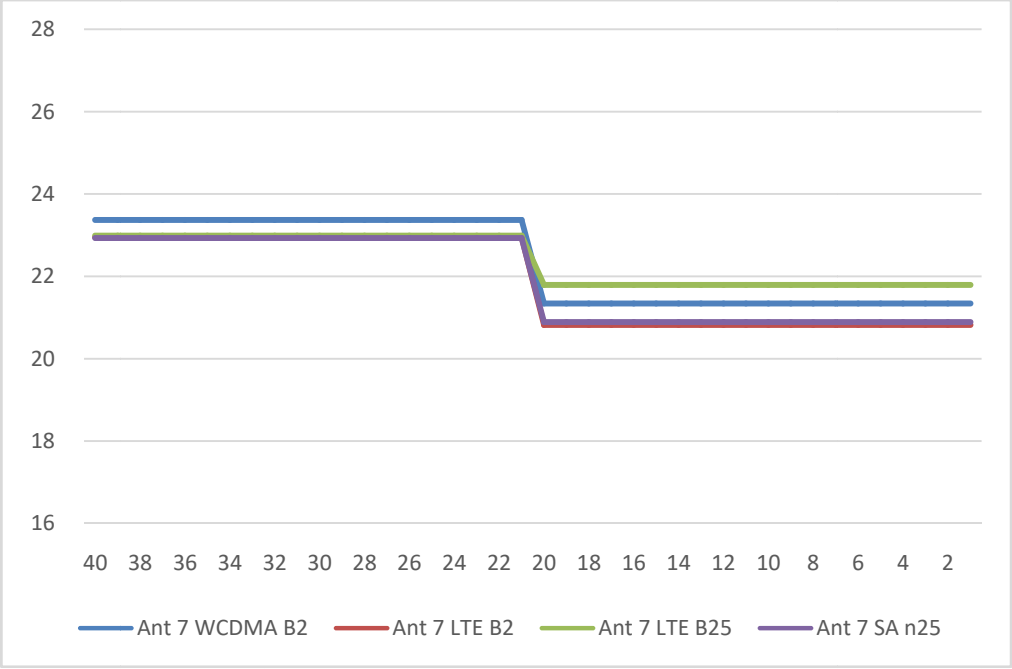
The DUT (Front side) is moved towards the flat phantom:



The DUT (Bottom edge) is moved towards the flat phantom:



The DUT (Top edge) is moved towards the flat phantom:



The detailed conducted power measurement data to determine the triggering distances is as below:

Table: Full Power and Reduced power (Moving toward phantom)

Postion	Ant	Distance (mm)	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
		Band	Power Reduction Status(dBm)																																							
Back Side	Ant 1	LTE B2	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06
Back Side	Ant 1	EN-DC n25	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25
Back Side	Ant 1	EN-DC n66	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32
Back Side	Ant 3	LTE B7	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61
Back Side	Ant 3	SA n41	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00
Back Side	Ant 3	EN-DC n41	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00
Back Side	Ant 7	WCDMA B2	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34
Back Side	Ant 7	LTE B2	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82
Back Side	Ant 7	LTE B25	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79
Back Side	Ant 7	SA n25	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57

Postion	Ant	Distance (mm)	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
		Band	Power Reduction Status(dBm)																																							
Front Side	Ant 1	LTE B2	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06
Front Side	Ant 1	EN-DC n25	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25
Front Side	Ant 1	EN-DC n66	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32
Front Side	Ant 3	LTE B7	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61
Front Side	Ant 3	SA n41	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00
Front Side	Ant 3	EN-DC n41	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00
Front Side	Ant 7	WCDMA B2	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34
Front Side	Ant 7	LTE B2	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82
Front Side	Ant 7	LTE B25	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79
Front Side	Ant 7	SA n25	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57

Postion	Ant	Distance (mm)	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
		Band	Power Reduction Status(dBm)																																							
Bottom Edge	Ant 1	LTE B2	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06
Bottom Edge	Ant 1	EN-DC n25	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25
Bottom Edge	Ant 1	EN-DC n66	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32
Bottom Edge	Ant 3	LTE B7	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61
Bottom Edge	Ant 3	SA n41	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00
Bottom Edge	Ant 3	EN-DC n41	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00
Bottom Edge	Ant 7	WCDMA B2	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34
Bottom Edge	Ant 7	LTE B2	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82
Bottom Edge	Ant 7	LTE B25	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79
Bottom Edge	Ant 7	SA n25	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57

Postion	Ant	Distance (mm)	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
		Band	Power Reduction Status(dBm)																																							
Top Edge	Ant 7	WCDMA B2	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34
Top Edge	Ant 7	LTE B2	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82
Top Edge	Ant 7	LTE B25	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79
Top Edge	Ant 7	SA n25	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57

Table: Full Power and Reduced power (Moving away from phantom)

Postion	Ant	Distance (mm)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
		Band	Power Reduction Status(dBm)																																							
Back Side	Ant 1	LTE B2	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92
Back Side	Ant 1	EN-DC n25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82
Back Side	Ant 1	EN-DC n66	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01
Back Side	Ant 3	LTE B7	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23
Back Side	Ant 3	SA n41	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90
Back Side	Ant 3	EN-DC n41	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90
Back Side	Ant 7	WCDMA B2	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37
Back Side	Ant 7	LTE B2	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95
Back Side	Ant 7	LTE B25	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99
Back Side	Ant 7	SA n25	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93

Postion	Ant	Distance (mm)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
		Band	Power Reduction Status(dBm)																																							
Front Side	Ant 1	LTE B2	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92
Front Side	Ant 1	EN-DC n25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82
Front Side	Ant 1	EN-DC n66	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01
Front Side	Ant 3	LTE B7	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23
Front Side	Ant 3	SA n41	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90
Front Side	Ant 3	EN-DC n41	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90
Front Side	Ant 7	WCDMA B2	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37
Front Side	Ant 7	LTE B2	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95
Front Side	Ant 7	LTE B25	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99
Front Side	Ant 7	SA n25	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93

Postion	Ant	Distance (mm)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
		Band	Power Reduction Status(dBm)																																							
Bottom Edge	Ant 1	LTE B2	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	20.06	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92
Bottom Edge	Ant 1	EN-DC n25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82	22.82
Bottom Edge	Ant 1	EN-DC n66	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	21.32	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01
Bottom Edge	Ant 3	LTE B7	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	20.61	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23
Bottom Edge	Ant 3	SA n41	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90
Bottom Edge	Ant 3	EN-DC n41	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90
Bottom Edge	Ant 7	WCDMA B2	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37
Bottom Edge	Ant 7	LTE B2	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95
Bottom Edge	Ant 7	LTE B25	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99
Bottom Edge	Ant 7	SA n25	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93

Postion	Ant	Distance (mm)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
		Band	Power Reduction Status(dBm)																																							
Top Edge	Ant 7	WCDMA B2	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	21.34	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37
Top Edge	Ant 7	LTE B2	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	20.82	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95
Top Edge	Ant 7	LTE B25	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	21.79	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99	22.99
Top Edge	Ant 7	SA n25	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	19.57	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93

3. Procedures for determining device tilt angle influences to proximity sensor triggering

The DUT was positioned directly below the flat phantom at the minimum measured trigger distance with Bottom side parallel to the base of the flat phantom for each band.

The EUT was rotated about Bottom side for angles up to +/- 45°. If the output power increased during the rotation the DUT was moved 1mm toward the phantom and the rotation repeated. This procedure was repeated until the power remained reduced for all angles up to +/- 45°.

The proximity sensor triggering tilt angle measurement method are as below:

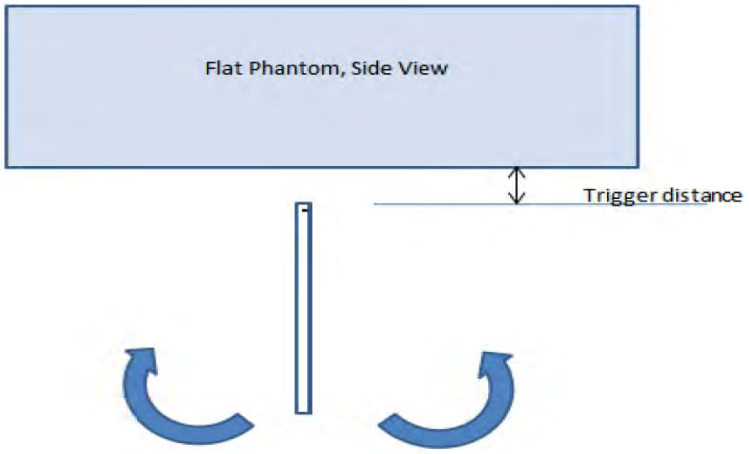


Table: Summary of Tablet Tilt Angle Influence to Proximity Sensor Triggering(Bottom/Top edge)

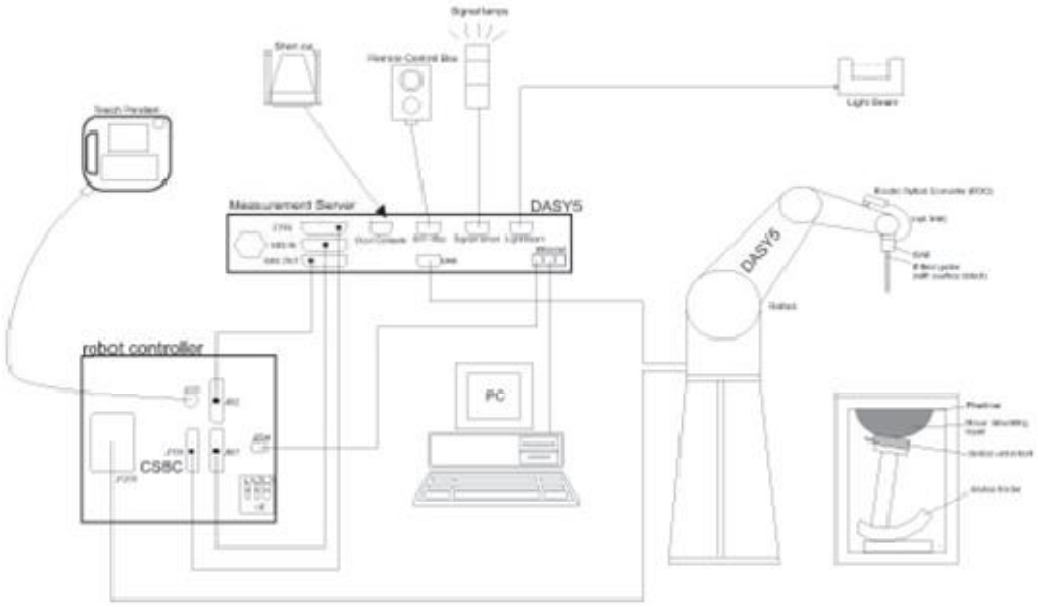
Band(MHz)	Position	Minimum trigger distance at which power reduction was maintained over ±45°	Power Reduction Status										
			-45°	-35°	-25°	-15°	-5°	0°	5°	15°	25°	35°	45°
WCDMA B2	Top edge	20mm	on	on	on	on	on	on	on	on	on	on	on
LTE B2	Top edge	20mm	on	on	on	on	on	on	on	on	on	on	on
LTE B25	Top edge	20mm	on	on	on	on	on	on	on	on	on	on	on
SA n25	Top edge	20mm	on	on	on	on	on	on	on	on	on	on	on
LTE B2	Bottom edge	20mm	on	on	on	on	on	on	on	on	on	on	on
LTE B7	Bottom edge	20mm	on	on	on	on	on	on	on	on	on	on	on
SA n41	Bottom edge	20mm	on	on	on	on	on	on	on	on	on	on	on
EN-DC n25	Bottom edge	20mm	on	on	on	on	on	on	on	on	on	on	on
EN-DC n41	Bottom edge	20mm	on	on	on	on	on	on	on	on	on	on	on
EN-DC n66	Bottom edge	20mm	on	on	on	on	on	on	on	on	on	on	on

Conclusion: It can be ensured that the proximity sensor can be valid triggered for the DUT tilt coverage exposure condition.

6 SAR Measurements System Configuration

6.1 SAR Measurement Set-up

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



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running WinXP or Win7 and the DASY software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

6.2 DASY5 E-field Probe System

The SAR measurements were conducted with the dosimetric probe EX3DV4 (manufactured by SPEAG), designed in the classical triangular configuration and optimized for dosimetric evaluation.

EX3DV4 Probe Specification

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)
Dynamic Range	10 μW/g to > 100 mW/g Linearity: ± 0.2dB (noise: typically < 1 μW/g)
Dimensions	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
Application	High precision dosimetric measurements in any exposure Scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.

E-field Probe Calibration

Each probe is calibrated according to a dosimetric assessment procedure with accuracy better than ± 10%. The spherical isotropy was evaluated and found to be better than ± 0.25dB. The sensitivity parameters (NormX, NormY, NormZ), the diode compression parameter (DCP) and the conversion factor (ConvF) of the probe are tested.

The free space E-field from amplified probe outputs is determined in a test chamber. This is performed in a TEM cell for frequencies bellow 1 GHz, and in a wave guide above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees.

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated brain tissue. The measured free space E-field in the medium correlates to temperature rise in a dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

SAR=C∆T/∆t

Where: ∆t = Exposure time (30 seconds),

C = Heat capacity of tissue (brain or muscle),

∆T = Temperature increase due to RF exposure.

Or

SAR=|E|^{2}σ/ρ

Where: σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m^3).

6.3 SAR Measurement Procedure

Power Reference Measurement

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

Area Scan

The area scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in DASY software can find the maximum found in the scanned area, within a range of the global maximum. The range (in dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan), if only one zoom scan follows the area scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of zoom scans has to be increased accordingly.
Area scan parameters extracted from FCC KDB 865664 D01 SAR measurement 100 MHz to 6 GHz.

<table>
<tr><td></td><td>≤3 GHz</td><td>> 3 GHz</td></tr>
<tr><td>Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface</td><td>5 ± 1 mm</td><td>½·δ·ln(2) ± 0.5 mm</td></tr>
<tr><td>Maximum probe angle from probe axis to phantom surface normal at the measurement location</td><td>30° ± 1°</td><td>20° ± 1°</td></tr>
<tr><td rowspan="2">Maximum area scan spatial resolution: ΔxArea, ΔyArea</td><td>≤ 2 GHz: ≤ 15 mm
2 – 3 GHz: ≤ 12 mm</td><td>3 – 4 GHz: ≤ 12 mm
4 – 6 GHz: ≤ 10 mm</td></tr>
<tr><td colspan="2">When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.</td></tr>
</table>

Zoom Scan

Zoom scans are used assess the peak spatial SAR values within a cubic averaging volume containing 1 gram and 10 gram of simulated tissue. The zoom scan measures points (refer to table below) within a cube shoes base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the zoom scan evaluates the averaged SAR for 1 gram and 10 gram and displays these values next to the job's label.

Zoom scan parameters extracted from FCC KDB 865664 D01 SAR measurement 100 MHz to 6 GHz.

<table>
<tr><td colspan="3"></td><td>≤3GHz</td><td>> 3 GHz</td></tr>
<tr><td colspan="3">Maximum zoom scan spatial resolution: $\triangle x_{zoom} \triangle y_{zoom}$</td><td>≤2GHz: ≤8mm
2 – 3GHz: ≤5mm*</td><td>3 – 4GHz: ≤5mm*
4 – 6GHz: ≤4mm*</td></tr>
<tr><td rowspan="3">Maximum zoom scan spatial resolution, normal to phantom surface</td><td colspan="2">Uniform grid: $\triangle z_{zoom}(n)$</td><td>≤5mm</td><td>3 – 4GHz: ≤4mm
4 – 5GHz: ≤3mm
5 – 6GHz: ≤2mm</td></tr>
<tr><td rowspan="2">Graded grid</td><td>$\triangle z_{zoom}(1)$: between 1st two points closest to phantom surface</td><td>≤4mm</td><td>3 – 4GHz: ≤3mm
4 – 5GHz: ≤2.5mm
5 – 6GHz: ≤2mm</td></tr>
<tr><td>$\triangle z_{zoom}(n>1)$: between subsequent points</td><td colspan="2">≤1.5•$\triangle z_{zoom}(n-1)$</td></tr>
<tr><td>Minimum zoom scan volume</td><td colspan="2">X, y, z</td><td>≥30mm</td><td>3 – 4GHz: ≥28mm
4 – 5GHz: ≥25mm
5 – 6GHz: ≥22mm</td></tr>
<tr><td colspan="5">Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.
* When zoom scan is required and the <u>reported</u> SAR from the area scan based 1-g SAR estimation procedures of KDB 447498 is ≤ 1.4W/kg, ≤8mm, ≤7mm and ≤5mm zoom scan resolution may be applied, respectively, for 2GHz to 3GHz, 3GHz to 4GHz and 4GHz to 6GHz.</td></tr>
</table>

Volume Scan Procedures

The volume scan is used for assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the EUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing. When all volume scan were completed, the software, SEMCAD postprocessor can combine and subsequently superpose these measurement data to calculating the multiband SAR.

Power Drift Monitoring

All SAR testing is under the EUT install full charged battery and transmit maximum output power. In DASY measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of EUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in dB. If the power drifts more than 5%, the SAR will be retested.

7 Main Test Equipment

Name of Equipment	Manufacturer	Type/Model	Serial Number	Last Cal.	Cal. Due Date
Network analyzer	Agilent	E5071B	MY42404014	2021-05-15	2022-05-14
Dielectric Probe Kit	HP	85070E	US44020115	2021-05-15	2022-05-14
Power meter	Agilent	E4417A	GB41291714	2021-05-15	2022-05-14
Power sensor	Agilent	N8481H	MY50350004	2021-05-15	2022-05-14
Power sensor	Agilent	E9327A	US40441622	2021-05-15	2022-05-14
Dual directional coupler	Agilent	778D-012	50519	/	/
Dual directional coupler	Agilent	777D	50146	/	/
Dual directional coupler	UCL	UCL-DDC0 56G-S	20010600118	/	/
Amplifier	INDEXSAR	TPA-005060 G01	13030502	2021-05-15	2022-05-14
Wireless communication tester	Anritsu	MT8820C	6201342015	2020-12-13	2021-12-12
Wireless communication tester	Key sight	E5515C	MY48360988	2020-12-13	2021-12-12
Wideband radio communication tester	R&S	CMW 500	113645	2021-05-15	2022-05-14
Base Station Simulator	R&S	CMW270	100673	2021-05-15	2022-05-14
E-field Probe	SPEAG	EX3DV4	7628	2021-02-16	2022-02-15
DAE	SPEAG	DAE4	1317	2021-02-23	2022-02-22
Validation Kit 750MHz	SPEAG	D750V3	1045	2020-08-28	2023-08-27
Validation Kit 835MHz	SPEAG	D835V2	4d020	2020-08-28	2023-08-27
Validation Kit 1750MHz	SPEAG	D1750V2	1033	2020-02-25	2023-02-24
Validation Kit 1900MHz	SPEAG	D1900V2	5d060	2020-08-27	2023-08-26
Validation Kit 2450MHz	SPEAG	D2450V2	786	2020-08-27	2023-08-26
Validation Kit 2600MHz	SPEAG	D2600V2	1025	2021-04-23	2024-04-22
Validation Kit 5GHz	SPEAG	D5GHzV2	1151	2020-02-27	2023-02-26
Temperature Probe	Tianjin jinming	JM222	381	2021-05-15	2022-05-14
Hygrothermograph	Anymetr	HTC - 1	TY2020A001	2021-05-15	2022-05-14
Twin SAM Phantom	Speag	SAM1	1534	/	/
Software for Test	Speag	DASY52	/	/	/
Softwarefor Tissue	Agilent	85070	/	/	/

8 Tissue Dielectric Parameter Measurements & System Verification

8.1 Tissue Verification

The temperature of the tissue-equivalent medium used during measurement must also be within 18°C to 25°C and within ± 2°C of the temperature when the tissue parameters are characterized. The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements. The parameters should be re-measured after each 24 hours of use; or earlier if the dielectric parameters can become out of tolerance.

Target values

Frequency (MHz)	Water (%)	Salt (%)	Sugar (%)	Glycol (%)	Preventol (%)	Cellulose (%)	ε_r	σ(s/m)
750	41.448	1.452	56	0	0.1	1.0	41.9	0.89
835	41.45	1.45	56	0	0.1	1.0	41.5	0.90
1750	55.24	0.31	0	44.45	0	0	40.1	1.37
1900	55.242	0.306	0	44.452	0	0	40.0	1.40
2450	62.7	0.5	0	36.8	0	0	39.2	1.80
2600	55.242	0.306	0	44.452	0	0	39.0	1.96
Frequency (MHz)	**Water (%)**	**Diethylenglycol monohexylether**			**Triton X-100**		**ε_r**	**σ(s/m)**
5250	65.53	17.24			17.23		35.9	4.71
5600	65.53	17.24			17.23		35.5	5.07
5750	65.53	17.24			17.23		35.4	5.22

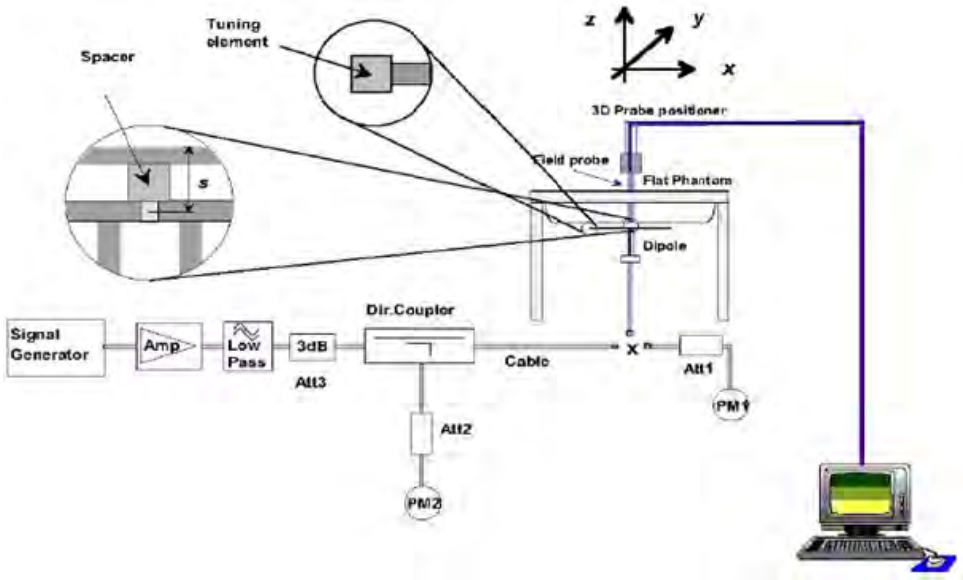
Measurements results

Frequency (MHz)	Test Date	Temp ℃	Measured Dielectric Parameters		Target Dielectric Parameters		Limit (Within ±5%)	
			ε_r	σ(s/m)	ε_r	σ(s/m)	Dev ε_r(%)	Dev σ(%)
750	7/28/2021	21.5	42.3	0.88	41.9	0.89	0.95	-1.12
	7/29/2021	21.5	42.0	0.87	41.9	0.89	0.24	-2.25
835	8/7/2021	21.5	41.4	0.88	41.5	0.90	-0.24	-2.22
	8/8/2021	21.5	41.3	0.87	41.5	0.90	-0.48	-3.33
1750	8/30/2021	21.5	40.2	1.34	40.1	1.37	0.25	-2.19
	8/31/2021	21.5	40.1	1.34	40.1	1.37	0.00	-2.19
	8/16/2021	21.5	40.3	1.36	40.1	1.37	0.50	-0.73
1900	8/9/2021	21.5	40.1	1.41	40.0	1.40	0.25	0.71
	8/10/2021	21.5	40.2	1.43	40.0	1.40	0.50	2.14
	8/11/2021	21.5	40.0	1.40	40.0	1.40	0.00	0.00
	8/12/2021	21.5	40.3	1.42	40.0	1.40	0.75	1.43
	8/13/2021	21.5	40.1	1.42	40.0	1.40	0.25	1.43
2450	7/30/2021	21.5	38.6	1.81	39.2	1.80	-1.53	0.56
2600	8/25/2021	21.5	38.2	2.01	39.0	1.96	-2.05	2.55
	8/26/2021	21.5	38.4	1.94	39.0	1.96	-1.54	-1.02
	8/24/2021	21.5	38.3	1.99	39.0	1.96	-1.79	1.53
5250	8/2/2021	21.5	35.5	4.80	35.9	4.71	-1.11	1.91
	8/3/2021	21.5	35.8	4.72	35.9	4.71	-0.28	0.21
5600	8/4/2021	21.5	34.2	5.21	35.5	5.07	-3.66	2.76
5750	8/5/2021	21.5	34.9	5.21	35.4	5.22	-1.41	-0.19
Note: The depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm for SAR measurements ≤ 3 GHz and ≥ 10.0 cm for measurements > 3 GHz.								

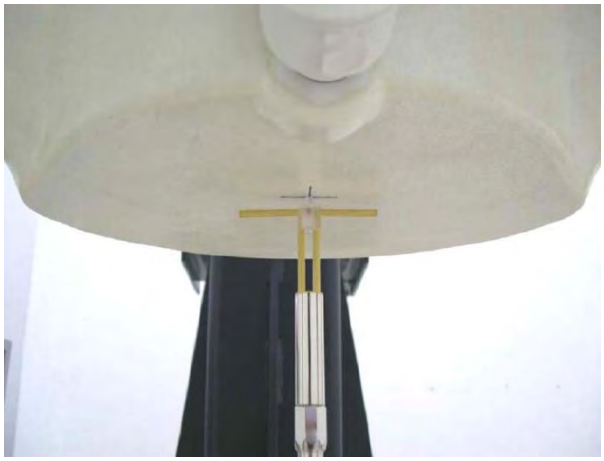
8.2 System Performance Check

The manufacturer calibrates the probes annually. Dielectric parameters of the tissue simulates were measured using the dielectric probe kit and the network analyzer. A system check measurement for every day was made following the determination of the dielectric parameters of the Tissue simulates, using the dipole validation kit. The dipole antenna was placed under the flat section of the twin SAM phantom.

System check is performed regularly on all frequency bands where tests are performed with the DASY system.



Picture 1System Performance Check setup



Picture 2 Setup Photo

Justification for Extended SAR Dipole Calibrations

Usage of SAR dipoles calibrated less than 3 years ago but more than 1 year ago were confirmed in maintaining return loss (< - 20 dB, within 20% of prior calibration) and impedance (within 5 ohm from prior calibration) requirements per extended calibrations in KDB 865664 D01:

Dipole		Date of Measurement	Return Loss(dB)	Δ %	Impedance (Ω)	ΔΩ
Dipole D1750V2 SN: 1033	Head Liquid	2/25/2020	-38.3	/	48.8	/
		2/26/2021	-40.0	-1.7	49.9	1.1
Dipole D5GHzV2 SN: 1151 (5250MHz)	Head Liquid	2/27/2020	-23.4	/	52.4	/
		2/26/2021	-23.8	-0.4	50.0	-2.4
Dipole D5GHzV2 SN: 1151 (5600MHz)	Head Liquid	2/27/2020	-22.6	/	57.0	/
		2/26/2021	-21.5	1.1	55.6	-1.4
Dipole D5GHzV2 SN: 1151 (5750MHz)	Head Liquid	2/27/2020	-25.0	/	55.9	/
		2/26/2021	-26.8	-1.8	52.5	-3.4

System Check results

Frequency (MHz)	Test Date	Temp ℃	250mW /100mW Measured SAR_{1g} (W/kg)	1W Normalized SAR_{1g} (W/kg)	1W Target SAR_{1g} (W/kg)	Δ % (Limit ±10%)	Plot No.
750	7/28/2021	21.5	2.13	8.52	8.37	1.79	1
	7/29/2021	21.5	2.10	8.40	8.37	0.36	2
835	8/7/2021	21.5	2.44	9.76	9.65	1.14	3
	8/8/2021	21.5	2.46	9.84	9.65	1.97	4
1750	8/30/2021	21.5	8.95	35.80	35.90	-0.28	5
	8/31/2021	21.5	9.11	36.44	35.90	1.50	6
	8/16/2021	21.5	8.96	35.84	35.90	-0.17	7
1900	8/9/2021	21.5	9.88	39.52	39.50	0.05	8
	8/10/2021	21.5	9.85	39.40	39.50	-0.25	9
	8/11/2021	21.5	10.55	42.20	39.50	6.84	10
	8/12/2021	21.5	10.50	42.00	39.50	6.33	11
	8/13/2021	21.5	10.50	42.00	39.50	6.33	12
2450	7/30/2021	21.5	13.70	54.80	52.30	4.78	13
2600	8/25/2021	21.5	13.90	55.60	56.10	-0.89	14
	8/26/2021	21.5	13.88	55.52	56.10	-1.03	15
	8/24/2021	21.5	13.94	55.76	56.10	-0.61	16
5250	8/2/2021	21.5	7.87	78.70	78.00	0.90	17
	8/3/2021	21.5	7.54	75.40	78.00	-3.33	18
5600	8/4/2021	21.5	7.67	76.70	80.50	-4.72	19
5750	8/5/2021	21.5	7.66	76.60	77.40	-1.03	20
Note: Target Values used derive from the calibration certificate Data Storage and Evaluation.							

8.3 SAR System Validation

Per FCC KDB 865664 D02v01, SAR system verification is required to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles are used with the required tissue-equivalent media for system validation, according to the procedures outlined in FCC KDB 865664 D01 and IEEE 1528-2013. Since SAR probe calibrations are frequency dependent, each probe calibration point must be validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media.

A tabulated summary of the system validation status, measurement frequencies, SAR probes, calibrated signal type(s) and tissue dielectric parameters has been included.

Frequency [MHz]	Date	Probe SN	Probe Type	Probe Cal Point		PERM (Er)	COND (Σ)	CW Validation			Mod. Validation		
								Sensitivity	Probe Linearity	Probe Isotropy	Mod. Type	Duty Factor	PAR
750	2/16/2021	7628	EX3DV4	750	Head	42.81	0.85	PASS	PASS	PASS	FDD	PASS	N/A
835	2/16/2021	7628	EX3DV4	835	Head	42.22	0.90	PASS	PASS	PASS	GMSK	PASS	N/A
1750	2/16/2021	7628	EX3DV4	1750	Head	39.91	1.32	PASS	PASS	PASS	NA	N/A	N/A
1900	2/16/2021	7628	EX3DV4	1900	Head	39.43	1.42	PASS	PASS	PASS	GMSK	PASS	N/A
2450	2/16/2021	7628	EX3DV4	2450	Head	38.19	1.83	PASS	PASS	PASS	OFDM	PASS	PASS
2600	2/16/2021	7628	EX3DV4	2600	Head	37.60	1.99	PASS	PASS	PASS	TDD	PASS	N/A
5250	2/16/2021	7628	EX3DV4	5250	Head	35.36	4.83	PASS	PASS	PASS	OFDM	N/A	PASS
5600	2/16/2021	7628	EX3DV4	5600	Head	34.43	5.29	PASS	PASS	PASS	OFDM	N/A	PASS
5750	2/16/2021	7628	EX3DV4	5750	Head	34.07	5.47	PASS	PASS	PASS	OFDM	N/A	PASS

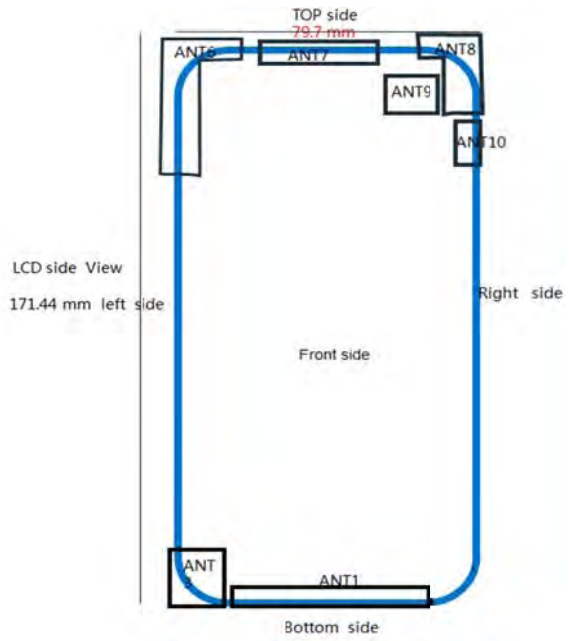
NOTE: While the probes have been calibrated for both CW and modulated signals, all measurements were performed using communication systems calibrated for CW signals only. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664D01v01 for scenarios when CW probe calibrations are used with other signal types. SAR systems were validated for modulated signals with a periodic duty cycle, such as GMSK, or with a high peak to average ratio (>5dB), such as OFDM according to KDB 865664.

9 Normal and Maximum Output Power

Please see the R2107A0659 *SAR Normal and Maximum Output Power*.

10 Measured and Reported (Scaled) SAR Results

10.1 EUT Antenna Locations



ANT 1: LTE B2/66/NR n25/n66
ANT 3: LTE B7/38/41/NR n41
ANT 6: GSM 850/WCDMA B5/LTE B5/12/13/17/26/71/NR n71
ANT 7: GSM 1900/WCDMA 2/4/LTE 2/4/25/66/NR n25/66
ANT 8: Wi-Fi 2.4G Chain 1
ANT 9: Wi-Fi 2.4G Chain 2 & Wi-Fi 5G Chain 2
ANT 10: Wi-Fi 5G Chain 1

Overall (Length x Width): 171.44 mm x 79.7 mm Overall Diagonal: 179 mm/Display Diagonal: 165mm						
Distance of the Antenna to the EUT surface/edge						
Antenna	Back Side	Front side	Left Edge	Right Edge	Top Edge	Bottom Edge
Ant 1	＜25mm	＜25mm	＜25mm	＜25mm	＞25mm	＜25mm
Ant 3	＜25mm	＜25mm	＜25mm	＞25mm	＞25mm	＜25mm
Ant 6	＜25mm	＜25mm	＜25mm	＞25mm	＜25mm	＞25mm
Ant 7	＜25mm	＜25mm	＜25mm	＜25mm	＜25mm	＞25mm
Ant 8	＜25mm	＜25mm	＞25mm	＜25mm	＜25mm	＞25mm
Ant 9	＜25mm	＜25mm	＞25mm	＜25mm	＜25mm	＞25mm
Ant 10	＜25mm	＜25mm	＞25mm	＜25mm	＜25mm	＞25mm
Hotspot mode, Positions for SAR tests						
Mode	Back Side	Front side	Left Edge	Right Edge	Top Edge	Bottom Edge
Ant 1	Yes	Yes	Yes	Yes	N/A	Yes
Ant 3	Yes	Yes	Yes	N/A	N/A	Yes
Ant 6	Yes	Yes	Yes	N/A	Yes	N/A
Ant 7	Yes	Yes	Yes	Yes	Yes	N/A
Ant 8	Yes	Yes	N/A	Yes	Yes	N/A
Ant 9	Yes	Yes	N/A	Yes	Yes	N/A
Ant 10	Yes	Yes	N/A	Yes	Yes	N/A
Note: 1. Per KDB 941225 D06, when the overall device length and width are ≥ 9cm*5cm, the test distance is 10mm. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface						

or edge.

2.For smart phones with an overall diagonal dimension is 179mm. Per KDB 648474 D04, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, product specific 10-g SAR must be tested as a phablet to determine SAR compliance. For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, product specific 10-g SAR is no required.

3. Per FCC KDB 447498 D01, for each exposure position, testing of other requised channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:

a) ≤0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100MHz

b) ≤0.6 W/kg or 1.5 W/kg, for1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz.

c) ≤ 0.4 W/kg or 1.0 Wkg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz.

4. When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

5. Per FCC KDB Publication 648474 D04, SAR was evaluated without a headset connected to the device. Since the reported SAR was ≤ 1.2 W/kg, no additional SAR evaluations using a headset cable were required.

10.2 Measured SAR Results

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. For GSM, when multiple slots are used, SAR should be tested to account for the maximum source-based time-averaged output power.

3. For WCDMA, When the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.

4. For LTE, QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are≥ 50% limit(1g).

Head SAR

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	Plot No.
GSM 850	ANT 6	Left cheek	0	GSM	Level 1	-	-	190/836.6	32.00	31.08	0.351	-0.110	1.24	0.434	/
		Left Tilt	0	GSM	Level 1	-	-	190/836.6	32.00	31.08	0.328	-0.090	1.24	0.405	/
		Right cheek	0	GSM	Level 1	-	-	190/836.6	32.00	31.08	0.548	0.049	1.24	0.677	/
		Right Tilt	0	GSM	Level 1	-	-	190/836.6	32.00	31.08	0.698	0.160	1.24	0.863	21
			0	GSM	Level 1	-	-	128/824.2	32.00	31.31	0.613	-0.070	1.17	0.719	/
			0	GSM	Level 1	-	-	251/848.8	32.00	31.12	0.597	0.100	1.22	0.731	/
GSM 1900	ANT 7	Left cheek	0	GSM	Level 1	-	-	661/1880	25.50	24.58	0.624	0.030	1.24	0.771	/
		Left Tilt	0	GSM	Level 1	-	-	512/1850.2	25.50	24.85	0.759	0.010	1.16	0.882	/
			0	GSM	Level 1	-	-	661/1880	25.50	24.58	0.855	0.010	1.24	1.057	22
			0	GSM	Level 1	-	-	810/1909.8	25.50	24.50	0.823	0.022	1.26	1.036	/
		Left Tilt Repeated	0	GSM	Level 1	-	-	661/1880	25.50	24.58	0.847	-0.023	1.24	1.047	/
		Right cheek	0	GSM	Level 1	-	-	661/1880	25.50	24.58	0.625	0.039	1.24	0.772	/
		Right Tilt	0	GSM	Level 1	-	-	512/1850.2	25.50	24.85	0.705	0.015	1.16	0.819	/
			0	GSM	Level 1	-	-	661/1880	25.50	24.58	0.731	0.010	1.24	0.903	/
			0	GSM	Level 1	-	-	810/1909.8	25.50	24.50	0.688	-0.010	1.26	0.866	/
WCDMA II	ANT 7	Left cheek	0	RMC 12.2K	Level 1	-	-	9262/1852.4	18.50	18.13	0.956	0.036	1.09	1.041	/
			0	RMC 12.2K	Level 1	-	-	9400/1880	18.50	18.09	0.832	0.160	1.10	0.914	/
			0	RMC 12.2K	Level 1	-	-	9538/1907.6	18.50	18.10	0.924	-0.018	1.10	1.013	/
		Left Tilt	0	RMC 12.2K	Level 1	-	-	9262/1852.4	18.50	18.13	0.946	0.038	1.09	1.030	/
			0	RMC 12.2K	Level 1	-	-	9400/1880	18.50	18.09	1.050	-0.140	1.10	1.154	/
			0	RMC 12.2K	Level 1	-	-	9538/1907.6	18.50	18.10	1.130	-0.015	1.10	1.239	/
		Right cheek	0	RMC 12.2K	Level 1	-	-	9262/1852.4	18.50	18.13	0.813	-0.060	1.09	0.885	/
			0	RMC 12.2K	Level 1	-	-	9400/1880	18.50	18.09	0.874	-0.080	1.10	0.961	/
			0	RMC 12.2K	Level 1	-	-	9538/1907.6	18.50	18.10	0.870	-0.110	1.10	0.954	/
		Right Tilt	0	RMC 12.2K	Level 1	-	-	9262/1852.4	18.50	18.13	0.947	-0.070	1.09	1.031	/
			0	RMC 12.2K	Level 1	-	-	9400/1880	18.50	18.09	1.280	-0.025	1.10	1.407	23
			0	RMC 12.2K	Level 1	-	-	9538/1907.6	18.50	18.10	1.000	-0.070	1.10	1.096	/

		Right Tilt Repeated	0	RMC 12.2K	Level 1	-	-	9400/1880	18.50	18.09	1.210	0.050	1.10	1.330	/
WCDMA IV	ANT 7	Left cheek	0	RMC 12.2K	Level 1	-	-	1312/1712.4	20.50	19.14	0.848	-0.080	1.37	1.160	/
			0	RMC 12.2K	Level 1	-	-	1413/1732.6	20.50	19.21	0.802	0.110	1.35	1.079	/
			0	RMC 12.2K	Level 1	-	-	1513/1752.6	20.50	19.20	0.813	0.000	1.35	1.097	/
		Left Tilt	0	RMC 12.2K	Level 1	-	-	1312/1712.4	20.50	19.14	0.783	0.000	1.37	1.071	/
			0	RMC 12.2K	Level 1	-	-	1413/1732.6	20.50	19.21	0.821	0.000	1.35	1.105	/
			0	RMC 12.2K	Level 1	-	-	1513/1752.6	20.50	19.20	0.919	0.020	1.35	1.240	/
		Left Tilt Repeated	0	RMC 12.2K	Level 1	-	-	1513/1752.6	20.50	19.20	0.925	0.039	1.35	1.248	24
		Right cheek	0	RMC 12.2K	Level 1	-	-	1312/1712.4	20.50	19.14	0.734	-0.030	1.37	1.004	/
			0	RMC 12.2K	Level 1	-	-	1413/1732.6	20.50	19.21	0.797	-0.040	1.35	1.073	/
			0	RMC 12.2K	Level 1	-	-	1513/1752.6	20.50	19.20	0.833	-0.020	1.35	1.124	/
		Right Tilt	0	RMC 12.2K	Level 1	-	-	1312/1712.4	20.50	19.14	0.751	-0.040	1.37	1.027	/
			0	RMC 12.2K	Level 1	-	-	1413/1732.6	20.50	19.21	0.840	-0.040	1.35	1.131	/
			0	RMC 12.2K	Level 1	-	-	1513/1752.6	20.50	19.20	0.899	-0.050	1.35	1.213	/
WCDMA V	ANT 6	Left cheek	0	RMC 12.2K	Level 1	-	-	4183/836.6	22.50	21.17	0.450	0.045	1.36	0.611	/
		Left Tilt	0	RMC 12.2K	Level 1	-	-	4183/836.6	22.50	21.17	0.603	-0.020	1.36	0.819	/
			0	RMC 12.2K	Level 1	-	-	4132/826.4	22.50	21.15	0.334	-0.110	1.36	0.456	/
			0	RMC 12.2K	Level 1	-	-	4233/846.6	22.50	21.15	0.343	-0.090	1.36	0.468	/
		Right cheek	0	RMC 12.2K	Level 1	-	-	4183/836.6	22.50	21.17	0.309	-0.050	1.36	0.420	/
		Right Tilt	0	RMC 12.2K	Level 1	-	-	4183/836.6	22.50	21.17	0.719	0.140	1.36	0.977	25
			0	RMC 12.2K	Level 1	-	-	4132/826.4	22.50	21.15	0.662	0.010	1.36	0.903	/
			0	RMC 12.2K	Level 1	-	-	4233/846.6	22.50	21.15	0.683	-0.020	1.36	0.932	/
LTE 2	ANT 7	Left cheek	0	QPSK	Level 1	1	50	18700/1860	19.00	17.79	0.761	-0.030	1.32	1.006	/
			0	QPSK	Level 1	1	50	18900/1880	19.00	17.57	0.782	0.050	1.39	1.087	/
			0	QPSK	Level 1	1	99	19100/1900	19.00	17.58	0.776	-0.010	1.39	1.076	/
			0	QPSK	Level 1	50%	0	18700/1860	19.00	17.82	0.798	0.010	1.31	1.047	/
			0	QPSK	Level 1	50%	0	18900/1880	19.00	17.64	0.781	0.010	1.37	1.068	/
			0	QPSK	Level 1	50%	0	19100/1900	19.00	17.66	0.789	0.000	1.36	1.074	/
		Left Tilt	0	QPSK	Level 1	1	50	19100/1900	19.00	17.79	0.870	-0.090	1.32	1.150	/
			0	QPSK	Level 1	1	50	18900/1880	19.00	17.57	1.010	0.000	1.39	1.404	26
			0	QPSK	Level 1	1	99	19100/1900	19.00	17.58	0.957	0.030	1.39	1.327	/
			0	QPSK	Level 1	50%	0	18700/1860	19.00	17.82	0.913	0.010	1.31	1.198	/
			0	QPSK	Level 1	50%	0	18900/1880	19.00	17.64	0.869	0.038	1.37	1.189	/
			0	QPSK	Level 1	50%	0	19100/1900	19.00	17.66	0.945	-0.017	1.36	1.287	/
			0	QPSK	Level 1	100%	0	18700/1860	19.00	17.62	0.912	0.012	1.37	1.253	/
			0	QPSK	Level 1	100%	0	18900/1880	19.00	17.59	0.886	-0.069	1.38	1.226	/
			0	QPSK	Level 1	100%	0	19100/1900	19.00	17.63	0.905	0.040	1.37	1.241	/
		Left Tilt Repeated	0	QPSK	Level 1	1	50	18900/1880	19.00	17.57	0.994	0.032	1.39	1.382	/
		Right cheek	0	QPSK	Level 1	1	50	18700/1860	19.00	17.79	0.770	-0.020	1.32	1.017	/
			0	QPSK	Level 1	1	50	18900/1880	19.00	17.57	0.808	-0.060	1.39	1.123	/

			0	QPSK	Level 1	1	99	19100/1900	19.00	17.58	0.803	-0.050	1.39	1.114	/
			0	QPSK	Level 1	50%	0	18700/1860	19.00	17.82	0.798	-0.160	1.31	1.047	/
			0	QPSK	Level 1	50%	0	18900/1880	19.00	17.64	0.825	-0.080	1.37	1.128	/
			0	QPSK	Level 1	50%	0	19100/1900	19.00	17.66	0.851	-0.070	1.36	1.159	/
		Right Tilt	0	QPSK	Level 1	1	50	18700/1860	19.00	17.79	0.782	-0.080	1.32	1.033	/
			0	QPSK	Level 1	1	50	18900/1880	19.00	17.57	0.895	-0.080	1.39	1.244	/
			0	QPSK	Level 1	1	99	19100/1900	19.00	17.58	0.900	-0.100	1.39	1.248	/
			0	QPSK	Level 1	50%	0	18700/1860	19.00	17.82	0.808	-0.050	1.31	1.060	/
			0	QPSK	Level 1	50%	0	18900/1880	19.00	17.64	0.830	-0.130	1.37	1.135	/
			0	QPSK	Level 1	50%	0	19100/1900	19.00	17.66	0.843	-0.090	1.36	1.148	/
LTE 5	ANT 6	Left cheek	0	QPSK	Level 1	1	0	20450/829	22.50	20.78	0.181	-0.026	1.49	0.269	/
			0	QPSK	Level 1	50%	13	20450/829	22.50	20.97	0.201	0.014	1.42	0.286	/
		Left Tilt	0	QPSK	Level 1	1	0	20450/829	22.50	20.78	0.172	-0.030	1.49	0.256	/
			0	QPSK	Level 1	50%	13	20450/829	22.50	20.97	0.306	0.038	1.42	0.435	/
		Right cheek	0	QPSK	Level 1	1	0	20450/829	22.50	20.78	0.315	0.150	1.49	0.468	/
			0	QPSK	Level 1	50%	13	20450/829	22.50	20.97	0.335	-0.100	1.42	0.476	/
		Right Tilt	0	QPSK	Level 1	1	0	20450/829	22.50	20.78	0.368	0.023	1.49	0.547	27
			0	QPSK	Level 1	50%	13	20450/829	22.50	20.97	0.363	0.030	1.42	0.516	/
LTE 7	ANT 3	Left cheek	0	QPSK	Level 1	1	99	21350/2560	24.70	23.23	0.174	0.170	1.40	0.244	28
			0	QPSK	Level 1	50%	0	21350/2560	23.70	22.19	0.131	0.027	1.42	0.185	/
		Left Tilt	0	QPSK	Level 1	1	99	21350/2560	24.70	23.23	0.078	0.000	1.40	0.110	/
			0	QPSK	Level 1	50%	0	21350/2560	23.70	22.19	0.061	0.140	1.42	0.086	/
		Right cheek	0	QPSK	Level 1	1	99	21350/2560	24.70	23.23	0.106	0.177	1.40	0.149	/
			0	QPSK	Level 1	50%	0	21350/2560	23.70	22.19	0.101	0.042	1.42	0.143	/
		Right Tilt	0	QPSK	Level 1	1	99	21350/2560	24.70	23.23	0.121	0.094	1.40	0.170	/
			0	QPSK	Level 1	50%	0	21350/2560	23.70	22.19	0.099	0.080	1.42	0.139	/
LTE 12	ANT 6	Left cheek	0	QPSK	Level 1	1	49	23095/707.5	25.00	23.23	0.244	-0.020	1.50	0.367	/
			0	QPSK	Level 1	50%	0	23060/704	24.00	22.29	0.150	0.070	1.48	0.222	/
		Left Tilt	0	QPSK	Level 1	1	49	23095/707.5	25.00	23.23	0.203	0.110	1.50	0.305	/
			0	QPSK	Level 1	50%	0	23060/704	24.00	22.29	0.155	0.070	1.48	0.230	/
		Right cheek	0	QPSK	Level 1	1	49	23095/707.5	25.00	23.23	0.479	0.040	1.50	0.720	/
			0	QPSK	Level 1	50%	0	23060/704	24.00	22.29	0.527	-0.020	1.48	0.781	29
		Right Tilt	0	QPSK	Level 1	1	49	23095/707.5	25.00	23.23	0.510	0.140	1.50	0.767	/
			0	QPSK	Level 1	50%	0	23060/704	24.00	22.29	0.395	0.050	1.48	0.586	/
LTE 13	ANT 6	Left cheek	0	QPSK	Level 1	1	25	23230/782	25.00	23.13	0.356	-0.160	1.54	0.548	/
			0	QPSK	Level 1	50%	0	23230/782	24.00	22.16	0.309	0.010	1.53	0.472	/
		Left Tilt	0	QPSK	Level 1	1	25	23230/782	25.00	23.13	0.326	0.130	1.54	0.501	/
			0	QPSK	Level 1	50%	0	23230/782	24.00	22.16	0.272	0.080	1.53	0.415	/
		Right cheek	0	QPSK	Level 1	1	25	23230/782	25.00	23.13	0.507	0.040	1.54	0.780	30
			0	QPSK	Level 1	50%	0	23230/782	24.00	22.16	0.442	0.080	1.53	0.675	/
		Right Tilt	0	QPSK	Level 1	1	25	23230/782	25.00	23.13	0.496	-0.080	1.54	0.763	/
			0	QPSK	Level 1	50%	0	23230/782	24.00	22.16	0.438	0.180	1.53	0.669	/
LTE 25	ANT 7	Left cheek	0	QPSK	Level 1	1	0	26140/1860	19.00	18.00	0.699	0.180	1.26	0.880	/

			0	QPSK	Level 1	1	0	26365/1882.5	19.00	17.61	0.816	0.150	1.38	1.124	/
			0	QPSK	Level 1	1	50	26590/1905	19.00	17.54	0.810	-0.010	1.40	1.134	/
			0	QPSK	Level 1	50%	25	26140/1860	19.00	17.76	0.735	0.060	1.33	0.978	/
			0	QPSK	Level 1	50%	25	26365/1882.5	19.00	17.65	0.846	-0.030	1.36	1.154	/
			0	QPSK	Level 1	50%	0	26590/1905	19.00	17.67	0.849	-0.010	1.36	1.153	/
		Left Tilt	0	QPSK	Level 1	1	0	26140/1860	19.00	18.00	0.973	0.020	1.26	1.225	/
			0	QPSK	Level 1	1	0	26365/1882.5	19.00	17.61	1.000	-0.030	1.38	1.377	/
			0	QPSK	Level 1	1	50	26590/1905	19.00	17.54	0.991	0.000	1.40	1.387	/
			0	QPSK	Level 1	50%	25	26140/1860	19.00	17.76	1.020	0.000	1.33	1.357	/
			0	QPSK	Level 1	50%	25	26365/1882.5	19.00	17.65	1.040	-0.050	1.36	1.419	/
			0	QPSK	Level 1	50%	0	26590/1905	19.00	17.67	1.050	-0.040	1.36	1.426	31
			0	QPSK	Level 1	100%	0	26140/1860	19.00	17.72	0.968	0.038	1.34	1.300	/
			0	QPSK	Level 1	100%	0	26365/1882.5	19.00	17.52	0.992	-0.091	1.41	1.395	/
			0	QPSK	Level 1	100%	0	26590/1905	19.00	17.68	0.957	0.012	1.36	1.297	/
		Left Tilt Repeated	0	QPSK	Level 1	50%	0	26590/1905	19.00	17.67	1.010	0.039	1.36	1.372	/
		Right cheek	0	QPSK	Level 1	1	0	26140/1860	19.00	18.00	0.687	-0.010	1.26	0.865	/
			0	QPSK	Level 1	1	0	26365/1882.5	19.00	17.61	0.730	-0.050	1.38	1.005	/
			0	QPSK	Level 1	1	50	26590/1905	19.00	17.54	0.740	-0.120	1.40	1.036	/
			0	QPSK	Level 1	50%	25	26140/1860	19.00	17.76	0.734	-0.060	1.33	0.977	/
			0	QPSK	Level 1	50%	25	26365/1882.5	19.00	17.65	0.753	-0.060	1.36	1.028	/
			0	QPSK	Level 1	50%	0	26590/1905	19.00	17.67	0.783	-0.050	1.36	1.064	/
		Right Tilt	0	QPSK	Level 1	1	0	26140/1860	19.00	18.00	0.867	-0.070	1.26	1.091	/
			0	QPSK	Level 1	1	0	26365/1882.5	19.00	17.61	0.903	-0.050	1.38	1.244	/
			0	QPSK	Level 1	1	50	26590/1905	19.00	17.54	0.917	-0.010	1.40	1.283	/
			0	QPSK	Level 1	50%	25	26140/1860	19.00	17.76	0.907	-0.040	1.33	1.207	/
			0	QPSK	Level 1	50%	25	26365/1882.5	19.00	17.65	0.933	-0.050	1.36	1.273	/
			0	QPSK	Level 1	50%	0	26590/1905	19.00	17.67	0.957	-0.100	1.36	1.300	/
LTE 26	ANT 6	Left cheek	0	QPSK	Level 1	1	0	26865/831.5	21.80	20.25	0.349	0.040	1.43	0.499	/
			0	QPSK	Level 1	50%	39	26865/831.5	21.80	20.29	0.312	0.060	1.42	0.442	/
		Left Tilt	0	QPSK	Level 1	1	0	26865/831.5	21.80	20.25	0.284	-0.050	1.43	0.406	/
			0	QPSK	Level 1	50%	39	26865/831.5	21.80	20.29	0.271	-0.070	1.42	0.384	/
		Right cheek	0	QPSK	Level 1	1	0	26865/831.5	21.80	20.25	0.506	0.020	1.43	0.723	/
			0	QPSK	Level 1	50%	39	26865/831.5	21.80	20.29	0.581	0.090	1.42	0.823	/
			0	QPSK	Level 1	50%	39	26765/821.5	21.80	20.24	0.556	-0.010	1.43	0.796	/
			0	QPSK	Level 1	50%	39	26965/841.5	21.80	20.23	0.475	-0.020	1.44	0.682	/
		Right Tilt	0	QPSK	Level 1	1	0	26865/831.5	21.80	20.25	0.592	0.140	1.43	0.846	32
			0	QPSK	Level 1	1	0	26765/821.5	21.80	20.22	0.580	0.050	1.44	0.835	/
			0	QPSK	Level 1	1	38	26965/841.5	21.80	20.14	0.529	-0.030	1.47	0.775	/
			0	QPSK	Level 1	50%	39	26865/831.5	21.80	20.29	0.514	0.020	1.42	0.728	/
			0	QPSK	Level 1	100%	0	26865/831.5	21.80	20.28	0.556	0.000	1.42	0.789	/
LTE 38	ANT 3	Left cheek	0	QPSK	Level 1	1	99	38150/2610	24.80	23.24	0.056	0.114	1.43	0.081	/
			0	QPSK	Level 1	50%	25	38000/2595	23.80	22.24	0.089	-0.050	1.43	0.127	/

		Left Tilt	0	QPSK	Level 1	1	99	38150/2610	24.80	23.24	0.052	0.043	1.43	0.074	/
			0	QPSK	Level 1	50%	25	38000/2595	23.80	22.24	0.054	0.055	1.43	0.077	/
		Right cheek	0	QPSK	Level 1	1	99	38150/2610	24.80	23.24	0.107	0.132	1.43	0.153	/
			0	QPSK	Level 1	50%	25	38000/2595	23.80	22.24	0.121	0.022	1.43	0.173	33
		Right Tilt	0	QPSK	Level 1	1	99	38150/2610	24.80	23.24	0.078	-0.010	1.43	0.112	/
			0	QPSK	Level 1	50%	25	38000/2595	23.80	22.24	0.099	0.170	1.43	0.142	/
LTE 41	ANT 3	Left cheek	0	QPSK	Level 1	1	0	40620/2593	27.20	25.64	0.094	0.042	1.43	0.134	/
			0	QPSK	Level 1	50%	50	40620/2593	26.20	24.68	0.106	-0.190	1.42	0.150	34
		Left Tilt	0	QPSK	Level 1	1	0	40620/2593	27.20	25.64	0.075	0.100	1.43	0.107	/
			0	QPSK	Level 1	50%	50	40620/2593	26.20	24.68	0.087	0.000	1.42	0.124	/
		Right cheek	0	QPSK	Level 1	1	0	40620/2593	27.20	25.64	0.071	0.060	1.43	0.102	/
			0	QPSK	Level 1	50%	50	40620/2593	26.20	24.68	0.053	0.060	1.42	0.075	/
		Right Tilt	0	QPSK	Level 1	1	0	40620/2593	27.20	25.64	0.065	0.038	1.43	0.093	/
			0	QPSK	Level 1	50%	50	40620/2593	26.20	24.68	0.052	0.037	1.42	0.074	/
		Left cheek	0	QPSK	Level 1	1	99	39750/2506 (PCC)	25.00	23.52	0.069	0.000	1.41	0.097	/
			0	QPSK		1	0	39948/2525.8 (SCC)							
LTE 66	ANT 7	Left cheek	0	QPSK	Level 1	1	50	132072/1720	20.00	18.91	0.753	0.032	1.29	0.968	/
			0	QPSK	Level 1	1	50	132322/1745	20.00	19.08	0.784	0.030	1.24	0.969	/
			0	QPSK	Level 1	1	0	132572/1770	20.00	18.85	0.828	0.010	1.30	1.079	/
			0	QPSK	Level 1	50%	25	132072/1720	20.00	19.02	0.772	0.020	1.25	0.967	/
			0	QPSK	Level 1	50%	25	132322/1745	20.00	19.04	0.782	-0.130	1.25	0.975	/
			0	QPSK	Level 1	50%	0	132572/1770	20.00	18.92	0.853	-0.050	1.28	1.094	/
		Left Tilt	0	QPSK	Level 1	1	50	132072/1720	20.00	18.91	0.813	-0.020	1.29	1.045	/
			0	QPSK	Level 1	1	50	132322/1745	20.00	19.08	0.904	-0.080	1.24	1.117	/
			0	QPSK	Level 1	1	0	132572/1770	20.00	18.85	1.020	-0.050	1.30	1.329	/
			0	QPSK	Level 1	50%	25	132072/1720	20.00	19.02	0.802	-0.030	1.25	1.005	/
			0	QPSK	Level 1	50%	25	132322/1745	20.00	19.04	0.883	-0.030	1.25	1.101	/
			0	QPSK	Level 1	50%	0	132572/1770	20.00	18.92	1.030	-0.030	1.28	1.321	35
			0	QPSK	Level 1	100%	0	132072/1720	20.00	18.95	0.693	0.060	1.27	0.883	/
			0	QPSK	Level 1	100%	0	132322/1745	20.00	18.95	0.747	0.010	1.27	0.951	/
			0	QPSK	Level 1	100%	0	132572/1770	20.00	18.91	0.853	0.010	1.29	1.096	/
		Left Tilt Repeated	0	QPSK	Level 1	1	0	132572/1770	20.00	18.85	0.998	0.020	1.30	1.301	/
		Right cheek	0	QPSK	Level 1	1	50	132072/1720	20.00	18.91	0.807	-0.190	1.29	1.037	/
			0	QPSK	Level 1	1	50	132322/1745	20.00	19.08	0.735	-0.020	1.24	0.908	/
			0	QPSK	Level 1	1	0	132572/1770	20.00	18.85	0.919	0.040	1.30	1.198	/
			0	QPSK	Level 1	50%	25	132072/1720	20.00	19.02	0.823	-0.020	1.25	1.031	/
			0	QPSK	Level 1	50%	25	132322/1745	20.00	19.04	0.742	-0.060	1.25	0.926	/
			0	QPSK	Level 1	50%	0	132572/1770	20.00	18.92	0.945	-0.050	1.28	1.212	/
		Right Tilt	0	QPSK	Level 1	1	50	132072/1720	20.00	18.91	0.810	0.040	1.29	1.041	/
			0	QPSK	Level 1	1	50	132322/1745	20.00	19.08	0.899	-0.020	1.24	1.111	/

			0	QPSK	Level 1	1	0	132572/1770	20.00	18.85	0.953	-0.040	1.30	1.242	/
			0	QPSK	Level 1	50%	25	132072/1720	20.00	19.02	1.000	0.080	1.25	1.253	/
			0	QPSK	Level 1	50%	25	132322/1745	20.00	19.04	0.892	0.030	1.25	1.113	/
			0	QPSK	Level 1	50%	0	132572/1770	20.00	18.92	1.000	0.080	1.28	1.282	/
		Left Tilt	0	QPSK	Level 1	1	99	132322/1745 (PCC)	20.00	18.82	0.872	0.016	1.31	1.144	/
						1	0	132124/1725.2 (SCC)							
LTE 71	ANT 6	Left cheek	0	QPSK	Level 1	1	99	133222/673	24.00	23.14	0.272	-0.050	1.22	0.332	/
			0	QPSK	Level 1	50%	50	133222/673	23.00	22.08	0.246	0.050	1.24	0.304	/
		Left Tilt	0	QPSK	Level 1	1	99	133222/673	24.00	23.14	0.254	-0.026	1.22	0.310	/
			0	QPSK	Level 1	50%	50	133222/673	23.00	22.08	0.201	-0.010	1.24	0.248	/
		Right cheek	0	QPSK	Level 1	1	99	133222/673	24.00	23.14	0.596	0.080	1.22	0.727	/
			0	QPSK	Level 1	50%	50	133222/673	23.00	22.08	0.522	0.050	1.24	0.645	/
		Right Tilt	0	QPSK	Level 1	1	99	133222/673	24.00	23.14	0.625	0.130	1.22	0.762	36
			0	QPSK	Level 1	50%	50	133222/673	23.00	22.08	0.535	0.050	1.24	0.661	/

Band	Ant.	Test Position	Inf.	Power Reduction	Mode	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	Plot No.
n25	ANT 7	Left cheek	SA	Level 1	DFT-s-OFDM QPSK	1	104	372000/1860	20.30	19.41	1.000	0.000	1.23	1.227	/
				Level 1	DFT-s-OFDM QPSK	1	104	376500/1882.5	20.30	19.57	1.060	0.050	1.18	1.254	/
				Level 1	DFT-s-OFDM QPSK	1	104	381000/1905	20.30	19.51	1.030	0.120	1.20	1.235	/
				Level 1	DFT-s-OFDM QPSK	50	25	372000/1860	20.30	19.59	1.060	0.028	1.18	1.248	/
				Level 1	DFT-s-OFDM QPSK	50	25	376500/1882.5	20.30	19.52	0.995	0.046	1.20	1.191	/
				Level 1	DFT-s-OFDM QPSK	50	25	381000/1905	20.30	19.58	1.020	-0.092	1.18	1.204	/
		Left Tilt		Level 1	DFT-s-OFDM QPSK	1	104	372000/1860	20.30	19.41	1.080	0.040	1.23	1.326	/
				Level 1	DFT-s-OFDM QPSK	1	104	376500/1882.5	20.30	19.57	1.130	0.050	1.18	1.337	37
				Level 1	DFT-s-OFDM QPSK	1	104	381000/1905	20.30	19.51	1.090	0.110	1.20	1.307	/
				Level 1	DFT-s-OFDM QPSK	50	25	372000/1860	20.30	19.59	1.090	0.040	1.18	1.284	/
				Level 1	DFT-s-OFDM QPSK	50	25	376500/1882.5	20.30	19.52	1.030	0.062	1.20	1.233	/
				Level 1	DFT-s-OFDM QPSK	50	25	381000/1905	20.30	19.58	1.050	-0.012	1.18	1.239	/
		Right cheek		Level 1	DFT-s-OFDM QPSK	1	104	372000/1860	20.30	19.41	0.966	0.080	1.23	1.186	/
				Level 1	DFT-s-OFDM QPSK	1	104	376500/1882.5	20.30	19.57	1.020	0.040	1.18	1.207	/
				Level 1	DFT-s-OFDM QPSK	1	104	381000/1905	20.30	19.51	0.956	0.050	1.20	1.147	/
				Level 1	DFT-s-OFDM QPSK	50	25	372000/1860	20.30	19.59	0.881	-0.011	1.18	1.037	/
				Level 1	DFT-s-OFDM QPSK	50	25	376500/1882.5	20.30	19.52	1.070	0.021	1.20	1.281	/
				Level 1	DFT-s-OFDM QPSK	50	25	381000/1905	20.30	19.58	1.010	0.110	1.18	1.192	/
		Right Tilt		Level 1	DFT-s-OFDM QPSK	1	104	372000/1860	20.30	19.41	1.030	0.160	1.23	1.264	/
				Level 1	DFT-s-OFDM QPSK	1	104	376500/1882.5	20.30	19.57	1.070	0.090	1.18	1.266	/
				Level 1	DFT-s-OFDM QPSK	1	104	381000/1905	20.30	19.51	1.060	0.100	1.20	1.271	/
				Level 1	DFT-s-OFDM QPSK	50	25	372000/1860	20.30	19.59	0.963	-0.010	1.18	1.134	/
				Level 1	DFT-s-OFDM QPSK	50	25	376500/1882.5	20.30	19.52	1.070	0.000	1.20	1.281	/
				Level 1	DFT-s-OFDM QPSK	50	25	381000/1905	20.30	19.58	1.070	0.030	1.18	1.263	/

		Left Tilt Repeated		Level 1	DFT-s-OFDM QPSK	1	104	376500/1882.5	20.30	19.57	1.080	0.047	1.18	1.278	/
		Left Tilt		Level 1	CP-OFDM QPSK	53	26	381000/1905	19.00	18.12	1.020	0.060	1.22	1.249	/
	ANT 1	Left cheek	NSA	Level 1	DFT-s-OFDM QPSK	1	104	381000/1905	24.40	22.82	0.026	-0.039	1.44	0.037	/
				Level 1	DFT-s-OFDM QPSK	50	25	376500/1882.5	24.40	22.86	0.064	0.025	1.43	0.091	/
		Left Tilt		Level 1	DFT-s-OFDM QPSK	1	104	381000/1905	24.40	22.82	0.023	0.040	1.44	0.033	/
				Level 1	DFT-s-OFDM QPSK	50	25	376500/1882.5	24.40	22.86	0.031	0.041	1.43	0.044	/
		Right cheek		Level 1	DFT-s-OFDM QPSK	1	104	381000/1905	24.40	22.82	0.030	0.038	1.44	0.042	/
				Level 1	DFT-s-OFDM QPSK	50	25	376500/1882.5	24.40	22.86	0.026	-0.039	1.43	0.037	/
		Right Tilt		Level 1	DFT-s-OFDM QPSK	1	104	381000/1905	24.40	22.82	0.017	0.039	1.44	0.025	/
				Level 1	DFT-s-OFDM QPSK	50	25	376500/1882.5	24.40	22.86	0.043	0.139	1.43	0.062	/
n41	ANT 3	Left cheek	SA& NSA	Level 1	DFT-s-OFDM QPSK	1	1	509202/2546.01	27.50	25.90	0.236	0.109	1.45	0.341	/
				Level 1	DFT-s-OFDM QPSK	135	67	509202/2546.01	27.50	25.83	0.264	0.147	1.47	0.388	38
		Left Tilt		Level 1	DFT-s-OFDM QPSK	1	1	509202/2546.01	27.50	25.90	0.098	0.026	1.45	0.142	/
				Level 1	DFT-s-OFDM QPSK	135	67	509202/2546.01	27.50	25.83	0.100	0.059	1.47	0.147	/
		Right cheek		Level 1	DFT-s-OFDM QPSK	1	1	509202/2546.01	27.50	25.90	0.142	0.176	1.45	0.205	/
				Level 1	DFT-s-OFDM QPSK	135	67	509202/2546.01	27.50	25.83	0.159	0.036	1.47	0.234	/
		Right Tilt		Level 1	DFT-s-OFDM QPSK	1	1	509202/2546.01	27.50	25.90	0.129	0.101	1.45	0.186	/
				Level 1	DFT-s-OFDM QPSK	135	67	509202/2546.01	27.50	25.83	0.161	0.062	1.47	0.236	/
		Left cheek		Level 1	CP-OFDM QPSK	1	1	518598/2592.99	25.50	25.21	0.185	-0.013	1.07	0.198	/
n66	ANT 7	Left cheek	SA	Level 1	DFT-s-OFDM QPSK	1	1	344000/1720	20.50	20.00	1.060	0.050	1.12	1.189	/
				Level 1	DFT-s-OFDM QPSK	1	1	349000/1745	20.50	19.99	1.040	0.070	1.12	1.170	/
				Level 1	DFT-s-OFDM QPSK	1	1	354000/1770	20.50	19.97	1.100	0.000	1.13	1.243	/
				Level 1	DFT-s-OFDM QPSK	50	25	344000/1720	20.50	19.92	1.020	0.060	1.14	1.166	/
				Level 1	DFT-s-OFDM QPSK	50	25	349000/1745	20.50	19.87	1.040	0.000	1.16	1.202	/
				Level 1	DFT-s-OFDM QPSK	50	25	354000/1770	20.50	19.92	1.120	0.030	1.14	1.280	/
		Left Tilt		Level 1	DFT-s-OFDM QPSK	1	1	344000/1720	20.50	20.00	0.907	0.020	1.12	1.018	/
				Level 1	DFT-s-OFDM QPSK	1	1	349000/1745	20.50	19.99	1.050	0.030	1.12	1.181	/
				Level 1	DFT-s-OFDM QPSK	1	1	354000/1770	20.50	19.97	1.130	0.020	1.13	1.277	/
				Level 1	DFT-s-OFDM QPSK	50	25	344000/1720	20.50	19.92	0.973	0.010	1.14	1.112	/
				Level 1	DFT-s-OFDM QPSK	50	25	349000/1745	20.50	19.87	1.120	0.050	1.16	1.295	/
				Level 1	DFT-s-OFDM QPSK	50	25	354000/1770	20.50	19.92	1.090	-0.030	1.14	1.246	/
		Right cheek		Level 1	DFT-s-OFDM QPSK	1	1	344000/1720	20.50	20.00	0.863	0.150	1.12	0.968	/
				Level 1	DFT-s-OFDM QPSK	1	1	349000/1745	20.50	19.99	0.905	-0.060	1.12	1.018	/
				Level 1	DFT-s-OFDM QPSK	1	1	354000/1770	20.50	19.97	0.976	-0.010	1.13	1.103	/
				Level 1	DFT-s-OFDM QPSK	50	25	354000/1770	20.50	19.92	1.030	0.000	1.14	1.177	/
				Level 1	DFT-s-OFDM QPSK	50	25	344000/1720	20.50	19.92	0.861	0.010	1.14	0.984	/
				Level 1	DFT-s-OFDM QPSK	50	25	349000/1745	20.50	19.87	0.923	0.000	1.16	1.067	/
		Right Tilt		Level 1	DFT-s-OFDM QPSK	1	1	344000/1720	20.50	20.00	0.883	-0.120	1.12	0.991	/
				Level 1	DFT-s-OFDM QPSK	1	1	349000/1745	20.50	19.99	1.000	0.070	1.12	1.125	/
				Level 1	DFT-s-OFDM QPSK	1	1	354000/1770	20.50	19.97	1.120	-0.010	1.13	1.265	/
				Level 1	DFT-s-OFDM QPSK	50	25	354000/1770	20.50	19.92	1.170	0.010	1.14	1.337	39
				Level 1	DFT-s-OFDM QPSK	50	25	344000/1720	20.50	19.92	0.930	-0.020	1.14	1.063	/

				Level 1	DFT-s-OFDM QPSK	50	25	349000/1745	20.50	19.87	1.060	0.000	1.16	1.225	/
		Right Tilt Repeated		Level 1	DFT-s-OFDM QPSK	50	25	354000/1770	20.50	19.92	1.120	0.078	1.14	1.280	/
		Right Tilt		Level 1	CP-OFDM QPSK	53	26	354000/1770	18.50	18.05	0.984	0.046	1.11	1.091	/
	ANT 1	Left cheek	NSA	Level 1	DFT-s-OFDM QPSK	1	104	349000/1745	24.70	23.01	0.032	0.081	1.48	0.047	/
				Level 1	DFT-s-OFDM QPSK	50	25	349000/1745	24.70	22.94	0.034	0.010	1.50	0.052	/
		Left Tilt		Level 1	DFT-s-OFDM QPSK	1	104	349000/1745	24.70	23.01	0.030	0.030	1.48	0.044	/
				Level 1	DFT-s-OFDM QPSK	50	25	349000/1745	24.70	22.94	0.014	0.090	1.50	0.021	/
		Right cheek		Level 1	DFT-s-OFDM QPSK	1	104	349000/1745	24.70	23.01	0.058	0.066	1.48	0.086	/
				Level 1	DFT-s-OFDM QPSK	50	25	349000/1745	24.70	22.94	0.018	0.102	1.50	0.027	/
		Right Tilt		Level 1	DFT-s-OFDM QPSK	1	104	349000/1745	24.70	23.01	0.042	0.042	1.48	0.061	/
				Level 1	DFT-s-OFDM QPSK	50	25	349000/1745	24.70	22.94	0.019	0.120	1.50	0.028	/
n71	ANT 6	Left cheek	SA& NSA	Level 1	DFT-s-OFDM QPSK	1	1	134600/673	23.50	22.08	0.253	0.047	1.39	0.351	/
				Level 1	DFT-s-OFDM QPSK	50	25	136100/680.5	23.50	22.05	0.279	0.013	1.40	0.390	/
		Left Tilt		Level 1	DFT-s-OFDM QPSK	1	1	134600/673	23.50	22.08	0.143	-0.100	1.39	0.198	/
				Level 1	DFT-s-OFDM QPSK	50	25	136100/680.5	23.50	22.05	0.162	-0.038	1.40	0.226	/
		Right cheek		Level 1	DFT-s-OFDM QPSK	1	1	134600/673	23.50	22.08	0.432	-0.030	1.39	0.599	/
				Level 1	DFT-s-OFDM QPSK	50	25	136100/680.5	23.50	22.05	0.455	-0.050	1.40	0.635	40
		Right Tilt		Level 1	DFT-s-OFDM QPSK	1	1	134600/673	23.50	22.08	0.398	-0.027	1.39	0.552	/
				Level 1	DFT-s-OFDM QPSK	50	25	136100/680.5	23.50	22.05	0.375	-0.031	1.40	0.524	/
		Right cheek		Level 1	CP-OFDM QPSK	53	26	134600/673	22.00	20.35	0.421	0.020	1.46	0.616	/

Band	Antenna	Test Position	Dist. (mm)	Mode	Duty Cycle	Power Reduction	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	Plot No.
Wi-Fi 2.4G	ANT 8	Left cheek	0	802.11b	98.0%	Level 1	1/2412	18.50	17.35	0.805	-0.032	1.33	1.070	/
			0	802.11b	98.0%	Level 1	6/2437	18.50	17.40	0.821	-0.010	1.31	1.079	41
			0	802.11b	98.0%	Level 1	11/2462	18.50	17.34	0.764	0.016	1.33	1.018	/
		Left cheek Repeated	0	802.11b	98.0%	Level 1	6/2437	18.50	17.40	0.815	0.000	1.31	1.071	/
		Left Tilt	0	802.11b	98.0%	Level 1	1/2412	18.50	17.35	0.752	0.060	1.33	1.000	/
			0	802.11b	98.0%	Level 1	6/2437	18.50	17.40	0.735	-0.110	1.31	0.966	/
			0	802.11b	98.0%	Level 1	11/2462	18.50	17.34	0.691	0.041	1.33	0.921	/
		Right cheek	0	802.11b	98.0%	Level 1	6/2437	18.50	17.40	0.440	-0.110	1.31	0.578	/
		Right Tilt	0	802.11b	98.0%	Level 1	6/2437	18.50	17.40	0.411	-0.070	1.31	0.540	/
	ANT 9	Left cheek	0	802.11b	98.0%	Level 1	1/2412	18.50	17.46	0.245	-0.070	1.30	0.318	/
		Left Tilt	0	802.11b	98.0%	Level 1	1/2412	18.50	17.46	0.207	-0.020	1.30	0.268	/
		Right cheek	0	802.11b	98.0%	Level 1	1/2412	18.50	17.46	0.062	0.026	1.30	0.081	/
		Right Tilt	0	802.11b	98.0%	Level 1	1/2412	18.50	17.46	0.066	0.026	1.30	0.085	/
	MIMO	Left cheek	0	802.11b	98.0%	Level 1	1/2412	14.50	14.14	0.428	0.060	1.11	0.475	/
		Left Tilt	0	802.11b	98.0%	Level 1	1/2412	14.50	14.14	0.413	-0.070	1.11	0.458	/
		Right cheek	0	802.11b	98.0%	Level 1	1/2412	14.50	14.14	0.169	0.018	1.11	0.187	/
		Right Tilt	0	802.11b	98.0%	Level 1	1/2412	14.50	14.14	0.195	0.020	1.11	0.216	/

U-NII-1	ANT 10	Left cheek	0	802.11a	100.0%	Level 1	36/5180	17.50	16.12	0.603	-0.013	1.37	0.829	/
			0	802.11a	100.0%	Level 1	40/5200	17.50	16.33	0.635	0.067	1.31	0.831	42
			0	802.11a	100.0%	Level 1	48/5240	17.50	15.88	0.569	0.029	1.45	0.826	/
		Left Tilt	0	802.11a	100.0%	Level 1	40/5200	17.50	16.33	0.407	0.034	1.31	0.533	/
		Right cheek	0	802.11a	100.0%	Level 1	40/5200	17.50	16.33	0.165	-0.037	1.31	0.216	/
		Right Tilt	0	802.11a	100.0%	Level 1	40/5200	17.50	16.33	0.103	0.067	1.31	0.135	/
	ANT 9	Left cheek	0	802.11a	100.0%	Level 1	36/5180	17.50	16.34	0.236	-0.054	1.31	0.308	/
		Left Tilt	0	802.11a	100.0%	Level 1	36/5180	17.50	16.34	0.256	0.028	1.31	0.334	/
		Right cheek	0	802.11a	100.0%	Level 1	36/5180	17.50	16.34	0.116	0.199	1.31	0.152	/
		Right Tilt	0	802.11a	100.0%	Level 1	36/5180	17.50	16.34	0.110	0.029	1.31	0.144	/
	MIMO	Left cheek	0	802.11a	100.0%	Level 1	40/5200	16.50	15.87	0.216	0.084	1.16	0.250	/
		Left Tilt	0	802.11a	100.0%	Level 1	40/5200	16.50	15.87	0.173	0.182	1.16	0.200	/
		Right cheek	0	802.11a	100.0%	Level 1	40/5200	16.50	15.87	0.065	0.191	1.16	0.075	/
		Right Tilt	0	802.11a	100.0%	Level 1	40/5200	16.50	15.87	0.072	0.039	1.16	0.083	/
U-NII-2A	ANT 10	Left cheek	0	802.11a	100.0%	Level 1	52/5260	17.50	15.95	0.525	-0.130	1.43	0.750	/
			0	802.11a	100.0%	Level 1	56/5280	17.50	16.03	0.569	-0.080	1.40	0.798	/
			0	802.11a	100.0%	Level 1	64/5320	17.50	16.54	0.643	0.046	1.25	0.802	43
		Left Tilt	0	802.11a	100.0%	Level 1	64/5320	17.50	16.54	0.434	0.043	1.25	0.541	/
		Right cheek	0	802.11a	100.0%	Level 1	64/5320	17.50	16.54	0.154	0.031	1.25	0.192	/
		Right Tilt	0	802.11a	100.0%	Level 1	64/5320	17.50	16.54	0.112	0.088	1.25	0.140	/
	ANT 9	Left cheek	0	802.11a	100.0%	Level 1	64/5320	17.50	16.68	0.352	0.028	1.21	0.425	/
		Left Tilt	0	802.11a	100.0%	Level 1	64/5320	17.50	16.68	0.325	0.176	1.21	0.393	/
		Right cheek	0	802.11a	100.0%	Level 1	64/5320	17.50	16.68	0.197	0.130	1.21	0.238	/
		Right Tilt	0	802.11a	100.0%	Level 1	64/5320	17.50	16.68	0.213	0.061	1.21	0.257	/
	MIMO	Left cheek	0	802.11a	100.0%	Level 1	64/5320	16.50	16.10	0.228	0.035	1.10	0.250	/
		Left Tilt	0	802.11a	100.0%	Level 1	64/5320	16.50	16.10	0.169	0.022	1.10	0.185	/
		Right cheek	0	802.11a	100.0%	Level 1	64/5320	16.50	16.10	0.061	-0.010	1.10	0.067	/
		Right Tilt	0	802.11a	100.0%	Level 1	64/5320	16.50	16.10	0.055	0.000	1.10	0.060	/
U-NII-2C	ANT 10	Left cheek	0	802.11a	100.0%	Level 1	100/5500	17.50	16.07	0.582	0.023	1.39	0.809	/
			0	802.11a	100.0%	Level 1	132/5660	17.50	16.24	0.559	0.019	1.34	0.747	/
			0	802.11a	100.0%	Level 1	140/5700	17.50	16.36	0.626	0.176	1.30	0.814	44
		Left Tilt	0	802.11a	100.0%	Level 1	140/5700	17.50	16.36	0.592	0.026	1.30	0.770	/
		Right cheek	0	802.11a	100.0%	Level 1	140/5700	17.50	16.36	0.183	0.025	1.30	0.238	/
		Right Tilt	0	802.11a	100.0%	Level 1	140/5700	17.50	16.36	0.190	0.037	1.30	0.247	/
	ANT 9	Left cheek	0	802.11a	100.0%	Level 1	140/5700	17.50	16.84	0.340	0.050	1.16	0.396	/
		Left Tilt	0	802.11a	100.0%	Level 1	140/5700	17.50	16.84	0.366	0.042	1.16	0.426	/
		Right cheek	0	802.11a	100.0%	Level 1	140/5700	17.50	16.84	0.170	0.071	1.16	0.198	/
		Right Tilt	0	802.11a	100.0%	Level 1	140/5700	17.50	16.84	0.216	0.059	1.16	0.251	/
	MIMO	Left cheek	0	802.11a	100.0%	Level 1	140/5700	16.50	15.94	0.206	0.018	1.14	0.234	/
		Left Tilt	0	802.11a	100.0%	Level 1	140/5700	16.50	15.94	0.239	0.045	1.14	0.272	/
		Right cheek	0	802.11a	100.0%	Level 1	140/5700	16.50	15.94	0.081	0.046	1.14	0.092	/
		Right Tilt	0	802.11a	100.0%	Level 1	140/5700	16.50	15.94	0.067	-0.013	1.14	0.076	/
U-NII-3	ANT 10	Left cheek	0	802.11a	100.0%	Level 1	149/5745	15.50	14.55	0.565	0.035	1.24	0.703	45

		Left Tilt	0	802.11a	100.0%	Level 1	149/5745	15.50	14.55	0.416	0.061	1.24	0.518	/
		Right cheek	0	802.11a	100.0%	Level 1	149/5745	15.50	14.55	0.134	0.012	1.24	0.167	/
		Right Tilt	0	802.11a	100.0%	Level 1	149/5745	15.50	14.55	0.172	-0.029	1.24	0.214	/
	ANT 9	Left cheek	0	802.11a	100.0%	Level 1	149/5745	15.50	14.85	0.316	0.084	1.16	0.367	/
		Left Tilt	0	802.11a	100.0%	Level 1	149/5745	15.50	14.85	0.260	0.031	1.16	0.302	/
		Right cheek	0	802.11a	100.0%	Level 1	149/5745	15.50	14.85	0.129	0.021	1.16	0.150	/
		Right Tilt	0	802.11a	100.0%	Level 1	149/5745	15.50	14.85	0.134	0.034	1.16	0.156	/
	MIMO	Left cheek	0	802.11a	100.0%	Level 1	149/5745	16.50	15.13	0.175	0.025	1.37	0.240	/
		Left Tilt	0	802.11a	100.0%	Level 1	149/5745	16.50	15.13	0.168	0.034	1.37	0.230	/
		Right cheek	0	802.11a	100.0%	Level 1	149/5745	16.50	15.13	0.045	-0.081	1.37	0.062	/
		Right Tilt	0	802.11a	100.0%	Level 1	149/5745	16.50	15.13	0.052	-0.039	1.37	0.071	/
Bluetooth	BT	Left cheek	0	DH5	77.0%	-	39/2441	13.00	11.62	0.142	0.000	1.78	0.253	/
		Left Tilt	0	DH5	77.0%	-	39/2441	13.00	11.62	0.165	-0.020	1.78	0.294	46
		Right cheek	0	DH5	77.0%	-	39/2441	13.00	11.62	0.085	-0.010	1.78	0.151	/
		Right Tilt	0	DH5	77.0%	-	39/2441	13.00	11.62	0.113	0.020	1.78	0.202	/

Body-worn SAR

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	Plot No.
GSM 850	ANT 6	Back Side	15	GSM	Level 2	-	-	190/836.6	33.50	31.60	0.176	0.054	1.55	0.273	/
		Front Side	15	GSM	Level 2	-	-	190/836.6	33.50	31.60	0.224	-0.140	1.55	0.347	47
GSM 1900	ANT 7	Back Side	15	GSM	Level 2	-	-	661/1880	30.50	29.92	0.558	-0.032	1.14	0.638	48
		Front Side	15	GSM	Level 2	-	-	661/1880	30.50	29.92	0.473	0.021	1.14	0.541	/
WCDMA II	ANT 7	Back Side	15	RMC	Level 2	-	-	9400/1880	24.50	23.36	0.600	-0.010	1.30	0.780	49
		Front Side	15	RMC	Level 2	-	-	9400/1880	24.50	23.36	0.441	0.110	1.30	0.573	/
WCDMA IV	ANT 7	Back Side	15	RMC	Level 2	-	-	1413/1732.6	24.50	23.53	0.332	0.120	1.25	0.415	50
		Front Side	15	RMC	Level 2	-	-	1413/1732.6	24.50	23.53	0.248	0.034	1.25	0.310	/
WCDMA V	ANT 6	Back Side	15	RMC	Level 2	-	-	4183/836.6	24.50	23.49	0.182	0.033	1.26	0.230	/
		Front Side	15	RMC	Level 2	-	-	4183/836.6	24.50	23.49	0.204	-0.050	1.26	0.257	51
LTE 2	ANT 7	Back Side	15	QPSK	Level 2	1	50	19100/1900	24.70	22.95	0.534	-0.020	1.50	0.799	52
			15	QPSK	Level 2	50%	0	18700/1860	23.70	22.03	0.398	0.058	1.47	0.585	/
		Front Side	15	QPSK	Level 2	1	50	19100/1900	24.70	22.95	0.435	0.034	1.50	0.651	/
			15	QPSK	Level 2	50%	0	18700/1860	23.70	22.03	0.333	0.057	1.47	0.490	/
LTE 5	ANT 6	Back Side	15	QPSK	Level 2	1	0	20450/829	24.80	23.11	0.151	0.010	1.48	0.223	/
			15	QPSK	Level 2	50%	25	20525/836.5	23.80	22.23	0.150	0.017	1.44	0.215	/
		Front Side	15	QPSK	Level 2	1	0	20450/829	24.80	23.11	0.163	0.150	1.48	0.241	53
			15	QPSK	Level 2	50%	25	20525/836.5	23.80	22.23	0.140	0.030	1.44	0.201	/
LTE 7	ANT 3	Back Side	15	QPSK	Level 2	1	99	20850/2510	24.70	23.11	0.724	-0.020	1.44	1.044	/
			15	QPSK	Level 2	1	99	21100/2535	24.70	23.04	0.718	0.019	1.47	1.052	/
			15	QPSK	Level 2	1	99	21350/2560	24.70	23.23	0.756	0.000	1.40	1.061	54
			15	QPSK	Level 2	50%	0	21350/2560	23.70	22.19	0.527	0.026	1.42	0.746	/
			15	QPSK	Level 2	100%	0	21350/2560	23.70	22.12	0.553	0.021	1.44	0.796	/
		Front Side	15	QPSK	Level 2	1	99	20850/2510	24.70	23.11	0.726	0.019	1.44	1.047	/
			15	QPSK	Level 2	1	99	21100/2535	24.70	23.04	0.685	0.021	1.47	1.004	/
			15	QPSK	Level 2	1	99	21350/2560	24.70	23.23	0.714	-0.011	1.40	1.002	/
			15	QPSK	Level 2	50%	0	21350/2560	23.70	22.19	0.556	0.040	1.42	0.787	/
LTE 12	ANT 6	Back Side	15	QPSK	Level 2	1	49	23060/704	25.00	23.23	0.124	0.069	1.50	0.186	/
			15	QPSK	Level 2	50%	0	23095/707.5	24.00	22.29	0.102	-0.067	1.48	0.151	/
		Front Side	15	QPSK	Level 2	1	49	23060/704	25.00	23.23	0.084	0.021	1.50	0.126	/
			15	QPSK	Level 2	50%	0	23095/707.5	24.00	22.29	0.126	0.000	1.48	0.187	55
LTE 13	ANT 6	Back Side	15	QPSK	Level 2	1	25	23230/782	25.00	23.13	0.123	0.030	1.54	0.189	/
			15	QPSK	Level 2	50%	0	23230/782	24.00	22.16	0.113	0.055	1.53	0.173	/
		Front Side	15	QPSK	Level 2	1	25	23230/782	25.00	23.13	0.129	0.074	1.54	0.198	56
			15	QPSK	Level 2	50%	0	23230/782	24.00	22.16	0.107	0.039	1.53	0.163	/
LTE 25	ANT 7	Back Side	15	QPSK	Level 2	1	50	26365/1882.5	24.80	22.99	0.526	0.110	1.52	0.798	57
			15	QPSK	Level 2	50%	0	26140/1860	23.80	22.07	0.388	0.025	1.49	0.578	/
		Front Side	15	QPSK	Level 2	1	50	26365/1882.5	24.80	22.99	0.408	-0.015	1.52	0.619	/
			15	QPSK	Level 2	50%	0	26140/1860	23.80	22.07	0.323	0.027	1.49	0.481	/

LTE 26	ANT 6	Back Side	15	QPSK	Level 2	1	38	26765/821.5	24.80	23.05	0.170	0.058	1.50	0.254	/
			15	QPSK	Level 2	50%	39	26765/821.5	23.80	22.13	0.137	0.034	1.47	0.201	/
		Front Side	15	QPSK	Level 2	1	38	26765/821.5	24.80	23.05	0.185	0.010	1.50	0.277	58
			15	QPSK	Level 2	50%	39	26765/821.5	23.80	22.13	0.155	0.090	1.47	0.228	/
LTE 38	ANT 3	Back Side	15	QPSK	Level 2	1	99	38150/2610	24.80	23.24	0.270	0.024	1.43	0.387	59
			15	QPSK	Level 2	50%	25	38000/2595	23.80	22.24	0.215	-0.090	1.43	0.308	/
		Front Side	15	QPSK	Level 2	1	99	38150/2610	24.80	23.24	0.268	0.011	1.43	0.384	/
			15	QPSK	Level 2	50%	25	38000/2595	23.80	22.24	0.197	0.018	1.43	0.282	/
LTE 41	ANT 3	Back Side	15	QPSK	Level 2	1	0	40620/2593	27.20	25.64	0.250	0.052	1.43	0.358	/
			15	QPSK	Level 2	50%	50	40620/2593	26.20	24.68	0.185	0.037	1.42	0.263	/
		Front Side	15	QPSK	Level 2	1	0	40620/2593	27.20	25.64	0.273	-0.030	1.43	0.391	60
			15	QPSK	Level 2	50%	50	40620/2593	26.20	24.68	0.189	0.055	1.42	0.268	/
		Front Side	15	QPSK	Level 2	1	99	39750/2506 (PCC)	25.00	23.52	0.148	0.014	1.41	0.208	/
						1	0	39948/2525.8 (SCC)							
LTE 66	ANT 7	Back Side	15	QPSK	Level 2	1	99	132572/1770	24.60	22.97	0.491	0.023	1.46	0.715	61
			15	QPSK	Level 2	50%	50	132072/1720	23.60	21.90	0.272	0.098	1.48	0.402	/
		Front Side	15	QPSK	Level 2	1	99	132572/1770	24.60	22.97	0.398	0.010	1.46	0.579	/
			15	QPSK	Level 2	50%	50	132072/1720	23.60	21.90	0.251	-0.011	1.48	0.371	/
		Back Side	15	QPSK	Level 2	1	99	132322/1745 (PCC)	24.60	22.89	0.448	0.033	1.48	0.664	/
						1	0	132520/1764.8 (SCC)							
LTE 71	ANT 6	Back Side	15	QPSK	Level 2	1	99	133222/673	24.80	23.14	0.089	0.075	1.47	0.130	/
			15	QPSK	Level 2	50%	50	133222/673	23.80	22.08	0.089	0.150	1.49	0.132	62
		Front Side	15	QPSK	Level 2	1	99	133222/673	24.80	23.14	0.063	0.055	1.47	0.092	/
			15	QPSK	Level 2	50%	50	133222/673	23.80	22.08	0.060	-0.093	1.49	0.089	/

Band	Ant	Test Position	Dist. (mm)	Inf.	Power Reduction	Mode	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	Plot No.
n25	ANT 7	Back Side	15	SA	Level 6-D1	DFT-s-OFDM QPSK	1	104	381000/1905	22.00	20.89	0.664	0.057	1.29	0.857	63
			15		Level 6-D1	DFT-s-OFDM QPSK	50	25	381000/1905	22.00	20.93	0.523	0.013	1.28	0.669	/
		Front Side	15		Level 6-D1	DFT-s-OFDM QPSK	1	104	381000/1905	22.00	20.89	0.451	0.050	1.29	0.582	/
			15		Level 6-D1	DFT-s-OFDM QPSK	50	25	381000/1905	22.00	20.93	0.419	-0.040	1.28	0.536	/
		Back Side	15		Level 6-D1	CP-OFDM QPSK	53	26	381000/1905	20.50	19.50	0.537	0.049	1.26	0.676	/
	ANT 1	Back Side	15	NSA	Level 6-D1	DFT-s-OFDM QPSK	1	104	381000/1905	22.40	21.09	0.570	0.011	1.35	0.771	/
			15		Level 6-D1	DFT-s-OFDM QPSK	50	25	376500/1882.5	22.40	21.06	0.579	0.022	1.36	0.788	/
		Front Side	15		Level 6-D1	DFT-s-OFDM QPSK	1	104	381000/1905	22.40	21.09	0.482	0.029	1.35	0.652	/
			15		Level 6-D1	DFT-s-OFDM QPSK	50	25	376500/1882.5	22.40	21.06	0.506	0.166	1.36	0.689	/
n41	ANT 3	Back Side	15	SA&NSA	Level 6-D1	DFT-s-OFDM QPSK	1	1	518598/2592.99	24.00	23.12	0.312	0.031	1.22	0.382	/
			15		Level 6-D1	DFT-s-OFDM QPSK	135	67	509202/2546.01	24.00	22.97	0.521	-0.027	1.27	0.660	64
		Front Side	15		Level 6-D1	DFT-s-OFDM QPSK	1	1	518598/2592.99	24.00	23.12	0.346	0.026	1.22	0.424	/

			15		Level 6-D1	DFT-s-OFDM QPSK	135	67	509202/2546.01	24.00	22.97	0.487	0.000	1.27	0.617	/
		Back Side	15		Level 6-D1	CP-OFDM QPSK	1	1	509202/2546.01	23.00	22.32	0.412	0.010	1.17	0.482	/
n66	ANT 7	Back Side	15	SA	Level 2	DFT-s-OFDM QPSK	1	1	344000/1720	24.90	23.11	0.516	0.100	1.51	0.779	65
			15		Level 2	DFT-s-OFDM QPSK	50	25	344000/1720	24.90	23.07	0.499	0.120	1.52	0.761	/
		Front Side	15		Level 2	DFT-s-OFDM QPSK	1	1	344000/1720	24.90	23.11	0.427	-0.040	1.51	0.645	/
			15		Level 2	DFT-s-OFDM QPSK	50	25	344000/1720	24.90	23.07	0.423	-0.110	1.52	0.645	/
		Back Side	15		Level 2	CP-OFDM QPSK	53	26	354000/1770	22.50	21.34	0.416	0.030	1.31	0.543	/
	ANT 1	Back Side	15	NSA	Level 2	DFT-s-OFDM QPSK	1	104	349000/1745	24.70	23.01	0.473	0.106	1.48	0.698	/
			15		Level 2	DFT-s-OFDM QPSK	50	25	349000/1745	24.70	22.94	0.486	0.065	1.50	0.729	/
		Front Side	15		Level 2	DFT-s-OFDM QPSK	1	104	349000/1745	24.70	23.01	0.427	-0.041	1.48	0.630	/
			15		Level 2	DFT-s-OFDM QPSK	50	25	349000/1745	24.70	22.94	0.405	0.020	1.50	0.607	/
n71	ANT 6	Back Side	15	SA&NSA	Level 2	DFT-s-OFDM QPSK	1	1	137600/688	25.00	23.33	0.119	0.000	1.47	0.175	66
			15		Level 2	DFT-s-OFDM QPSK	50	25	136100/680.5	25.00	23.31	0.118	-0.040	1.48	0.174	/
		Front Side	15		Level 2	DFT-s-OFDM QPSK	1	1	137600/688	25.00	23.33	0.070	0.041	1.47	0.103	/
			15		Level 2	DFT-s-OFDM QPSK	50	25	136100/680.5	25.00	23.31	0.085	0.110	1.48	0.125	/
		Back Side	15		Level 2	CP-OFDM QPSK	53	26	134600/673	22.50	21.86	0.079	0.060	1.16	0.092	/

Band	Antenna	Test Position	Dist. (mm)	Mode	Duty Cycle	Power Reduction	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	Plot No.
Wi-Fi 2.4G	ANT 8	Back Side	15	802.11b	98.0%	Level 2	6/2437	18.50	17.40	0.129	0.050	1.31	0.170	/
		Front Side	15	802.11b	98.0%	Level 2	6/2437	18.50	17.40	0.124	0.034	1.31	0.163	/
	ANT 9	Back Side	15	802.11b	98.0%	Level 2	1/2412	18.50	17.46	0.131	0.062	1.30	0.170	/
		Front Side	15	802.11b	98.0%	Level 2	1/2412	18.50	17.46	0.103	0.020	1.30	0.134	/
	MIMO	Back Side	15	802.11b	98.0%	Level 2	1/2412	20.50	19.50	0.216	-0.110	1.28	0.277	67
		Front Side	15	802.11b	98.0%	Level 2	1/2412	20.50	19.50	0.136	0.090	1.28	0.175	/
U-NII-1	ANT 10	Back Side	15	802.11a	100.0%	Level 2	40/5200	17.50	16.33	0.124	-0.050	1.31	0.162	/
		Front Side	15	802.11a	100.0%	Level 2	40/5200	17.50	16.33	0.082	0.041	1.31	0.107	/
	ANT 9	Back Side	15	802.11a	100.0%	Level 2	36/5180	17.50	16.34	0.082	0.046	1.31	0.107	/
		Front Side	15	802.11a	100.0%	Level 2	36/5180	17.50	16.34	0.052	-0.010	1.31	0.068	/
	MIMO	Back Side	15	802.11a	100.0%	Level 2	40/5200	21.00	19.33	0.231	-0.121	1.47	0.339	68
		Front Side	15	802.11a	100.0%	Level 2	40/5200	21.00	19.33	0.125	0.000	1.47	0.184	/
U-NII-2A	ANT 10	Back Side	15	802.11a	100.0%	Level 2	64/5320	17.50	16.54	0.051	0.100	1.25	0.064	/
		Front Side	15	802.11a	100.0%	Level 2	64/5320	17.50	16.54	0.096	0.137	1.25	0.120	/
	ANT 9	Back Side	15	802.11a	100.0%	Level 2	64/5320	17.50	16.68	0.168	0.190	1.21	0.203	/
		Front Side	15	802.11a	100.0%	Level 2	64/5320	17.50	16.68	0.049	-0.010	1.21	0.059	/
	MIMO	Back Side	15	802.11a	100.0%	Level 2	64/5320	21.00	19.62	0.212	0.155	1.37	0.291	69
		Front Side	15	802.11a	100.0%	Level 2	64/5320	21.00	19.62	0.085	0.038	1.37	0.117	/
U-NII-2C	ANT 10	Back Side	15	802.11a	100.0%	Level 2	140/5700	17.50	16.36	0.291	-0.059	1.30	0.378	/
		Front Side	15	802.11a	100.0%	Level 2	140/5700	17.50	16.36	0.124	0.085	1.30	0.161	/
	ANT 9	Back Side	15	802.11a	100.0%	Level 2	140/5700	17.50	16.84	0.137	0.047	1.16	0.159	/
		Front Side	15	802.11a	100.0%	Level 2	140/5700	17.50	16.84	0.051	0.085	1.16	0.059	/
	MIMO	Back Side	15	802.11a	100.0%	Level 2	140/5700	21.00	19.62	0.305	0.041	1.38	0.419	70
		Front Side	15	802.11a	100.0%	Level 2	140/5700	21.00	19.62	0.118	0.022	1.38	0.162	/

U-NII-3	ANT 10	Back Side	15	802.11a	100.0%	Level 2	149/5745	17.50	16.74	0.325	0.039	1.19	0.387	/
		Front Side	15	802.11a	100.0%	Level 2	149/5745	17.50	16.74	0.244	0.043	1.19	0.291	/
	ANT 9	Back Side	15	802.11a	100.0%	Level 2	149/5745	17.50	16.69	0.121	0.059	1.21	0.146	/
		Front Side	15	802.11a	100.0%	Level 2	149/5745	17.50	16.69	0.060	0.170	1.21	0.072	/
	MIMO	Back Side	15	802.11a	100.0%	Level 2	149/5745	21.00	19.73	0.333	0.032	1.34	0.447	71
		Front Side	15	802.11a	100.0%	Level 2	149/5746	21.00	19.73	0.135	-0.048	1.34	0.181	/

Hotspot SAR

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	Plot No.
GSM850	ANT 6	Back Side	10	4TX Slots	Level 3	—	—	190/836.6	27.50	27.49	0.376	-0.028	1.00	0.377	/
		Front Side	10	4TX Slots	Level 3	—	—	190/836.6	27.50	27.49	0.395	-0.065	1.00	0.396	72
		Left Edge	10	4TX Slots	Level 3	—	—	190/836.6	27.50	27.49	0.280	0.012	1.00	0.281	/
		Right Edge	10	4TX Slots	Level 3	—	—	190/836.6	27.50	27.49	0.000	0.033	1.00	0.000	/
		Top Edge	10	4TX Slots	Level 3	—	—	190/836.6	27.50	27.49	0.294	-0.010	1.00	0.295	/
GSM1900	ANT 7	Back Side	10	4TX Slots	Level 3	—	—	661/1880	24.50	24.16	0.532	0.018	1.08	0.575	/
		Front Side	10	4TX Slots	Level 3	—	—	661/1880	24.50	24.16	0.446	-0.090	1.08	0.482	/
		Left Edge	10	4TX Slots	Level 3	—	—	661/1880	24.50	24.16	0.075	0.030	1.08	0.081	/
		Right Edge	10	4TX Slots	Level 3	—	—	661/1880	24.50	24.16	0.123	0.100	1.08	0.133	/
		Top Edge	10	4TX Slots	Level 3	—	—	512/1850.2	24.50	24.43	0.749	0.080	1.02	0.761	/
			10	4TX Slots	Level 3	—	—	661/1880	24.50	24.16	0.768	0.016	1.08	0.831	73
			10	4TX Slots	Level 3	—	—	810/1909.8	24.50	24.21	0.752	-0.024	1.07	0.804	/
WCDMA II	ANT 7	Back Side	10	RMC	Level 3	—	—	9400/1880	21.50	20.10	0.479	0.032	1.38	0.661	/
		Front Side	10	RMC	Level 3	—	—	9400/1880	21.50	20.10	0.417	-0.015	1.38	0.576	/
		Left Edge	10	RMC	Level 3	—	—	9400/1880	21.50	20.10	0.043	0.020	1.38	0.059	/
		Right Edge	10	RMC	Level 3	—	—	9400/1880	21.50	20.10	0.071	0.099	1.38	0.098	/
		Top Edge	10	RMC	Level 3	—	—	9262/1852.4	21.50	20.03	0.723	0.026	1.40	1.014	/
			10	RMC	Level 3	—	—	9400/1880	21.50	20.10	0.787	0.040	1.38	1.086	74
			10	RMC	Level 3	—	—	9538/1907.6	21.50	20.01	0.756	-0.010	1.41	1.065	/
WCDMA IV	ANT 7	Back Side	10	RMC	Level 3	—	—	1312/1712.4	23.00	21.69	0.586	0.030	1.35	0.792	/
			10	RMC	Level 3	—	—	1413/1732.6	23.00	21.75	0.672	0.021	1.33	0.896	/
			10	RMC	Level 3	—	—	1513/1752.6	23.00	21.67	0.632	0.149	1.36	0.858	/
		Front Side	10	RMC	Level 3	—	—	1413/1732.6	23.00	21.75	0.581	-0.080	1.33	0.775	/
		Left Edge	10	RMC	Level 3	—	—	1413/1732.6	23.00	21.75	0.162	0.035	1.33	0.216	/
		Right Edge	10	RMC	Level 3	—	—	1413/1732.6	23.00	21.75	0.000	0.000	1.33	0.000	/
		Top Edge	10	RMC	Level 3	—	—	1312/1712.4	23.00	21.69	0.649	0.011	1.35	0.877	/
			10	RMC	Level 3	—	—	1413/1732.6	23.00	21.75	0.703	-0.022	1.33	0.937	75
			10	RMC	Level 3	—	—	1513/1752.6	23.00	21.67	0.658	-0.070	1.36	0.894	/
WCDMA V	ANT 6	Back Side	10	RMC	Level 3	—	—	4183/836.6	24.50	23.49	0.395	0.119	1.26	0.498	76
		Front Side	10	RMC	Level 3	—	—	4183/836.6	24.50	23.49	0.372	0.024	1.26	0.469	/
		Left Edge	10	RMC	Level 3	—	—	4183/836.6	24.50	23.49	0.245	-0.032	1.26	0.309	/
		Right Edge	10	RMC	Level 3	—	—	4183/836.6	24.50	23.49	0.056	0.015	1.26	0.071	/
		Top Edge	10	RMC	Level 3	—	—	4183/836.6	24.50	23.49	0.326	0.010	1.26	0.411	/
LTE 2	ANT 7	Back Side	10	QPSK	Level 3	1	0	18700/1860	21.50	19.78	0.409	0.027	1.49	0.608	/
			10	QPSK	Level 3	50%	0	18700/1860	21.50	19.81	0.422	0.015	1.48	0.623	/
		Front Side	10	QPSK	Level 3	1	0	18700/1860	21.50	19.78	0.378	-0.090	1.49	0.562	/
			10	QPSK	Level 3	50%	0	18700/1860	21.50	19.81	0.381	0.024	1.48	0.562	/
		Left Edge	10	QPSK	Level 3	1	0	18700/1860	21.50	19.78	0.039	0.021	1.49	0.058	/
			10	QPSK	Level 3	50%	0	18700/1860	21.50	19.81	0.042	0.000	1.48	0.062	/

		Right Edge	10	QPSK	Level 3	1	0	18700/1860	21.50	19.78	0.083	-0.014	1.49	0.123	/
			10	QPSK	Level 3	50%	0	18700/1860	21.50	19.81	0.079	0.038	1.48	0.117	/
		Top Edge	10	QPSK	Level 3	1	0	18700/1860	21.50	19.78	0.688	0.050	1.49	1.022	77
			10	QPSK	Level 3	1	0	18900/1880	21.50	19.71	0.624	-0.016	1.51	0.942	/
			10	QPSK	Level 3	1	50	19100/1900	21.50	19.65	0.637	0.100	1.53	0.975	/
			10	QPSK	Level 3	50%	0	18700/1860	21.50	19.81	0.646	0.022	1.48	0.953	/
			10	QPSK	Level 3	50%	0	18900/1880	21.50	19.65	0.621	0.080	1.53	0.951	/
			10	QPSK	Level 3	50%	0	19100/1900	21.50	19.66	0.669	0.034	1.53	1.022	/
			10	QPSK	Level 3	100%	0	18700/1860	21.50	19.72	0.648	0.011	1.51	0.976	/
			10	QPSK	Level 3	100%	0	18900/1880	21.50	19.61	0.577	-0.020	1.55	0.892	/
			10	QPSK	Level 3	100%	0	19100/1900	21.50	19.67	0.621	-0.094	1.52	0.946	/
LTE 5	ANT 6	Back Side	10	QPSK	Level 3	1	0	20450/829	24.80	23.19	0.157	-0.016	1.45	0.227	/
			10	QPSK	Level 3	50%	25	20525/836.5	23.80	22.23	0.144	0.080	1.44	0.207	/
		Front Side	10	QPSK	Level 3	1	0	20450/829	24.80	23.19	0.165	0.030	1.45	0.239	78
			10	QPSK	Level 3	50%	25	20525/836.5	23.80	22.23	0.123	0.022	1.44	0.177	/
		Left Edge	10	QPSK	Level 3	1	0	20450/829	24.80	23.19	0.134	0.047	1.45	0.194	/
			10	QPSK	Level 3	50%	25	20525/836.5	23.80	22.23	0.106	0.000	1.44	0.152	/
		Right Edge	10	QPSK	Level 3	1	0	20450/829	24.80	23.19	0.047	0.032	1.45	0.068	/
			10	QPSK	Level 3	50%	25	20525/836.5	23.80	22.23	0.026	0.000	1.44	0.037	/
		Top Edge	10	QPSK	Level 3	1	0	20450/829	24.80	23.19	0.163	-0.130	1.45	0.236	/
			10	QPSK	Level 3	50%	25	20525/836.5	23.80	22.23	0.133	0.022	1.44	0.191	/
LTE 7	ANT 3	Back Side	10	QPSK	Level 3	1	99	21350/2560	22.50	21.02	0.524	-0.014	1.41	0.737	/
			10	QPSK	Level 3	50%	25	21350/2560	22.50	21.14	0.402	0.038	1.37	0.550	/
		Front Side	10	QPSK	Level 3	1	99	21350/2560	22.50	21.02	0.552	-0.021	1.41	0.776	/
			10	QPSK	Level 3	50%	25	21350/2560	22.50	21.14	0.462	0.000	1.37	0.632	/
		Left Edge	10	QPSK	Level 3	1	99	21350/2560	22.50	21.02	0.279	0.037	1.41	0.392	/
			10	QPSK	Level 3	50%	25	21350/2560	22.50	21.14	0.344	0.020	1.37	0.470	/
		Right Edge	10	QPSK	Level 3	1	99	21350/2560	22.50	21.02	0.000	0.000	1.41	0.000	/
			10	QPSK	Level 3	50%	25	21350/2560	22.50	21.14	0.000	0.000	1.37	0.000	/
		Bottom Edge	10	QPSK	Level 3	1	99	20850/2510	22.50	20.93	0.546	0.030	1.44	0.784	/
			10	QPSK	Level 3	1	99	21100/2535	22.50	20.91	0.572	-0.012	1.44	0.825	/
			10	QPSK	Level 3	1	99	21350/2560	22.50	21.02	0.590	0.036	1.41	0.830	79
			10	QPSK	Level 3	50%	25	21350/2560	22.50	21.14	0.568	0.011	1.37	0.777	/
			10	QPSK	Level 3	100%	0	21350/2560	22.50	21.02	0.521	0.000	1.41	0.733	/
LTE 12	ANT 6	Back Side	10	QPSK	Level 3	1	49	23095/707.5	25.00	23.23	0.179	0.027	1.50	0.269	/
			10	QPSK	Level 3	50%	0	23095/707.5	24.00	22.29	0.141	-0.010	1.48	0.209	/
		Front Side	10	QPSK	Level 3	1	49	23095/707.5	25.00	23.23	0.197	0.050	1.50	0.296	80
			10	QPSK	Level 3	50%	0	23095/707.5	24.00	22.29	0.144	-0.022	1.48	0.213	/
		Left Edge	10	QPSK	Level 3	1	49	23095/707.5	25.00	23.23	0.191	0.100	1.50	0.287	/
			10	QPSK	Level 3	50%	0	23095/707.5	24.00	22.29	0.150	0.036	1.48	0.222	/
		Right Edge	10	QPSK	Level 3	1	49	23095/707.5	25.00	23.23	0.049	0.017	1.50	0.074	/
			10	QPSK	Level 3	50%	0	23095/707.5	24.00	22.29	0.048	-0.100	1.48	0.071	/
		Top Edge	10	QPSK	Level 3	1	49	23095/707.5	25.00	23.23	0.141	-0.035	1.50	0.212	/

			10	QPSK	Level 3	50%	0	23095/707.5	24.00	22.29	0.132	0.022	1.48	0.196	/
LTE 13	ANT 6	Back Side	10	QPSK	Level 3	1	25	23230/782	25.00	23.13	0.213	-0.020	1.54	0.328	/
			10	QPSK	Level 3	50%	0	23230/782	24.00	22.16	0.166	0.050	1.53	0.254	/
		Front Side	10	QPSK	Level 3	1	25	23230/782	25.00	23.13	0.216	0.100	1.54	0.332	81
			10	QPSK	Level 3	50%	0	23230/782	24.00	22.16	0.179	-0.040	1.53	0.273	/
		Left Edge	10	QPSK	Level 3	1	25	23230/782	25.00	23.13	0.166	0.180	1.54	0.255	/
			10	QPSK	Level 3	50%	0	23230/782	24.00	22.16	0.131	0.037	1.53	0.200	/
		Right Edge	10	QPSK	Level 3	1	25	23230/782	25.00	23.13	0.057	0.036	1.54	0.088	/
			10	QPSK	Level 3	50%	0	23230/782	24.00	22.16	0.045	0.014	1.53	0.069	/
		Top Edge	10	QPSK	Level 3	1	25	23230/782	25.00	23.13	0.173	-0.018	1.54	0.266	/
			10	QPSK	Level 3	50%	0	23230/782	24.00	22.16	0.128	0.020	1.53	0.196	/
LTE 25	ANT 7	Back Side	10	QPSK	Level 3	1	0	26140/1860	21.30	19.70	0.506	0.028	1.45	0.731	/
			10	QPSK	Level 3	50%	0	26140/1860	21.30	19.72	0.478	-0.013	1.44	0.688	/
		Front Side	10	QPSK	Level 3	1	0	26140/1860	21.30	19.70	0.436	0.011	1.45	0.630	/
			10	QPSK	Level 3	50%	0	26140/1860	21.30	19.72	0.421	0.027	1.44	0.606	/
		Left Edge	10	QPSK	Level 3	1	0	26140/1860	21.30	19.70	0.000	0.000	1.45	0.000	/
			10	QPSK	Level 3	50%	0	26140/1860	21.30	19.72	0.000	0.000	1.44	0.000	/
		Right Edge	10	QPSK	Level 3	1	0	26140/1860	21.30	19.70	0.094	0.019	1.45	0.136	/
			10	QPSK	Level 3	50%	0	26140/1860	21.30	19.72	0.085	0.024	1.44	0.122	/
		Top Edge	10	QPSK	Level 3	1	0	26140/1860	21.30	19.70	0.659	-0.020	1.45	0.953	/
			10	QPSK	Level 3	1	0	26365/1882.5	21.30	19.61	0.682	-0.018	1.48	1.006	/
			10	QPSK	Level 3	1	0	26140/1860	21.30	19.63	0.591	0.000	1.47	0.868	/
			10	QPSK	Level 3	50%	0	26140/1860	21.30	19.72	0.716	0.120	1.44	1.030	82
			10	QPSK	Level 3	50%	0	26365/1882.5	21.30	19.60	0.653	0.032	1.48	0.966	/
			10	QPSK	Level 3	50%	25	26140/1860	21.30	19.59	0.684	0.018	1.48	1.014	/
			10	QPSK	Level 3	100%	0	26140/1860	21.30	19.71	0.615	-0.132	1.44	0.887	/
			10	QPSK	Level 3	100%	0	26365/1882.5	21.30	19.55	0.668	0.040	1.50	0.999	/
			10	QPSK	Level 3	100%	0	26140/1860	21.30	19.68	0.623	0.060	1.45	0.905	/
LTE 26	ANT 6	Back Side	10	QPSK	Level 3	1	38	26765/821.5	24.80	23.05	0.299	0.025	1.50	0.447	/
			10	QPSK	Level 3	50%	39	26765/821.5	23.80	22.13	0.267	0.012	1.47	0.392	/
		Front Side	10	QPSK	Level 3	1	38	26765/821.5	24.80	23.05	0.340	0.030	1.50	0.509	83
			10	QPSK	Level 3	50%	39	26765/821.5	23.80	22.13	0.282	0.120	1.47	0.414	/
		Left Edge	10	QPSK	Level 3	1	38	26765/821.5	24.80	23.05	0.216	0.038	1.50	0.323	/
			10	QPSK	Level 3	50%	39	26765/821.5	23.80	22.13	0.194	-0.011	1.47	0.285	/
		Right Edge	10	QPSK	Level 3	1	38	26765/821.5	24.80	23.05	0.051	0.050	1.50	0.076	/
			10	QPSK	Level 3	50%	39	26765/821.5	23.80	22.13	0.000	0.042	1.47	0.000	/
		Top Edge	10	QPSK	Level 3	1	38	26765/821.5	24.80	23.05	0.279	0.032	1.50	0.417	/
			10	QPSK	Level 3	50%	39	26765/821.5	23.80	22.13	0.220	0.018	1.47	0.323	/
LTE 38	ANT 3	Back Side	10	QPSK	Level 3	1	99	38150/2610	24.80	23.24	0.403	0.032	1.43	0.577	/
			10	QPSK	Level 3	50%	25	38000/2595	23.80	22.24	0.328	-0.099	1.43	0.470	/
		Front Side	10	QPSK	Level 3	1	99	38150/2610	24.80	23.24	0.357	0.017	1.43	0.511	/
			10	QPSK	Level 3	50%	25	38000/2595	23.80	22.24	0.389	0.020	1.43	0.557	/
		Left Edge	10	QPSK	Level 3	1	99	38150/2610	24.80	23.24	0.288	0.180	1.43	0.412	/

			10	QPSK	Level 3	50%	25	38000/2595	23.80	22.24	0.113	0.022	1.43	0.162	/
		Right Edge	10	QPSK	Level 3	1	99	38150/2610	24.80	23.24	0.041	0.061	1.43	0.059	/
			10	QPSK	Level 3	50%	25	38000/2595	23.80	22.24	0.000	0.000	1.43	0.000	/
		Bottom Edge	10	QPSK	Level 3	1	99	38150/2610	24.80	23.24	0.498	0.070	1.43	0.713	84
			10	QPSK	Level 3	50%	25	38000/2595	23.80	22.24	0.391	0.022	1.43	0.560	/
LTE 41	ANT 3	Back Side	10	QPSK	Level 3	1	0	40620/2593	27.20	25.64	0.485	0.022	1.43	0.695	/
			10	QPSK	Level 3	50%	50	40620/2593	26.20	24.68	0.362	-0.080	1.42	0.514	/
		Front Side	10	QPSK	Level 3	1	0	40620/2593	27.20	25.64	0.480	0.010	1.43	0.687	/
			10	QPSK	Level 3	50%	50	40620/2593	26.20	24.68	0.352	0.000	1.42	0.500	/
		Left Edge	10	QPSK	Level 3	1	0	40620/2593	27.20	25.64	0.191	0.099	1.43	0.274	/
			10	QPSK	Level 3	50%	50	40620/2593	26.20	24.68	0.126	0.000	1.42	0.179	/
		Right Edge	10	QPSK	Level 3	1	0	40620/2593	27.20	25.64	0.055	0.024	1.43	0.079	/
			10	QPSK	Level 3	50%	50	40620/2593	26.20	24.68	0.000	0.010	1.42	0.000	/
		Bottom Edge	10	QPSK	Level 3	1	0	40620/2593	27.20	25.64	0.441	0.025	1.43	0.632	/
			10	QPSK	Level 3	50%	25	39750/2506	26.20	24.61	0.582	-0.013	1.44	0.839	/
			10	QPSK	Level 3	50%	25	40185/2549.5	26.20	24.66	0.569	0.024	1.43	0.811	/
			10	QPSK	Level 3	50%	50	40620/2593	26.20	24.68	0.654	0.049	1.42	0.928	85
			10	QPSK	Level 3	50%	5	41055/2636.5	26.20	24.65	0.623	0.090	1.43	0.890	/
			10	QPSK	Level 3	50%	0	41490/2680	26.20	24.50	0.615	-0.031	1.48	0.910	/
			10	QPSK	Level 3	100%	0	41055/2636.5	26.20	24.69	0.523	0.038	1.42	0.740	/
		Bottom Edge	10	QPSK	Level 3	1	99	39750/2506 (PCC)	25.00	23.52	0.383	0.029	1.41	0.539	/
						1	0	39948/2525.8 (SCC)							
LTE 66	ANT 7	Back Side	10	QPSK	Level 3	1	50	132322/1745	21.60	19.88	0.292	0.012	1.49	0.434	/
			10	QPSK	Level 3	50%	25	132322/1745	21.60	19.96	0.291	0.039	1.46	0.425	/
		Front Side	10	QPSK	Level 3	1	50	132322/1745	21.60	19.88	0.246	0.011	1.49	0.366	/
			10	QPSK	Level 3	50%	25	132322/1745	21.60	19.96	0.250	-0.020	1.46	0.365	/
		Left Edge	10	QPSK	Level 3	1	50	132322/1745	21.60	19.88	0.068	-0.168	1.49	0.101	/
			10	QPSK	Level 3	50%	25	132322/1745	21.60	19.96	0.059	0.020	1.46	0.086	/
		Right Edge	10	QPSK	Level 3	1	50	132322/1745	21.60	19.88	0.000	0.000	1.49	0.000	/
			10	QPSK	Level 3	50%	25	132322/1745	21.60	19.96	0.000	0.000	1.46	0.000	/
		Top Edge	10	QPSK	Level 3	1	50	132322/1745	21.60	19.88	0.368	0.082	1.49	0.547	/
			10	QPSK	Level 3	50%	25	132322/1745	21.60	19.96	0.413	0.070	1.46	0.602	86
		Top Edge	10	QPSK	Level 3	1	99	132072/1720 (PCC)	21.60	19.80	0.397	-0.010	1.51	0.601	/
						1	0	132270/1739.8 (SCC)							
LTE 71	ANT 6	Back Side	10	QPSK	Level 3	1	99	133222/673	24.80	23.14	0.136	0.032	1.47	0.199	/
			10	QPSK	Level 3	50%	50	133222/673	23.80	22.08	0.123	0.014	1.49	0.183	/
		Front Side	10	QPSK	Level 3	1	99	133222/673	24.80	23.14	0.114	0.025	1.47	0.167	/
			10	QPSK	Level 3	50%	50	133222/673	23.80	22.08	0.116	0.019	1.49	0.172	/
		Left Edge	10	QPSK	Level 3	1	99	133222/673	24.80	23.14	0.182	-0.040	1.47	0.267	87

			10	QPSK	Level 3	50%	50	133222/673	23.80	22.08	0.125	0.028	1.49	0.186	/
		Right Edge	10	QPSK	Level 3	1	99	133222/673	24.80	23.14	0.000	-0.110	1.47	0.000	/
			10	QPSK	Level 3	50%	50	133222/673	23.80	22.08	0.000	-0.070	1.49	0.000	/
		Top Edge	10	QPSK	Level 3	1	99	133222/673	24.80	23.14	0.123	0.035	1.47	0.180	/
			10	QPSK	Level 3	50%	50	133222/673	23.80	22.08	0.121	0.011	1.49	0.180	/

Band	Ant.	Test Position	Dist. (mm)	Inf.	Power Reduction	Mode	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	Plot No.
n25	ANT 7	Back Side	10	SA	Level 3	DFT-s-OFDM QPSK	1	104	381000/1905	22.00	20.89	0.533	0.080	1.29	0.688	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	381000/1905	22.00	20.93	0.559	-0.062	1.28	0.715	/
		Front Side	10		Level 3	DFT-s-OFDM QPSK	1	104	381000/1905	22.00	20.89	0.476	0.000	1.29	0.615	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	381000/1905	22.00	20.93	0.488	0.038	1.28	0.624	/
		Left Edge	10		Level 3	DFT-s-OFDM QPSK	1	104	381000/1905	22.00	20.89	0.062	0.029	1.29	0.080	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	381000/1905	22.00	20.93	0.059	0.015	1.28	0.075	/
		Right Edge	10		Level 3	DFT-s-OFDM QPSK	1	104	381000/1905	22.00	20.89	0.098	0.038	1.29	0.127	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	381000/1905	22.00	20.93	0.104	-0.050	1.28	0.133	/
		Top Edge	10		Level 3	DFT-s-OFDM QPSK	1	104	372000/1860	22.00	20.83	0.985	0.030	1.31	1.290	/
		Top Edge	10		Level 3	DFT-s-OFDM QPSK	1	104	376500/1882.5	22.00	20.86	0.924	0.019	1.30	1.201	/
		Top Edge	10		Level 3	DFT-s-OFDM QPSK	1	104	381000/1905	22.00	20.89	0.906	0.140	1.29	1.170	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	372000/1860	22.00	20.92	0.948	-0.129	1.28	1.216	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	376500/1882.5	22.00	20.92	0.972	0.021	1.28	1.246	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	381000/1905	22.00	20.93	1.030	0.048	1.28	1.318	88
		Top Edge Repeated	10		Level 3	DFT-s-OFDM QPSK	50	25	381000/1905	22.00	20.93	0.998	0.020	1.28	1.277	/
		Top Edge	10		Level 3	CP-OFDM QPSK	53	26	381000/1905	20.50	19.50	0.862	-0.070	1.26	1.085	/
	ANT 1	Back Side	10	NSA	Level 3	DFT-s-OFDM QPSK	1	104	376500/1882.5	17.90	16.98	0.346	0.012	1.24	0.428	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	381000/1905	17.90	17.09	0.385	-0.019	1.21	0.464	/
		Front Side	10		Level 3	DFT-s-OFDM QPSK	1	104	376500/1882.5	17.90	16.98	0.342	0.040	1.24	0.423	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	381000/1905	17.90	17.09	0.387	0.023	1.21	0.466	/
		Left Edge	10		Level 3	DFT-s-OFDM QPSK	1	104	376500/1882.5	17.90	16.98	0.000	-0.060	1.24	0.000	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	381000/1905	17.90	17.09	0.000	0.170	1.21	0.000	/
		Right Edge	10		Level 3	DFT-s-OFDM QPSK	1	104	376500/1882.5	17.90	16.98	0.038	-0.090	1.24	0.047	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	381000/1905	17.90	17.09	0.042	0.000	1.21	0.051	/
		Bottom Edge	10		Level 3	DFT-s-OFDM QPSK	1	104	376500/1882.5	17.90	16.98	0.576	-0.014	1.24	0.712	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	381000/1905	17.90	17.09	0.657	0.026	1.21	0.792	/
n41	ANT 3	Back Side	10	SA& NSA	Level 3	DFT-s-OFDM QPSK	1	1	509202/2546.01	23.00	22.00	0.344	-0.023	1.26	0.433	/
			10		Level 3	DFT-s-OFDM QPSK	135	67	509202/2546.01	23.00	21.91	0.387	0.140	1.29	0.497	/
		Front Side	10		Level 3	DFT-s-OFDM QPSK	1	1	509202/2546.01	23.00	22.00	0.323	0.049	1.26	0.407	/
			10		Level 3	DFT-s-OFDM QPSK	135	67	509202/2546.01	23.00	21.91	0.611	0.038	1.29	0.785	89
		Left Edge	10		Level 3	DFT-s-OFDM QPSK	1	1	509202/2546.01	23.00	22.00	0.188	-0.075	1.26	0.237	/
			10		Level 3	DFT-s-OFDM QPSK	135	67	509202/2546.01	23.00	21.91	0.231	0.031	1.29	0.297	/
		Right Edge	10		Level 3	DFT-s-OFDM QPSK	1	1	509202/2546.01	23.00	22.00	0.062	-0.051	1.26	0.078	/

			10		Level 3	DFT-s-OFDM QPSK	135	67	509202/2546.01	23.00	21.91	0.075	0.018	1.29	0.096	/
		Bottom Edge	10		Level 3	DFT-s-OFDM QPSK	1	1	509202/2546.01	23.00	22.00	0.296	0.027	1.26	0.373	/
			10		Level 3	DFT-s-OFDM QPSK	135	67	509202/2546.01	23.00	21.91	0.467	0.020	1.29	0.600	/
		Front Side	10		Level 3	CP-OFDM QPSK	1	1	509202/2546.01	22.00	21.13	0.548	-0.010	1.22	0.670	/
n66	ANT 7	Back Side	10	SA	Level 3	DFT-s-OFDM QPSK	1	1	344000/1720	23.50	23.11	0.599	0.031	1.09	0.655	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	344000/1720	23.50	23.07	0.611	0.027	1.10	0.675	/
		Front Side	10		Level 3	DFT-s-OFDM QPSK	1	1	344000/1720	23.50	23.11	0.621	0.030	1.09	0.679	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	344000/1720	23.50	23.07	0.582	0.100	1.10	0.643	/
		Left Edge	10		Level 3	DFT-s-OFDM QPSK	1	1	344000/1720	23.50	23.11	0.159	0.023	1.09	0.174	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	344000/1720	23.50	23.07	0.186	0.160	1.10	0.205	/
		Right Edge	10		Level 3	DFT-s-OFDM QPSK	1	1	344000/1720	23.50	23.11	0.044	0.120	1.09	0.048	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	344000/1720	23.50	23.07	0.047	0.063	1.10	0.052	/
		Top Edge	10		Level 3	DFT-s-OFDM QPSK	1	1	344000/1720	23.50	23.11	0.737	-0.010	1.09	0.806	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	344000/1720	23.50	23.07	0.941	-0.022	1.10	1.039	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	349000/1745	23.50	23.00	0.876	0.030	1.12	0.983	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	354000/1770	23.50	22.98	0.913	-0.098	1.13	1.029	/
		Top Edge Repeated	10		Level 3	DFT-s-OFDM QPSK	50	25	344000/1720	23.50	23.07	0.948	0.027	1.10	1.047	90
		Top Edge	10		Level 3	CP-OFDM QPSK	53	26	349000/1745	22.50	21.40	0.762	0.000	1.29	0.982	/
	ANT 1	Back Side	10	NSA	Level 3	DFT-s-OFDM QPSK	1	104	349000/1745	20.00	19.09	0.419	0.026	1.23	0.517	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	349000/1745	20.00	18.96	0.441	0.047	1.27	0.560	/
		Front Side	10		Level 3	DFT-s-OFDM QPSK	1	104	349000/1745	20.00	19.09	0.395	-0.120	1.23	0.487	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	349000/1745	20.00	18.96	0.447	0.021	1.27	0.568	/
		Left Edge	10		Level 3	DFT-s-OFDM QPSK	1	104	349000/1745	20.00	19.09	0.000	0.000	1.23	0.000	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	349000/1745	20.00	18.96	0.000	0.000	1.27	0.000	/
		Right Edge	10		Level 3	DFT-s-OFDM QPSK	1	104	349000/1745	20.00	19.09	0.083	0.049	1.23	0.102	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	349000/1745	20.00	18.96	0.105	0.012	1.27	0.133	/
		Bottom Edge	10		Level 3	DFT-s-OFDM QPSK	1	104	349000/1745	20.00	19.09	0.529	-0.010	1.23	0.652	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	349000/1745	20.00	18.96	0.613	0.100	1.27	0.779	/
n71	ANT 6	Back Side	10	SA&NSA	Level 3	DFT-s-OFDM QPSK	1	1	137600/688	25.00	23.33	0.148	0.090	1.47	0.217	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	136100/680.5	25.00	23.31	0.140	-0.150	1.48	0.207	/
		Front Side	10		Level 3	DFT-s-OFDM QPSK	1	1	137600/688	25.00	23.33	0.130	-0.040	1.47	0.191	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	136100/680.5	25.00	23.31	0.133	0.060	1.48	0.196	/
		Left Edge	10		Level 3	DFT-s-OFDM QPSK	1	1	137600/688	25.00	23.33	0.189	0.180	1.47	0.278	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	136100/680.5	25.00	23.31	0.194	0.170	1.48	0.286	91
		Right Edge	10		Level 3	DFT-s-OFDM QPSK	1	1	137600/688	25.00	23.33	0.054	0.160	1.47	0.079	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	136100/680.5	25.00	23.31	0.047	-0.030	1.48	0.069	/
		Top Edge	10		Level 3	DFT-s-OFDM QPSK	1	1	137600/688	25.00	23.33	0.108	-0.040	1.47	0.159	/
			10		Level 3	DFT-s-OFDM QPSK	50	25	136100/680.5	25.00	23.31	0.112	0.128	1.48	0.165	/
		Left Edge	10		Level 3	CP-OFDM QPSK	53	36	134600/673	22.50	21.86	0.146	0.036	1.16	0.169	/

Band	Antenna	Test Position	Dist. (mm)	Mode	Duty Cycle	Power Reduction	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	Plot No.
Wi-Fi 2.4G	ANT 8	Back Side	10	802.11b	98.0%	Level 3	6/2437	18.50	17.40	0.146	0.025	1.31	0.192	/
		Front Side	10	802.11b	98.0%	Level 3	6/2437	18.50	17.40	0.138	0.034	1.31	0.181	/
		Left Edge	10	802.11b	98.0%	Level 3	6/2437	18.50	17.40	0.000	-0.050	1.31	0.000	/
		Right Edge	10	802.11b	98.0%	Level 3	6/2437	18.50	17.40	0.084	0.044	1.31	0.110	/
		Top Edge	10	802.11b	98.0%	Level 3	6/2437	18.50	17.40	0.420	0.048	1.31	0.552	/
	ANT 9	Back Side	10	802.11b	98.0%	Level 3	1/2412	18.50	17.46	0.137	-0.039	1.30	0.178	/
		Front Side	10	802.11b	98.0%	Level 3	1/2412	18.50	17.46	0.000	0.000	1.30	0.000	/
		Left Edge	10	802.11b	98.0%	Level 3	1/2412	18.50	17.46	0.000	0.000	1.30	0.000	/
		Right Edge	10	802.11b	98.0%	Level 3	1/2412	18.50	17.46	0.000	0.000	1.30	0.000	/
		Top Edge	10	802.11b	98.0%	Level 3	1/2412	18.50	17.46	0.054	0.072	1.30	0.070	/
	MIMO	Back Side	10	802.11b	98.0%	Level 3	1/2412	19.00	18.58	0.389	0.000	1.13	0.438	/
		Front Side	10	802.11b	98.0%	Level 3	1/2412	19.00	18.58	0.253	0.010	1.13	0.285	/
		Left Edge	10	802.11b	98.0%	Level 3	1/2412	19.00	18.58	0.053	-0.043	1.13	0.060	/
		Right Edge	10	802.11b	98.0%	Level 3	1/2412	19.00	18.58	0.169	0.020	1.13	0.190	/
		Top Edge	10	802.11b	98.0%	Level 3	1/2412	19.00	18.58	0.514	0.060	1.13	0.578	92
U-NII-1	ANT 10	Back Side	10	802.11a	100.0%	Level 3	40/5200	17.50	16.33	0.217	0.110	1.31	0.284	/
		Front Side	10	802.11a	100.0%	Level 3	40/5200	17.50	16.33	0.137	0.030	1.31	0.179	/
		Left Edge	10	802.11a	100.0%	Level 3	40/5200	17.50	16.33	0.058	0.051	1.31	0.076	/
		Right Edge	10	802.11a	100.0%	Level 3	40/5200	17.50	16.33	0.422	0.046	1.31	0.552	/
		Top Edge	10	802.11a	100.0%	Level 3	40/5200	17.50	16.33	0.072	0.057	1.31	0.094	/
	ANT 9	Back Side	10	802.11a	100.0%	Level 3	36/5180	17.50	16.34	0.134	0.076	1.31	0.175	/
		Front Side	10	802.11a	100.0%	Level 3	36/5180	17.50	16.34	0.054	-0.085	1.31	0.071	/
		Left Edge	10	802.11a	100.0%	Level 3	36/5180	17.50	16.34	0.040	0.000	1.31	0.052	/
		Right Edge	10	802.11a	100.0%	Level 3	36/5180	17.50	16.34	0.065	0.022	1.31	0.085	/
		Top Edge	10	802.11a	100.0%	Level 3	36/5180	17.50	16.34	0.053	0.150	1.31	0.069	/
	MIMO	Back Side	10	802.11a	100.0%	Level 3	40/5200	21.00	19.33	0.230	-0.080	1.47	0.338	/
		Front Side	10	802.11a	100.0%	Level 3	40/5200	21.00	19.33	0.125	0.031	1.47	0.184	/
		Left Edge	10	802.11a	100.0%	Level 3	40/5200	21.00	19.33	0.065	0.100	1.47	0.095	/
		Right Edge	10	802.11a	100.0%	Level 3	40/5200	21.00	19.33	0.426	0.049	1.47	0.626	93
		Top Edge	10	802.11a	100.0%	Level 3	40/5200	21.00	19.33	0.104	0.032	1.47	0.153	/
U-NII-3	ANT 10	Back Side	10	802.11a	100.0%	Level 3	149/5745	17.50	16.74	0.482	0.047	1.19	0.574	/
		Front Side	10	802.11a	100.0%	Level 3	149/5745	17.50	16.74	0.265	-0.051	1.19	0.316	/
		Left Edge	10	802.11a	100.0%	Level 3	149/5745	17.50	16.74	0.062	0.033	1.19	0.074	/
		Right Edge	10	802.11a	100.0%	Level 3	149/5745	17.50	16.74	0.814	0.170	1.19	0.970	94
		Top Edge	10	802.11a	100.0%	Level 3	149/5745	17.50	16.74	0.143	-0.034	1.19	0.170	/
	ANT 9	Back Side	10	802.11a	100.0%	Level 3	149/5745	17.50	16.69	0.203	0.075	1.21	0.245	/
		Front Side	10	802.11a	100.0%	Level 3	149/5745	17.50	16.69	0.048	0.058	1.21	0.058	/
		Left Edge	10	802.11a	100.0%	Level 3	149/5745	17.50	16.69	0.068	-0.057	1.21	0.082	/
		Right Edge	10	802.11a	100.0%	Level 3	149/5745	17.50	16.69	0.085	0.010	1.21	0.102	/

		Top Edge	10	802.11a	100.0%	Level 3	149/5745	17.50	16.69	0.078	0.000	1.21	0.094	/
	MIMO	Back Side	10	802.11a	100.0%	Level 3	149/5745	21.00	19.73	0.402	0.026	1.34	0.539	/
		Front Side	10	802.11a	100.0%	Level 3	149/5745	21.00	19.73	0.204	0.132	1.34	0.274	/
		Left Edge	10	802.11a	100.0%	Level 3	149/5745	21.00	19.73	0.068	0.080	1.34	0.091	/
		Right Edge	10	802.11a	100.0%	Level 3	149/5745	21.00	19.73	0.691	0.044	1.34	0.927	/
		Top Edge	10	802.11a	100.0%	Level 3	149/5745	21.00	19.73	0.176	0.020	1.34	0.236	/
Bluetooth	BT	Back Side	10	DH5	77.0%	-	39/2441	13.00	11.62	0.000	0.000	1.78	0.000	/
		Front Side	10	DH5	77.0%	-	39/2441	13.00	11.62	0.000	0.000	1.78	0.000	/
		Left Edge	10	DH5	77.0%	-	39/2441	13.00	11.62	0.000	0.000	1.78	0.000	/
		Right Edge	10	DH5	77.0%	-	39/2441	13.00	11.62	0.000	0.000	1.78	0.000	/
		Top Edge	10	DH5	77.0%	-	39/2441	13.00	11.62	0.051	0.035	1.78	0.090	95

Product-specific 10g SAR

Band	Antenna	Test Position	Mode	Power Reduction	RB	offset	Channel Frequency(MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Scaling Factor	Report SAR1g	0mm SAR
WCDMA II	ANT 7	Back Side	RMC	Level 3	—	—	9400/1880	24.50	21.50	0.661	2.00	1.319	Yes
		Front Side	RMC	Level 3	—	—	9400/1880	24.50	21.50	0.576	2.00	1.149	No
		Left Edge	RMC	Level 3	—	—	9400/1880	24.50	21.50	0.059	2.00	0.118	No
		Right Edge	RMC	Level 3	—	—	9400/1880	24.50	21.50	0.098	2.00	0.196	No
		Top Edge	RMC	Level 3	—	—	9400/1880	24.50	21.50	1.086	2.00	2.168	Yes
WCDMA IV	ANT 7	Back Side	RMC	Level 3	—	—	1413/1732.6	24.50	23.00	0.896	1.41	1.266	Yes
		Front Side	RMC	Level 3	—	—	1413/1732.6	24.50	23.00	0.775	1.41	1.094	No
		Left Edge	RMC	Level 3	—	—	1413/1732.6	24.50	23.00	0.216	1.41	0.305	No
		Right Edge	RMC	Level 3	—	—	1413/1732.6	24.50	23.00	0.000	1.41	0.000	No
		Top Edge	RMC	Level 3	—	—	1413/1732.6	24.50	23.00	0.937	1.41	1.324	Yes
LTE 2	ANT 7	Back Side	QPSK	Level 3	1	0	18700/1860	24.70	21.50	0.608	2.09	1.270	Yes
			QPSK	Level 3	50%	0	18700/1860	23.70	21.50	0.623	1.66	1.034	No
		Front Side	QPSK	Level 3	1	0	18700/1860	24.70	21.50	0.562	2.09	1.174	No
			QPSK	Level 3	50%	0	18700/1860	23.70	21.50	0.562	1.66	0.933	No
		Left Edge	QPSK	Level 3	1	0	18700/1860	24.70	21.50	0.000	2.09	0.000	No
			QPSK	Level 3	50%	0	18700/1860	23.70	21.50	0.000	1.66	0.000	No
		Right Edge	QPSK	Level 3	1	0	18700/1860	24.70	21.50	0.123	2.09	0.258	No
			QPSK	Level 3	50%	0	18700/1860	23.70	21.50	0.117	1.66	0.193	No
		Top Edge	QPSK	Level 3	1	0	18700/1860	24.70	21.50	1.022	2.09	2.136	Yes
			QPSK	Level 3	50%	0	18700/1860	23.70	21.50	0.953	1.66	1.582	Yes
LTE 7	ANT 3	Back Side	QPSK	Level 3	1	99	21350/2560	24.70	22.50	0.737	1.66	1.223	Yes
			QPSK	Level 3	50%	25	21350/2560	23.70	22.50	0.550	1.32	0.725	No
		Front Side	QPSK	Level 3	1	99	21350/2560	24.70	22.50	0.776	1.66	1.288	Yes
			QPSK	Level 3	50%	25	21350/2560	23.70	22.50	0.632	1.32	0.833	No
		Left Edge	QPSK	Level 3	1	99	21350/2560	24.70	22.50	0.392	1.66	0.651	No
			QPSK	Level 3	50%	25	21350/2560	23.70	22.50	0.470	1.32	0.620	No
		Right Edge	QPSK	Level 3	1	99	21350/2560	24.70	22.50	0.000	1.66	0.000	No
			QPSK	Level 3	50%	25	21350/2560	23.70	22.50	0.000	1.32	0.000	No
		Bottom Edge	QPSK	Level 3	1	99	21350/2560	24.70	22.50	0.830	1.66	1.377	Yes
			QPSK	Level 3	50%	25	21350/2560	23.70	22.50	0.777	1.32	1.024	No
LTE 25	ANT 7	Back Side	QPSK	Level 3	1	0	26140/1860	24.80	21.30	0.731	2.24	1.637	Yes
			QPSK	Level 3	50%	0	26140/1860	23.80	21.30	0.688	1.78	1.223	Yes
		Front Side	QPSK	Level 3	1	0	26140/1860	24.80	21.30	0.630	2.24	1.411	Yes
			QPSK	Level 3	50%	0	26140/1860	23.80	21.30	0.606	1.78	1.077	No
		Left Edge	QPSK	Level 3	1	0	26140/1860	24.80	21.30	0.000	2.24	0.000	No
			QPSK	Level 3	50%	0	26140/1860	23.80	21.30	0.000	1.78	0.000	No
		Right Edge	QPSK	Level 3	1	0	26140/1860	24.80	21.30	0.136	2.24	0.304	No
			QPSK	Level 3	50%	0	26140/1860	23.80	21.30	0.122	1.78	0.217	No
		Top Edge	QPSK	Level 3	1	0	26140/1860	24.80	21.30	0.953	2.24	2.132	Yes

			QPSK	Level 3	50%	0	26140/1860	23.80	21.30	1.030	1.78	1.832	Yes
LTE B66	ANT 7	Back Side	QPSK	Level 3	1	50	132322/1745	24.60	21.60	0.434	2.00	0.866	No
			QPSK	Level 3	50%	25	132322/1746	23.60	21.60	0.425	1.58	0.673	No
		Front Side	QPSK	Level 3	1	50	132322/1745	24.60	21.60	0.366	2.00	0.729	No
			QPSK	Level 3	50%	25	132322/1746	23.60	21.60	0.365	1.58	0.578	No
		Left Edge	QPSK	Level 3	1	50	132322/1745	24.60	21.60	0.101	2.00	0.202	No
			QPSK	Level 3	50%	25	132322/1746	23.60	21.60	0.086	1.58	0.136	No
		Right Edge	QPSK	Level 3	1	50	132322/1745	24.60	21.60	0.000	2.00	0.000	No
			QPSK	Level 3	50%	25	132322/1746	23.60	21.60	0.000	1.58	0.000	No
		Top Edge	QPSK	Level 3	1	50	132322/1745	24.60	21.60	0.547	2.00	1.091	No
			QPSK	Level 3	50%	25	132322/1746	23.60	21.60	0.602	1.58	0.955	No
n25	ANT 1	Back Side	DFT-s-OFDM QPSK	Level 3	1	104	376500/1882.5	24.80	17.90	0.428	4.90	2.094	Yes
			DFT-s-OFDM QPSK	Level 3	50	25	381000/1905	24.80	17.90	0.464	4.90	2.272	Yes
		Front Side	DFT-s-OFDM QPSK	Level 3	1	104	376500/1882.5	24.80	17.90	0.423	4.90	2.070	Yes
			DFT-s-OFDM QPSK	Level 3	50	25	381000/1905	24.80	17.90	0.466	4.90	2.284	Yes
		Left Edge	DFT-s-OFDM QPSK	Level 3	1	104	376500/1882.5	24.80	17.90	0.000	4.90	0.000	No
			DFT-s-OFDM QPSK	Level 3	50	25	381000/1905	24.80	17.90	0.000	4.90	0.000	No
		Right Edge	DFT-s-OFDM QPSK	Level 3	1	104	376500/1882.5	24.80	17.90	0.047	4.90	0.230	No
			DFT-s-OFDM QPSK	Level 3	50	25	381000/1905	24.80	17.90	0.051	4.90	0.248	No
		Bottom Edge	DFT-s-OFDM QPSK	Level 3	1	104	376500/1882.5	24.80	17.90	0.712	4.90	3.487	Yes
			DFT-s-OFDM QPSK	Level 3	50	25	381000/1905	24.80	17.90	0.792	4.90	3.878	Yes
	ANT 7	Back Side	DFT-s-OFDM QPSK	Level 3	1	104	381000/1905	24.80	22.00	0.688	1.91	1.311	Yes
			DFT-s-OFDM QPSK	Level 3	50	25	381000/1905	24.40	22.00	0.715	1.74	1.243	Yes
		Front Side	DFT-s-OFDM QPSK	Level 3	1	104	381000/1905	24.40	22.00	0.615	1.74	1.068	No
			DFT-s-OFDM QPSK	Level 3	50	25	381000/1905	24.40	22.00	0.624	1.74	1.085	No
		Left Edge	DFT-s-OFDM QPSK	Level 3	1	104	381000/1905	24.40	22.00	0.080	1.74	0.139	No
			DFT-s-OFDM QPSK	Level 3	50	25	381000/1905	24.40	22.00	0.075	1.74	0.131	No
		Right Edge	DFT-s-OFDM QPSK	Level 3	1	104	381000/1905	24.40	22.00	0.127	1.74	0.220	No
			DFT-s-OFDM QPSK	Level 3	50	25	381000/1905	24.40	22.00	0.133	1.74	0.231	No
		Top Edge	DFT-s-OFDM QPSK	Level 3	1	104	381000/1905	24.40	22.00	1.170	1.74	2.033	Yes
			DFT-s-OFDM QPSK	Level 3	50	25	381000/1905	24.40	22.00	1.318	1.74	2.290	Yes
n41	ANT 3	Back Side	DFT-s-OFDM QPSK	Level 3	1	1	509202/2546.01	27.50	23.00	0.433	2.82	1.221	Yes
			DFT-s-OFDM QPSK	Level 3	135	67	509202/2546.01	27.50	23.00	0.497	2.82	1.402	Yes
		Front Side	DFT-s-OFDM QPSK	Level 3	1	1	509202/2546.01	27.50	23.00	0.407	2.82	1.146	No
			DFT-s-OFDM QPSK	Level 3	135	67	509202/2546.01	27.50	23.00	0.785	2.82	2.213	Yes
		Left Edge	DFT-s-OFDM QPSK	Level 3	1	1	509202/2546.01	27.50	23.00	0.237	2.82	0.667	No
			DFT-s-OFDM QPSK	Level 3	135	67	509202/2546.01	27.50	23.00	0.297	2.82	0.837	No
		Right Edge	DFT-s-OFDM QPSK	Level 3	1	1	509202/2546.01	27.50	23.00	0.078	2.82	0.220	No
			DFT-s-OFDM QPSK	Level 3	135	67	509202/2546.01	27.50	23.00	0.096	2.82	0.272	No
		Bottom Edge	DFT-s-OFDM QPSK	Level 3	1	1	509202/2546.01	27.50	23.00	0.373	2.82	1.050	No
			DFT-s-OFDM QPSK	Level 3	135	67	509202/2546.01	27.50	23.00	0.600	2.82	1.692	Yes
n66	ANT 1	Back Side	DFT-s-OFDM QPSK	Level 3	1	104	349000/1745	24.70	20.00	0.517	2.95	1.525	Yes
			DFT-s-OFDM QPSK	Level 3	50	25	349000/1745	24.70	20.00	0.560	2.95	1.654	Yes

		Front Side	DFT-s-OFDM QPSK	Level 3	1	104	349000/1745	24.70	20.00	0.487	2.95	1.437	Yes
			DFT-s-OFDM QPSK	Level 3	50	25	349000/1745	24.70	20.00	0.568	2.95	1.676	Yes
		Left Edge	DFT-s-OFDM QPSK	Level 3	1	104	349000/1745	24.70	20.00	0.000	2.95	0.000	No
			DFT-s-OFDM QPSK	Level 3	50	25	349000/1745	24.70	20.00	0.000	2.95	0.000	No
		Right Edge	DFT-s-OFDM QPSK	Level 3	1	104	349000/1745	24.70	20.00	0.102	2.95	0.302	No
			DFT-s-OFDM QPSK	Level 3	50	25	349000/1745	24.70	20.00	0.133	2.95	0.394	No
		Bottom Edge	DFT-s-OFDM QPSK	Level 3	1	104	349000/1745	24.70	20.00	0.652	2.95	1.925	Yes
			DFT-s-OFDM QPSK	Level 3	50	25	349000/1745	24.70	20.00	0.779	2.95	2.299	Yes
	ANT 7	Back Side	DFT-s-OFDM QPSK	Level 3	1	1	344000/1720	24.90	23.50	0.655	1.38	0.905	No
			DFT-s-OFDM QPSK	Level 3	50	25	344000/1720	24.90	23.50	0.675	1.38	0.931	No
		Front Side	DFT-s-OFDM QPSK	Level 3	1	1	344000/1720	24.90	23.50	0.679	1.38	0.938	No
			DFT-s-OFDM QPSK	Level 3	50	25	344000/1720	24.90	23.50	0.643	1.38	0.887	No
		Left Edge	DFT-s-OFDM QPSK	Level 3	1	1	344000/1720	24.90	23.50	0.174	1.38	0.240	No
			DFT-s-OFDM QPSK	Level 3	50	25	344000/1720	24.90	23.50	0.205	1.38	0.283	No
		Right Edge	DFT-s-OFDM QPSK	Level 3	1	1	344000/1720	24.90	23.50	0.048	1.38	0.066	No
			DFT-s-OFDM QPSK	Level 3	50	25	344000/1720	24.90	23.50	0.052	1.38	0.072	No
		Top Edge	DFT-s-OFDM QPSK	Level 3	1	1	344000/1720	24.90	23.50	0.806	1.38	1.113	No
			DFT-s-OFDM QPSK	Level 3	50	25	344000/1720	24.90	23.50	1.039	1.38	1.434	Yes

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR10g	Power Drift (dB)	Scaling Factor	Report SAR10g	Plot No.
WCDMA B2	ANT 7	Back Side	0	RMC	Level 6-D1	—	—	9400/1880	24.50	23.36	2.560	0.150	1.30	3.328	/
			0	RMC	Level 6-D1	—	—	9262/1852.4	24.50	23.37	2.040	0.013	1.30	2.646	/
			0	RMC	Level 6-D1	—	—	9538/1907.6	24.50	23.30	2.170	0.060	1.32	2.861	/
		Top Edge	0	RMC	Level 6-D1	—	—	9400/1880	24.50	23.36	2.360	0.023	1.30	3.068	/
			0	RMC	Level 6-D1	—	—	9262/1852.4	24.50	23.37	2.700	-0.024	1.30	3.502	96
			0	RMC	Level 6-D1	—	—	9538/1907.6	24.50	23.30	2.620	-0.048	1.32	3.454	/
WCDMA B4	ANT 7	Back Side	0	RMC	Level 6-D1	—	—	1413/1732.6	24.50	23.53	1.830	0.043	1.25	2.288	/
			0	RMC	Level 6-D1	—	—	1312/1712.4	24.50	23.41	1.440	0.021	1.29	1.851	/
			0	RMC	Level 6-D1	—	—	1513/1752.6	24.50	23.46	1.590	0.000	1.27	2.020	/
		Top Edge	0	RMC	Level 6-D1	—	—	1413/1732.6	24.50	23.53	1.890	0.082	1.25	2.363	/
			0	RMC	Level 6-D1	—	—	1312/1712.4	24.50	23.41	1.760	0.015	1.29	2.262	/
			0	RMC	Level 6-D1	—	—	1513/1752.6	24.50	23.46	1.910	0.077	1.27	2.427	97
LTE B2	ANT 7	Back Side	0	QPSK	Level 6-D1	1	50	19100/1900	24.00	22.95	2.380	0.030	1.27	3.031	/
			0	QPSK	Level 6-D1	1	99	18700/1860	24.00	22.93	1.950	0.036	1.28	2.495	/
			0	QPSK	Level 6-D1	1	50	18900/1880	24.00	22.91	2.010	-0.090	1.29	2.583	/
			0	QPSK	Level 6-D1	50%	0	18700/1860	23.00	22.03	1.910	-0.140	1.25	2.388	/
			0	QPSK	Level 6-D1	50%	25	18900/1880	23.00	21.89	1.540	0.021	1.29	1.988	/
			0	QPSK	Level 6-D1	50%	50	19100/1900	23.00	21.91	1.660	0.042	1.29	2.134	/
		Top Edge	0	QPSK	Level 6-D1	1	50	19100/1900	24.00	22.95	2.470	0.069	1.27	3.146	98
			0	QPSK	Level 6-D1	1	99	18700/1860	24.00	22.93	2.270	0.071	1.28	2.904	/
			0	QPSK	Level 6-D1	1	50	18900/1880	24.00	22.91	2.410	0.035	1.29	3.098	/
			0	QPSK	Level 6-D1	50%	0	18700/1860	23.00	22.03	2.250	0.034	1.25	2.813	/

			0	QPSK	Level 6-D1	50%	25	18900/1880	23.00	21.89	2.070	-0.021	1.29	2.673	/
			0	QPSK	Level 6-D1	50%	50	19100/1900	23.00	21.91	2.050	0.028	1.29	2.635	/
LTE B7	ANT 3	Back Side	0	QPSK	Level 6-D1	1	99	21350/2560	23.70	23.23	2.550	0.019	1.11	2.841	/
			0	QPSK	Level 6-D1	1	99	20850/2510	23.70	23.11	2.180	0.071	1.15	2.497	/
			0	QPSK	Level 6-D1	1	99	21100/2535	23.70	23.04	2.670	0.035	1.16	3.108	/
			0	QPSK	Level 6-D1	50%	0	21350/2560	22.70	22.19	2.060	-0.030	1.12	2.317	/
			0	QPSK	Level 6-D1	50%	50	20850/2510	22.70	22.02	1.900	-0.010	1.17	2.222	/
			0	QPSK	Level 6-D1	50%	0	21100/2535	22.70	22.11	2.000	0.023	1.15	2.291	/
		Front Side	0	QPSK	Level 6-D1	1	99	21350/2560	23.70	23.23	2.800	0.046	1.11	3.120	99
			0	QPSK	Level 6-D1	1	99	20850/2510	23.70	23.11	2.710	0.129	1.15	3.104	/
			0	QPSK	Level 6-D1	1	99	21100/2535	23.70	23.04	2.680	0.050	1.16	3.120	/
			0	QPSK	Level 6-D1	50%	0	21350/2560	22.70	22.19	2.460	0.184	1.12	2.767	/
			0	QPSK	Level 6-D1	50%	50	20850/2510	22.70	22.02	2.340	0.042	1.17	2.737	/
			0	QPSK	Level 6-D1	50%	0	21100/2535	22.70	22.11	2.440	0.061	1.15	2.795	/
		Bottom Edge	0	QPSK	Level 6-D1	1	99	21350/2560	23.70	23.23	1.790	0.030	1.11	1.995	/
			0	QPSK	Level 6-D1	1	99	20850/2510	23.70	23.11	1.860	0.018	1.15	2.131	/
			0	QPSK	Level 6-D1	1	99	21100/2535	23.70	23.04	2.200	0.024	1.16	2.561	/
			0	QPSK	Level 6-D1	50%	0	21350/2560	22.70	22.19	1.560	0.000	1.12	1.754	/
			0	QPSK	Level 6-D1	50%	50	20850/2510	22.70	22.02	1.420	-0.065	1.17	1.661	/
			0	QPSK	Level 6-D1	50%	0	21100/2535	22.70	22.11	1.720	0.019	1.15	1.970	/
LTE 25	ANT 7	Back Side	0	QPSK	Level 6-D1	1	50	26365/1882.5	24.00	22.99	2.380	0.016	1.26	3.003	/
			0	QPSK	Level 6-D1	1	50	26140/1860	24.00	22.92	1.800	0.027	1.28	2.308	/
			0	QPSK	Level 6-D1	1	0	26590/1905	24.00	22.92	1.870	0.080	1.28	2.398	/
			0	QPSK	Level 6-D1	50%	0	26140/1860	23.00	22.07	1.810	0.042	1.24	2.242	/
			0	QPSK	Level 6-D1	50%	50	26365/1882.5	23.00	21.99	1.510	0.094	1.26	1.905	/
			0	QPSK	Level 6-D1	50%	25	26590/1905	23.00	22.03	1.620	0.025	1.25	2.025	/
		Front Side	0	QPSK	Level 6-D1	1	50	26365/1882.5	24.00	22.99	1.950	0.061	1.26	2.461	/
			0	QPSK	Level 6-D1	1	50	26140/1860	24.00	22.92	1.990	0.038	1.28	2.552	/
			0	QPSK	Level 6-D1	1	0	26590/1905	24.00	22.92	2.060	0.000	1.28	2.642	/
		Top Edge	0	QPSK	Level 6-D1	1	50	26365/1882.5	24.00	22.99	2.470	0.105	1.26	3.117	100
			0	QPSK	Level 6-D1	1	50	26140/1860	24.00	22.92	2.410	0.024	1.28	3.090	/
			0	QPSK	Level 6-D1	1	0	26590/1905	24.00	22.92	2.300	0.048	1.28	2.949	/
			0	QPSK	Level 6-D1	50%	0	26140/1860	23.00	22.07	2.040	0.020	1.24	2.527	/
			0	QPSK	Level 6-D1	50%	50	26365/1882.5	23.00	21.99	2.000	0.022	1.26	2.524	/
			0	QPSK	Level 6-D1	50%	25	26590/1905	23.00	22.03	1.990	0.018	1.25	2.488	/

Band	Ant	Test Position	Dist. (mm)	Inf.	Power Reduction	Mode	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR10g	Power Drift (dB)	Scaling Factor	Report SAR10g	Plot No.
n25	ANT 7	Back Side	0	SA	Level 6-D1	DFT-s-OFDM QPSK	1	104	381000/1905	22.00	20.89	1.450	0.010	1.29	1.872	/
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	381000/1905	22.00	20.93	1.420	0.021	1.28	1.817	/
		Front Side	0		Level 6-D1	DFT-s-OFDM QPSK	1	104	381000/1905	22.00	20.89	1.130	-0.060	1.29	1.459	/
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	381000/1905	22.00	20.93	1.120	0.035	1.28	1.433	/

		Top Edge	0		Level 6-D1	DFT-s-OFDM QPSK	1	104	381000/1905	22.00	20.89	1.810	-0.049	1.29	2.337	/
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	381000/1905	22.00	20.93	1.870	-0.096	1.28	2.392	/
	ANT 1	Back Side	0	NSA	Level 6-D1	DFT-s-OFDM QPSK	1	104	372000/1860	22.40	20.87	1.940	0.130	1.42	2.759	/
			0		Level 6-D1	DFT-s-OFDM QPSK	1	104	376500/1882.5	22.40	21.05	1.850	0.024	1.36	2.524	/
			0		Level 6-D1	DFT-s-OFDM QPSK	1	104	381000/1905	22.40	21.09	2.010	0.080	1.35	2.718	/
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	372000/1860	22.40	21.05	1.890	-0.090	1.36	2.579	/
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	376500/1882.5	22.40	21.06	2.090	0.100	1.36	2.845	101
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	381000/1905	22.40	21.03	1.980	0.035	1.37	2.714	/
		Front Side	0		Level 6-D1	DFT-s-OFDM QPSK	1	104	372000/1860	22.40	20.87	1.420	0.022	1.42	2.020	/
			0		Level 6-D1	DFT-s-OFDM QPSK	1	104	376500/1882.5	22.40	21.05	1.490	0.072	1.36	2.033	/
			0		Level 6-D1	DFT-s-OFDM QPSK	1	104	381000/1905	22.40	21.09	1.690	0.035	1.35	2.285	/
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	372000/1860	22.40	21.05	1.620	0.060	1.36	2.211	/
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	376500/1882.5	22.40	21.06	1.550	0.049	1.36	2.110	/
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	381000/1905	22.40	21.03	1.580	0.039	1.37	2.166	/
		Bottom Edge	0		Level 6-D1	DFT-s-OFDM QPSK	1	104	372000/1860	22.40	20.87	1.720	-0.015	1.42	2.446	/
			0		Level 6-D1	DFT-s-OFDM QPSK	1	104	376500/1882.5	22.40	21.05	1.520	0.049	1.36	2.074	/
			0		Level 6-D1	DFT-s-OFDM QPSK	1	104	381000/1905	22.40	21.09	1.670	-0.021	1.35	2.258	/
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	372000/1860	22.40	21.05	1.640	0.032	1.36	2.238	/
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	376500/1882.5	22.40	21.06	1.820	0.015	1.36	2.478	/
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	381000/1905	22.40	21.03	1.770	0.020	1.37	2.426	/
		Back Side	0		Level 6-D1	CP-OFDM QPSK	53	26	381000/1905	22.50	21.32	1.760	0.027	1.31	2.309	/
n41	ANT 3	Back Side	0	SA& NSA	Level 6-D1	DFT-s-OFDM QPSK	1	1	509202/2546.01	24.00	23.03	1.650	-0.060	1.25	2.063	/
			0		Level 6-D1	DFT-s-OFDM QPSK	1	1	518598/2592.99	24.00	23.12	1.840	0.021	1.22	2.253	/
			0		Level 6-D1	DFT-s-OFDM QPSK	1	1	528000/2640	24.00	23.05	1.890	0.095	1.24	2.352	/
			0		Level 6-D1	DFT-s-OFDM QPSK	135	67	509202/2546.01	24.00	22.97	1.920	0.038	1.27	2.434	/
			0		Level 6-D1	DFT-s-OFDM QPSK	135	67	518598/2592.99	24.00	22.91	1.670	0.037	1.28	2.146	/
			0		Level 6-D1	DFT-s-OFDM QPSK	135	67	528000/2640	24.00	22.90	1.850	0.118	1.29	2.383	/
		Front Side	0		Level 6-D1	DFT-s-OFDM QPSK	135	67	509202/2546.01	24.00	22.97	2.480	0.130	1.27	3.144	102
			0		Level 6-D1	DFT-s-OFDM QPSK	135	67	518598/2592.99	24.00	22.91	2.210	-0.079	1.28	2.840	/
			0		Level 6-D1	DFT-s-OFDM QPSK	135	67	528000/2640	24.00	22.90	2.290	0.000	1.29	2.950	/
		Bottom Edge	0		Level 6-D1	DFT-s-OFDM QPSK	135	67	509202/2546.01	24.00	22.97	1.170	-0.020	1.27	1.483	/
		Front Side	0		Level 6-D1	CP-OFDM QPSK	1	1	509202/2546.01	23.00	22.32	2.150	0.060	1.17	2.514	/
n66	ANT 1	Back Side	0	NSA	Level 6-D1	DFT-s-OFDM QPSK	1	1	349000/1745	22.70	21.38	1.350	0.016	1.36	1.830	/
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	349000/1745	22.70	21.15	1.290	-0.090	1.43	1.843	/
		Front Side	0		Level 6-D1	DFT-s-OFDM QPSK	1	1	349000/1745	22.70	21.38	1.190	0.011	1.36	1.613	/
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	349000/1745	22.70	21.15	1.210	0.070	1.43	1.729	/
		Bottom Edge	0		Level 6-D1	DFT-s-OFDM QPSK	1	1	349000/1745	22.70	21.38	1.530	-0.020	1.36	2.073	/
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	344000/1720	22.70	21.09	1.450	0.036	1.45	2.101	/
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	349000/1745	22.70	21.15	1.670	0.120	1.43	2.386	/
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	354000/1770	22.70	21.01	1.480	-0.027	1.48	2.184	/
	ANT 7	Top Edge	0	SA	Level 6-D1	DFT-s-OFDM QPSK	1	1	344000/1720	24.90	23.11	1.940	-0.049	1.51	2.930	/
		Top Edge	0		Level 6-D1	DFT-s-OFDM QPSK	1	104	349000/1745	24.90	23.04	2.010	0.040	1.53	3.085	103
		Top Edge	0		Level 6-D1	DFT-s-OFDM QPSK	1	1	354000/1770	24.90	23.03	1.970	0.031	1.54	3.030	/

		Top Edge	0		Level 6-D1	CP-OFDM QPSK	53	26	349000/1745	22.50	21.40	1.690	0.021	1.29	2.177	/

Band	Antenna	Test Position	Dist. (mm)	Mode	Duty Cycle	Power Reduction	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR10g	Power Drift (dB)	Scaling Factor	Report SAR10g	Plot No.
U-NII-2A	ANT 10	Back Side	0	802.11a	100.0%	Level 2	64/5320	17.50	16.54	0.382	0.026	1.25	0.477	/
		Front Side	0	802.11a	100.0%	Level 2	64/5320	17.50	16.54	0.504	-0.010	1.25	0.629	/
		Left Edge	0	802.11a	100.0%	Level 2	64/5320	17.50	16.54	0.011	0.021	1.25	0.014	/
		Right Edge	0	802.11a	100.0%	Level 2	64/5320	17.50	16.54	0.934	0.055	1.25	1.165	/
		Top Edge	0	802.11a	100.0%	Level 2	64/5320	17.50	16.54	0.238	0.000	1.25	0.297	/
	ANT 9	Back Side	0	802.11a	100.0%	Level 2	64/5320	17.50	16.68	0.498	0.099	1.21	0.601	/
		Front Side	0	802.11a	100.0%	Level 2	64/5320	17.50	16.68	0.145	0.127	1.21	0.175	/
		Left Edge	0	802.11a	100.0%	Level 2	64/5320	17.50	16.68	0.017	-0.069	1.21	0.021	/
		Right Edge	0	802.11a	100.0%	Level 2	64/5320	17.50	16.68	0.115	0.015	1.21	0.139	/
		Top Edge	0	802.11a	100.0%	Level 2	64/5320	17.50	16.68	0.086	0.013	1.21	0.104	/
	MIMO	Back Side	0	802.11a	100.0%	Level 2	64/5320	21.00	19.62	0.703	-0.075	1.37	0.966	/
		Front Side	0	802.11a	100.0%	Level 2	64/5320	21.00	19.62	0.498	0.017	1.37	0.684	/
		Left Edge	0	802.11a	100.0%	Level 2	64/5320	21.00	19.62	0.018	0.048	1.37	0.025	/
		Right Edge	0	802.11a	100.0%	Level 2	64/5320	21.00	19.62	0.976	0.029	1.37	1.341	104
		Top Edge	0	802.11a	100.0%	Level 2	64/5320	21.00	19.62	0.341	0.016	1.37	0.468	/
U-NII-2C	ANT 10	Back Side	0	802.11a	100.0%	Level 2	140/5700	17.50	16.36	0.548	0.036	1.30	0.712	/
		Front Side	0	802.11a	100.0%	Level 2	140/5700	17.50	16.36	0.553	0.072	1.30	0.719	/
		Left Edge	0	802.11a	100.0%	Level 2	140/5700	17.50	16.36	0.019	-0.010	1.30	0.025	/
		Right Edge	0	802.11a	100.0%	Level 2	140/5700	17.50	16.36	0.853	0.050	1.30	1.109	/
		Top Edge	0	802.11a	100.0%	Level 2	140/5700	17.50	16.36	0.255	-0.130	1.30	0.332	/
	ANT 9	Back Side	0	802.11a	100.0%	Level 2	140/5700	17.50	16.84	0.263	0.100	1.16	0.306	/
		Front Side	0	802.11a	100.0%	Level 2	140/5700	17.50	16.84	0.146	0.063	1.16	0.170	/
		Left Edge	0	802.11a	100.0%	Level 2	140/5700	17.50	16.84	0.019	-0.089	1.16	0.022	/
		Right Edge	0	802.11a	100.0%	Level 2	140/5700	17.50	16.84	0.107	0.024	1.16	0.125	/
		Top Edge	0	802.11a	100.0%	Level 2	140/5700	17.50	16.84	0.134	0.016	1.16	0.156	/
	MIMO	Back Side	0	802.11a	100.0%	Level 2	140/5700	21.00	19.62	0.596	-0.032	1.38	0.820	/
		Front Side	0	802.11a	100.0%	Level 2	140/5700	21.00	19.62	0.572	-0.019	1.38	0.787	/
		Left Edge	0	802.11a	100.0%	Level 2	140/5700	21.00	19.62	0.012	0.025	1.38	0.017	/
		Right Edge	0	802.11a	100.0%	Level 2	140/5700	21.00	19.62	0.974	0.064	1.38	1.339	105
		Top Edge	0	802.11a	100.0%	Level 2	140/5700	21.00	19.62	0.361	0.080	1.38	0.496	/

Simultaneous SAR

Head

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g
GSM 1900	ANT 7	Left Tilt	0	GSM	Level 4	-	-	661/1880	24.00	22.30	0.426	-0.160	1.48	0.630
WCDMA II	ANT 7	Left cheek	0	RMC 12.2K	Level 4	-	-	9400/1880	16.50	15.61	0.680	-0.040	1.23	0.835
		Left Tilt	0	RMC 12.2K	Level 4	-	-	9400/1880	16.50	15.61	0.702	-0.090	1.23	0.862
		Right Tilt	0	RMC 12.2K	Level 4			9400/1880	16.50	15.61	0.563	-0.140	1.23	0.691
WCDMA IV	ANT 7	Left cheek	0	RMC 12.2K	Level 4	-	-	1413/1732.6	19.00	18.26	0.611	0.020	1.19	0.725
		Left Tilt	0	RMC 12.2K	Level 4	-	-	1413/1732.6	19.00	18.26	0.661	-0.030	1.19	0.784
		Right Tilt	0	RMC 12.2K	Level 4	-	-	1413/1732.6	19.00	18.26	0.669	-0.040	1.19	0.793
LTE 2	ANT 7	Left cheek	0	QPSK	Level 4	1	50	18700/1860	17.00	15.33	0.458	0.000	1.47	0.673
			0	QPSK	Level 4	50%	0	18700/1860	17.00	15.40	0.471	0.000	1.45	0.681
		Left Tilt	0	QPSK	Level 4	1	50	18700/1860	17.00	15.33	0.560	-0.070	1.47	0.823
			0	QPSK	Level 4	50%	0	18700/1860	17.00	15.40	0.575	-0.010	1.45	0.831
		Right Tilt	0	QPSK	Level 4	1	50	18700/1860	17.00	15.33	0.537	-0.090	1.47	0.789
			0	QPSK	Level 4	50%	0	18700/1860	17.00	15.40	0.563	-0.070	1.45	0.814
LTE 25	ANT 7	Left cheek	0	QPSK	Level 4	1	0	26140/1860	17.00	15.90	0.485	-0.030	1.29	0.625
			0	QPSK	Level 4	50%	0	26140/1860	17.00	15.37	0.514	0.140	1.46	0.748
		Left Tilt	0	QPSK	Level 4	1	0	26140/1860	17.00	15.90	0.540	-0.020	1.29	0.696
			0	QPSK	Level 4	50%	0	26140/1860	17.00	15.37	0.540	-0.020	1.46	0.786
		Right Tilt	0	QPSK	Level 4	1	0	26140/1860	17.00	15.90	0.536	-0.040	1.29	0.691
			0	QPSK	Level 4	50%	0	26140/1860	17.00	15.37	0.559	-0.060	1.46	0.814
LTE 66	ANT 7	Left cheek	0	QPSK	Level 4	1	0	132572/1770	18.00	16.66	0.514	0.160	1.36	0.700
			0	QPSK	Level 4	50%	50	132072/1720	18.00	16.65	0.483	0.090	1.36	0.659
		Left Tilt	0	QPSK	Level 4	1	0	132572/1770	18.00	16.66	0.511	-0.030	1.36	0.696
			0	QPSK	Level 4	50%	50	132072/1720	18.00	16.65	0.424	0.020	1.36	0.579
		Right cheek	0	QPSK	Level 4	1	0	132572/1770	18.00	16.66	0.506	0.032	1.36	0.689
			0	QPSK	Level 4	50%	50	132072/1720	18.00	16.65	0.438	0.016	1.36	0.598
		Right Tilt	0	QPSK	Level 4	1	0	132572/1770	18.00	16.66	0.510	0.020	1.36	0.694
			0	QPSK	Level 4	50%	50	132072/1720	18.00	16.65	0.421	0.020	1.36	0.574
n25	ANT 7	Left cheek	0	Level 4	DFT-s-OFDM QPSK	1	104	376500/1882.5	17.50	17.07	0.769	0.011	1.10	0.849
			0	Level 4	DFT-s-OFDM QPSK	50	25	372000/1860	17.50	17.12	0.645	0.038	1.09	0.704
		Left Tilt	0	Level 4	DFT-s-OFDM QPSK	1	104	376500/1882.5	17.50	17.07	0.786	0.143	1.10	0.868
			0	Level 4	DFT-s-OFDM QPSK	50	25	372000/1860	17.50	17.12	0.792	-0.021	1.09	0.864
		Right cheek	0	Level 4	DFT-s-OFDM QPSK	1	104	376500/1882.5	17.50	17.07	0.434	0.012	1.10	0.479
			0	Level 4	DFT-s-OFDM QPSK	50	25	372000/1860	17.50	17.12	0.531	0.080	1.09	0.580
		Right Tilt	0	Level 4	DFT-s-OFDM QPSK	1	104	376500/1882.5	17.50	17.07	0.493	0.020	1.10	0.544
			0	Level 4	DFT-s-OFDM QPSK	50	25	372000/1860	17.50	17.12	0.527	0.018	1.09	0.575
n66	ANT 7	Left cheek	0	Level 4	DFT-s-OFDM QPSK	1	104	354000/1770	18.50	17.88	0.754	-0.130	1.15	0.870
			0	Level 4	DFT-s-OFDM QPSK	50	25	354000/1770	18.50	17.80	0.653	0.027	1.17	0.767

		Left Tilt	0	Level 4	DFT-s-OFDM QPSK	1	104	354000/1770	18.50	17.88	0.753	-0.030	1.15	0.869
			0	Level 4	DFT-s-OFDM QPSK	50	25	354000/1770	18.50	17.80	0.678	-0.070	1.17	0.797
		Right Tilt	0	Level 4	DFT-s-OFDM QPSK	1	104	354000/1770	18.50	17.88	0.707	-0.070	1.15	0.815
			0	Level 4	DFT-s-OFDM QPSK	50	25	354000/1770	18.50	17.80	0.667	-0.160	1.17	0.784

Body-worn

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g
LTE 7	ANT 3	Back Side	15	QPSK	Level7-D1	1	99	21350/2560	21.50	20.61	0.521	-0.002	1.23	0.639
			15	QPSK	Level7-D1	50%	50	21350/2560	21.50	20.58	0.409	0.013	1.24	0.506

Hotspot

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g
WCDMA II	ANT 7	Top Edge	10	RMC	Level 5	—	—	9400/1880	20.00	18.41	0.597	0.030	1.44	0.861
WCDMA IV	ANT 7	Top Edge	10	RMC	Level 5	—	—	1413/1732.6	21.50	20.21	0.513	0.021	1.35	0.690
LTE 2	ANT 7	Top Edge	10	QPSK	Level 5	1	99	19100/1900	19.50	17.83	0.437	-0.041	1.47	0.642
			10	QPSK	Level 5	50%	25	18700/1860	19.50	18.01	0.416	0.022	1.41	0.586
LTE 25	ANT 7	Top Edge	10	QPSK	Level 5	1	0	26365/1882.5	19.80	18.01	0.537	0.018	1.51	0.811
			10	QPSK	Level 5	50%	0	26140/1860	19.80	18.11	0.552	0.020	1.48	0.815
n25	ANT 7	Top Edge	10	Level 5	DFT-s-OFDM QPSK	1	104	376500/1882.5	20.30	19.57	0.540	0.046	1.18	0.639
			10	Level 5	DFT-s-OFDM QPSK	50	25	372000/1860	20.30	19.59	0.501	0.056	1.18	0.590
n66	ANT 7	Top Edge	10	Level 5	DFT-s-OFDM QPSK	1	1	344000/1720	23.00	22.01	0.411	0.088	1.26	0.516
			10	Level 5	DFT-s-OFDM QPSK	50	25	344000/1720	23.00	21.92	0.427	0.038	1.28	0.548

Product-specific 10g

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR10g	Power Drift (dB)	Scaling Factor	Report SAR1g
WCDMA B2	ANT 7	Back Side	0	RMC	Level 7-D1	—	—	9400/1880	23.00	21.40	1.560	0.060	1.45	2.255
		Top Edge	0	RMC	Level 7-D1	—	—	9400/1880	23.00	21.40	1.690	0.019	1.45	2.443
LTE 2	ANT 7	Back Side	0	QPSK	Level 7-D1	1	99	19100/1900	22.50	20.89	1.330	0.050	1.45	1.927
			0	QPSK	Level 7-D1	50%	25	18700/1860	22.50	20.86	1.230	0.052	1.46	1.794
		Top Edge	0	QPSK	Level 7-D1	1	99	19100/1900	22.50	20.89	1.690	-0.021	1.45	2.448
			0	QPSK	Level 7-D1	50%	25	18700/1860	22.50	20.86	1.780	-0.095	1.46	2.597
LTE 7	ANT 3	Back Side	0	QPSK	Level 7-D1	1	99	21350/2560	21.50	20.61	1.390	0.015	1.23	1.706
			0	QPSK	Level 7-D1	50%	50	21350/2560	21.50	20.58	1.480	0.090	1.24	1.829
		Front Side	0	QPSK	Level 7-D1	1	99	21350/2560	21.50	20.61	1.620	-0.100	1.23	1.988
			0	QPSK	Level 7-D1	50%	50	21350/2560	21.50	20.58	1.490	0.016	1.24	1.842
LTE 25	ANT 7	Back Side	0	QPSK	Level 7-D1	1	50	26365/1882.5	23.50	21.79	1.580	0.022	1.48	2.342
			0	QPSK	Level 7-D1	50%	0	26140/1860	23.50	21.68	1.470	0.071	1.52	2.235
		Top Edge	0	QPSK	Level 7-D1	1	50	26365/1882.5	23.50	21.79	1.490	-0.019	1.48	2.209
			0	QPSK	Level 7-D1	50%	0	26140/1860	23.50	21.68	1.380	0.026	1.52	2.098

n25	ANT 1	Back Side	0	Level 7-D1	DFT-s-OFDM QPSK	1	104	381000/1905	21.40	20.25	1.620	0.012	1.30	2.111
n41	ANT 3	Back Side	0	Level 7-D1	DFT-s-OFDM QPSK	135	67	509202/2546.01	23.00	22.00	1.490	0.000	1.26	1.876
		Front Side	0	Level 7-D1	DFT-s-OFDM QPSK	135	67	509202/2546.01	23.00	22.00	1.850	0.040	1.26	2.329

Additional SAR test at a conservative distance (triggering distance minus 1mm)

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g
WCDMA B2	ANT 7	Back Side	19	RMC	Level 6-D2	—	—	9400/1880	24.50	23.36	0.397	0.010	1.30	0.516
		Top Edge	19	RMC	Level 6-D2	—	—	9400/1880	24.50	23.36	0.460	0.170	1.30	0.598
WCDMA B4	ANT 7	Back Side	19	RMC	Level 6-D2	—	—	1413/1732.6	24.50	23.53	0.187	-0.090	1.25	0.234
		Top Edge	19	RMC	Level 6-D2	—	—	1413/1732.6	24.50	23.53	0.204	0.023	1.25	0.255
LTE B2	ANT 7	Back Side	19	QPSK	Level 6-D2	1	50	19100/1900	24.70	22.95	0.314	0.038	1.50	0.470
			19	QPSK	Level 6-D2	50%	0	18700/1860	23.70	22.03	0.266	0.023	1.47	0.391
		Top Edge	19	QPSK	Level 6-D2	1	50	19100/1900	24.70	22.95	0.441	0.180	1.50	0.660
			19	QPSK	Level 6-D2	50%	0	18700/1860	23.70	22.03	0.309	0.010	1.47	0.454
LTE B7	ANT 3	Back Side	19	QPSK	Level 6-D2	1	99	21350/2560	24.70	23.23	0.296	0.070	1.40	0.415
			19	QPSK	Level 6-D2	50%	0	21350/2560	23.70	22.19	0.274	0.035	1.42	0.388
		Front Side	19	QPSK	Level 6-D2	1	99	21350/2560	24.70	23.23	0.270	-0.090	1.40	0.379
			19	QPSK	Level 6-D2	50%	0	21350/2560	23.70	22.19	0.204	0.038	1.42	0.289
		Bottom Edge	19	QPSK	Level 6-D2	1	99	21350/2560	24.70	23.23	0.299	0.052	1.40	0.419
			19	QPSK	Level 6-D2	50%	0	21350/2560	23.70	22.19	0.218	-0.027	1.42	0.309
LTE B25	ANT 7	Back Side	19	QPSK	Level 6-D2	1	50	26365/1882.5	24.80	22.99	0.328	0.033	1.52	0.498
			19	QPSK	Level 6-D2	50%	0	26140/1860	23.80	22.07	0.247	0.100	1.49	0.368
		Front Side	19	QPSK	Level 6-D2	1	50	26365/1882.5	24.80	22.99	0.253	0.000	1.52	0.384
			19	QPSK	Level 6-D2	50%	0	26140/1860	23.80	22.07	0.197	0.016	1.49	0.293
		Top Edge	19	QPSK	Level 6-D2	1	50	26365/1882.5	24.80	22.99	0.401	0.020	1.52	0.608
			19	QPSK	Level 6-D2	50%	0	26140/1860	23.80	22.07	0.310	0.025	1.49	0.462
n41	ANT 3	Back Side	19	Level 6-D2	DFT-s-OFDM QPSK	1	1	509202/2546.01	26.50	25.90	0.255	0.024	1.15	0.293
			19	Level 6-D2	DFT-s-OFDM QPSK	135	67	509202/2546.01	26.50	25.83	0.601	0.019	1.17	0.701
		Front Side	19	Level 6-D2	DFT-s-OFDM QPSK	1	1	509202/2546.01	26.50	25.90	0.245	-0.030	1.15	0.281
			19	Level 6-D2	DFT-s-OFDM QPSK	135	67	509202/2546.01	26.50	25.83	0.574	0.027	1.17	0.670
		Bottom Edge	19	Level 6-D2	DFT-s-OFDM QPSK	1	1	509202/2546.01	26.50	25.90	0.280	0.010	1.15	0.321
			19	Level 6-D2	DFT-s-OFDM QPSK	135	67	509202/2546.01	26.50	25.83	0.369	0.129	1.17	0.431
n66	ANT 1	Back Side	19	Level 6-D2	DFT-s-OFDM QPSK	1	104	349000/1745	24.70	23.01	0.243	0.038	1.48	0.359
			19	Level 6-D2	DFT-s-OFDM QPSK	50	25	349000/1745	24.70	22.94	0.237	-0.040	1.50	0.355
		Front Side	19	Level 6-D2	DFT-s-OFDM QPSK	1	104	349000/1745	24.70	23.01	0.227	0.012	1.48	0.335
			19	Level 6-D2	DFT-s-OFDM QPSK	50	25	349000/1745	24.70	22.94	0.192	0.035	1.50	0.288
		Bottom Edge	19	Level 6-D2	DFT-s-OFDM QPSK	1	104	349000/1745	24.70	23.01	0.482	0.017	1.48	0.711
			19	Level 6-D2	DFT-s-OFDM QPSK	50	25	349000/1745	24.70	22.94	0.470	0.013	1.50	0.705
n41	ANT 3	Back Side	19	Level 6-D2	DFT-s-OFDM QPSK	1	1	509202/2546.01	26.50	25.90	0.255	0.024	1.15	0.293
			19	Level 6-D2	DFT-s-OFDM QPSK	135	67	509202/2546.01	26.50	25.83	0.601	0.019	1.17	0.701
		Front Side	19	Level 6-D2	DFT-s-OFDM QPSK	1	1	509202/2546.01	26.50	25.90	0.245	-0.030	1.15	0.281
			19	Level 6-D2	DFT-s-OFDM QPSK	135	67	509202/2546.01	26.50	25.83	0.574	0.027	1.17	0.670

		Bottom Edge	19	Level 6-D2	DFT-s-OFDM QPSK	1	1	509202/2546.01	26.50	25.90	0.280	0.010	1.15	0.321
			19	Level 6-D2	DFT-s-OFDM QPSK	135	67	509202/2546.01	26.50	25.83	0.369	0.129	1.17	0.431
n66	ANT 1	Back Side	19	Level 6-D2	DFT-s-OFDM QPSK	1	104	349000/1745	24.70	23.01	0.243	0.038	1.48	0.359
			19	Level 6-D2	DFT-s-OFDM QPSK	50	25	349000/1745	24.70	22.94	0.237	-0.040	1.50	0.355
		Front Side	19	Level 6-D2	DFT-s-OFDM QPSK	1	104	349000/1745	24.70	23.01	0.227	0.012	1.48	0.335
			19	Level 6-D2	DFT-s-OFDM QPSK	50	25	349000/1745	24.70	22.94	0.192	0.035	1.50	0.288
		Bottom Edge	19	Level 6-D2	DFT-s-OFDM QPSK	1	104	349000/1745	24.70	23.01	0.482	0.017	1.48	0.711
			19	Level 6-D2	DFT-s-OFDM QPSK	50	25	349000/1745	24.70	22.94	0.470	0.013	1.50	0.705
	ANT 7	Top Edge	19	Level 6-D2	DFT-s-OFDM QPSK	1	1	344000/1720	24.90	23.11	0.236	0.020	1.51	0.214

EN-DC SAR

Head

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	Plot No.
LTE 2	ANT 1	Left cheek	0	QPSK	Level 1	1	0	19100/1900	24.00	23.92	0.046	0.061	1.02	0.047	/
			0	QPSK	Level 1	50%	0	18700/1860	24.00	23.90	0.053	0.022	1.02	0.054	/
		Left Tilt	0	QPSK	Level 1	1	0	19100/1900	24.00	23.92	0.025	0.046	1.02	0.025	/
			0	QPSK	Level 1	50%	0	18700/1860	24.00	23.90	0.022	0.032	1.02	0.023	/
		Right cheek	0	QPSK	Level 1	1	0	19100/1900	24.00	23.92	0.064	0.037	1.02	0.065	/
			0	QPSK	Level 1	50%	0	18700/1860	24.00	23.90	0.088	0.115	1.02	0.090	106
		Right Tilt	0	QPSK	Level 1	1	0	19100/1900	24.00	23.92	0.034	0.044	1.02	0.034	/
			0	QPSK	Level 1	50%	0	18700/1860	24.00	23.90	0.040	0.042	1.02	0.041	/
LTE 66	ANT 1	Left cheek	0	QPSK	Level 1	1	0	132322/1745	24.00	22.91	0.043	0.180	1.29	0.055	107
			0	QPSK	Level 1	50%	0	132322/1745	24.00	22.84	0.021	0.086	1.31	0.027	/
		Left Tilt	0	QPSK	Level 1	1	0	132322/1745	24.00	22.91	0.019	-0.070	1.29	0.024	/
			0	QPSK	Level 1	50%	0	132322/1745	24.00	22.84	0.009	0.103	1.31	0.012	/
		Right cheek	0	QPSK	Level 1	1	0	132322/1745	24.00	22.91	0.038	0.027	1.29	0.048	/
			0	QPSK	Level 1	50%	0	132322/1745	24.00	22.84	0.035	0.168	1.31	0.045	/
		Right Tilt	0	QPSK	Level 1	1	0	132322/1745	24.00	22.91	0.018	0.139	1.29	0.023	/
			0	QPSK	Level 1	50%	0	132322/1745	24.00	22.84	0.014	0.160	1.31	0.018	/

Body-worn

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	Plot No.
LTE2	ANT 1	Back Side	15	QPSK	Level 2	1	0	19100/1900	24.00	23.92	0.703	0.020	1.02	0.716	/
			15	QPSK	Level 2	50%	0	18700/1860	24.00	23.90	0.772	-0.053	1.02	0.790	108
		Front Side	15	QPSK	Level 2	1	0	19100/1900	24.00	23.92	0.533	0.011	1.02	0.543	/
			15	QPSK	Level 2	50%	0	18700/1860	24.00	23.90	0.650	0.000	1.02	0.665	/
LTE 66	ANT 1	Back Side	15	QPSK	Level 2	1	0	132322/1745	24.00	22.91	0.416	-0.010	1.29	0.535	109
			15	QPSK	Level 2	50%	0	132322/1745	24.00	22.84	0.340	0.085	1.31	0.444	/
		Front Side	15	QPSK	Level 2	1	0	132322/1745	24.00	22.91	0.389	0.041	1.29	0.500	/
			15	QPSK	Level 2	50%	0	132322/1745	24.00	22.84	0.321	0.033	1.31	0.419	/

Hotspot

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	Plot No.
LTE 2	ANT 1	Back Side	10	QPSK	Level 3	1	99	19100/1900	21.50	21.17	0.502	0.079	1.08	0.542	/
			10	QPSK	Level 3	50%	0	18700/1860	21.50	21.03	0.594	-0.012	1.11	0.662	/
		Front Side	10	QPSK	Level 3	1	99	19100/1900	21.50	21.17	0.418	-0.090	1.08	0.451	/
			10	QPSK	Level 3	50%	0	18700/1860	21.50	21.03	0.543	0.010	1.11	0.605	/
		Left Edge	10	QPSK	Level 3	1	99	19100/1900	21.50	21.17	0.025	0.013	1.08	0.027	/

			10	QPSK	Level 3	50%	0	18700/1860	21.50	21.03	0.018	0.000	1.11	0.020	/
		Right Edge	10	QPSK	Level 3	1	99	19100/1900	21.50	21.17	0.029	0.026	1.08	0.031	/
			10	QPSK	Level 3	50%	0	18700/1860	21.50	21.03	0.084	-0.015	1.11	0.094	/
		Bottom Edge	10	QPSK	Level 3	1	0	18700/1860	21.50	20.93	1.020	0.032	1.14	1.163	/
		Bottom Edge	10	QPSK	Level 3	1	0	18900/1880	21.50	21.14	0.972	-0.018	1.09	1.056	/
		Bottom Edge	10	QPSK	Level 3	1	99	19100/1900	21.50	21.17	0.985	0.040	1.08	1.063	/
			10	QPSK	Level 3	50%	0	18700/1860	21.50	21.03	1.230	0.000	1.11	1.371	110
			10	QPSK	Level 3	50%	0	18900/1880	21.50	20.73	1.040	-0.030	1.19	1.242	/
			10	QPSK	Level 3	50%	50	19100/1900	21.50	20.27	0.985	0.016	1.33	1.307	/
			10	QPSK	Level 3	100%	0	18700/1860	20.50	19.95	0.942	0.040	1.14	1.069	/
			10	QPSK	Level 3	100%	0	18900/1880	20.50	20.06	1.050	0.026	1.11	1.162	/
			10	QPSK	Level 3	100%	0	19100/1900	20.50	20.00	0.987	-0.038	1.12	1.107	/
		Bottom Edge Repeated	10	QPSK	Level 3	50%	0	18700/1860	21.50	21.03	1.180	0.032	1.11	1.315	/
LTE 66	ANT 1	Back Side	10	QPSK	Level 3	1	0	132322/1745	21.00	20.07	0.386	0.012	1.24	0.478	/
			10	QPSK	Level 3	50%	0	132322/1745	21.00	19.98	0.255	0.068	1.26	0.323	/
		Front Side	10	QPSK	Level 3	1	0	132322/1745	21.00	20.07	0.239	-0.020	1.24	0.296	/
			10	QPSK	Level 3	50%	0	132322/1745	21.00	19.98	0.253	0.110	1.26	0.320	/
		Left Edge	10	QPSK	Level 3	1	0	132322/1745	21.00	20.07	0.000	0.000	1.24	0.000	/
			10	QPSK	Level 3	50%	0	132322/1745	21.00	19.98	0.000	0.000	1.26	0.000	/
		Right Edge	10	QPSK	Level 3	1	0	132322/1745	21.00	20.07	0.000	0.000	1.24	0.000	/
			10	QPSK	Level 3	50%	0	132322/1745	21.00	19.98	0.000	0.000	1.26	0.000	/
		Bottom Edge	10	QPSK	Level 3	1	0	132322/1745	21.00	20.07	0.553	0.092	1.24	0.685	/
			10	QPSK	Level 3	50%	0	132322/1745	21.00	19.98	0.562	-0.030	1.26	0.711	111

Product-specific 10g SAR

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR10g	Power Drift (dB)	Scaling Factor	Report SAR10g	Plot No.
LTE 2	ANT 1	Bottom Edge	0	QPSK	Level 6-D1	1	99	19100/1900	21.50	21.17	1.720	0.010	1.08	1.856	/
			0	QPSK	Level 6-D1	50%	0	18700/1860	21.50	21.03	1.940	-0.055	1.11	2.162	112
			0	QPSK	Level 6-D1	50%	0	18900/1880	21.50	20.73	1.750	0.021	1.19	2.089	/
			0	QPSK	Level 6-D1	50%	50	19100/1900	21.50	20.27	1.880	-0.090	1.33	2.496	/
			0	QPSK	Level 6-D1	100%	0	18900/1880	20.50	20.06	1.760	0.044	1.11	1.948	/
LTE 66	ANT 1	Bottom Edge	0	QPSK	Level 6-D1	1	50	132072/1720	24.00	22.75	2.390	0.010	1.33	3.187	/
			0	QPSK	Level 6-D1	1	0	132322/1745	24.00	22.91	2.720	0.030	1.29	3.496	113
			0	QPSK	Level 6-D1	1	0	132572/1770	24.00	22.90	2.380	-0.017	1.29	3.066	/
			0	QPSK	Level 6-D1	50%	25	132072/1720	24.00	22.82	2.310	0.036	1.31	3.031	/
			0	QPSK	Level 6-D1	50%	0	132322/1745	24.00	22.84	2.360	-0.012	1.31	3.083	/
			0	QPSK	Level 6-D1	50%	50	132572/1770	24.00	22.79	2.410	0.044	1.32	3.184	/
			0	QPSK	Level 6-D1	100%	0	132072/1720	23.00	22.72	2.310	0.010	1.07	2.464	/
			0	QPSK	Level 6-D1	100%	0	132322/1745	23.00	22.84	2.400	0.022	1.04	2.490	/
			0	QPSK	Level 6-D1	100%	0	132572/1770	23.00	22.68	2.260	-0.024	1.08	2.433	/

Additional SAR test at a conservative distance (triggering distance minus 1mm)

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR10g	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g
LTE 2	ANT 1	Bottom Edge	19	QPSK	Level 6-D2	1	0	19100/1900	24.00	23.92	0.328	0.567	-0.140	1.02	0.334
			19	QPSK	Level 6-D2	50%	0	18700/1860	24.00	23.90	0.334	0.578	-0.060	1.02	0.342
		Bottom Edge	19	QPSK	Level 6-D2	1	0	132322/1745	24.00	22.91	0.223	0.379	0.110	1.29	0.287
			19	QPSK	Level 6-D2	50%	0	132322/1745	24.00	22.84	0.185	0.315	0.000	1.31	0.242
LTE 66	ANT 1	Bottom Edge	19	QPSK	Level 6-D2	1	0	19100/1900	24.00	23.92	0.328	0.567	-0.140	1.02	0.334
			19	QPSK	Level 6-D2	50%	0	18700/1860	24.00	23.90	0.334	0.578	-0.060	1.02	0.342
		Bottom Edge	19	QPSK	Level 6-D2	1	0	132322/1745	24.00	22.91	0.223	0.379	0.110	1.29	0.287
			19	QPSK	Level 6-D2	50%	0	132322/1745	24.00	22.84	0.185	0.315	0.000	1.31	0.242

NR Full Power，LTE 16dBm

Head

Band	Antenna	Test Position	Dist. (mm)	Information	Power Reduction	Mode	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Scaling Factor	Report SAR1g
n25	ANT 1	Left cheek	0	NSA	Level 1	DFT-s-OFDM QPSK	1	104	381000/1905	16.00	24.40	0.037	0.14	0.005
			0		Level 1	DFT-s-OFDM QPSK	50	25	376500/1882.5	16.00	24.40	0.091	0.14	0.013
		Left Tilt	0		Level 1	DFT-s-OFDM QPSK	1	104	381000/1905	16.00	24.40	0.033	0.14	0.005
			0		Level 1	DFT-s-OFDM QPSK	50	25	376500/1882.5	16.00	24.40	0.044	0.14	0.006
		Right cheek	0		Level 1	DFT-s-OFDM QPSK	1	104	381000/1905	16.00	24.40	0.042	0.14	0.006
			0		Level 1	DFT-s-OFDM QPSK	50	25	376500/1882.5	16.00	24.40	0.037	0.14	0.005
		Right Tilt	0		Level 1	DFT-s-OFDM QPSK	1	104	381000/1905	16.00	24.40	0.025	0.14	0.004
			0		Level 1	DFT-s-OFDM QPSK	50	25	376500/1882.5	16.00	24.40	0.062	0.14	0.009
n41	ANT 3	Left cheek	0	SA&NSA	Level 1	DFT-s-OFDM QPSK	1	1	509202/2546.01	16.00	27.50	0.341	0.07	0.024
			0		Level 1	DFT-s-OFDM QPSK	135	67	509202/2546.01	16.00	27.50	0.388	0.07	0.027
		Left Tilt	0		Level 1	DFT-s-OFDM QPSK	1	1	509202/2546.01	16.00	27.50	0.142	0.07	0.010
			0		Level 1	DFT-s-OFDM QPSK	135	67	509202/2546.01	16.00	27.50	0.147	0.07	0.010
		Right cheek	0		Level 1	DFT-s-OFDM QPSK	1	1	509202/2546.01	16.00	27.50	0.205	0.07	0.015
			0		Level 1	DFT-s-OFDM QPSK	135	67	509202/2546.01	16.00	27.50	0.234	0.07	0.017
		Right Tilt	0		Level 1	DFT-s-OFDM QPSK	1	1	509202/2546.01	16.00	27.50	0.186	0.07	0.013
			0		Level 1	DFT-s-OFDM QPSK	135	67	509202/2546.01	16.00	27.50	0.236	0.07	0.017
		Left cheek	0		Level 1	CP-OFDM QPSK	1	1	518598/2592.99	16.00	25.50	0.198	0.11	0.022
n66	ANT 1	Left cheek	0	NSA	Level 1	DFT-s-OFDM QPSK	1	104	349000/1745	16.00	24.70	0.047	0.13	0.006
			0		Level 1	DFT-s-OFDM QPSK	50	25	349000/1745	16.00	24.70	0.052	0.13	0.007
		Left Tilt	0		Level 1	DFT-s-OFDM QPSK	1	104	349000/1745	16.00	24.70	0.044	0.13	0.006
			0		Level 1	DFT-s-OFDM QPSK	50	25	349000/1745	16.00	24.70	0.021	0.13	0.003
		Right cheek	0		Level 1	DFT-s-OFDM QPSK	1	104	349000/1745	16.00	24.70	0.086	0.13	0.012
			0		Level 1	DFT-s-OFDM QPSK	50	25	349000/1745	16.00	24.70	0.027	0.13	0.004
		Right Tilt	0		Level 1	DFT-s-OFDM QPSK	1	104	349000/1745	16.00	24.70	0.061	0.13	0.008
			0		Level 1	DFT-s-OFDM QPSK	50	25	349000/1745	16.00	24.70	0.028	0.13	0.004
n71	ANT 6	Left cheek	0	SA&NSA	Level 1	DFT-s-OFDM QPSK	1	1	134600/673	16.00	23.50	0.351	0.18	0.062
			0		Level 1	DFT-s-OFDM QPSK	50	25	136100/680.5	16.00	23.50	0.390	0.18	0.069
		Left Tilt	0		Level 1	DFT-s-OFDM QPSK	1	1	134600/673	16.00	23.50	0.198	0.18	0.035
			0		Level 1	DFT-s-OFDM QPSK	50	25	136100/680.5	16.00	23.50	0.226	0.18	0.040
		Right cheek	0		Level 1	DFT-s-OFDM QPSK	1	1	134600/673	16.00	23.50	0.599	0.18	0.107
			0		Level 1	DFT-s-OFDM QPSK	50	25	136100/680.5	16.00	23.50	0.635	0.18	0.113
		Right Tilt	0		Level 1	DFT-s-OFDM QPSK	1	1	134600/673	16.00	23.50	0.552	0.18	0.098
			0		Level 1	DFT-s-OFDM QPSK	50	25	136100/680.5	16.00	23.50	0.524	0.18	0.093
		Right cheek	0		Level 1	CP-OFDM QPSK	53	26	134600/673	16.00	22.00	0.616	0.25	0.155

Body-worn

Band	Antenna	Test Position	Dist. (mm)	Information	Power Reduction	Mode	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Scaling Factor	Report SAR1g
n25	ANT 1	Back Side	15	NSA	Level 6-D1	DFT-s-OFDM QPSK	1	104	381000/1905	16.00	22.40	0.771	0.23	0.177
			15		Level 6-D1	DFT-s-OFDM QPSK	50	25	376500/1882.5	16.00	22.40	0.788	0.23	0.181
		Front Side	15		Level 6-D1	DFT-s-OFDM QPSK	1	104	381000/1905	16.00	22.40	0.652	0.23	0.149
			15		Level 6-D1	DFT-s-OFDM QPSK	50	25	376500/1882.5	16.00	22.40	0.689	0.23	0.158
n41	ANT 3	Back Side	15	SA&NSA	Level 6-D1	DFT-s-OFDM QPSK	1	1	518598/2592.99	16.00	24.00	0.382	0.16	0.061
			15		Level 6-D1	DFT-s-OFDM QPSK	135	67	509202/2546.01	16.00	24.00	0.660	0.16	0.105
		Front Side	15		Level 6-D1	DFT-s-OFDM QPSK	1	1	518598/2592.99	16.00	24.00	0.424	0.16	0.067
			15		Level 6-D1	DFT-s-OFDM QPSK	135	67	509202/2546.01	16.00	24.00	0.617	0.16	0.098
		Back Side	15		Level 6-D1	CP-OFDM QPSK	1	1	509202/2546.01	16.00	23.00	0.482	0.20	0.096
n66	ANT 1	Back Side	15	NSA	Level 2	DFT-s-OFDM QPSK	1	104	349000/1745	16.00	24.70	0.698	0.13	0.094
			15		Level 2	DFT-s-OFDM QPSK	50	25	349000/1745	16.00	24.70	0.729	0.13	0.098
		Front Side	15		Level 2	DFT-s-OFDM QPSK	1	104	349000/1745	16.00	24.70	0.630	0.13	0.085
			15		Level 2	DFT-s-OFDM QPSK	50	25	349000/1745	16.00	24.70	0.607	0.13	0.082
n71	ANT 6	Back Side	15	SA&NSA	Level 2	DFT-s-OFDM QPSK	1	1	137600/688	16.00	25.00	0.175	0.13	0.022
			15		Level 2	DFT-s-OFDM QPSK	50	25	136100/680.5	16.00	25.00	0.174	0.13	0.022
		Front Side	15		Level 2	DFT-s-OFDM QPSK	1	1	137600/688	16.00	25.00	0.103	0.13	0.013
			15		Level 2	DFT-s-OFDM QPSK	50	25	136100/680.5	16.00	25.00	0.125	0.13	0.016
		Back Side	15		Level 2	CP-OFDM QPSK	53	26	134600/673	16.00	22.50	0.092	0.22	0.020

Hotspot

Band	Antenna	Test Position	Dist. (mm)	Information	Power Reduction	Mode	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Scaling Factor	Report SAR1g
n25	ANT 1	Back Side	10	NSA	Level 3	DFT-s-OFDM QPSK	1	104	376500/1882.5	16.00	17.90	0.428	0.65	0.276
			10		Level 3	DFT-s-OFDM QPSK	50	25	381000/1905	16.00	17.90	0.464	0.65	0.300
		Front Side	10		Level 3	DFT-s-OFDM QPSK	1	104	376500/1882.5	16.00	17.90	0.423	0.65	0.273
			10		Level 3	DFT-s-OFDM QPSK	50	25	381000/1905	16.00	17.90	0.466	0.65	0.301
		Left Edge	10		Level 3	DFT-s-OFDM QPSK	1	104	376500/1882.5	16.00	17.90	0.000	0.65	0.000
			10		Level 3	DFT-s-OFDM QPSK	50	25	381000/1905	16.00	17.90	0.000	0.65	0.000
		Right Edge	10		Level 3	DFT-s-OFDM QPSK	1	104	376500/1882.5	16.00	17.90	0.047	0.65	0.030
			10		Level 3	DFT-s-OFDM QPSK	50	25	381000/1905	16.00	17.90	0.051	0.65	0.033
		Bottom Edge	10		Level 3	DFT-s-OFDM QPSK	1	104	376500/1882.5	16.00	17.90	0.712	0.65	0.460
			10		Level 3	DFT-s-OFDM QPSK	50	25	381000/1905	16.00	17.90	0.792	0.65	0.511
n41	ANT 3	Back Side	10	SA&NSA	Level 3	DFT-s-OFDM QPSK	1	1	509202/2546.01	16.00	23.00	0.433	0.20	0.086
			10		Level 3	DFT-s-OFDM QPSK	135	67	509202/2546.01	16.00	23.00	0.497	0.20	0.099
		Front Side	10		Level 3	DFT-s-OFDM QPSK	1	1	509202/2546.01	16.00	23.00	0.407	0.20	0.081
			10		Level 3	DFT-s-OFDM QPSK	135	67	509202/2546.01	16.00	23.00	0.785	0.20	0.157
		Left Edge	10		Level 3	DFT-s-OFDM QPSK	1	1	509202/2546.01	16.00	23.00	0.237	0.20	0.047
			10		Level 3	DFT-s-OFDM QPSK	135	67	509202/2546.01	16.00	23.00	0.297	0.20	0.059
		Right Edge	10		Level 3	DFT-s-OFDM QPSK	1	1	509202/2546.01	16.00	23.00	0.078	0.20	0.016
			10		Level 3	DFT-s-OFDM QPSK	135	67	509202/2546.01	16.00	23.00	0.096	0.20	0.019

		Bottom Edge	10		Level 3	DFT-s-OFDM QPSK	1	1	509202/2546.01	16.00	23.00	0.373	0.20	0.074
			10		Level 3	DFT-s-OFDM QPSK	135	67	509202/2546.01	16.00	23.00	0.600	0.20	0.120
		Front Side	10		Level 3	CP-OFDM QPSK	1	1	509202/2546.01	16.00	22.00	0.670	0.25	0.168
n66	ANT 1	Back Side	10	NSA	Level 3	DFT-s-OFDM QPSK	1	104	349000/1745	16.00	20.00	0.517	0.40	0.206
			10		Level 3	DFT-s-OFDM QPSK	50	25	349000/1745	16.00	20.00	0.560	0.40	0.223
		Front Side	10		Level 3	DFT-s-OFDM QPSK	1	104	349000/1745	16.00	20.00	0.487	0.40	0.194
			10		Level 3	DFT-s-OFDM QPSK	50	25	349000/1745	16.00	20.00	0.568	0.40	0.226
		Left Edge	10		Level 3	DFT-s-OFDM QPSK	1	104	349000/1745	16.00	20.00	0.000	0.40	0.000
			10		Level 3	DFT-s-OFDM QPSK	50	25	349000/1745	16.00	20.00	0.000	0.40	0.000
		Right Edge	10		Level 3	DFT-s-OFDM QPSK	1	104	349000/1745	16.00	20.00	0.102	0.40	0.041
			10		Level 3	DFT-s-OFDM QPSK	50	25	349000/1745	16.00	20.00	0.133	0.40	0.053
		Bottom Edge	10		Level 3	DFT-s-OFDM QPSK	1	104	349000/1745	16.00	20.00	0.652	0.40	0.260
			10		Level 3	DFT-s-OFDM QPSK	50	25	349000/1745	16.00	20.00	0.779	0.40	0.310
n71	ANT 6	Back Side	10	SA&NSA	Level 3	DFT-s-OFDM QPSK	1	1	137600/688	16.00	25.00	0.217	0.13	0.027
			10		Level 3	DFT-s-OFDM QPSK	50	25	136100/680.5	16.00	25.00	0.207	0.13	0.026
		Front Side	10		Level 3	DFT-s-OFDM QPSK	1	1	137600/688	16.00	25.00	0.191	0.13	0.024
			10		Level 3	DFT-s-OFDM QPSK	50	25	136100/680.5	16.00	25.00	0.196	0.13	0.025
		Left Edge	10		Level 3	DFT-s-OFDM QPSK	1	1	137600/688	16.00	25.00	0.278	0.13	0.035
			10		Level 3	DFT-s-OFDM QPSK	50	25	136100/680.5	16.00	25.00	0.286	0.13	0.036
		Right Edge	10		Level 3	DFT-s-OFDM QPSK	1	1	137600/688	16.00	25.00	0.079	0.13	0.010
			10		Level 3	DFT-s-OFDM QPSK	50	25	136100/680.5	16.00	25.00	0.069	0.13	0.009
		Top Edge	10		Level 3	DFT-s-OFDM QPSK	1	1	137600/688	16.00	25.00	0.159	0.13	0.020
			10		Level 3	DFT-s-OFDM QPSK	50	25	136100/680.5	16.00	25.00	0.165	0.13	0.021
		Left Edge	10		Level 3	CP-OFDM QPSK	53	36	134600/673	16.00	21.86	0.169	0.26	0.044

Product-specific 10g

Band	Antenna	Test Position	Dist. (mm)	Information	Power Reduction	Mode	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR10g	Scaling Factor	Report SAR10g
n25	ANT 7	Back Side	0	SA	Level 6-D1	DFT-s-OFDM QPSK	1	104	381000/1905	16.00	22.00	1.872	0.25	0.470
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	381000/1905	16.00	22.00	1.817	0.25	0.456
		Front Side	0		Level 6-D1	DFT-s-OFDM QPSK	1	104	381000/1905	16.00	22.00	1.459	0.25	0.367
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	381000/1905	16.00	22.00	1.433	0.25	0.360
		Top Edge	0		Level 6-D1	DFT-s-OFDM QPSK	1	104	381000/1905	16.00	22.00	2.337	0.25	0.587
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	381000/1905	16.00	22.00	2.392	0.25	0.601
n25	ANT 1	Back Side	0	NSA	Level 6-D1	DFT-s-OFDM QPSK	1	104	372000/1860	16.00	22.40	2.759	0.23	0.632
			0		Level 6-D1	DFT-s-OFDM QPSK	1	104	376500/1882.5	16.00	22.40	2.524	0.23	0.578
			0		Level 6-D1	DFT-s-OFDM QPSK	1	104	381000/1905	16.00	22.40	2.718	0.23	0.623
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	372000/1860	16.00	22.40	2.579	0.23	0.591
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	376500/1882.5	16.00	22.40	2.845	0.23	0.652
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	381000/1905	16.00	22.40	2.714	0.23	0.622
		Front Side	0		Level 6-D1	DFT-s-OFDM QPSK	1	104	372000/1860	16.00	22.40	2.020	0.23	0.463
			0		Level 6-D1	DFT-s-OFDM QPSK	1	104	376500/1882.5	16.00	22.40	2.033	0.23	0.466
			0		Level 6-D1	DFT-s-OFDM QPSK	1	104	381000/1905	16.00	22.40	2.285	0.23	0.523

			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	372000/1860	16.00	22.40	2.211	0.23	0.506
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	376500/1882.5	16.00	22.40	2.110	0.23	0.483
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	381000/1905	16.00	22.40	2.166	0.23	0.496
		Bottom Edge	0		Level 6-D1	DFT-s-OFDM QPSK	1	104	372000/1860	16.00	22.40	2.446	0.23	0.560
			0		Level 6-D1	DFT-s-OFDM QPSK	1	104	376500/1882.5	16.00	22.40	2.074	0.23	0.475
			0		Level 6-D1	DFT-s-OFDM QPSK	1	104	381000/1905	16.00	22.40	2.258	0.23	0.517
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	372000/1860	16.00	22.40	2.238	0.23	0.513
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	376500/1882.5	16.00	22.40	2.478	0.23	0.568
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	381000/1905	16.00	22.40	2.426	0.23	0.556
		Back Side	0		Level 6-D1	CP-OFDM QPSK	53	26	381000/1905	16.00	22.50	2.309	0.22	0.517
n41	ANT 3	Back Side	0	SA&NSA	Level 6-D1	DFT-s-OFDM QPSK	1	1	509202/2546.01	16.00	24.00	2.063	0.16	0.327
			0		Level 6-D1	DFT-s-OFDM QPSK	1	1	518598/2592.99	16.00	24.00	2.253	0.16	0.357
			0		Level 6-D1	DFT-s-OFDM QPSK	1	1	528000/2640	16.00	24.00	2.352	0.16	0.373
			0		Level 6-D1	DFT-s-OFDM QPSK	135	67	509202/2546.01	16.00	24.00	2.434	0.16	0.386
			0		Level 6-D1	DFT-s-OFDM QPSK	135	67	518598/2592.99	16.00	24.00	2.146	0.16	0.340
			0		Level 6-D1	DFT-s-OFDM QPSK	135	67	528000/2640	16.00	24.00	2.383	0.16	0.378
		Front Side	0		Level 6-D1	DFT-s-OFDM QPSK	135	67	509202/2546.01	16.00	24.00	3.144	0.16	0.498
			0		Level 6-D1	DFT-s-OFDM QPSK	135	67	518598/2592.99	16.00	24.00	2.840	0.16	0.450
			0		Level 6-D1	DFT-s-OFDM QPSK	135	67	528000/2640	16.00	24.00	2.950	0.16	0.468
		Bottom Edge	0		Level 6-D1	DFT-s-OFDM QPSK	135	67	509202/2546.01	16.00	24.00	1.483	0.16	0.235
		Front Side	0		Level 6-D1	CP-OFDM QPSK	1	1	509202/2546.01	16.00	23.00	2.514	0.20	0.502
n66	ANT 1	Back Side	0	NSA	Level 6-D1	DFT-s-OFDM QPSK	1	1	349000/1745	16.00	22.70	1.830	0.21	0.391
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	349000/1745	16.00	22.70	1.843	0.21	0.394
		Front Side	0		Level 6-D1	DFT-s-OFDM QPSK	1	1	349000/1745	16.00	22.70	1.613	0.21	0.345
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	349000/1745	16.00	22.70	1.729	0.21	0.370
		Bottom Edge	0		Level 6-D1	DFT-s-OFDM QPSK	1	1	349000/1745	16.00	22.70	2.073	0.21	0.443
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	344000/1720	16.00	22.70	2.101	0.21	0.449
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	349000/1745	16.00	22.70	2.386	0.21	0.510
			0		Level 6-D1	DFT-s-OFDM QPSK	50	25	354000/1770	16.00	22.70	2.184	0.21	0.467
		Bottom Edge	0		Level 6-D1	CP-OFDM QPSK	53	26	354000/1770	16.00	20.50	1.544	0.35	0.548

LTE Full Power，NR 16dBm

Head

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Scaling Factor	Report SAR1g
LTE 2	ANT 1	Left cheek	0	QPSK	Level 1	1	0	19100/1900	16.00	24.00	0.047	0.16	0.007
			0	QPSK	Level 1	50%	0	18700/1860	16.00	24.00	0.054	0.16	0.009
		Left Tilt	0	QPSK	Level 1	1	0	19100/1900	16.00	24.00	0.025	0.16	0.004
			0	QPSK	Level 1	50%	0	18700/1860	16.00	24.00	0.023	0.16	0.004
		Right cheek	0	QPSK	Level 1	1	0	19100/1900	16.00	24.00	0.065	0.16	0.010
			0	QPSK	Level 1	50%	0	18700/1860	16.00	24.00	0.090	0.16	0.014
		Right Tilt	0	QPSK	Level 1	1	0	19100/1900	16.00	24.00	0.034	0.16	0.005
			0	QPSK	Level 1	50%	0	18700/1860	16.00	24.00	0.041	0.16	0.007
LTE 2	ANT 7	Left cheek	0	QPSK	Level 1	1	50	18700/1860	16.00	19.00	1.006	0.50	0.504
			0	QPSK	Level 1	1	50	18900/1880	16.00	19.00	1.087	0.50	0.545
			0	QPSK	Level 1	1	99	19100/1900	16.00	19.00	1.076	0.50	0.539
			0	QPSK	Level 1	50%	0	18700/1860	16.00	19.00	1.047	0.50	0.525
			0	QPSK	Level 1	50%	0	18900/1880	16.00	19.00	1.068	0.50	0.535
			0	QPSK	Level 1	50%	0	19100/1900	16.00	19.00	1.074	0.50	0.538
		Left Tilt	0	QPSK	Level 1	1	50	19100/1900	16.00	19.00	1.150	0.50	0.576
			0	QPSK	Level 1	1	50	18900/1880	16.00	19.00	1.404	0.50	0.704
			0	QPSK	Level 1	1	99	19100/1900	16.00	19.00	1.327	0.50	0.665
			0	QPSK	Level 1	50%	0	18700/1860	16.00	19.00	1.198	0.50	0.600
			0	QPSK	Level 1	50%	0	18900/1880	16.00	19.00	1.189	0.50	0.596
			0	QPSK	Level 1	50%	0	19100/1900	16.00	19.00	1.287	0.50	0.645
			0	QPSK	Level 1	100%	0	18700/1860	16.00	19.00	1.253	0.50	0.628
			0	QPSK	Level 1	100%	0	18900/1880	16.00	19.00	1.226	0.50	0.614
			0	QPSK	Level 1	100%	0	19100/1900	16.00	19.00	1.241	0.50	0.622
		Left Tilt Repeated	0	QPSK	Level 1	1	50	18900/1880	16.00	19.00	1.382	0.50	0.692
		Right cheek	0	QPSK	Level 1	1	50	18700/1860	16.00	19.00	1.017	0.50	0.510
			0	QPSK	Level 1	1	50	18900/1880	16.00	19.00	1.123	0.50	0.563
			0	QPSK	Level 1	1	99	19100/1900	16.00	19.00	1.114	0.50	0.558
			0	QPSK	Level 1	50%	0	18700/1860	16.00	19.00	1.047	0.50	0.525
			0	QPSK	Level 1	50%	0	18900/1880	16.00	19.00	1.128	0.50	0.566
			0	QPSK	Level 1	50%	0	19100/1900	16.00	19.00	1.159	0.50	0.581
		Right Tilt	0	QPSK	Level 1	1	50	19100/1900	16.00	19.00	1.033	0.50	0.518
			0	QPSK	Level 1	1	50	18900/1880	16.00	19.00	1.244	0.50	0.623
			0	QPSK	Level 1	1	99	19100/1900	16.00	19.00	1.248	0.50	0.626
			0	QPSK	Level 1	50%	0	18700/1860	16.00	19.00	1.060	0.50	0.531
			0	QPSK	Level 1	50%	0	18900/1880	16.00	19.00	1.135	0.50	0.569
			0	QPSK	Level 1	50%	0	19100/1900	16.00	19.00	1.148	0.50	0.575
LTE 12	ANT 6	Left cheek	0	QPSK	Level 1	1	49	23095/707.5	16.00	25.00	0.367	0.13	0.046

			0	QPSK	Level 1	50%	0	23060/704	16.00	24.00	0.222	0.16	0.035
		Left Tilt	0	QPSK	Level 1	1	49	23095/707.5	16.00	25.00	0.305	0.13	0.038
			0	QPSK	Level 1	50%	0	23060/704	16.00	24.00	0.230	0.16	0.036
		Right cheek	0	QPSK	Level 1	1	49	23095/707.5	16.00	25.00	0.720	0.13	0.091
			0	QPSK	Level 1	50%	0	23060/704	16.00	24.00	0.781	0.16	0.124
		Right Tilt	0	QPSK	Level 1	1	49	23095/707.5	16.00	25.00	0.767	0.13	0.097
			0	QPSK	Level 1	50%	0	23060/704	16.00	24.00	0.586	0.16	0.093
LTE 66	ANT 1	Left cheek	0	QPSK	Level 1	1	0	132322/1745	16.00	24.00	0.055	0.16	0.009
			0	QPSK	Level 1	50%	0	132322/1745	16.00	24.00	0.027	0.16	0.004
		Left Tilt	0	QPSK	Level 1	1	0	132322/1745	16.00	24.00	0.024	0.16	0.004
			0	QPSK	Level 1	50%	0	132322/1745	16.00	24.00	0.012	0.16	0.002
		Right cheek	0	QPSK	Level 1	1	0	132322/1745	16.00	24.00	0.048	0.16	0.008
			0	QPSK	Level 1	50%	0	132322/1745	16.00	24.00	0.045	0.16	0.007
		Right Tilt	0	QPSK	Level 1	1	0	132322/1745	16.00	24.00	0.023	0.16	0.004
			0	QPSK	Level 1	50%	0	132322/1745	16.00	24.00	0.018	0.16	0.003
LTE 66	ANT 7	Left cheek	0	QPSK	Level 1	1	50	132072/1720	16.00	20.00	0.968	0.40	0.385
			0	QPSK	Level 1	1	50	132322/1745	16.00	20.00	0.969	0.40	0.386
			0	QPSK	Level 1	1	0	132572/1770	16.00	20.00	1.079	0.40	0.430
			0	QPSK	Level 1	50%	25	132072/1720	16.00	20.00	0.967	0.40	0.385
			0	QPSK	Level 1	50%	25	132322/1745	16.00	20.00	0.975	0.40	0.388
			0	QPSK	Level 1	50%	0	132572/1770	16.00	20.00	1.094	0.40	0.435
		Left Tilt	0	QPSK	Level 1	1	50	132072/1720	16.00	20.00	1.045	0.40	0.416
			0	QPSK	Level 1	1	50	132322/1745	16.00	20.00	1.117	0.40	0.445
			0	QPSK	Level 1	1	0	132572/1770	16.00	20.00	1.329	0.40	0.529
			0	QPSK	Level 1	50%	25	132072/1720	16.00	20.00	1.005	0.40	0.400
			0	QPSK	Level 1	50%	25	132322/1745	16.00	20.00	1.101	0.40	0.438
			0	QPSK	Level 1	50%	0	132572/1770	16.00	20.00	1.321	0.40	0.526
			0	QPSK	Level 1	100%	0	132072/1720	16.00	20.00	0.883	0.40	0.351
			0	QPSK	Level 1	100%	0	132322/1745	16.00	20.00	0.951	0.40	0.379
			0	QPSK	Level 1	100%	0	132572/1770	16.00	20.00	1.096	0.40	0.436
		Left Tilt repeat	0	QPSK	Level 1	1	0	132572/1770	16.00	20.00	1.301	0.40	0.518
		Right cheek	0	QPSK	Level 1	1	50	132072/1720	16.00	20.00	1.037	0.40	0.413
			0	QPSK	Level 1	1	50	132322/1745	16.00	20.00	0.908	0.40	0.362
			0	QPSK	Level 1	1	0	132572/1770	16.00	20.00	1.198	0.40	0.477
			0	QPSK	Level 1	50%	25	132072/1720	16.00	20.00	1.031	0.40	0.411
			0	QPSK	Level 1	50%	25	132322/1745	16.00	20.00	0.926	0.40	0.368
			0	QPSK	Level 1	50%	0	132572/1770	16.00	20.00	1.212	0.40	0.482
		Right Tilt	0	QPSK	Level 1	1	50	132072/1720	16.00	20.00	1.041	0.40	0.414
			0	QPSK	Level 1	1	50	132322/1745	16.00	20.00	1.111	0.40	0.442
			0	QPSK	Level 1	1	0	132572/1770	16.00	20.00	1.242	0.40	0.494
			0	QPSK	Level 1	50%	25	132072/1720	16.00	20.00	1.253	0.40	0.499
			0	QPSK	Level 1	50%	25	132322/1745	16.00	20.00	1.113	0.40	0.443
			0	QPSK	Level 1	50%	0	132572/1770	16.00	20.00	1.282	0.40	0.511

Body-worn

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Scaling Factor	Report SAR1g
LTE 2	ANT 1	Back Side	15	QPSK	Level 2	1	0	19100/1900	16.00	24.00	0.716	0.16	0.113
			15	QPSK	Level 2	50%	0	18700/1860	16.00	24.00	0.790	0.16	0.125
		Front Side	15	QPSK	Level 2	1	0	19100/1900	16.00	24.00	0.543	0.16	0.086
			15	QPSK	Level 2	50%	0	18700/1860	16.00	24.00	0.665	0.16	0.105
LTE 2	ANT 7	Back Side	15	QPSK	Level 2	1	50	19100/1900	16.00	24.70	0.799	0.13	0.108
			15	QPSK	Level 2	50%	0	18700/1860	16.00	23.70	0.585	0.17	0.099
		Front Side	15	QPSK	Level 2	1	50	19100/1900	16.00	24.70	0.651	0.13	0.088
			15	QPSK	Level 2	50%	0	18700/1860	16.00	23.70	0.490	0.17	0.083
LTE 12	ANT 6	Back Side	15	QPSK	Level 2	1	49	23060/704	16.00	25.00	0.186	0.13	0.023
			15	QPSK	Level 2	50%	0	23095/707.5	16.00	24.00	0.151	0.16	0.024
		Front Side	15	QPSK	Level 2	1	49	23060/704	16.00	25.00	0.126	0.13	0.016
			15	QPSK	Level 2	50%	0	23095/707.5	16.00	24.00	0.187	0.16	0.030
LTE 66	ANT 1	Back Side	15	QPSK	Level 2	1	0	132322/1745	16.00	24.00	0.535	0.16	0.085
			15	QPSK	Level 2	50%	0	132322/1745	16.00	24.00	0.444	0.16	0.070
		Front Side	15	QPSK	Level 2	1	0	132322/1745	16.00	24.00	0.500	0.16	0.079
			15	QPSK	Level 2	50%	0	132322/1745	16.00	24.00	0.419	0.16	0.066
LTE 66	ANT 7	Back Side	15	QPSK	Level 2	1	99	132572/1770	16.00	24.60	0.715	0.14	0.099
			15	QPSK	Level 2	50%	50	132072/1720	16.00	23.60	0.402	0.17	0.070
		Front Side	15	QPSK	Level 2	1	99	132572/1770	16.00	24.60	0.579	0.14	0.080
			15	QPSK	Level 2	50%	50	132072/1720	16.00	23.60	0.371	0.17	0.065

Hotspot

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Scaling Factor	Report SAR1g
LTE 2	ANT 1	Back Side	10	QPSK	Level 3	1	99	19100/1900	16.00	21.50	0.542	0.28	0.153
			10	QPSK	Level 3	50%	0	18700/1860	16.00	21.50	0.662	0.28	0.187
		Front Side	10	QPSK	Level 3	1	99	19100/1900	16.00	21.50	0.451	0.28	0.127
			10	QPSK	Level 3	50%	0	18700/1860	16.00	21.50	0.605	0.28	0.171
		Left Edge	10	QPSK	Level 3	1	99	19100/1900	16.00	21.50	0.027	0.28	0.008
			10	QPSK	Level 3	50%	0	18700/1860	16.00	21.50	0.020	0.28	0.006
		Right Edge	10	QPSK	Level 3	1	99	19100/1900	16.00	21.50	0.031	0.28	0.009
			10	QPSK	Level 3	50%	0	18700/1860	16.00	21.50	0.094	0.28	0.026
		Bottom Edge	10	QPSK	Level 3	1	0	18700/1860	16.00	21.50	1.163	0.28	0.328
		Bottom Edge	10	QPSK	Level 3	1	0	18900/1880	16.00	21.50	1.056	0.28	0.298
		Bottom Edge	10	QPSK	Level 3	1	99	19100/1900	16.00	21.50	1.063	0.28	0.300
			10	QPSK	Level 3	50%	0	18700/1860	16.00	21.50	1.371	0.28	0.386
			10	QPSK	Level 3	50%	0	18900/1880	16.00	21.50	1.242	0.28	0.350
			10	QPSK	Level 3	50%	50	19100/1900	16.00	21.50	1.307	0.28	0.368
			10	QPSK	Level 3	100%	0	18700/1860	16.00	20.50	1.069	0.35	0.379

			10	QPSK	Level 3	100%	0	18900/1880	16.00	20.50	1.162	0.35	0.412
			10	QPSK	Level 3	100%	0	19100/1900	16.00	20.50	1.107	0.35	0.393
		Bottom Edge Repeated	10	QPSK	Level 3	50%	0	18700/1860	16.00	21.50	1.315	0.28	0.371
LTE 2	ANT 7	Back Side	10	QPSK	Level 3	1	0	18700/1860	16.00	21.50	0.608	0.28	0.171
			10	QPSK	Level 3	50%	0	18700/1860	16.00	21.50	0.623	0.28	0.176
		Front Side	10	QPSK	Level 3	1	0	18700/1860	16.00	21.50	0.562	0.28	0.158
			10	QPSK	Level 3	50%	0	18700/1860	16.00	21.50	0.562	0.28	0.158
		Left Edge	10	QPSK	Level 3	1	0	18700/1860	16.00	21.50	0.058	0.28	0.016
			10	QPSK	Level 3	50%	0	18700/1860	16.00	21.50	0.062	0.28	0.017
		Right Edge	10	QPSK	Level 3	1	0	18700/1860	16.00	21.50	0.123	0.28	0.035
			10	QPSK	Level 3	50%	0	18700/1860	16.00	21.50	0.117	0.28	0.033
		Top Edge	10	QPSK	Level 3	1	0	18700/1860	16.00	21.50	1.022	0.28	0.288
			10	QPSK	Level 3	1	0	18900/1880	16.00	21.50	0.942	0.28	0.266
			10	QPSK	Level 3	1	50	19100/1900	16.00	21.50	0.975	0.28	0.275
			10	QPSK	Level 3	50%	0	18700/1860	16.00	21.50	0.953	0.28	0.269
			10	QPSK	Level 3	50%	0	18900/1880	16.00	21.50	0.951	0.28	0.268
			10	QPSK	Level 3	50%	0	19100/1900	16.00	21.50	1.022	0.28	0.288
			10	QPSK	Level 3	100%	0	18700/1860	16.00	21.50	0.976	0.28	0.275
			10	QPSK	Level 3	100%	0	18900/1880	16.00	21.50	0.892	0.28	0.251
			10	QPSK	Level 3	100%	0	19100/1900	16.00	21.50	0.946	0.28	0.267
LTE 12	ANT 6	Back Side	10	QPSK	Level 3	1	49	23060/704	16.00	25.00	0.269	0.13	0.034
			10	QPSK	Level 3	50%	0	23095/707.5	16.00	24.00	0.209	0.16	0.033
		Front Side	10	QPSK	Level 3	1	49	23060/704	16.00	25.00	0.296	0.13	0.037
			10	QPSK	Level 3	50%	0	23095/707.5	16.00	24.00	0.213	0.16	0.034
		Left Edge	10	QPSK	Level 3	1	49	23060/704	16.00	25.00	0.287	0.13	0.036
			10	QPSK	Level 3	50%	0	23095/707.5	16.00	24.00	0.222	0.16	0.035
		Right Edge	10	QPSK	Level 3	1	49	23060/704	16.00	25.00	0.074	0.13	0.009
			10	QPSK	Level 3	50%	0	23095/707.5	16.00	24.00	0.071	0.16	0.011
		Top Edge	10	QPSK	Level 3	1	49	23060/704	16.00	25.00	0.212	0.13	0.027
			10	QPSK	Level 3	50%	0	23095/707.5	16.00	24.00	0.196	0.16	0.031
LTE B66	ANT 1	Back Side	10	QPSK	Level 3	1	0	132322/1745	16.00	21.00	0.478	0.32	0.151
			10	QPSK	Level 3	50%	0	132322/1745	16.00	21.00	0.323	0.32	0.102
		Front Side	10	QPSK	Level 3	1	0	132322/1745	16.00	21.00	0.296	0.32	0.094
			10	QPSK	Level 3	50%	0	132322/1745	16.00	21.00	0.320	0.32	0.101
		Left Edge	10	QPSK	Level 3	1	0	132322/1745	16.00	21.00	0.000	0.32	0.000
			10	QPSK	Level 3	50%	0	132322/1745	16.00	21.00	0.000	0.32	0.000
		Right Edge	10	QPSK	Level 3	1	0	132322/1745	16.00	21.00	0.000	0.32	0.000
			10	QPSK	Level 3	50%	0	132322/1745	16.00	21.00	0.000	0.32	0.000
		Bottom Edge	10	QPSK	Level 3	1	0	132322/1745	16.00	21.00	0.685	0.32	0.217
			10	QPSK	Level 3	50%	0	132322/1745	16.00	21.00	0.711	0.32	0.225
LTE B66	ANT 7	Back Side	10	QPSK	Level 3	1	50	132322/1745	16.00	21.60	0.434	0.28	0.120
			10	QPSK	Level 3	50%	25	132322/1746	16.00	21.60	0.425	0.28	0.117

		Front Side	10	QPSK	Level 3	1	50	132322/1745	16.00	21.60	0.366	0.28	0.101
			10	QPSK	Level 3	50%	25	132322/1746	16.00	21.60	0.365	0.28	0.100
		Left Edge	10	QPSK	Level 3	1	50	132322/1745	16.00	21.60	0.101	0.28	0.028
			10	QPSK	Level 3	50%	25	132322/1746	16.00	21.60	0.086	0.28	0.024
		Right Edge	10	QPSK	Level 3	1	50	132322/1745	16.00	21.60	0.000	0.28	0.000
			10	QPSK	Level 3	50%	25	132322/1746	16.00	21.60	0.000	0.28	0.000
		Top Edge	10	QPSK	Level 3	1	50	132322/1745	16.00	21.60	0.547	0.28	0.151
			10	QPSK	Level 3	50%	25	132322/1746	16.00	21.60	0.602	0.28	0.166

Product-specific 10g

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR10g	Scaling Factor	Report SAR10g
LTE B2	ANT 7	Back Side	0	QPSK	Level 6-D1	1	50	19100/1900	16.00	24.00	3.031	0.16	0.480
			0	QPSK	Level 6-D1	1	99	18700/1860	16.00	24.00	2.495	0.16	0.395
			0	QPSK	Level 6-D1	1	50	18900/1880	16.00	24.00	2.583	0.16	0.409
			0	QPSK	Level 6-D1	50%	0	18700/1860	16.00	23.00	2.388	0.20	0.476
			0	QPSK	Level 6-D1	50%	25	18900/1880	16.00	23.00	1.988	0.20	0.397
			0	QPSK	Level 6-D1	50%	50	19100/1900	16.00	23.00	2.134	0.20	0.426
		Top Edge	0	QPSK	Level 6-D1	1	50	19100/1900	16.00	24.00	3.146	0.16	0.499
			0	QPSK	Level 6-D1	1	99	18700/1860	16.00	24.00	2.904	0.16	0.460
			0	QPSK	Level 6-D1	1	50	18900/1880	16.00	24.00	3.098	0.16	0.491
			0	QPSK	Level 6-D1	50%	0	18700/1860	16.00	23.00	2.813	0.20	0.561
			0	QPSK	Level 6-D1	50%	25	18900/1880	16.00	23.00	2.673	0.20	0.533
			0	QPSK	Level 6-D1	50%	50	19100/1900	16.00	23.00	2.635	0.20	0.526
LTE B7	ANT 3	Back Side	0	QPSK	Level 6-D1	1	99	21350/2560	16.00	23.70	2.841	0.17	0.483
			0	QPSK	Level 6-D1	1	99	20850/2510	16.00	23.70	2.497	0.17	0.424
			0	QPSK	Level 6-D1	1	99	21100/2535	16.00	23.70	3.108	0.17	0.528
			0	QPSK	Level 6-D1	50%	0	21350/2560	16.00	22.70	2.317	0.21	0.495
			0	QPSK	Level 6-D1	50%	50	20850/2510	16.00	22.70	2.222	0.21	0.475
			0	QPSK	Level 6-D1	50%	0	21100/2535	16.00	22.70	2.291	0.21	0.490
		Front Side	0	QPSK	Level 6-D1	1	99	21350/2560	16.00	23.70	3.120	0.17	0.530
			0	QPSK	Level 6-D1	1	99	20850/2510	16.00	23.70	3.104	0.17	0.527
			0	QPSK	Level 6-D1	1	99	21100/2535	16.00	23.70	3.120	0.17	0.530
			0	QPSK	Level 6-D1	50%	0	21350/2560	16.00	22.70	2.767	0.21	0.591
			0	QPSK	Level 6-D1	50%	50	20850/2510	16.00	22.70	2.737	0.21	0.585
			0	QPSK	Level 6-D1	50%	0	21100/2535	16.00	22.70	2.795	0.21	0.598
		Bottom Edge	0	QPSK	Level 6-D1	1	99	21350/2560	16.00	23.70	1.995	0.17	0.339
			0	QPSK	Level 6-D1	1	99	20850/2510	16.00	23.70	2.131	0.17	0.362
			0	QPSK	Level 6-D1	1	99	21100/2535	16.00	23.70	2.561	0.17	0.435
			0	QPSK	Level 6-D1	50%	0	21350/2560	16.00	22.70	1.754	0.21	0.375
			0	QPSK	Level 6-D1	50%	50	20850/2510	16.00	22.70	1.661	0.21	0.355
			0	QPSK	Level 6-D1	50%	0	21100/2535	16.00	22.70	1.970	0.21	0.421
LTE B25	ANT 7	Back Side	0	QPSK	Level 6-D1	1	50	26365/1882.5	16.00	24.00	3.003	0.16	0.476

			0	QPSK	Level 6-D1	1	50	26140/1860	16.00	24.00	2.308	0.16	0.366
			0	QPSK	Level 6-D1	1	0	26590/1905	16.00	24.00	2.398	0.16	0.380
			0	QPSK	Level 6-D1	50%	0	26140/1860	16.00	23.00	2.242	0.20	0.447
			0	QPSK	Level 6-D1	50%	50	26365/1882.5	16.00	23.00	1.905	0.20	0.380
			0	QPSK	Level 6-D1	50%	25	26590/1905	16.00	23.00	2.025	0.20	0.404
		Front Side	0	QPSK	Level 6-D1	1	50	26365/1882.5	16.00	24.00	2.461	0.16	0.390
			0	QPSK	Level 6-D1	1	50	26140/1860	16.00	24.00	2.552	0.16	0.404
			0	QPSK	Level 6-D1	1	0	26590/1905	16.00	24.00	2.642	0.16	0.419
		Top Edge	0	QPSK	Level 6-D1	1	50	26365/1882.5	16.00	24.00	3.117	0.16	0.494
			0	QPSK	Level 6-D1	1	50	26140/1860	16.00	24.00	3.090	0.16	0.490
			0	QPSK	Level 6-D1	1	0	26590/1905	16.00	24.00	2.949	0.16	0.467
			0	QPSK	Level 6-D1	50%	0	26140/1860	16.00	23.00	2.527	0.20	0.504
			0	QPSK	Level 6-D1	50%	50	26365/1882.5	16.00	23.00	2.524	0.20	0.504
			0	QPSK	Level 6-D1	50%	25	26590/1905	16.00	23.00	2.488	0.20	0.496

10.3 Simultaneous Transmission Analysis

Simultaneous Transmission Configurations	Head	Body-worn	Hotspot	Product Specific 10-g SAR
WWAN + Wi-Fi 2.4G MIMO	Yes	Yes	Yes	Yes
WWAN + Wi-Fi 5G MIMO	Yes	Yes	Yes	Yes
WWAN + Bluetooth	Yes	Yes	Yes	Yes
WWAN + Bluetooth + Wi-Fi 5G MIMO	Yes	Yes	Yes	Yes

General Note:

1. The Scaled SAR summation is calculated based on the same configuration and test position.
2. Per KDB 447498 D01, simultaneous transmission SAR is compliant if,

i) Scalar SAR summation < 1.6W/kg, simultaneously transmission SAR measurement is not necessary.

ii) SPLSR = (SAR1 + SAR2)^1.5 / (min. separation distance, mm), and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.

iii) If SPLSR ≤ 0.04, simultaneously transmission SAR measurement is not necessary.

The maximum SAR_{1g} Value for Main-Antenna

Band		NR Full Power，LTE 16 dBm																												
		DC_12A_n25A			DC_66A_n25A			DC_2A_n41A			DC_66A_n41A			DC_12A_n41A			DC_12A-n66A			DC_2A_n66A			DC_2A_n71A			DC_66A_n71A			ENDC MAX
		LTE B12	n25	B12+ n25	LTE B66	n25	B66+ n25	LTE B2	n41	B2+n 41	LTE B66	n41	B66+ n41	LTE B12	n41	B12+ n41	LTE B12	n66	B12+ n66	LTE B2	n66	B2+n 66	LTE B2	n71	B2+n 71	LTE B66	n71	B66+ n71	
Head	Left cheek	0.046	0.091	0.137	0.435	0.091	0.527	0.545	0.388	0.933	0.435	0.388	0.823	0.046	0.388	0.434	0.046	0.052	0.098	0.545	0.052	0.596	0.009	0.390	0.398	0.009	0.390	0.398	0.933
	Left Tilt	0.038	0.044	0.083	0.529	0.044	0.574	0.704	0.147	0.850	0.529	0.147	0.676	0.038	0.147	0.185	0.038	0.044	0.082	0.704	0.044	0.747	0.004	0.226	0.230	0.004	0.226	0.230	0.850
	Right cheek	0.124	0.042	0.166	0.482	0.042	0.525	0.581	0.234	0.814	0.482	0.234	0.716	0.124	0.234	0.357	0.124	0.086	0.210	0.581	0.086	0.666	0.014	0.635	0.650	0.008	0.635	0.643	0.814
	Right Tilt	0.097	0.062	0.158	0.511	0.062	0.572	0.626	0.236	0.862	0.511	0.236	0.747	0.097	0.236	0.333	0.097	0.061	0.158	0.626	0.061	0.687	0.007	0.552	0.558	0.004	0.552	0.556	0.862
Body worn	Back Side	0.024	0.788	0.812	0.099	0.788	0.887	0.108	0.660	0.768	0.099	0.660	0.759	0.024	0.660	0.684	0.024	0.729	0.753	0.108	0.729	0.837	0.125	0.175	0.300	0.085	0.175	0.260	0.887
	Front Side	0.030	0.689	0.718	0.080	0.689	0.769	0.088	0.617	0.705	0.080	0.617	0.697	0.030	0.617	0.647	0.030	0.630	0.660	0.088	0.630	0.718	0.105	0.125	0.231	0.079	0.125	0.205	0.769
Hotspot	Back Side	0.034	0.464	0.498	0.120	0.464	0.583	0.176	0.497	0.673	0.120	0.497	0.617	0.034	0.497	0.531	0.034	0.560	0.594	0.176	0.560	0.736	0.187	0.217	0.404	0.151	0.217	0.369	0.736
	Front Side	0.037	0.466	0.504	0.101	0.466	0.567	0.158	0.785	0.944	0.101	0.785	0.886	0.037	0.785	0.823	0.037	0.568	0.605	0.158	0.568	0.726	0.171	0.196	0.367	0.101	0.196	0.297	0.944
	Left Edge	0.036	0.000	0.036	0.028	0.000	0.028	0.017	0.297	0.314	0.028	0.297	0.325	0.036	0.297	0.333	0.036	0.000	0.036	0.017	0.000	0.017	0.008	0.286	0.294	0.000	0.286	0.286	0.333
	Right Edge	0.011	0.051	0.062	0.000	0.051	0.051	0.035	0.096	0.131	0.000	0.096	0.096	0.011	0.096	0.108	0.011	0.133	0.145	0.035	0.133	0.168	0.026	0.079	0.106	0.000	0.079	0.079	0.168
	Top Edge	0.031	0.000	0.031	0.166	0.000	0.166	0.288	0.000	0.288	0.166	0.000	0.166	0.031	0.000	0.031	0.031	0.000	0.031	0.288	0.000	0.288	0.000	0.165	0.165	0.000	0.165	0.165	0.288
	Bottom Edge	0.000	0.792	0.792	0.000	0.792	0.792	0.000	0.600	0.600	0.000	0.600	0.600	0.000	0.600	0.600	0.000	0.779	0.779	0.000	0.779	0.779	0.412	0.000	0.412	0.225	0.000	0.225	0.792
Product-specific 10g SAR	Back Side	NA	2.111	2.111	NA	2.111	2.111	0.480	1.876	2.356	NA	1.876	1.876	NA	1.876	1.876	NA	1.843	1.843	0.480	1.843	2.324	NA	NA	NA	NA	NA	NA	2.356
	Front Side	NA	2.285	2.285	NA	2.285	2.285	NA	2.329	2.329	NA	2.329	2.329	NA	2.329	2.329	NA	1.729	1.729	NA	1.729	1.729	NA	NA	NA	NA	NA	NA	2.329
	Left Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.000	NA	NA	NA	NA	NA	NA	NA
	Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.000	NA	NA	NA	NA	NA	NA	NA
	Top Edge	NA	NA	NA	NA	NA	NA	0.561	NA	0.561	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.561	NA	0.561	NA	NA	NA	NA	NA	NA	0.561
	Bottom Edge	NA	2.478	2.478	NA	2.478	2.478	NA	1.483	1.483	NA	1.483	1.483	NA	1.483	1.483	NA	2.386	2.386	NA	2.386	2.386	NA	NA	NA	NA	NA	NA	2.478

Band		LTE Full Power，NR 16 dBm																												
		DC_12A_n25A			DC_66A_n25A			DC_2A_n41A			DC_66A_n41A			DC_12A_n41A			DC_12A-n66A			DC_2A_n66A			DC_2A_n71A			DC_66A_n71A			ENDC MAX
		LTE B12	n25	B12+ n25	LTE B66	n25	B66+ n25	LTE B2	n41	B2+n 41	LTE B66	n41	B66+ n41	LTE B12	n41	B12+ n41	LTE B12	n66	B12+ n66	LTE B2	n66	B2+n 66	LTE B2	n71	B2+n 71	LTE B66	n71	B66+ n71	
Head	Left cheek	0.367	0.013	0.380	0.700	0.013	0.713	0.681	0.027	0.708	0.700	0.027	0.727	0.367	0.027	0.394	0.367	0.007	0.374	0.681	0.007	0.688	0.054	0.069	0.123	0.055	0.069	0.124	0.727
	Left Tilt	0.305	0.006	0.312	0.696	0.006	0.702	0.831	0.010	0.842	0.696	0.010	0.706	0.305	0.010	0.316	0.305	0.006	0.311	0.831	0.006	0.837	0.025	0.040	0.065	0.024	0.040	0.064	0.842
	Right cheek	0.781	0.006	0.787	1.064	0.006	1.070	1.159	0.017	1.175	1.064	0.017	1.080	0.781	0.017	0.798	0.781	0.012	0.793	1.159	0.012	1.170	0.090	0.155	0.245	0.048	0.155	0.203	1.175
	Right Tilt	0.767	0.009	0.776	0.694	0.009	0.703	0.814	0.017	0.831	0.694	0.017	0.711	0.767	0.017	0.783	0.767	0.008	0.775	0.814	0.008	0.822	0.041	0.098	0.139	0.023	0.098	0.121	0.831
Body worn	Back Side	0.186	0.181	0.367	0.715	0.181	0.895	0.799	0.105	0.904	0.715	0.105	0.819	0.186	0.105	0.291	0.186	0.098	0.285	0.799	0.098	0.897	0.790	0.022	0.812	0.535	0.022	0.557	0.904
	Front Side	0.187	0.158	0.345	0.579	0.158	0.737	0.651	0.098	0.749	0.579	0.098	0.677	0.187	0.098	0.285	0.187	0.085	0.272	0.651	0.085	0.736	0.665	0.016	0.681	0.500	0.016	0.516	0.749
Hotspot	Back Side	0.269	0.300	0.569	0.434	0.300	0.733	0.623	0.099	0.722	0.434	0.099	0.533	0.269	0.099	0.368	0.269	0.223	0.492	0.623	0.223	0.846	0.662	0.027	0.689	0.478	0.027	0.506	0.846
	Front Side	0.296	0.301	0.597	0.366	0.301	0.667	0.562	0.168	0.730	0.366	0.168	0.534	0.296	0.168	0.464	0.296	0.226	0.522	0.562	0.226	0.788	0.605	0.025	0.630	0.320	0.025	0.345	0.788
	Left Edge	0.287	0.000	0.287	0.101	0.000	0.101	0.062	0.059	0.121	0.101	0.059	0.160	0.287	0.059	0.346	0.287	0.000	0.287	0.062	0.000	0.062	0.027	0.044	0.071	0.000	0.044	0.044	0.346
	Right Edge	0.074	0.033	0.106	0.000	0.033	0.033	0.123	0.019	0.143	0.000	0.019	0.019	0.074	0.019	0.093	0.074	0.053	0.127	0.123	0.053	0.176	0.094	0.010	0.104	0.000	0.010	0.010	0.176
	Top Edge	0.212	0.000	0.212	0.602	0.000	0.602	0.642	0.000	0.642	0.602	0.000	0.602	0.212	0.000	0.212	0.212	0.000	0.212	0.642	0.000	0.642	0.000	0.021	0.021	0.000	0.021	0.021	0.642
	Bottom Edge	0.000	0.511	0.511	0.000	0.511	0.511	0.000	0.120	0.120	0.000	0.120	0.120	0.000	0.120	0.120	0.000	0.310	0.310	0.000	0.310	0.310	1.371	0.000	1.371	0.711	0.000	0.711	1.371
Product-specific 10g SAR	Back Side	NA	0.652	0.652	NA	0.652	0.652	1.927	0.386	2.313	NA	0.386	0.386	NA	0.386	0.386	NA	0.394	0.394	1.927	0.394	2.321	NA	NA	NA	NA	NA	NA	2.321
	Front Side	NA	0.523	0.523	NA	0.523	0.523	NA	0.502	0.502	NA	0.502	0.502	NA	0.502	0.502	NA	0.370	0.370	NA	0.370	0.370	NA	NA	NA	NA	NA	NA	0.523
	Left Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Top Edge	NA	NA	NA	NA	NA	NA	2.597	NA	2.597	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.597	NA	2.597	NA	NA	NA	NA	NA	NA	2.597
	Bottom Edge	NA	0.568	0.568	NA	0.568	0.568	NA	0.235	0.235	NA	0.235	0.235	NA	0.235	0.235	NA	0.548	0.548	NA	0.548	0.548	2.496	NA	2.496	3.496	NA	3.496	3.496

$SAR_{1g/10g}$(W/kg) Test Position		GSM 850	GSM 1900	WCD MA II	WCD MA IV	WCD MA V	LTE 2	LTE5	LTE7	LTE 12	LTE 13	LTE 25	LTE 26	LTE 38	LTE 41	LTE 66	LTE 71	n25	n41	n66	n71	EN-DC	MAX. $SAR_{1g/10g}$
Head	Left Cheek	0.434	0.771	0.835	0.725	0.611	0.681	0.286	0.244	0.367	0.548	0.748	0.499	0.127	0.150	0.700	0.332	0.849	0.388	0.870	0.390	0.933	0.933
	Left Tilt	0.405	0.630	0.862	0.784	0.819	0.831	0.435	0.110	0.305	0.501	0.786	0.406	0.077	0.124	0.696	0.310	0.868	0.147	0.869	0.226	0.850	0.869
	Right Cheek	0.677	0.772	0.961	1.124	0.420	1.159	0.476	0.149	0.781	0.780	1.036	0.823	0.173	0.102	0.689	0.727	0.580	0.234	1.177	0.635	1.175	1.177
	Right Tilt	0.863	0.903	0.691	0.793	0.977	0.814	0.547	0.170	0.767	0.763	0.814	0.846	0.142	0.093	0.694	0.762	0.575	0.236	0.815	0.552	0.862	0.977
Body worn	Back Side	0.273	0.638	0.780	0.415	0.230	0.799	0.223	0.639	0.186	0.189	0.798	0.254	0.387	0.358	0.715	0.132	0.857	0.660	0.779	0.175	0.904	0.904
	Front Side	0.347	0.541	0.573	0.310	0.257	0.651	0.241	1.047	0.187	0.198	0.619	0.277	0.384	0.391	0.579	0.092	0.689	0.617	0.645	0.125	0.769	1.047
Hotspot	Back Side	0.377	0.575	0.661	0.896	0.498	0.623	0.227	0.737	0.269	0.328	0.731	0.447	0.577	0.695	0.434	0.199	0.715	0.497	0.675	0.217	0.846	0.896
	Front Side	0.396	0.482	0.576	0.775	0.469	0.562	0.239	0.776	0.296	0.332	0.630	0.509	0.557	0.687	0.366	0.172	0.624	0.785	0.679	0.196	0.944	0.944
	Left Edge	0.281	0.081	0.059	0.216	0.309	0.062	0.194	0.470	0.287	0.255	0.000	0.323	0.412	0.274	0.101	0.267	0.080	0.297	0.205	0.286	0.346	0.470
	Right Edge	0.000	0.133	0.098	0.000	0.071	0.123	0.068	0.000	0.074	0.088	0.136	0.076	0.059	0.079	0.000	0.000	0.133	0.096	0.133	0.079	0.176	0.176
	Top Edge	0.295	0.831	0.861	0.690	0.411	0.642	0.236	0.830	0.212	0.266	0.815	0.417	NA	NA	0.602	0.180	0.639	NA	0.548	0.165	0.642	0.861
	Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.713	0.928	NA	NA	0.792	0.373	0.779	NA	1.371	1.371
Product-specific 10g SAR	Back Side	NA	NA	2.255	2.288	NA	1.927	NA	1.829	NA	NA	2.342	NA	NA	NA	NA	NA	2.111	1.876	1.843	NA	2.356	2.356
	Front Side	NA	NA	NA	NA	NA	NA	NA	1.988	NA	NA	2.642	NA	NA	NA	NA	NA	2.285	2.329	1.729	NA	2.329	2.642
	Left Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Top Edge	NA	NA	2.443	2.427	NA	2.597	NA	NA	NA	NA	2.209	NA	NA	NA	NA	NA	2.392	NA	3.085	NA	2.597	3.085
	Bottom Edge	NA	NA	NA	NA	NA	NA	NA	2.561	NA	NA	NA	NA	NA	NA	NA	NA	2.478	1.483	2.386	NA	3.496	3.496

WWAN + WLAN 2.4G / WLAN 5G/BT

$SAR_{1g/10g}$(W/kg) Test Position		WWAN MAX. $SAR_{1g/10g}$	Wi-Fi 2.4G MIMO MAX. $SAR_{1g/10g}$	Wi-Fi 5G MIMO MAX. $SAR_{1g/10g}$	BT	MAX. $\Sigma SAR_{1g/10g}$			
		1	2	3	4	1+2	1+3	1+4	1+3+4
Head	Left, Cheek	0.933	0.475	0.250	0.253	1.408	1.183	1.186	1.436
	Left, Tilt	0.869	0.458	0.272	0.294	1.327	1.141	1.163	1.435
	Right, Cheek	1.177	0.187	0.092	0.151	1.364	1.269	1.328	1.420
	Right, Tilt	0.977	0.216	0.083	0.202	1.193	1.060	1.179	1.262
Body worn	Back Side	0.904	0.277	0.447	0.000	1.181	1.351	0.904	1.351
	Front Side	1.047	0.175	0.184	0.000	1.222	1.231	1.047	1.231
Hotspot	Front Side	0.896	0.438	0.539	0.000	1.334	1.435	0.896	1.435
	Back Side	0.944	0.285	0.274	0.000	1.229	1.218	0.944	1.218
	Right Edge	0.470	0.060	0.095	0.000	0.530	0.565	0.470	0.565
	Left Edge	0.176	0.190	0.927	0.000	0.366	1.103	0.176	1.103
	Top Edge	0.861	0.578	0.236	0.090	1.439	1.097	0.951	1.187
	Bottom Edge	1.371	NA	NA	NA	1.371	1.371	1.371	1.371
Product-specific 10g SAR	Front Side	2.356	NA	0.966	NA	2.356	3.322	2.356	3.322
	Back Side	2.642	NA	0.787	NA	2.642	3.429	2.642	3.429
	Right Edge	NA	NA	0.025	NA	NA	0.025	NA	0.025
	Left Edge	NA	NA	1.341	NA	NA	1.341	NA	1.341
	Top Edge	3.085	NA	0.496	NA	3.085	3.581	3.085	3.581
	Bottom Edge	3.496	NA	NA	NA	3.496	3.496	3.496	3.496

Note: 1.The value with blue color is the maximum $\Sigma SAR_{1g/10g}$ Value.

2.MAX. $\Sigma SAR_{1g/10g}$ =Unlicensed SAR_{MAX} +Licensed SAR_{MAX}

MAX. ΣSAR_{1g} = 1.439W/kg<1.6W/kg and MAX. ΣSAR_{10g} =3.581W/kg<4 W/kg, so the Simultaneous transimition SAR with volum scan are not required for WWAN and WLAN 2.4G / WLAN 5G/BT Antenna.

11 Measurement Uncertainty

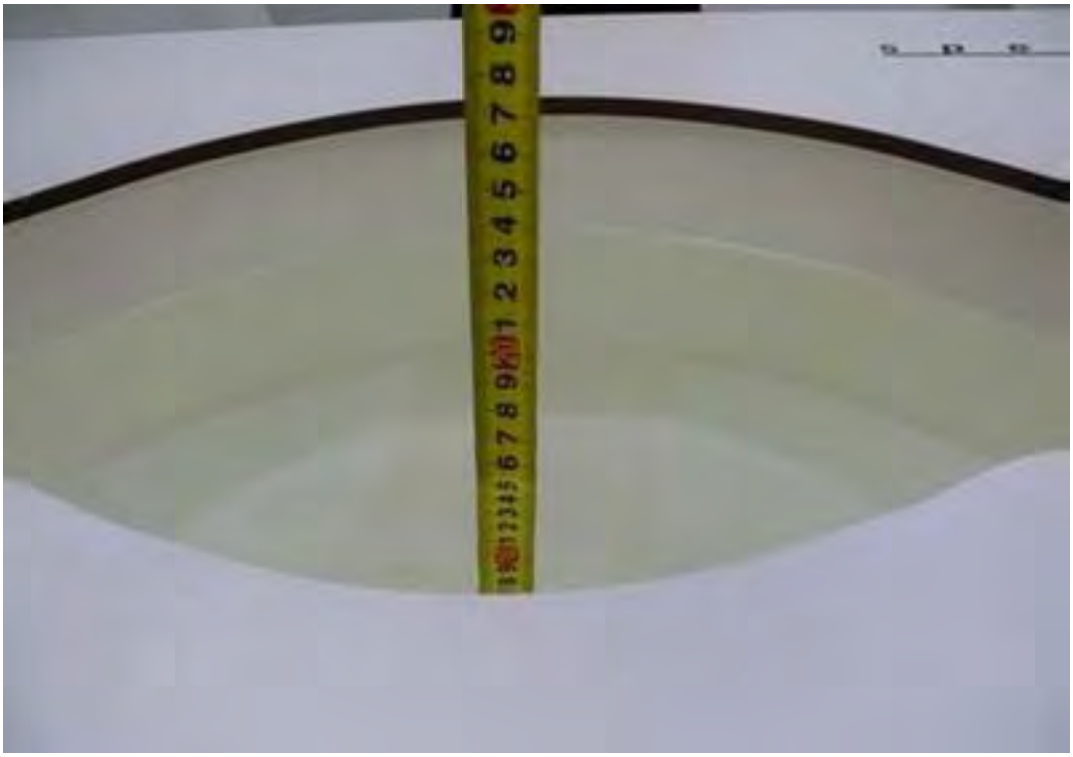
Per KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528- 2013 is not required in SAR reports submitted for equipment approval.

ANNEX A: Test Layout

Tissue Simulating Liquids

For the measurement of the field distribution inside the flat phantom with DASY, the phantom must be filled with around 25 liters of homogeneous body tissue simulating liquid. For Head and Body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm, which is shown in Picture 3 and Picture 4.

Picture 3: liquid depth in the head Phantom



Picture 4: Liquid depth in the flat Phantom

ANNEX B: System Check Results

Please See R2107A0659 SAR ANNEX B System Check Results & ANNEX C Graph Results

ANNEX C: Highest Graph Results

Please See R2107A0659 SAR ANNEX B System Check Results & ANNEX C Graph Results

ANNEX D: Probe Calibration Certificate

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

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

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

Accreditation No.: SCS 0108

Client Auden

Certificate No: EX3-7628_Feb21

CALIBRATION CERTIFICATE

Object EX3DV4 - SN:7628

Calibration procedure(s) QA CAL-01.v9, QA CAL-14.v6, QA CAL-23.v5, QA CAL-25.v7
Calibration procedure for dosimetric E-field probes

Calibration date: February 16, 2021

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	01-Apr-20 (No. 217-03100/03101)	Apr-21
Power sensor NRP-Z91	SN: 103244	01-Apr-20 (No. 217-03100)	Apr-21
Power sensor NRP-Z91	SN: 103245	01-Apr-20 (No. 217-03101)	Apr-21
Reference 20 dB Attenuator	SN: CC2552 (20x)	31-Mar-20 (No. 217-03106)	Apr-21
DAE4	SN: 660	23-Dec-20 (No. DAE4-660_Dec20)	Dec-21
Reference Probe ES3DV2	SN: 3013	30-Dec-20 (No. ES3-3013_Dec20)	Dec-21
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-20)	In house check: Jun-22
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-20)	In house check: Jun-22
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-20)	In house check: Jun-22
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-20)	In house check: Jun-22
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-20)	In house check: Oct-21

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

Issued: February 16, 2021

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

Certificate No: EX3-7628_Feb21 Page 1 of 23

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) 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 $\vartheta = 0$ ($f \le 900$ 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).

EX3DV4 – SN:7628 February 16, 2021

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7628

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu V/(V/m)^2$)[A]	0.61	0.56	0.61	± 10.1 %
DCP (mV)[B]	109.2	108.2	109.0	

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dB√μV	C	D dB	VR mV	Max dev.	Max Unc[E] (k=2)
0	CW	X	0.00	0.00	1.00	0.00	149.4	± 2.7 %	± 4.7 %
		Y	0.00	0.00	1.00		155.2		
		Z	0.00	0.00	1.00		166.3		
10352-AAA	Pulse Waveform (200Hz, 10%)	X	1.78	61.75	7.06	10.00	60.0	± 2.9 %	± 9.6 %
		Y	1.55	60.76	6.50		60.0		
		Z	1.58	60.81	6.57		60.0		
10353-AAA	Pulse Waveform (200Hz, 20%)	X	0.85	60.00	5.15	6.99	80.0	± 2.3 %	± 9.6 %
		Y	0.85	60.00	5.03		80.0		
		Z	0.79	60.00	4.98		80.0		
10354-AAA	Pulse Waveform (200Hz, 40%)	X	0.44	60.00	4.18	3.98	95.0	± 2.5 %	± 9.6 %
		Y	8.00	70.00	7.00		95.0		
		Z	0.10	132.92	0.43		95.0		
10355-AAA	Pulse Waveform (200Hz, 60%)	X	0.26	60.00	3.63	2.22	120.0	± 1.6 %	± 9.6 %
		Y	10.15	157.55	9.99		120.0		
		Z	7.49	159.80	25.97		120.0		
10387-AAA	QPSK Waveform, 1 MHz	X	0.71	69.02	16.11	1.00	150.0	± 3.3 %	± 9.6 %
		Y	0.53	63.89	12.42		150.0		
		Z	0.53	63.57	12.67		150.0		
10388-AAA	QPSK Waveform, 10 MHz	X	1.60	69.56	15.90	0.00	150.0	± 1.1 %	± 9.6 %
		Y	1.33	66.14	13.93		150.0		
		Z	1.33	66.05	14.03		150.0		
10396-AAA	64-QAM Waveform, 100 kHz	X	1.78	65.59	16.29	3.01	150.0	± 1.0 %	± 9.6 %
		Y	1.71	64.82	15.85		150.0		
		Z	1.57	63.48	15.49		150.0		
10399-AAA	64-QAM Waveform, 40 MHz	X	2.93	67.49	15.80	0.00	150.0	± 1.4 %	± 9.6 %
		Y	2.81	66.48	15.12		150.0		
		Z	2.80	66.27	15.10		150.0		
10414-AAA	WLAN CCDF, 64-QAM, 40MHz	X	3.83	66.82	15.68	0.00	150.0	± 2.5 %	± 9.6 %
		Y	3.77	66.09	15.24		150.0		
		Z	3.92	66.64	15.56		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.

EX3DV4– SN:7628 February 16, 2021

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7628

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	8.5	59.16	31.40	4.05	0.00	4.90	0.60	0.00	1.00
Y	9.3	65.93	32.35	4.45	0.00	4.92	0.54	0.00	1.00
Z	9.2	65.89	32.86	1.60	0.00	4.90	0.18	0.00	1.00

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	-144.2
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

Note: Measurement distance from surface can be increased to 3-4 mm for an *Area Scan* job.

Certificate No: EX3-7628_Feb21 Page 4 of 23

EX3DV4– SN:7628 February 16, 2021

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7628

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	10.48	10.48	10.48	0.43	0.80	± 12.0 %
835	41.5	0.90	10.15	10.15	10.15	0.46	0.80	± 12.0 %
900	41.5	0.97	9.77	9.77	9.77	0.51	0.86	± 12.0 %
1450	40.5	1.20	9.03	9.03	9.03	0.35	0.80	± 12.0 %
1750	40.1	1.37	8.76	8.76	8.76	0.28	0.86	± 12.0 %
1900	40.0	1.40	8.38	8.38	8.38	0.28	0.86	± 12.0 %
2000	40.0	1.40	8.29	8.29	8.29	0.37	0.88	± 12.0 %
2300	39.5	1.67	8.15	8.15	8.15	0.36	0.92	± 12.0 %
2450	39.2	1.80	8.01	8.01	8.01	0.27	0.92	± 12.0 %
2600	39.0	1.96	7.71	7.71	7.71	0.40	0.92	± 12.0 %
3300	38.2	2.71	7.24	7.24	7.24	0.30	1.35	± 13.1 %
3500	37.9	2.91	7.04	7.04	7.04	0.30	1.35	± 13.1 %
3700	37.7	3.12	7.00	7.00	7.00	0.35	1.35	± 13.1 %
3900	37.5	3.32	6.83	6.83	6.83	0.35	1.50	± 13.1 %
4100	37.2	3.53	6.73	6.73	6.73	0.35	1.50	± 13.1 %
4200	37.1	3.63	6.46	6.46	6.46	0.35	1.60	± 13.1 %
4400	36.9	3.84	6.39	6.39	6.39	0.35	1.60	± 13.1 %
4600	36.7	4.04	6.12	6.12	6.12	0.35	1.70	± 13.1 %
4800	36.4	4.25	6.16	6.16	6.16	0.40	1.80	± 13.1 %
4950	36.3	4.40	5.94	5.94	5.94	0.40	1.80	± 13.1 %
5250	35.9	4.71	5.51	5.51	5.51	0.40	1.80	± 13.1 %
5600	35.5	5.07	5.00	5.00	5.00	0.40	1.80	± 13.1 %
5750	35.4	5.22	4.95	4.95	4.95	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:7628

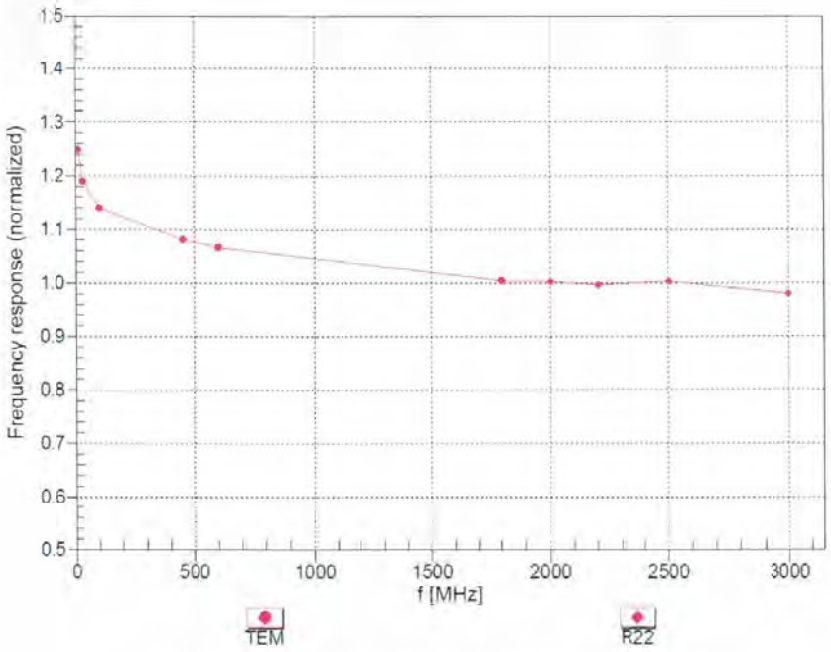
Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) [C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha [G]	Depth [G] (mm)	Unc (k=2)
6500	34.5	6.07	5.50	5.50	5.50	0.20	2.50	± 18.6 %
7000	33.9	6.65	5.60	5.60	5.60	0.25	2.50	± 18.6 %
8000	32.7	7.84	5.40	5.40	5.40	0.50	1.50	± 18.6 %
9000	31.5	9.08	5.35	5.35	5.35	0.50	1.80	± 18.6 %

[C] Frequency validity above 6GHz is ± 700 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.
[F] At frequencies 6-10 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. 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; below ± 2% for frequencies between 3-6 GHz; and below ± 4% for frequencies between 6-10 GHz at any distance larger than half the probe tip diameter from the boundary.

EX3DV4– SN:7628 February 16, 2021

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



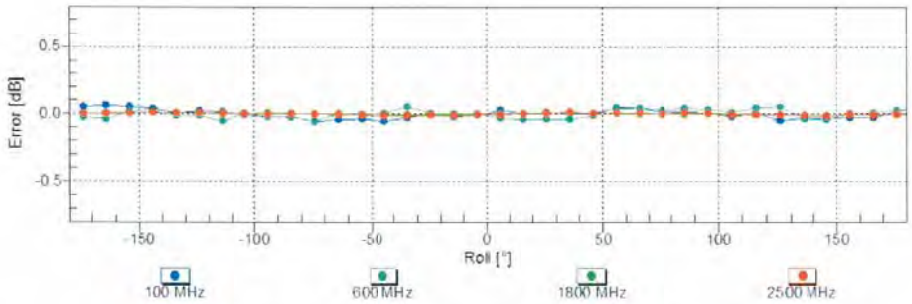
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

EX3DV4– SN:7628 February 16, 2021

Receiving Pattern (ϕ), ϑ = 0°

f=600 MHz,TEM

f=1800 MHz,R22

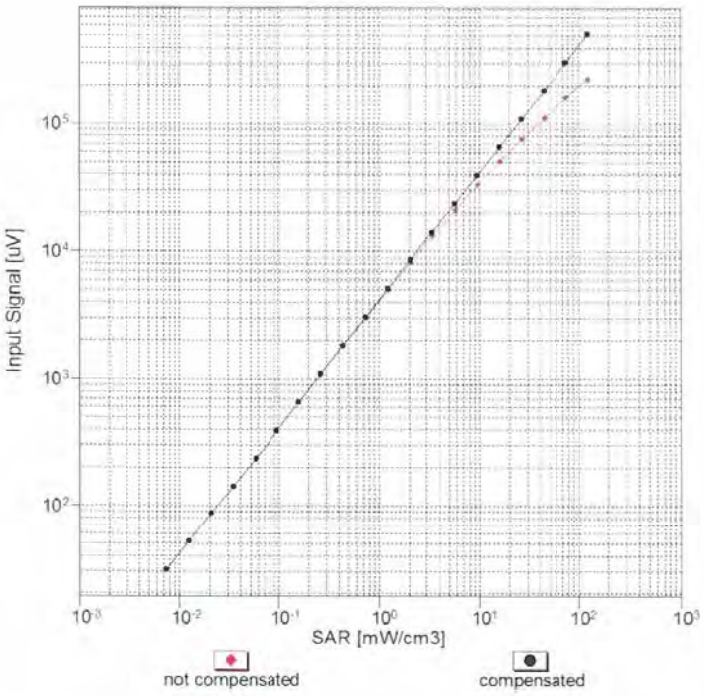


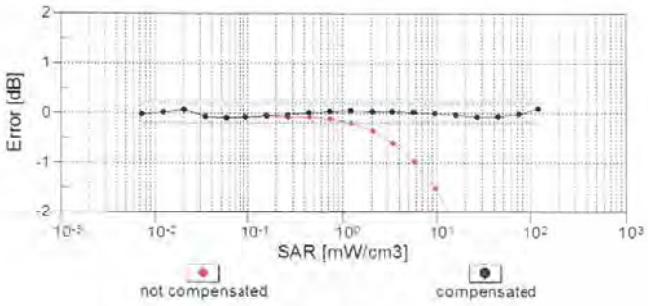
Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

Certificate No: EX3-7628_Feb21 Page 8 of 23

EX3DV4– SN:7628 February 16, 2021

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





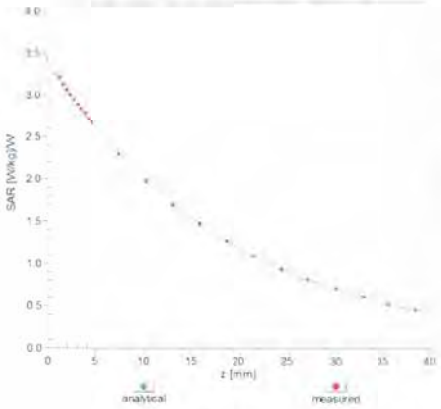
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Certificate No: EX3-7628_Feb21 Page 9 of 23

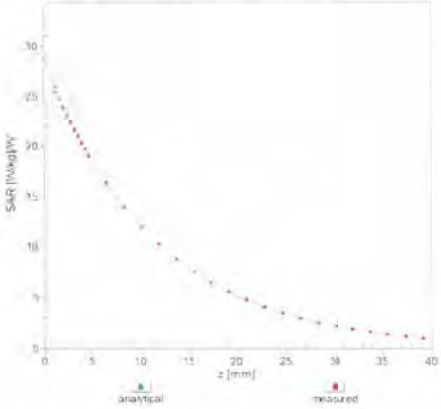
EX3DV4– SN:7628 February 16, 2021

Conversion Factor Assessment

f = 835 MHz,WGLS R9 (H_convF)

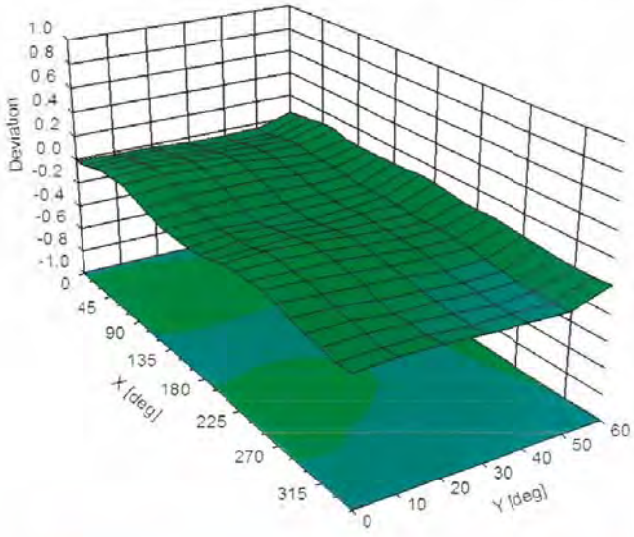


f = 1900 MHz,WGLS R22 (H_convF)



Deviation from Isotropy in Liquid

Error (ϕ, ϑ), f = 900 MHz



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

Certificate No: EX3-7628_Feb21 Page 10 of 23

EX3DV4– SN:7628 February 16, 2021

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	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	± 9.6 %
10063	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	± 9.6 %
10064	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	± 9.6 %
10065	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	± 9.6 %
10066	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	± 9.6 %
10067	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	± 9.6 %
10068	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	± 9.6 %
10069	CAD	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	CAC	UMTS-FDD (HSDPA)	WCDMA	3.98	± 9.6 %
10098	DAC	UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	± 9.6 %

Certificate No: EX3-7628_Feb21 Page 11 of 23

EX3DV4– SN:7628 February 16, 2021

10099	CAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	± 9.6 %
10100	CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5.67	± 9.6 %
10101	CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %
10102	CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10103	DAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10104	CAE	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	± 9.6 %
10105	CAE	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	± 9.6 %
10108	CAE	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	CAG	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10115	CAG	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	± 9.6 %
10116	CAG	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	± 9.6 %
10117	CAG	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	± 9.6 %
10118	CAD	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	± 9.6 %
10119	CAD	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	± 9.6 %
10140	CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10141	CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	± 9.6 %
10142	CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10143	CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	± 9.6 %
10144	CAC	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	± 9.6 %
10145	CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	± 9.6 %
10146	CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	± 9.6 %
10147	CAC	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	CAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	± 9.6 %
10152	CAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10153	CAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.05	± 9.6 %
10154	CAF	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10155	CAF	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10156	CAF	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	± 9.6 %
10157	CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10158	CAE	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	CAG	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	± 9.6 %
10161	CAG	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10162	CAG	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	± 9.6 %
10166	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	± 9.6 %
10167	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	± 9.6 %
10168	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	± 9.6 %
10169	CAG	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10170	CAG	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10171	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	± 9.6 %
10172	CAE	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10173	CAE	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10174	CAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10175	CAF	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10176	CAF	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10177	CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10178	CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10179	AAE	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 %

Certificate No: EX3-7628_Feb21 Page 12 of 23

10181	CAG	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10182	CAG	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10183	CAG	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10184	CAG	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10185	CAI	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	± 9.6 %
10186	CAG	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10187	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10188	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10189	CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10193	CAE	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	± 9.6 %
10194	AAD	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	± 9.6 %
10195	CAE	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	± 9.6 %
10196	CAE	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10197	AAE	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	± 9.6 %
10198	CAF	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	± 9.6 %
10219	CAF	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	± 9.6 %
10220	AAF	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	CAD	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	± 9.6 %
10224	CAD	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN	8.08	± 9.6 %
10225	CAD	UMTS-FDD (HSPA+)	WCDMA	5.97	± 9.6 %
10226	CAD	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	± 9.6 %
10227	CAD	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	± 9.6 %
10228	CAD	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	± 9.6 %
10229	DAC	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	CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10233	CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10234	CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10235	CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10236	CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10237	CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10238	CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10239	CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10240	CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10241	CAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	± 9.6 %
10242	CAD	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	± 9.6 %
10243	CAD	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	± 9.6 %
10244	CAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	± 9.6 %
10245	CAG	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	± 9.6 %
10246	CAG	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	± 9.6 %
10247	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	± 9.6 %
10248	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	± 9.6 %
10249	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10250	CAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	± 9.6 %
10251	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	CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	± 9.6 %
10255	CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD	9.20	± 9.6 %
10256	CAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	± 9.6 %
10257	CAD	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	± 9.6 %
10258	CAD	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	± 9.6 %
10259	CAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	± 9.6 %

10260	CAG	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	± 9.6 %
10261	CAG	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	± 9.6 %
10262	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	± 9.6 %
10263	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	± 9.6 %
10264	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	± 9.6 %
10265	CAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10266	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	CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-TDD	10.13	± 9.6 %
10270	CAB	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	CAD	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	WCDMA	3.96	± 9.6 %
10277	CAD	PHS (QPSK)	PHS	11.81	± 9.6 %
10278	CAD	PHS (QPSK, BW 884MHz, Rolloff 0.5)	PHS	11.81	± 9.6 %
10279	CAG	PHS (QPSK, BW 884MHz, Rolloff 0.38)	PHS	12.18	± 9.6 %
10290	CAG	CDMA2000, RC1, SO55, Full Rate	CDMA2000	3.91	± 9.6 %
10291	CAG	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3.46	± 9.6 %
10292	CAG	CDMA2000, RC3, SO32, Full Rate	CDMA2000	3.39	± 9.6 %
10293	CAG	CDMA2000, RC3, SO3, Full Rate	CDMA2000	3.50	± 9.6 %
10295	CAG	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	CDMA2000	12.49	± 9.6 %
10297	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.81	± 9.6 %
10298	CAF	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10299	CAF	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	± 9.6 %
10300	CAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10301	CAC	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	WiMAX	12.03	± 9.6 %
10302	CAB	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3CTRL)	WiMAX	12.57	± 9.6 %
10303	CAB	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	12.52	± 9.6 %
10304	CAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	11.86	± 9.6 %
10305	CAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC)	WiMAX	15.24	± 9.6 %
10306	CAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC)	WiMAX	14.67	± 9.6 %
10307	AAB	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC)	WiMAX	14.49	± 9.6 %
10308	AAB	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	WiMAX	14.46	± 9.6 %
10309	AAB	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM,AMC 2x3)	WiMAX	14.58	± 9.6 %
10310	AAB	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3	WiMAX	14.57	± 9.6 %
10311	AAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-FDD	6.06	± 9.6 %
10313	AAD	iDEN 1:3	iDEN	10.51	± 9.6 %
10314	AAD	iDEN 1:6	iDEN	13.48	± 9.6 %
10315	AAD	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc dc)	WLAN	1.71	± 9.6 %
10316	AAD	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc dc)	WLAN	8.36	± 9.6 %
10317	AAA	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc dc)	WLAN	8.36	± 9.6 %
10352	AAA	Pulse Waveform (200Hz, 10%)	Generic	10.00	± 9.6 %
10353	AAA	Pulse Waveform (200Hz, 20%)	Generic	6.99	± 9.6 %
10354	AAA	Pulse Waveform (200Hz, 40%)	Generic	3.98	± 9.6 %
10355	AAA	Pulse Waveform (200Hz, 60%)	Generic	2.22	± 9.6 %
10356	AAA	Pulse Waveform (200Hz, 80%)	Generic	0.97	± 9.6 %
10387	AAA	QPSK Waveform, 1 MHz	Generic	5.10	± 9.6 %
10388	AAA	QPSK Waveform, 10 MHz	Generic	5.22	± 9.6 %
10396	AAA	64-QAM Waveform, 100 kHz	Generic	6.27	± 9.6 %
10399	AAA	64-QAM Waveform, 40 MHz	Generic	6.27	± 9.6 %
10400	AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc dc)	WLAN	8.37	± 9.6 %
10401	AAA	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc dc)	WLAN	8.60	± 9.6 %
10402	AAA	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc dc)	WLAN	8.53	± 9.6 %
10403	AAB	CDMA2000 (1xEV-DO, Rev. 0)	CDMA2000	3.76	± 9.6 %
10404	AAB	CDMA2000 (1xEV-DO, Rev. A)	CDMA2000	3.77	± 9.6 %
10406	AAD	CDMA2000, RC3, SO32, SCH0, Ful Rate	CDMA2000	5.22	± 9.6 %