FCC SAR TEST REPORT

FCC ID	**:**	**A4RGD1YQ**
Equipment	**:**	**Phone**
Model Name	**:**	**GD1YQ**
Applicant	**:**	**Google LLC** **1600 Amphitheatre Parkway,** **Mountain View, California, 94043 USA**
Standard	**:**	**FCC 47 CFR Part 2 (2.1093)** **ANSI/IEEE C95.1-1992** **IEEE 1528-2013**

The product was received on Apr. 17, 2020 and testing was started from Jun. 11, 2020 and completed on Jul. 01, 2020. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Cona Huang

Approved by: Cona Huang / Deputy Manager

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History of this test report

Report No.	Version	Description	Issued Date
FA011718-01A	01	Initial issue of report	Jul. 23, 2020
FA011718-01A	02	Update section 3.2 and appendix B	Jul. 29, 2020
FA011718-01A	03	1. Update BT Head SAR test results and appendix B 2. Update typo on page 106	Jul. 31, 2020
FA011718-01A	04	1. Update section1, section3.2, section4, section15.2, section15.3, section16.3 and appendix D.	Aug. 14, 2020

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for Google LLC, Phone, GD1YQ, are as follows.

Equipment Class	Frequency Band	Highest SAR Summary			Highest Simultaneous Transmission 1g SAR (W/kg)
		Head (Separation 0mm)	Body-worn (Separation 10mm)	Hotspot (Separation 10mm)	
		1g SAR (W/kg)			
Licensed	GSM850	0.36	0.29	0.54	1.57
	GSM1900	0.37	0.89	0.96	
	WCDMA II	0.45	1.02	0.89	
	WCDMA IV	0.42	1.03	0.93	
	WCDMA V	0.55	0.30	0.56	
	CDMA BC0	0.59	0.31	0.56	
	CDMA BC1	0.50	1.10	0.91	
	CDMA BC10	0.50	0.30	0.49	
	LTE Band 7	0.74	1.18	0.97	
	LTE Band 12 / 17	0.41	0.30	0.31	
	LTE Band 13	0.47	0.34	0.45	
	LTE Band 14	0.50	0.33	0.44	
	LTE Band 2 / 25	0.55	1.05	0.87	
	LTE Band 5 / 26	0.69	0.32	0.48	
	LTE Band 30	0.77	1.18	0.99	
	LTE Band 38 / 41	0.54	1.10	0.86	
	LTE Band 48	0.79	0.89	0.97	
	LTE Band 4 / 66	0.59	1.04	0.93	
	LTE Band 71	0.40	0.24	0.24	
	FR1 n5	0.48	0.24	0.24	
	FR1 n7	0.46	1.12	0.96	
	FR1 n12	0.44	0.22	0.23	
	FR1 n 2 / 25	0.57	1.12	0.93	
	FR1 n41	1.16	0.52	0.87	
	FR1 n66	0.36	0.59	0.62	
	FR1 n71	0.32	0.13	0.19	
DTS	2.4GHz WLAN	0.30	0.23	0.28	1.57
NII	5GHz WLAN	0.25	0.58	0.58	1.57
DSS	Bluetooth	0.11	0.02	0.07	1.56
Date of Testing:		2020/6/11 ~ 2020/7/1			

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190) and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC test. This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg) specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and FCC KDB publications.

Reviewed by: Jason Wang

Report Producer: Daisy Peng

2. Guidance Applied

The Specific Absorption Rate (SAR) testing specification, method, and procedure for this device is in accordance with the following standards:

- FCC 47 CFR Part 2 (2.1093)
- ANSI/IEEE C95.1-1992
- IEEE 1528-2013
- FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
- FCC KDB 865664 D02 SAR Reporting v01r02
- FCC KDB 447498 D01 General RF Exposure Guidance v06
- FCC KDB 648474 D04 SAR Evaluation Considerations for Wireless Handsets v01r03
- FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02
- FCC KDB 941225 D01 3G SAR Procedures v03r01
- FCC KDB 941225 D05 SAR for LTE Devices v02r05
- FCC KDB 941225 D05A Rel.10 LTE SAR Test Guidance v01r02
- FCC KDB 941225 D06 Hotspot Mode SAR v02r01
- FCC KDB 941225 D07 UMPC Mini Tablet v01r02

3. Equipment Under Test (EUT) Information

3.1 General Information

Product Feature & Specification	
Equipment Name	Phone
Model Name	GD1YQ
FCC ID	A4RGD1YQ
Wireless Technology and Frequency Range	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz CDMA2000 BC0: 824.7 MHz ~ 848.31 MHz CDMA 2000 BC1: 1851.25 MHz ~ 1908.75 MHz CDMA 2000 BC10: 817.9 MHz ~ 823.1 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz 5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n12 : 699 MHz ~ 716 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n71 : 663 MHz ~ 698 MHz 5G NR n260: 37GHz ~ 40GHz 5G NR n261: 27.5GHz ~ 28.35GHz WLAN 2.4GHz Band: 2412 MHz ~ 2472 MHz WLAN 5.2GHz Band: 5150 MHz ~ 5250 MHz WLAN 5.3GHz Band: 5250 MHz ~ 5350 MHz WLAN 5.6GHz Band: 5470 MHz ~ 5725 MHz WLAN 5.8GHz Band: 5725 MHz ~ 5825 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz NFC: 13.56 MHz WPT: 110KHz ~ 148.5KHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA HSUPA DC-HSDPA LTE: QPSK, 16QAM, 64QAM 5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM WLAN: 802.11a/b/g/n/ac HT20/HT40/VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE NFC/WPT: ASK
GSM / (E)GPRS Transfer mode	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.
Remark: 1. This device implements open loop antenna tuning techniques for several WWAN (cellular) operating modes. Specifically, this technique is employed in the GSM, WCDMA, CDMA and LTE modes. The detail descriptions of the antenna tuner are included in the operational description. 2. The device implements the power management and sensor detection for SAR compliance at different exposure conditions (head, body-worn, hotspot) and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. Details about the power management decision and sensor detection are provided in the operational description. 3. This device WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications	

3.2 Maximum Tune-up Limit

General Note:

1. For each cellular band, the device has several WWAN antennas, the antenna selection is based on the connection quality condition, and only one antenna will transmit at a time.
2. The device implements the power management and sensor detection for SAR compliance at different exposure conditions (head, body-worn, hotspot) by DSI and the Qualcomm Smart Transmit will manage to ensure the power level not exceeding the associated power table. Details about the power management decision and sensor detection are provided in the operational description.
3. Below table shows maximum tune up output power configured for this EUT for various transmit conditions (Device State Index DSI) by manufacturer, and the detail power measurement and tune-up limit refer to appendix D
4. In the table below which the DSI may have difference output power level. If some DSI output power measurement was not include in the appendix D, because the same output power level has been presented within the other DSI and use the same level to do SAR tested.
5. The DSI 0 was not used for SAR testing, the other DSI may have the same power levels but DSI 0 is covered for all modes under the mobile RF exposure evaluation, please refer to Sporton's test report FA011718-01B

Antenna configuration	
Config*	Support transmit antenna and band
Config 0	ANT 0: GSM850, UMTS B5, CDMA BC0/BC10, LTE B5/B12/B13/B14/B17/B26/B71, NR n5/n12/n71 ANT 2: GSM1900, UMTS B2/B4, CDMA BC1, LTE B2/B4/B7/B25/B30/B66/B38/B41, NR n2/n7/n25/n41/n66 ANT 5: NR n41 HPUE ANT 7: LTE B48
Config 1	ANT 0: UMTS B2/B4, CDMA BC1, LTE B2/B4/B7/B25/B30/B66/B38/B41, NR n2/n7/n25/n41/n66 ANT 1: UMTS B5, CDMA BC0/BC10, LTE B5/B12/B13/B14/B17/B26/B71, NR n5/n12/n71 ANT 2: LTE B48

*Config 0 and 1 means output ports of power measurement for different antennas and bands.

Config0			Maximum Transmit Power Level (dBm)					
Radio Tech	Band Number	Antenna name	DSI_0	DSI_2	DSI_4	DSI_6	DSI_7	DSI_8
			Default	Head Standalone	Body Standalone	Hotspot Simultaneous Transmit	Head Simultaneous Transmit	Body Simultaneous Transmit
GSM1Tx	850	ANT0	33.7	33.7	33.7	33.7	33.7	33.7
GSM2Tx	850	ANT0	32.0	32.0	32.0	32.0	32.0	32.0
GSM3Tx	850	ANT0	31.0	31.0	31.0	31.0	31.0	31.0
GSM4Tx	850	ANT0	30.0	30.0	30.0	30.0	30.0	30.0
EGPRS1Tx	850	ANT0	28.0	28.0	28.0	28.0	28.0	28.0
EGPRS2Tx	850	ANT0	27.0	27.0	27.0	27.0	27.0	27.0
EGPRS3Tx	850	ANT0	27.0	27.0	27.0	27.0	27.0	27.0
EGPRS4Tx	850	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
GSM1Tx	1900	ANT2	31.0	31.0	31.0	31.0	31.0	31.0
GSM2Tx	1900	ANT2	29.5	29.5	29.5	29.5	29.5	29.5
GSM3Tx	1900	ANT2	29.0	29.0	29.0	29.0	29.0	29.0
GSM4Tx	1900	ANT2	28.0	28.0	28.0	28.0	28.0	28.0
EGPRS1Tx	1900	ANT2	27.0	27.0	27.0	27.0	27.0	27.0
EGPRS2Tx	1900	ANT2	26.0	26.0	26.0	26.0	26.0	26.0
EGPRS3Tx	1900	ANT2	25.0	25.0	25.0	25.0	25.0	25.0
EGPRS4Tx	1900	ANT2	24.0	24.0	24.0	24.0	24.0	24.0
WCDMA AMR/RMC	B2	ANT2	25.0	25.0	25.0	24.2	25.0	24.7
WCDMA HSDPA/HSUPA	B2	ANT2	24.0	24.0	24.0	23.2	24.0	23.7
WCDMA AMR/RMC	B4	ANT2	25.0	25.0	25.0	24.8	25.0	25.0
WCDMA HSDPA/HSUPA	B4	ANT2	24.0	24.0	24.0	23.8	24.0	24.0
WCDMA AMR/RMC	B5	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
WCDMA HSDPA/HSUPA	B5	ANT0	24.0	24.0	24.0	24.0	24.0	24.0
CDMA	BC0	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
CDMA	BC1	ANT2	25.0	25.0	24.7	23.7	25.0	23.9
CDMA	BC10	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B2	ANT2	25.0	25.0	25.0	24.2	25.0	24.2
LTE	B4	ANT2	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B5	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B7	ANT2	25.0	25.0	23.1	18.7	25.0	22.3
LTE	B12	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B13	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B14	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B17	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B25	ANT2	25.0	25.0	25.0	24.2	25.0	24.2
LTE	B26	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B30	ANT2	25.0	25.0	22.9	19.7	25.0	22.1
LTE	B38	ANT2	25.0	25.0	25.0	20.2	25.0	24.2
LTE	B38_HPUE	ANT2	27.5	27.5	26.6	21.8	27.5	25.8
LTE	B41	ANT2	25.0	25.0	25.0	20.2	25.0	24.2
LTE	B41_HPUE	ANT2	27.5	27.5	26.6	21.8	27.5	25.8
LTE	B48	ANT7	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B66	ANT2	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B71	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
5G FR1	n2	ANT2	25.0	25.0	24.9	24.1	25.0	24.1
5G FR1	n5	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
5G FR1	n7	ANT2	25.0	25.0	22.6	19.2	25.0	21.8
5G FR1	n12	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
5G FR1	n25	ANT2	25.0	25.0	25.0	24.1	25.0	25.0
5G FR1	n41	ANT2	25.0	25.0	25.0	25.0	25.0	24.1
5G FR1	n41_HPUE	ANT5	27.5	25.2	27.5	27.5	24.4	27.5
5G FR1	n66	ANT2	25.0	25.0	25.0	25.0	25.0	25.0
5G FR1	n71	ANT0	25.0	25.0	25.0	25.0	25.0	25.0

Config1			Maximum Transmit Power Level (dBm)					
Radio Tech	Band Number	Antenna name	DSI_0	DSI_2	DSI_4	DSI_6	DSI_7	DSI_8
			Default	Head Standalone	Body Standalone	Hotspot Simultaneous Transmit	Head Simultaneous Transmit	Body Simultaneous Transmit
WCDMA AMR/RMC	B2	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
WCDMA HSDPA/HSUPA	B2	ANT0	24.0	24.0	24.0	24.0	24.0	24.0
WCDMA AMR/RMC	B4	ANT0	25.0	25.0	23.0	21.9	25.0	22.2
WCDMA HSDPA/HSUPA	B4	ANT0	24.0	24.0	22.0	20.9	24.0	21.2
WCDMA AMR/RMC	B5	ANT1	25.0	25.0	25.0	25.0	25.0	25.0
WCDMA HSDPA/HSUPA	B5	ANT1	24.0	24.0	24.0	24.0	24.0	24.0
CDMA	BC0	ANT1	25.0	25.0	25.0	25.0	25.0	25.0
CDMA	BC1	ANT0	25.0	25.0	25.0	24.1	25.0	25.0
CDMA	BC10	ANT1	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B2	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B4	ANT0	25.0	25.0	23.0	21.7	25.0	22.2
LTE	B5	ANT1	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B7	ANT0	25.0	25.0	25.0	24.7	25.0	24.7
LTE	B12	ANT1	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B13	ANT1	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B14	ANT1	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B17	ANT1	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B25	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B26	ANT1	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B30	ANT0	25.0	25.0	25.0	24.7	25.0	25.0
LTE	B38	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B38_HPUE	ANT0	27.5	27.5	27.5	27.5	27.5	27.5
LTE	B41	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
LTE	B41_HPUE	ANT0	27.5	27.5	27.5	27.5	27.5	27.5
LTE	B48	ANT2	23.5	23.5	23.5	23.5	23.5	23.5
LTE	B66	ANT0	25.0	25.0	23.0	21.7	25.0	22.2
LTE	B71	ANT1	25.0	25.0	25.0	25.0	25.0	25.0
5G FR1	n2	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
5G FR1	n5	ANT1	25.0	25.0	25.0	25.0	25.0	25.0
5G FR1	n7	ANT0	25.0	25.0	25.0	24.8	25.0	24.8
5G FR1	n12	ANT1	25.0	25.0	25.0	25.0	25.0	25.0
5G FR1	n25	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
5G FR1	n41	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
5G FR1	n66	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
5G FR1	n71	ANT1	25.0	25.0	25.0	25.0	25.0	25.0

<WLAN Maximum Power>

General Note:

1. The device implements the power management for WLAN SAR compliance at different exposure conditions (head, body-worn, hotspot). The control logic about the power management decision is provided in the operational description.
2. The WLAN power table relate to each exposure condition is description below:
   a. Default Power Table: when operate at mobile condition.
   b. Power Table 1: when operate at body condition in standalone or transmit simultaneous with Bluetooth when WWAN off.
   c. Power Table 2: when operate at head exposure condition.
   d. Power Table 3: when operate at hotspot or body exposure condition when transmit simultaneously with WWAN on.

<Default Power Table>

<2.4GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	23	23	23	23	26
		6	2437	23	23	23	23	26
		11	2462	23	23	23	23	26
		12	2467	18.5	18.5	18.5	18.5	21.5
		13	2472	14	14	14	14	17
	802.11g 6Mbps	1	2412	18.5	18.5	18.5	18.5	21.5
		6	2437	22	22	22	22	25
		11	2462	18	18	18	18	21
		12	2467	12.5	12.5	12.5	12.5	15.5
		13	2472	2	-2	2	-2	3.5
	802.11n-HT20 MCS0	1	2412	18	18	18	18	21
		6	2437	22.5	22.5	22.5	22.5	25.5
		11	2462	17.5	17.5	17.5	17.5	20.5
		12	2467	10.5	10.5	10.5	10.5	13.5
		13	2472	2	-2	2	-2	3.5
	802.11ac-VHT20 MCS0	1	2412	18	18	18	18	21
		6	2437	22.5	22.5	22.5	22.5	25.5
		11	2462	17.5	17.5	17.5	17.5	20.5
		12	2467	10.5	10.5	10.5	10.5	13.5
		13	2472	2	-2	2	-2	3.5

<5GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	18.5	18.5	18.5	18.5	21.5
		40	5200	18.5	18.5	18.5	18.5	21.5
		44	5220	18.5	18.5	18.5	18.5	21.5
		48	5240	17.5	17.5	17.5	17.5	20.5
	802.11n-HT20 MCS0	36	5180	18.5	18.5	18.5	18.5	21.5
		40	5200	18.5	18.5	18.5	18.5	21.5
		44	5220	18.5	18.5	18.5	18.5	21.5
		48	5240	18.5	18.5	18.5	18.5	21.5
	802.11n-HT40 MCS0	38	5190	13	13	13	13	16
		46	5230	21	21	21	21	24
	802.11ac-VHT20 MCS0	36	5180	18.5	18.5	18.5	18.5	21.5
		40	5200	18.5	18.5	18.5	18.5	21.5
		44	5220	18.5	18.5	18.5	18.5	21.5
		48	5240	18.5	18.5	18.5	18.5	21.5
	802.11ac-VHT40 MCS0	38	5190	13	13	13	13	16
		46	5230	21	21	21	21	24
	802.11ac-VHT80 MCS0	42	5210	12.5	12.5	12.5	12.5	15.5

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	17.5	17.5	17.5	17.5	20.5
		56	5280	17.5	17.5	17.5	17.5	20.5
		60	5300	17.5	17.5	17.5	17.5	20.5
		64	5320	17.5	17.5	17.5	17.5	20.5
	802.11n-HT20 MCS0	52	5260	18	18	18	18	21
		56	5280	18	18	18	18	21
		60	5300	18	18	18	18	21
		64	5320	18	18	18	18	21
	802.11n-HT40 MCS0	54	5270	21	21	21	21	24
		62	5310	13.5	13.5	13.5	13.5	16.5
	802.11ac-VHT20 MCS0	52	5260	18	18	18	18	21
		56	5280	18	18	18	18	21
		60	5300	18	18	18	18	21
		64	5320	18	18	18	18	21
	802.11ac-VHT40 MCS0	54	5270	21	21	21	21	24
		62	5310	13.5	13.5	13.5	13.5	16.5
	802.11ac-VHT80 MCS0	58	5290	12	12	12	12	15

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	18	18	18	18	21
		116	5580	18	18	18	18	21
		124	5620	18	18	18	18	21
		132	5660	18	18	18	18	21
		140	5700	18	18	18	18	21
		144	5720	18	18	18	18	21
	802.11n-HT20 MCS0	100	5500	18	18	18	18	21
		116	5580	18	18	18	18	21
		124	5620	18	18	18	18	21
		132	5660	18	18	18	18	21
		140	5700	18	18	18	18	21
		144	5720	18	18	18	18	21
	802.11n-HT40 MCS0	102	5510	16	16	16	16	19
		110	5550	21	21	21	21	24
		126	5630	21	21	21	21	24
		134	5670	21	21	21	21	24
		142	5710	21	21	21	21	24
	802.11ac-VHT20 MCS0	100	5500	18	18	18	18	21
		116	5580	18	18	18	18	21
		124	5620	18	18	18	18	21
		132	5660	18	18	18	18	21
		140	5700	18	18	18	18	21
		144	5720	18	18	18	18	21
	802.11ac-VHT40 MCS0	102	5510	16	16	16	16	19
		110	5550	21	21	21	21	24
		126	5630	21	21	21	21	24
		134	5670	21	21	21	21	24
		142	5710	21	21	21	21	24
	802.11ac-VHT80 MCS0	106	5530	13	13	13	13	16
		122	5610	21	21	21	21	24
		138	5690	21	21	21	21	24

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	21	21	21	21	24
		157	5785	21	21	21	21	24
		165	5825	21	21	21	21	24
	802.11n-HT20 MCS0	149	5745	21	21	21	21	24
		157	5785	21	21	21	21	24
		165	5825	21	21	21	21	24
	802.11n-HT40 MCS0	151	5755	21	21	21	21	24
		159	5795	21	21	21	21	24
	802.11ac-VHT20 MCS0	149	5745	21	21	21	21	24
		157	5785	21	21	21	21	24
		165	5825	21	21	21	21	24
	802.11ac-VHT40 MCS0	151	5755	21	21	21	21	24
		159	5795	21	21	21	21	24
	802.11ac-VHT80 MCS0	155	5775	21	21	21	21	24

<Power Table 1>

<2.4GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	23	23	23	23	26
		6	2437	23	23	23	23	26
		11	2462	23	23	23	23	26
		12	2467	18.5	18.5	18.5	18.5	21.5
		13	2472	14	14	14	14	17
	802.11g 6Mbps	1	2412	18.5	18.5	18.5	18.5	21.5
		6	2437	22	22	22	22	25
		11	2462	18	18	18	18	21
		12	2467	12.5	12.5	12.5	12.5	15.5
		13	2472	2	-2	2	-2	3.5
	802.11n-HT20 MCS0	1	2412	18	18	18	18	21
		6	2437	22.5	22.5	22.5	22.5	25.5
		11	2462	17.5	17.5	17.5	17.5	20.5
		12	2467	10.5	10.5	10.5	10.5	13.5
		13	2472	2	-2	2	-2	3.5
	802.11ac-VHT20 MCS0	1	2412	18	18	18	18	21
		6	2437	22.5	22.5	22.5	22.5	25.5
		11	2462	17.5	17.5	17.5	17.5	20.5
		12	2467	10.5	10.5	10.5	10.5	13.5
		13	2472	2	-2	2	-2	3.5

<5GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	18.5	18.5	18.5	18.5	21.5
		40	5200	18.5	18.5	18.5	18.5	21.5
		44	5220	18.5	18.5	18.5	18.5	21.5
		48	5240	17.5	17.5	17.5	17.5	20.5
	802.11n-HT20 MCS0	36	5180	18.5	18.5	18.5	18.5	21.5
		40	5200	18.5	18.5	18.5	18.5	21.5
		44	5220	18.5	18.5	18.5	18.5	21.5
		48	5240	18.5	18.5	18.5	18.5	21.5
	802.11n-HT40 MCS0	38	5190	13	13	13	13	16
		46	5230	21	21	21	21	24
	802.11ac-VHT20 MCS0	36	5180	18.5	18.5	18.5	18.5	21.5
		40	5200	18.5	18.5	18.5	18.5	21.5
		44	5220	18.5	18.5	18.5	18.5	21.5
		48	5240	18.5	18.5	18.5	18.5	21.5
	802.11ac-VHT40 MCS0	38	5190	13	13	13	13	16
		46	5230	21	21	21	21	24
	802.11ac-VHT80 MCS0	42	5210	12.5	12.5	12.5	12.5	15.5

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	17.5	17.5	17.5	17.5	20.5
		56	5280	17.5	17.5	17.5	17.5	20.5
		60	5300	17.5	17.5	17.5	17.5	20.5
		64	5320	17.5	17.5	17.5	17.5	20.5
	802.11n-HT20 MCS0	52	5260	18	18	18	18	21
		56	5280	18	18	18	18	21
		60	5300	18	18	18	18	21
		64	5320	18	18	18	18	21
	802.11n-HT40 MCS0	54	5270	21	21	21	21	24
		62	5310	13.5	13.5	13.5	13.5	16.5
	802.11ac-VHT20 MCS0	52	5260	18	18	18	18	21
		56	5280	18	18	18	18	21
		60	5300	18	18	18	18	21
		64	5320	18	18	18	18	21
	802.11ac-VHT40 MCS0	54	5270	21	21	21	21	24
		62	5310	13.5	13.5	13.5	13.5	16.5
	802.1118.00ac-VHT80 MCS0	58	5290	12	12	12	12	15

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	18	18	18	18	21
		116	5580	18	18	18	18	21
		124	5620	18	18	18	18	21
		132	5660	18	18	18	18	21
		140	5700	18	18	18	18	21
		144	5720	18	18	18	18	21
	802.11n-HT20 MCS0	100	5500	18	18	18	18	21
		116	5580	18	18	18	18	21
		124	5620	18	18	18	18	21
		132	5660	18	18	18	18	21
		140	5700	18	18	18	18	21
		144	5720	18	18	18	18	21
	802.11n-HT40 MCS0	102	5510	16	16	16	16	19
		110	5550	21	21	21	21	24
		126	5630	21	21	21	21	24
		134	5670	21	21	21	21	24
		142	5710	20.5	20.5	20.5	20.5	23.5
	802.11ac-VHT20 MCS0	100	5500	18	18	18	18	21
		116	5580	18	18	18	18	21
		124	5620	18	18	18	18	21
		132	5660	18	18	18	18	21
		140	5700	18	18	18	18	21
		144	5720	18	18	18	18	21
	802.11ac-VHT40 MCS0	102	5510	16	16	16	16	19
		110	5550	21	21	21	21	24
		126	5630	21	21	21	21	24
		134	5670	20.5	20.5	20.5	20.5	23.5
		142	5710	20.5	20.5	20.5	20.5	23.5
	802.11ac-VHT80 MCS0	106	5530	13	13	13	13	16
		122	5610	21	21	21	21	24
		138	5690	20.5	20.5	20.5	20.5	23.5

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	21	21	21	21	24
		157	5785	21	21	21	21	24
		165	5825	21	21	21	21	24
	802.11n-HT20 MCS0	149	5745	21	21	21	21	24
		157	5785	20.5	20.5	20.5	20.5	23.5
		165	5825	20.5	20.5	20.5	20.5	23.5
	802.11n-HT40 MCS0	151	5755	21	21	21	21	24
		159	5795	21	21	21	21	24
	802.11ac-VHT20 MCS0	149	5745	21	21	21	21	24
		157	5785	20.5	20.5	20.5	20.5	23.5
		165	5825	20.5	20.5	20.5	20.5	23.5
	802.11ac-VHT40 MCS0	151	5755	21	21	21	21	24
		159	5795	21	21	21	21	24
	802.11ac-VHT80 MCS0	155	5775	21	21	21	21	24

<Power Table 2>

<2.4GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	16.00	17.50	16.00	17.50	19.80
		6	2437	16.00	17.50	16.00	17.50	19.80
		11	2462	16.00	17.50	16.00	17.50	19.80
		12	2467	16.00	17.50	16.00	17.50	19.80
		13	2472	16.00	17.50	16.00	17.50	19.80
	802.11g 6Mbps	1	2412	16.00	17.50	16.00	17.50	19.80
		6	2437	16.00	17.50	16.00	17.50	19.80
		11	2462	16.00	17.50	16.00	17.50	19.80
		12	2467	12.50	12.50	12.50	12.50	15.50
		13	2472	2.00	0.00	2.00	0.00	4.10
	802.11n-HT20 MCS0	1	2412	16.00	17.50	16.00	17.50	19.80
		6	2437	16.00	17.50	16.00	17.50	19.80
		11	2462	16.00	17.50	16.00	17.50	19.80
		12	2467	11.00	10.50	11.00	10.50	13.80
		13	2472	2.00	0.00	2.00	0.00	4.10
	802.11ac-VHT20 MCS0	1	2412	16.00	17.50	16.00	17.50	19.80
		6	2437	16.00	17.50	16.00	17.50	19.80
		11	2462	16.00	17.50	16.00	17.50	19.80
		12	2467	11.00	11.00	11.00	11.00	14.00
		13	2472	2.00	0.00	2.00	0.00	4.10

<5GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	9.50	11.50	9.50	11.50	13.60
		40	5200	9.50	11.50	9.50	11.50	13.60
		44	5220	9.50	11.50	9.50	11.50	13.60
		48	5240	9.50	11.50	9.50	11.50	13.60
	802.11n-HT20 MCS0	36	5180	9.50	11.50	9.50	11.50	13.60
		40	5200	9.50	11.50	9.50	11.50	13.60
		44	5220	9.50	11.50	9.50	11.50	13.60
		48	5240	9.50	11.50	9.50	11.50	13.60
	802.11n-HT40 MCS0	38	5190	9.50	11.50	9.50	11.50	13.60
		46	5230	9.50	11.50	9.50	11.50	13.60
	802.11ac-VHT20 MCS0	36	5180	9.50	11.50	9.50	11.50	13.60
		40	5200	9.50	11.50	9.50	11.50	13.60
		44	5220	9.50	11.50	9.50	11.50	13.60
		48	5240	9.50	11.50	9.50	11.50	13.60
	802.11ac-VHT40 MCS0	38	5190	9.50	11.50	9.50	11.50	13.60
		46	5230	9.50	11.50	9.50	11.50	13.60
	802.11ac-VHT80 MCS0	42	5210	9.50	11.50	9.50	11.50	13.60

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	9.50	11.50	9.50	11.50	13.60
		56	5280	9.50	11.50	9.50	11.50	13.60
		60	5300	9.50	11.50	9.50	11.50	13.60
		64	5320	9.50	11.50	9.50	11.50	13.60
	802.11n-HT20 MCS0	52	5260	9.50	11.50	9.50	11.50	13.60
		56	5280	9.50	11.50	9.50	11.50	13.60
		60	5300	9.50	11.50	9.50	11.50	13.60
		64	5320	9.50	11.50	9.50	11.50	13.60
	802.11n-HT40 MCS0	54	5270	9.50	11.50	9.50	11.50	13.60
		62	5310	9.50	11.50	9.50	11.50	13.60
	802.11ac-VHT20 MCS0	52	5260	9.50	11.50	9.50	11.50	13.60
		56	5280	9.50	11.50	9.50	11.50	13.60
		60	5300	9.50	11.50	9.50	11.50	13.60
		64	5320	9.50	11.50	9.50	11.50	13.60
	802.11ac-VHT40 MCS0	54	5270	9.50	11.50	9.50	11.50	13.60
		62	5310	9.50	11.50	9.50	11.50	13.60
	802.11ac-VHT80 MCS0	58	5290	9.50	11.50	9.50	11.50	13.60

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	9.00	12.00	9.00	12.00	13.80
		116	5580	9.00	12.00	9.00	12.00	13.80
		124	5620	9.00	12.00	9.00	12.00	13.80
		132	5660	9.00	12.00	9.00	12.00	13.80
		140	5700	9.00	12.00	9.00	12.00	13.80
		144	5720	9.00	12.00	9.00	12.00	13.80
	802.11n-HT20 MCS0	100	5500	9.00	12.00	9.00	12.00	13.80
		116	5580	9.00	12.00	9.00	12.00	13.80
		124	5620	9.00	12.00	9.00	12.00	13.80
		132	5660	9.00	12.00	9.00	12.00	13.80
		140	5700	9.00	12.00	9.00	12.00	13.80
		144	5720	9.00	12.00	9.00	12.00	13.80
	802.11n-HT40 MCS0	102	5510	9.00	12.00	9.00	12.00	13.80
		110	5550	9.00	12.00	9.00	12.00	13.80
		126	5630	9.00	12.00	9.00	12.00	13.80
		134	5670	9.00	12.00	9.00	12.00	13.80
		142	5710	9.00	12.00	9.00	12.00	13.80
	802.11ac-VHT20 MCS0	100	5500	9.00	12.00	9.00	12.00	13.80
		116	5580	9.00	12.00	9.00	12.00	13.80
		124	5620	9.00	12.00	9.00	12.00	13.80
		132	5660	9.00	12.00	9.00	12.00	13.80
		140	5700	9.00	12.00	9.00	12.00	13.80
		144	5720	9.00	12.00	9.00	12.00	13.80
	802.11ac-VHT40 MCS0	102	5510	9.00	12.00	9.00	12.00	13.80
		110	5550	9.00	12.00	9.00	12.00	13.80
		126	5630	9.00	12.00	9.00	12.00	13.80
		134	5670	9.00	12.00	9.00	12.00	13.80
		142	5710	9.00	12.00	9.00	12.00	13.80
	802.11ac-VHT80 MCS0	106	5530	9.00	12.00	9.00	12.00	13.80
		122	5610	9.00	12.00	9.00	12.00	13.80
		138	5690	9.00	12.00	9.00	12.00	13.80

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	9.00	12.50	9.00	12.50	14.10
		157	5785	9.00	12.50	9.00	12.50	14.10
		165	5825	9.00	12.50	9.00	12.50	14.10
	802.11n-HT20 MCS0	149	5745	9.00	12.50	9.00	12.50	14.10
		157	5785	9.00	12.50	9.00	12.50	14.10
		165	5825	9.00	12.50	9.00	12.50	14.10
	802.11n-HT40 MCS0	151	5755	9.00	12.50	9.00	12.50	14.10
		159	5795	9.00	12.50	9.00	12.50	14.10
	802.11ac-VHT20 MCS0	149	5745	9.00	12.50	9.00	12.50	14.10
		157	5785	9.00	12.50	9.00	12.50	14.10
		165	5825	9.00	12.50	9.00	12.50	14.10
	802.11ac-VHT40 MCS0	151	5755	9.00	12.50	9.00	12.50	14.10
		159	5795	9.00	12.50	9.00	12.50	14.10
	802.11ac-VHT80 MCS0	155	5775	9.00	12.50	9.00	12.50	14.10

<Power Table 3>

<2.4GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	23.00	23.00	23.00	23.00	26.00
		6	2437	23.00	23.00	23.00	23.00	26.00
		11	2462	23.00	23.00	23.00	23.00	26.00
		12	2467	18.50	18.50	18.50	18.50	21.50
		13	2472	14.00	14.00	14.00	14.00	17.00
	802.11g 6Mbps	1	2412	18.50	18.50	18.50	18.50	21.50
		6	2437	22.00	22.00	22.00	22.00	25.00
		11	2462	18.00	18.00	18.00	18.00	21.00
		12	2467	12.50	12.50	12.50	12.50	15.50
		13	2472	2.00	-2.00	2.00	-2.00	3.50
	802.11n-HT20 MCS0	1	2412	18.00	18.00	18.00	18.00	21.00
		6	2437	22.50	22.50	22.50	22.50	25.50
		11	2462	17.50	17.50	17.50	17.50	20.50
		12	2467	10.50	10.50	10.50	10.50	13.50
		13	2472	2.00	-2.00	2.00	-2.00	3.50
	802.11ac-VHT20 MCS0	1	2412	18.00	18.00	18.00	18.00	21.00
		6	2437	22.50	22.50	22.50	22.50	25.50
		11	2462	17.50	17.50	17.50	17.50	20.50
		12	2467	10.50	10.50	10.50	10.50	13.50
		13	2472	2.00	-2.00	2.00	-2.00	3.50

<5GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	18.50	18.50	18.50	18.50	21.50
		40	5200	18.50	18.50	18.50	18.00	21.30
		44	5220	18.50	18.50	18.50	17.50	21.00
		48	5240	17.50	17.50	17.50	17.00	20.30
	802.11n-HT20 MCS0	36	5180	18.50	18.50	18.50	18.50	21.50
		40	5200	18.50	18.50	18.50	18.50	21.50
		44	5220	18.50	18.50	18.50	18.50	21.50
		48	5240	18.50	18.50	18.50	18.50	21.50
	802.11n-HT40 MCS0	38	5190	13.00	13.00	13.00	13.00	16.00
		46	5230	21.00	20.50	21.00	20.50	23.80
	802.11ac-VHT20 MCS0	36	5180	18.50	18.50	18.50	18.50	21.50
		40	5200	18.50	18.50	18.50	18.50	21.50
		44	5220	18.50	18.50	18.50	18.50	21.50
		48	5240	18.50	18.50	18.50	18.50	21.50
	802.11ac-VHT40 MCS0	38	5190	13.00	13.00	13.00	13.00	16.00
		46	5230	21.00	20.50	21.00	20.50	23.80
	802.11ac-VHT80 MCS0	42	5210	12.50	12.50	12.50	12.50	15.50

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	17.50	17.50	17.50	17.50	20.50
		56	5280	17.50	17.50	17.50	17.50	20.50
		60	5300	17.50	17.50	17.50	17.50	20.50
		64	5320	17.50	17.50	17.50	17.50	20.50
	802.11n-HT20 MCS0	52	5260	18.00	18.00	18.00	18.00	21.00
		56	5280	18.00	18.00	18.00	18.00	21.00
		60	5300	18.00	18.00	18.00	18.00	21.00
		64	5320	18.00	18.00	18.00	18.00	21.00
	802.11n-HT40 MCS0	54	5270	21.00	21.00	21.00	21.00	24.00
		62	5310	13.50	13.50	13.50	13.50	16.50
	802.11ac-VHT20 MCS0	52	5260	18.00	18.00	18.00	18.00	21.00
		56	5280	18.00	18.00	18.00	18.00	21.00
		60	5300	18.00	18.00	18.00	18.00	21.00
		64	5320	18.00	18.00	18.00	18.00	21.00
	802.11ac-VHT40 MCS0	54	5270	21.00	21.00	21.00	21.00	24.00
		62	5310	13.50	13.50	13.50	13.50	16.50
	802.11ac-VHT80 MCS0	58	5290	12.00	12.00	12.00	12.00	15.00

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	18.00	18.00	18.00	18.00	21.00
		116	5580	18.00	18.00	18.00	18.00	21.00
		124	5620	18.00	18.00	18.00	18.00	21.00
		132	5660	18.00	18.00	18.00	18.00	21.00
		140	5700	18.00	18.00	18.00	18.00	21.00
		144	5720	18.00	18.00	18.00	18.00	21.00
	802.11n-HT20 MCS0	100	5500	18.00	18.00	18.00	18.00	21.00
		116	5580	18.00	18.00	18.00	18.00	21.00
		124	5620	18.00	18.00	18.00	18.00	21.00
		132	5660	18.00	18.00	18.00	18.00	21.00
		140	5700	18.00	18.00	18.00	18.00	21.00
		144	5720	18.00	18.00	18.00	18.00	21.00
	802.11n-HT40 MCS0	102	5510	16.00	16.00	16.00	16.00	19.00
		110	5550	20.00	21.00	20.00	21.00	23.50
		126	5630	20.00	21.00	20.00	21.00	23.50
		134	5670	20.00	21.00	20.00	21.00	23.50
		142	5710	20.00	20.50	20.00	20.50	23.30
	802.11ac-VHT20 MCS0	100	5500	18.00	18.00	18.00	18.00	21.00
		116	5580	18.00	18.00	18.00	18.00	21.00
		124	5620	18.00	18.00	18.00	18.00	21.00
		132	5660	18.00	18.00	18.00	18.00	21.00
		140	5700	18.00	18.00	18.00	18.00	21.00
		144	5720	18.00	18.00	18.00	18.00	21.00
	802.11ac-VHT40 MCS0	102	5510	16.00	16.00	16.00	16.00	19.00
		110	5550	20.00	21.00	20.00	21.00	23.50
		126	5630	20.00	21.00	20.00	21.00	23.50
		134	5670	20.00	20.50	20.00	20.50	23.30
		142	5710	20.00	20.50	20.00	20.50	23.30
	802.11ac-VHT80 MCS0	106	5530	13.00	13.00	13.00	13.00	16.00
		122	5610	20.00	21.00	20.00	21.00	23.50
		138	5690	20.00	20.50	20.00	20.50	23.30

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	21.00	21.00	21.00	21.00	24.00
		157	5785	21.00	21.00	21.00	21.00	24.00
		165	5825	21.00	21.00	21.00	21.00	24.00
	802.11n-HT20 MCS0	149	5745	21.00	21.00	21.00	21.00	24.00
		157	5785	20.50	20.50	20.50	20.50	23.50
		165	5825	20.50	20.50	20.50	20.50	23.50
	802.11n-HT40 MCS0	151	5755	21.00	21.00	21.00	21.00	24.00
		159	5795	21.00	21.00	21.00	21.00	24.00
	802.11ac-VHT20 MCS0	149	5745	21.00	21.00	21.00	21.00	24.00
		157	5785	20.50	20.50	20.50	20.50	23.50
		165	5825	20.50	20.50	20.50	20.50	23.50
	802.11ac-VHT40 MCS0	151	5755	21.00	21.00	21.00	21.00	24.00
		159	5795	21.00	21.00	21.00	21.00	24.00
	802.11ac-VHT80 MCS0	155	5775	21.00	21.00	21.00	21.00	24.00

<Bluetooth Maximum Power>

General Note:

1. The device implements the power management for Bluetooth SAR compliance at different exposure conditions (head, body-worn, hotspot). The control logic about the power management decision is provided in the operational description.
2. The Bluetooth power table relate to each exposure condition is description below:
   a. Default Power Table: when operate at mobile condition.
   b. Power Table 1: when operate at body condition in standalone or transmit simultaneous with WLAN when WWAN off or transmit simultaneous with WWAN when WLAN off.
   c. Power Table 2: when operate at head exposure condition.
   d. Power Table 3: when operate at hotspot or body exposure condition and transmit simultaneously with WWAN/WLAN on.

<Default Power Table>

Mode	Average power (dBm)				
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	19.50	19.50	19.50	19.50	19.50

<Power Table1>

Mode	Average power (dBm)				
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	19.50	19.50	19.50	19.00	19.00

<Power Table 2>

Mode	Average power (dBm)				
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	12.00	12.00	12.00	12.00	12.00

<Power Table 3>

Mode	Average power (dBm)				
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	19.50	19.50	19.50	19.00	19.00

3.3 General 5G NR and LTE SAR Test and Reporting Considerations

LTE Information	
FCC ID	A4RGD1YQ
Equipment Name	Phone
Operating Frequency Range of each LTE transmission band	LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz
Channel Bandwidth	LTE Band 02:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 04:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 05:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 07: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 14: 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 25:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 30: 5MHz, 10MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 48: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 71: 5MHz, 10MHz, 15MHz, 20MHz
UE Rel and Cat.	Rel15, UL cat. 13, DL cat. 18
uplink modulations used	QPSK / 16QAM / 64QAM
LTE Voice / Data requirements	Voice and Data
LTE MPR permanently built-in by design	**Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3**
LTE A-MPR	In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)
Spectrum plots for RB configuration	A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.
Power reduction applied to satisfy SAR compliance	The device has several different power modes for head / hotspot conditions SAR compliance; power selection is determined by the device's positioning and usage scenarios.
LTE Carrier Aggregation Combinations	Inter-Band and Intra-Band possible combinations and the detail power measurement please referred to section13
LTE Carrier Aggregation Additional Information	1. This device supports LTE Carrier Aggregation (CA) in the uplink for LTE B5/B7/B41/B48/B66 with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per FCC Guidance. 2. This device supports maximum of 4 carriers in the downlink and 2 carriers in the uplink. Additional following LTE Release features are not supported: Relay, HetNet, Enhanced MIMO, eICI, WiFi Offloading, MDH, eMBMA, Cross-Carrier Scheduling, Enhanced SC-FDMA.

Modulation	Channel bandwidth / Transmission bandwidth (N_{RB})						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3
256 QAM	≥ 1						≤ 5

Transmission (H, M, L) channel numbers and frequencies in each LTE band												
LTE Band 2												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900
LTE Band 4												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745
LTE Band 5												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	20407	824.7	20415	825.5	20425	826.5	20450	829				
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5				
H	20643	848.3	20635	847.5	20625	846.5	20600	844				
LTE Band 7												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	20775	2502.5	20800	2505	20825	2507.5	20850	2510				
M	21100	2535	21100	2535	21100	2535	21100	2535				
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560				
LTE Band 12												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	23017	699.7	23025	700.5	23035	701.5	23060	704				
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5				
H	23173	715.3	23165	714.5	23155	713.5	23130	711				
LTE Band 13												
	Bandwidth 5 MHz				Bandwidth 10 MHz							
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)					
L	23205		779.5		23230		782					
M	23230		782									
H	23255		784.5									
LTE Band 14												
	Bandwidth 5 MHz				Bandwidth 10 MHz							
	Channel #		Channel #		Channel #		Freq.(MHz)					
L	23305		790.5		23330		793					
M	23330		793									
H	23355		795.5									
LTE Band 17												
	Bandwidth 5 MHz				Bandwidth 10 MHz							
	Channel #		Freq.(MHz)		Channel #		Freq. (MHz)					
L	23755		706.5		23780		709					
M	23790		710		23790		710					
H	23825		713.5		23800		711					
LTE Band 25												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26047	1850.7	26055	1851.5	26065	1852.5	26090	1855	26115	1857.5	26140	1860
M	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880
H	26683	1914.3	26675	1913.5	26665	1912.5	26640	1910	26615	1907.5	26590	1905

LTE Band 26										
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5

LTE Band 30				
	Bandwidth 5 MHz		Bandwidth 10 MHz	
	Channel #	Freq.(MHz)	Channel #	Freq.(MHz)
L	27685	2307.5	27710	2310
M	27710	2310		
H	27735	2312.5		

LTE Band 38								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580
M	38000	2595	38000	2595	38000	2595	38000	2595
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610

LTE Band 41								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	39675	2498.5	39700	2501	39725	2503.5	39750	2506
L M	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5
M	40620	2593	40620	2593	40620	2593	40620	2593
H M	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680

LTE Band 66												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	131979	1710.7	131987	1711.5	131997	1712.5	132022	1715	132047	1717.5	132072	1720
M	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745
H	132665	1779.3	132657	1778.5	132647	1777.5	132622	1775	132597	1772.5	132572	1770

LTE Band 71								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	133147	665.5	133172	668	133197	670.5	133222	673
M	133297	680.5	133297	680.5	133297	680.5	133297	680.5
H	133447	695.5	133422	693	133397	690.5	133372	688

LTE Band 48								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	55265	3552.5	55290	3555	55315	3557.5	55340	3560
L M	55810	3607	55815	3607.5	55820	3608	55830	3609
M H	56170	3643	56165	3642.5	56160	3642	56150	3641
H	56715	3697.5	56690	3695	56665	3692.5	56640	3690

5G NR Information	
FCC ID	A4RGD1YQ
Equipment Name	Phone
Operating Frequency Range of each 5G NR transmission band	5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n12 : 699 MHz ~ 716 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n71 : 663 MHz ~ 698 MHz
Channel Bandwidth	5G NR n2: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n5: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n7: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n12: 5MHz, 10MHz, 15MHz 5G NR n25: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n41: 20MHz, 40MHz, 50MHz, 60MHz, 80MHz, 90MHz, 100MHz 5G NR n66: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n71: 5MHz, 10MHz, 15MHz, 20MHz
SCS	FDD: SCS15KHz, TDD: SCS30KHz
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM QPSK / 16QAM / 64QAM / 256QAM
A-MPR (Additional MPR) disabled for SAR Testing?	Yes
LTE Anchor Bands for n2	LTE B5/12/13/14
LTE Anchor Bands for n5	LTE B2/7/30/48/66
LTE Anchor Bands for n7	LTE B5/12
LTE Anchor Bands for n12	LTE B2/66
LTE Anchor Bands for n25	LTE B12
LTE Anchor Bands for n41	LTE B2/4/25/26/41/66
LTE Anchor Bands for n66	LTE B5/12/13/14/48/71
LTE Anchor Bands for n71	LTE B2/7/66

Transmission (H, M, L) channel numbers and frequencies in each 5G NR band

NR Band 2

	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860
M	376000	1880	376000	1880	376000	1880	376000	1880
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900

NR Band 5

	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	165300	826.5	165800	829	166300	831.5	166800	834
M	167300	836.5	167300	836.5	167300	836.5	167300	836.5
H	169300	846.5	168800	844	168300	841.5	167800	839

NR Band 7

	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	500500	2502.5	501000	2505	501500	2507.5	502000	2510
M	507000	2535	507000	2535	507000	2535	507000	2535
H	513500	2567.5	513000	2565	512500	2562.5	512000	2560

NR Band 12

	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	140300	701.5	140800	704	141300	706.5
M	141500	707.5	141500	707.5	141500	707.5
H	142700	713.5	142200	711	141700	708.5

NR Band 25								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860
M	376000	1880	376000	1880	376000	1880	376000	1880
H	382500	1912.5	382000	1910	381500	1907.5	381000	1905

NR Band 41														
	Bandwidth 20MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	501204	2506.02	503202	2516.01	504204	2521.02	505200	2526	507204	2536.02	508200	2541	509202	2546.01
M	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99
H	535998	2679.99	534000	2670	532998	2664.99	531996	2659.98	529998	2649.99	528996	2644.98	528000	2640

NR Band 66								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	342500	1712.5	343000	1715	343500	1717.5	344000	1720
M	349000	1745	349000	1745	349000	1745	349000	1745
H	355500	1777.5	355000	1775	354500	1772.5	354000	1770

NR Band 71								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	133100	665.5	133600	668	13410	670.5	134600	673
M	136100	680.5	136100	680.5	136100	680.5	136100	680.5
H	139100	695.5	138600	693	13810	690.5	137600	688

4. Smart Transmit feature for RF Exposure compliance

The FCC RF exposure limit is defined based on time-averaged RF exposure. The product implements Qualcomm Smart Transmit feature which controls the instantaneous transmitting power for WWAN transmitter to ensure the product in compliance with FCC RF exposure limit over a defined time window, for SAR (transmit frequency ≤ 6GHz). To control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is compliant to the regulation requirement.

This report describes the procedures for the SAR char generation, and the parameters obtained from SAR characterization (referred to as SAR char, respectively) will be used as input for Smart Transmit. SAR char will be entered via the Embedded File System (EFS) to enable the Smart Transmit Feature.

<Terminologies in this report>

P_{limit}	The time-averaged RF power which corresponds to SAR_design_targer.
P_{max}	Maximum target power level
SAR_design_target:	The design target for SAR compliance. It should be less than regulatory power density limit to account for all device design related uncertainties.
SAR char	P_{limit} for all the technologies/bands for all applicable DSI

<SAR Characterization>

SAR char must be generated to cover all radio configurations and usage scenarios that the wireless device supports for operating at 6 GHz or below. It will then be used as input for Smart Transmit to control and manage RF exposure for f < 6 GHz.

<SAR design target and uncertainty>

The detail SAR design target relate to each exposure conditions pls refer to operation description

	Uncertainty dB (k=2)
Total uncertainty	1.0

To account for total uncertainty, SAR_design_target should be determined as:

$$SAR\_design\_target \ < SAR_{regulatory\_limit} \times 10^{\frac{-total\ uncertainty}{10}}$$

The Smart Transmit algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of SAR_design_target, below the predefined time-averaged power limit, for each characterized technology and band.

Smart Transmit allows the device to transmit at higher power instantaneously, as high as Pmax, when needed, but enforces power limiting to maintain time-averaged transmit power to Plimit. Below table shows Plimit EFS settings and maximum tune up output power Pmax configured for this EUT for various transmit conditions (Device State Index DSI).

<P_{limit} for supported technologies and bands (P_{limit} in EFS file)>

Config 0							
Band	Antenna	Head Standalone (DSI:2)	Body Worn Standalone (DSI:4)	Hotspot (DSI:6)	Head Simultaneous (DSI:7)	Body Worn Simultaneous (DSI:8)	Pmax*
GSM850(GPRS 4 Tx slots)**	0	29.8	29.9	29.1	29.0	29.1	26.0
GSM1900(GPRS 4 Tx slots)**	2	29.8	25.2	25.1	29.0	24.4	24.0
WCDMA B2	2	27.7	24.5	23.2	26.9	23.7	24.0
WCDMA B4	2	27.5	24.8	23.8	26.7	24.0	24.0
WCDMA B5	0	30.0	29.6	28.8	29.2	28.8	24.0
CDMA BC0	0	29.9	30.0	29.2	29.1	29.2	24.0
CDMA BC1	2	27.5	23.7	22.7	26.7	22.9	24.0
CDMA BC10	0	30.8	30.4	29.6	30.0	29.6	24.0
LTE B7	2	28.5	22.1	17.7	27.7	21.3	24.0
LTE B12/17	0	31.8	29.9	29.1	31.0	29.1	24.0
LTE B13	0	30.8	29.4	28.6	30.0	28.6	24.0
LTE B14	0	30.8	29.5	28.7	30.0	28.7	24.0
LTE B25/2	2	27.8	24	23.2	27.0	24.0	24.0
LTE B26/5	0	30.0	29.7	28.9	29.2	28.9	24.0
LTE B30	2	27.6	21.9	18.7	26.8	21.1	24.0
LTE B41/38**	2	27.0	22.0	17.2	26.2	21.2	22.0
LTE B41/38 HPUE**	2	27.0	22.0	17.2	26.2	21.2	22.9
LTE B48**	7	25.1	24.2	22.2	24.3	23.4	22.0
LTE B66/4	2	28.4	25.0	24.2	27.6	24.2	24.0
LTE B71	0	32.6	31.2	30.4	31.8	30.4	24.0
FR1 n25/2	2	27.8	23.9	23.1	27.0	23.1	24.0
FR1 n5	0	33.2	41.9	41.1	32.4	41.1	24.0
FR1 n7	2	27.9	21.6	18.2	27.1	20.8	24.0
FR1 n12	0	33.3	31.9	31.1	32.5	31.1	24.0
FR1 n41	2	26.8	20.8	19.3	26.0	20.0	19.2
FR1 n41 HPUE**	5	19.4	24.5	24.8	18.6	23.7	21.7
FR1 n66	2	29.0	25.4	24.6	28.2	24.6	24.0
FR1 n71	0	33.5	35.2	34.4	32.7	34.4	24.0

Config 1							
Band	Antenna	Head Standalone (DSI:2)	Body Worn Standalone (DSI:4)	Hotspot (DSI:6)	Head Simultaneous (DSI:7)	Body Worn Simultaneous (DSI:8)	Pmax*
WCDMA B2	0	27.7	27.6	24.3	26.9	26.8	24.0
WCDMA B4	0	29.8	22.0	20.9	29.0	21.2	24.0
WCDMA B5	1	27.1	30.9	30.1	26.3	30.1	24.0
CDMA BC0	1	29.0	30.2	29.4	28.2	29.4	24.0
CDMA BC1	0	27.7	24.8	23.1	26.9	24.0	24.0
CDMA BC10	1	27.9	30.6	29.8	27.1	29.8	24.0
LTE B7	0	25.0	24.5	23.7	24.2	23.7	24.0
LTE B12/17	1	29.0	31.4	30.6	28.2	30.6	24.0
LTE B13	1	28.4	31.5	30.7	27.6	30.7	24.0
LTE B14	1	27.9	30.8	30.0	27.1	30.0	24.0
LTE B25/2	0	27.3	27.3	25.0	26.5	26.5	24.0
LTE B26/5	1	27.6	31.1	30.3	26.8	30.3	24.0
LTE B30	0	25.6	26.6	23.7	24.8	25.8	24.0
LTE B41/38**	0	26.6	24.7	23.9	25.8	23.9	22.0
LTE B41/38_HPUE**	0	26.6	24.7	23.9	25.8	23.9	22.9
LTE B48**	2	25.7	24.6	22.3	24.9	23.8	20.5
LTE B66/4	0	28.0	22.0	20.7	27.2	21.2	24.0
LTE B71	1	28.9	32.4	31.6	28.1	31.6	24.0
FR1 n25/2	0	37.3	30.5	32.5	36.5	29.7	24.0
FR1 n5	1	26.4	43.0	42.2	25.6	42.2	24.0
FR1 n7	0	25.9	24.6	23.8	25.1	23.8	24.0
FR1 n12	1	28.4	30.9	28.6	27.6	30.1	24.0
FR1 n41**	0	25.1	25.4	24.6	24.3	24.6	19.2
FR1 n66	0	35.4	32.9	27.8	34.6	32.1	24.0
FR1 n71	1	27.3	31.8	31.0	26.5	31.0	24.0

*P_{max} is used for RF tune up procedure. The maximum allowed output power is equal to Pmax + 1dB uncertainty.

**All P_{limit} power levels entered in the Table correspond to average power levels after accounting for duty cycle in the case TDD modulation schemes (for e.g., GSM & LTE TDD & NR TDD).

The max allowed output power is the P_{limit} + 1dB device uncertainty, and if P_{limit} is higher than P_{max}, the device output power will be P_{max} instead.

5. RF Exposure Limits

5.1 Uncontrolled Environment

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

5.2 Controlled Environment

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

Limits for Occupational/Controlled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.4	8.0	20.0

Limits for General Population/Uncontrolled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.08	1.6	4.0

1. Whole-Body SAR is averaged over the entire body, partial-body SAR is averaged over any 1gram of tissue defined as a tissue volume in the shape of a cube. SAR for hands, wrists, feet and ankles is averaged over any 10 grams of tissue defined as a tissue volume in the shape of a cube.

6. Specific Absorption Rate (SAR)

6.1 Introduction

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

6.2 SAR Definition

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

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

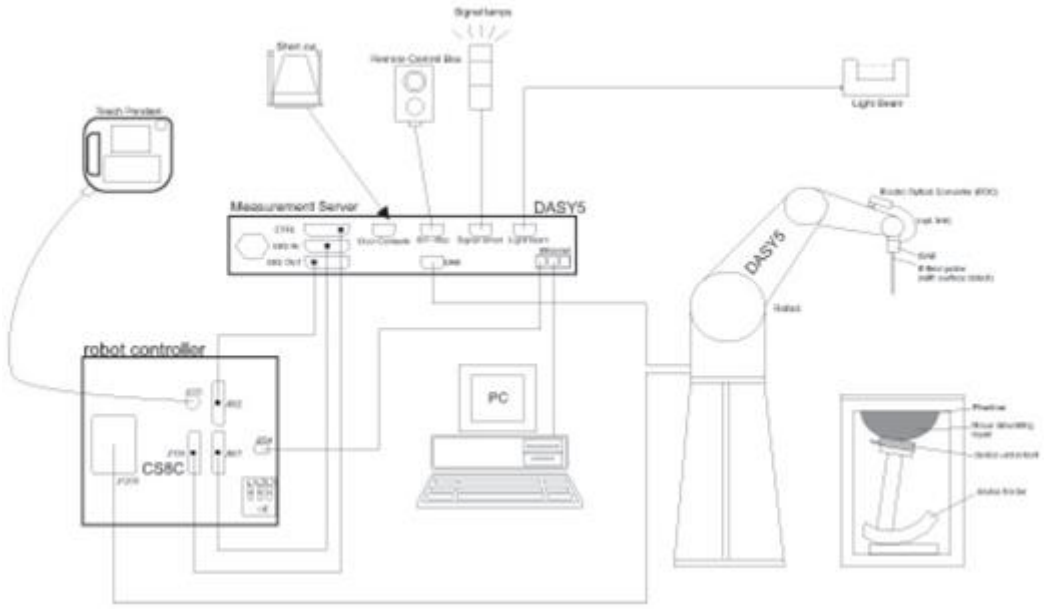
SAR is expressed in units of Watts per kilogram (W/kg)

$$\mathbf{SAR} = \frac{\boldsymbol{\sigma}|\mathbf{E}|^{\mathbf{2}}}{\boldsymbol{\rho}}$$

Where: σ is the conductivity of the tissue, ρ is the mass density of the tissue and E is the RMS electrical field strength.

7. System Description and Setup

The DASY system used 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 DASY5 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.

7.1 Test Side Location

Sporton Lab and below test site location are accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190 and 0007) and the FCC designation No. TW1190 and TW0007 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC test.

Test Side	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory			
Test Site Location	TW1190 No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, CHINESE TAIPEI		TW0007 No. 58, Aly. 75, Ln. 564, Wehnua 3rd, Rd., Guishan Dist., Taoyuan City, CHINESE TAIPEI	
Test Site No.	SAR01-HY	SAR03-HY	SAR08-HY	SAR09-HY
	SAR04-HY	SAR05-HY	SAR11-HY	SAR12-HY
	SAR06-HY	SAR10-HY		

7.2 E-Field Probe

The SAR measurement is conducted with the dosimetric probe (manufactured by SPEAG).The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency. This probe has a built in optical surface detection system to prevent from collision with phantom.

<ES3DV3 Probe>

Construction	Symmetric design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	10 MHz – 4 GHz; Linearity: ±0.2 dB (30 MHz – 4 GHz)	
Directivity	±0.2 dB in TSL (rotation around probe axis) ±0.3 dB in TSL (rotation normal to probe axis)	
Dynamic Range	5 µW/g – >100 mW/g; Linearity: ±0.2 dB	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 3.9 mm (body: 12 mm) Distance from probe tip to dipole centers: 3.0 mm	

<EX3DV4 Probe>

Construction	Symmetric design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	10 MHz – >6 GHz Linearity: ±0.2 dB (30 MHz – 6 GHz)	
Directivity	±0.3 dB in TSL (rotation around probe axis) ±0.5 dB in TSL (rotation normal to probe axis)	
Dynamic Range	10 µW/g – >100 mW/g Linearity: ±0.2 dB (noise: typically <1 µW/g)	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 2.5 mm (body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	

7.3 Data Acquisition Electronics (DAE)

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

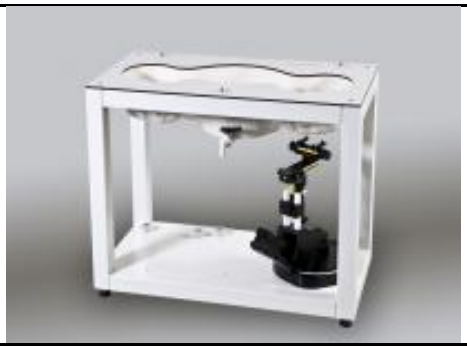
The input impedance of the DAE is 200 MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.

Fig 5.1 Photo of DAE

7.4 Phantom

<SAM Twin Phantom>

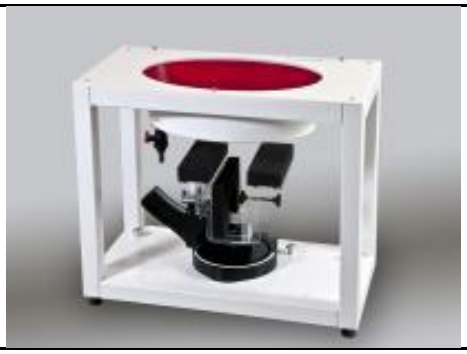
Shell Thickness	2 ± 0.2 mm; Center ear point: 6 ± 0.2 mm
Filling Volume	Approx. 25 liters
Dimensions	Length: 1000 mm; Width: 500 mm; Height: adjustable feet
Measurement Areas	Left Hand, Right Hand, Flat Phantom



The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. A white cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. On the phantom top, three reference markers are provided to identify the phantom position with respect to the robot.

<ELI Phantom>

Shell Thickness	2 ± 0.2 mm (sagging: <1%)
Filling Volume	Approx. 30 liters
Dimensions	Major ellipse axis: 600 mm Minor axis: 400 mm



The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI4 is fully compatible with standard and all known tissue simulating liquids.

7.5 Device Holder

<Mounting Device for Hand-Held Transmitter>

In combination with the Twin SAM V5.0/V5.0c or ELI phantoms, the Mounting Device for Hand-Held Transmitters enables rotation of the mounted transmitter device to specified spherical coordinates. At the heads, the rotation axis is at the ear opening. Transmitter devices can be easily and accurately positioned according to IEC 62209-1, IEEE 1528, FCC, or other specifications. The device holder can be locked for positioning at different phantom sections (left head, right head, flat). And upgrade kit to Mounting Device to enable easy mounting of wider devices like big smart-phones, e-books, small tablets, etc. It holds devices with width up to 140 mm.

Mounting Device for Hand-Held Transmitters

Mounting Device Adaptor for Wide-Phones

<Mounting Device for Laptops and other Body-Worn Transmitters>

The extension is lightweight and made of POM, acrylic glass and foam. It fits easily on the upper part of the mounting device in place of the phone positioned. The extension is fully compatible with the SAM Twin and ELI phantoms.

Mounting Device for Laptops

8. Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>

(a) For WWAN power measurement, use base station simulator to configure EUT WWAN transmission in conducted connection with RF cable, at maximum power in each supported wireless interface and frequency band.
(b) Read the WWAN RF power level from the base station simulator.
(c) For WLAN/BT power measurement, use engineering software to configure EUT WLAN/BT continuously transmission, at maximum RF power in each supported wireless interface and frequency band
(d) Connect EUT RF port through RF cable to the power meter, and measure WLAN/BT output power

<SAR measurement>

(a) Use base station simulator to configure EUT WWAN transmission in radiated connection, and engineering software to configure EUT WLAN/BT continuously transmission, at maximum RF power, in the highest power channel.
(b) Place the EUT in the positions as Appendix D demonstrates.
(c) Set scan area, grid size and other setting on the DASY software.
(d) Measure SAR results for the highest power channel on each testing position.
(e) Find out the largest SAR result on these testing positions of each band
(f) Measure SAR results for other channels in worst SAR testing position if the reported SAR of highest power channel is larger than 0.8 W/kg

According to the test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

(a) Power reference measurement
(b) Area scan
(c) Zoom scan
(d) Power drift measurement

8.1 Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1g and 10g, as well as for user-specific masses. The DASY software includes all numerical procedures necessary to evaluate the spatial peak SAR value.

The base for the evaluation is a "cube" measurement. The measured volume must include the 1g and 10g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.

The entire evaluation of the spatial peak values is performed within the post-processing engine (SEMCAD). The system always gives the maximum values for the 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:

(a) Extraction of the measured data (grid and values) from the Zoom Scan
(b) Calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
(c) Generation of a high-resolution mesh within the measured volume
(d) Interpolation of all measured values form the measurement grid to the high-resolution grid
(e) Extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
(f) Calculation of the averaged SAR within masses of 1g and 10g

8.2 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.

8.3 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 dB0 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 D01v01r04 SAR measurement 100 MHz to 6 GHz.

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

8.4 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 D01v01r04 SAR measurement 100 MHz to 6 GHz.

			≤ 3 GHz	> 3 GHz
Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm

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 *reported* SAR from the *area scan based 1-g SAR estimation* procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

8.5 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.

8.6 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.

9. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit(2)	D750V3	1107	Mar. 08, 2019	Mar. 06, 2021
SPEAG	835MHz System Validation Kit	D835V2	4d167	Nov. 25, 2019	Nov. 24, 2020
SPEAG	1750MHz System Validation Kit(2)	D1750V2	1112	Mar. 07, 2019	Mar. 05, 2021
SPEAG	1900MHz System Validation Kit(2)	D1900V2	5d185	Mar. 07, 2019	Mar. 05, 2021
SPEAG	2300MHz System Validation Kit(2)	D2300V2	1006	Jan. 28, 2019	Jan. 26, 2021
SPEAG	2450MHz System Validation Kit	D2450V2	929	Nov. 21, 2019	Nov. 20, 2020
SPEAG	2600MHz System Validation Kit(2)	D2600V2	1008	Aug. 31, 2018	Aug. 29, 2020
SPEAG	3500MHz System Validation Kit(2)	D3500V2	1014	Jan. 29, 2019	Jan. 27, 2021
SPEAG	3700MHz System Validation Kit(2)	D3700V2	1006	Mar. 05, 2019	Mar. 03, 2021
SPEAG	5GHz System Validation Kit(2)	D5GHzV2	1006	Sep. 27, 2018	Sep. 25, 2020
SPEAG	Data Acquisition Electronics	DAE3	495	Jun. 04, 2020	Jun. 03, 2021
SPEAG	Data Acquisition Electronics	DAE4	854	May. 26, 2020	May. 25, 2021
SPEAG	Data Acquisition Electronics	DAE4	1311	Aug. 27, 2019	Aug. 26, 2020
SPEAG	Data Acquisition Electronics	DAE4	1424	Jan. 24, 2020	Jan. 23, 2021
SPEAG	Dosimetric E-Field Probe	ES3DV3	3169	May. 27, 2020	May. 26, 2021
SPEAG	Dosimetric E-Field Probe	EX3DV4	3642	Apr. 29, 2020	Apr. 28, 2021
SPEAG	Dosimetric E-Field Probe	EX3DV4	3925	Sep. 20, 2019	Sep. 19, 2020
SPEAG	Dosimetric E-Field Probe	EX3DV4	3931	Sep. 26, 2019	Sep. 25, 2020
SPEAG	Dosimetric E-Field Probe	EX3DV4	7590	Apr. 14, 2020	Apr. 13, 2021
RCPTWN	Thermometer	HTC-1	TM685-1	Nov. 12, 2019	Nov. 11, 2020
RCPTWN	Thermometer	HTC-1	TM560-2	Nov. 12, 2019	Nov. 11, 2020
Anritsu	Radio Communication Analyzer	MT8821C	6201341950	Oct. 31, 2019	Oct. 30, 2020
Agilent	Wireless Communication Test Set	E5515C	MY50267236	Mar. 18, 2020	Mar. 17, 2021
R&S	BT Base Station	CBT	100815	Feb. 15, 2020	Feb. 14, 2021
SPEAG	Device Holder	N/A	N/A	N/A	N/A
Anritsu	Signal Generator	MG3710A	6201502524	Nov. 20, 2019	Nov. 19, 2020
Agilent	ENA Network Analyzer	E5071C	MY46104758	Sep. 06, 2019	Sep. 05, 2020
SPEAG	Dielectric Probe Kit	DAK-3.5	1126	Sep. 18, 2019	Sep. 17, 2020
LINE SEIKI	Digital Thermometer	DTM3000-spezial	3169	Sep. 10, 2019	Sep. 09, 2020
Anritsu	Power Meter	ML2495A	1036004	Aug. 08, 2019	Aug. 07, 2020
Anritsu	Power Sensor	MA2411B	1027253	Aug. 08, 2019	Aug. 07, 2020
Anritsu	Power Meter	ML2495A	1218006	Oct. 14, 2019	Oct. 13, 2020
Anritsu	Power Sensor	MA2411B	1207363	Oct. 14, 2019	Oct. 13, 2020
Agilent	Spectrum Analyzer	E4408B	MY44211028	Aug. 27, 2019	Aug. 26, 2020
Anritsu	Spectrum Analyzer	N9010A	MY53470118	Mar. 12, 2020	Mar. 11, 2021
Mini-Circuits	Power Amplifier	ZVE-8G+	6418	Oct. 16, 2019	Oct. 15, 2020
Mini-Circuits	Power Amplifier	ZVE-8G+	6382	Aug. 12, 2019	Aug. 11, 2020
ATM	Dual Directional Coupler	C122H-10	P610410z-02	Note 1	
Woken	Attenuator 1	WK0602-XX	N/A	Note 1	
PE	Attenuator 2	PE7005-10	N/A	Note 1	
PE	Attenuator 3	PE7005- 3	N/A	Note 1	

General Note:

1. Prior to system verification and validation, the path loss from the signal generator to the system check source and the power meter, which includes the amplifier, cable, attenuator and directional coupler, was measured by the network analyzer. The reading of the power meter was offset by the path loss difference between the path to the power meter and the path to the system check source to monitor the actual power level fed to the system check source.
2. The dipole calibration interval can be extended to 3 years with justification according to KDB 865664 D01. The dipoles are also not physically damaged, or repaired during the interval. The justification data in appendix C can be found which the return loss is < -20dB, within 20% of prior calibration, the impedance is within 5 ohm of prior calibration for each dipole.

10. System Verification

10.1 Tissue Simulating Liquids

For the measurement of the field distribution inside the SAM phantom with DASY, the phantom must be filled with around 25 liters of homogeneous body tissue simulating liquid. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm, which is shown in Fig. 10.1. For 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 Fig. 10.2.

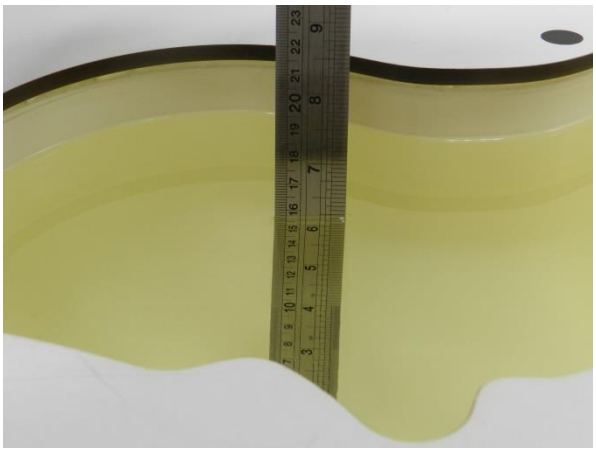


Fig 10.1Photo of Liquid Height for Head SAR

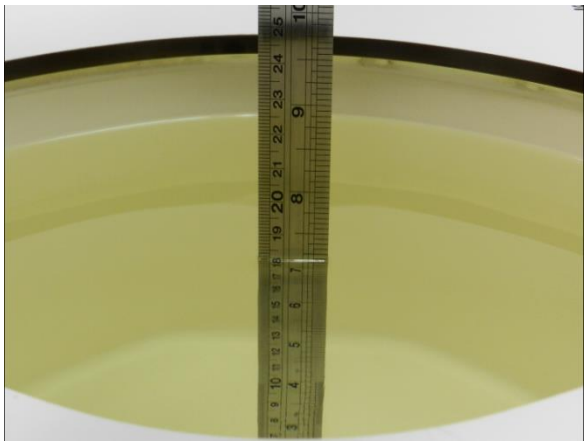


Fig 10.2 Photo of Liquid Height for Body SAR

10.2 Tissue Verification

The following tissue formulations are provided for reference only as some of the parameters have not been thoroughly verified. The composition of ingredients may be modified accordingly to achieve the desired target tissue parameters required for routine SAR evaluation.

Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity (σ)	Permittivity (εr)
750	41.1	57.0	0.2	1.4	0.2	0	0.89	41.9
835	40.3	57.9	0.2	1.4	0.2	0	0.90	41.5
900	40.3	57.9	0.2	1.4	0.2	0	0.97	41.5
1800, 1900, 2000	55.2	0	0	0.3	0	44.5	1.40	40.0
2450	55.0	0	0	0	0	45.0	1.80	39.2
2600	54.8	0	0	0.1	0	45.1	1.96	39.0

Simulating Liquid for 5GHz, Manufactured by SPEAG

Ingredients	(% by weight)
Water	64~78%
Mineral oil	11~18%
Emulsifiers	9~15%
Additives and Salt	2~3%

<Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Liquid Temp. (℃)	Conductivity (σ)	Permittivity (ε_r)	Conductivity Target (σ)	Permittivity Target (ε_r)	Delta (σ) (%)	Delta (ε_r) (%)	Limit (%)	Date
750	22.5	0.898	43.686	0.89	41.90	0.90	4.26	±5	2020/6/12
750	22.2	0.899	43.706	0.89	41.90	1.01	4.31	±5	2020/6/17
750	22.8	0.899	43.705	0.89	41.90	1.01	4.31	±5	2020/6/20
750	22.8	0.899	43.705	0.89	41.90	1.01	4.31	±5	2020/6/20
750	22.6	0.907	43.494	0.89	41.90	1.91	3.80	±5	2020/6/21
750	22.6	0.895	43.476	0.89	41.90	0.56	3.76	±5	2020/6/22
835	22.6	0.926	42.880	0.90	41.50	2.89	3.33	±5	2020/6/11
835	22.2	0.934	43.410	0.90	41.50	3.78	4.60	±5	2020/6/17
835	22.8	0.881	42.679	0.90	41.50	-2.11	2.84	±5	2020/6/19
835	22.6	0.891	42.467	0.90	41.50	-1.00	2.33	±5	2020/6/21
835	22.6	0.938	43.530	0.90	41.50	4.22	4.89	±5	2020/6/23
835	22.3	0.916	42.376	0.90	41.50	1.78	2.11	±5	2020/6/24
1750	22.6	1.368	40.612	1.37	40.10	-0.15	1.28	±5	2020/6/11
1750	22.2	1.369	40.623	1.37	40.10	-0.07	1.30	±5	2020/6/18
1750	22.3	1.358	41.604	1.37	40.10	-0.88	3.75	±5	2020/6/24
1750	22.3	1.373	40.285	1.37	40.10	0.22	0.46	±5	2020/6/25
1900	22.6	1.414	39.197	1.40	40.00	1.00	-2.01	±5	2020/6/11
1900	22.2	1.384	40.370	1.40	40.00	-1.14	0.92	±5	2020/6/18
1900	22.6	1.380	40.270	1.40	40.00	-1.43	0.68	±5	2020/6/23
1900	22.3	1.422	39.531	1.40	40.00	1.57	-1.17	±5	2020/6/24
1900	22.3	1.455	39.146	1.40	40.00	3.93	-2.14	±5	2020/6/25
1900	22.6	1.419	40.831	1.40	40.00	1.36	2.08	±5	2020/6/29
2300	22.4	1.658	39.119	1.67	39.50	-0.72	-0.96	±5	2020/6/26
2600	22.5	1.944	38.151	1.96	39.00	-0.82	-2.18	±5	2020/6/13
2600	22.8	1.953	38.251	1.96	39.00	-0.36	-1.92	±5	2020/6/19
2600	22.4	1.969	38.425	1.96	39.00	0.46	-1.47	±5	2020/6/27
2600	22.5	2.001	37.703	1.96	39.00	2.09	-3.33	±5	2020/7/1
3500	22.5	3.047	38.225	2.91	37.90	4.71	0.86	±5	2020/6/28
3700	22.5	3.200	37.948	3.12	37.70	2.56	0.66	±5	2020/6/28
2450	22.2	1.819	39.836	1.80	39.20	1.06	1.62	±5	2020/6/24
2450	22.5	1.800	39.388	1.80	39.20	0.00	0.48	±5	2020/6/28
5250	22.2	4.885	36.480	4.71	35.95	3.72	1.47	±5	2020/6/24
5250	22.4	4.887	36.482	4.71	35.95	3.76	1.48	±5	2020/6/29
5600	22.2	5.236	35.998	5.07	35.50	3.27	1.40	±5	2020/6/24
5600	22.4	5.231	35.994	5.07	35.50	3.18	1.39	±5	2020/6/29
5750	22.2	5.384	35.779	5.22	35.35	3.14	1.21	±5	2020/6/24
5750	22.4	5.385	35.800	5.22	35.35	3.16	1.27	±5	2020/6/29

10.3 System Performance Check Results

Comparing to the original SAR value provided by SPEAG, the verification data should be within its specification of 10 %. Below table shows the target SAR and measured SAR after normalized to 1W input power. The table below indicates the system performance check can meet the variation criterion and the plots can be referred to Appendix A of this report.

Date	Frequency (MHz)	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)
2020/6/12	750	250	D750V3-1107	EX3DV4 - SN3925	DAE4 Sn1311	2.13	8.32	8.52	2.40
2020/6/17	750	250	D750V3-1107	EX3DV4 - SN3925	DAE4 Sn1311	2.13	8.32	8.52	2.40
2020/6/20	750	250	D750V3-1107	EX3DV4 - SN3642	DAE4 Sn1311	2.03	8.32	8.12	-2.40
2020/6/20	750	250	D750V3-1107	ES3DV3 - SN3169	DAE4 Sn854	2.11	8.32	8.44	1.44
2020/6/21	750	250	D750V3-1107	ES3DV3 - SN3169	DAE4 Sn854	2.07	8.32	8.28	-0.48
2020/6/22	750	250	D750V3-1107	ES3DV3 - SN3169	DAE4 Sn1311	2.04	8.32	8.16	-1.92
2020/6/11	835	250	D835V2-4d167	EX3DV4 - SN3925	DAE4 Sn1311	2.49	9.55	9.96	4.29
2020/6/17	835	250	D835V2-4d167	EX3DV4 - SN3925	DAE4 Sn1311	2.51	9.55	10.04	5.13
2020/6/19	835	250	D835V2-4d167	EX3DV4 - SN3925	DAE4 Sn1311	2.38	9.55	9.52	-0.31
2020/6/21	835	250	D835V2-4d167	ES3DV3 - SN3169	DAE4 Sn854	2.40	9.55	9.6	0.52
2020/6/23	835	250	D835V2-4d167	ES3DV3 - SN3169	DAE4 Sn1311	2.52	9.55	10.08	5.55
2020/6/24	835	250	D835V2-4d167	ES3DV3 - SN3169	DAE4 Sn854	2.46	9.55	9.84	3.04
2020/6/11	1750	250	D1750V2-1112	EX3DV4 - SN3925	DAE4 Sn1311	10.00	36.70	40	8.99
2020/6/18	1750	250	D1750V2-1112	EX3DV4 - SN3925	DAE4 Sn1311	9.34	36.70	37.36	1.80
2020/6/24	1750	250	D1750V2-1112	ES3DV3 - SN3169	DAE4 Sn854	8.53	36.70	34.12	-7.03
2020/6/25	1750	250	D1750V2-1112	ES3DV3 - SN3169	DAE4 Sn854	8.62	36.70	34.48	-6.05
2020/6/11	1900	250	D1900V2-5d185	EX3DV4 - SN3925	DAE4 Sn1311	9.65	39.40	38.6	-2.03
2020/6/18	1900	250	D1900V2-5d185	EX3DV4 - SN3925	DAE4 Sn1311	9.45	39.40	37.8	-4.06
2020/6/23	1900	250	D1900V2-5d185	ES3DV3 - SN3169	DAE4 Sn854	9.40	39.40	37.6	-4.57
2020/6/24	1900	250	D1900V2-5d185	ES3DV3 - SN3169	DAE4 Sn854	9.81	39.40	39.24	-0.41
2020/6/25	1900	250	D1900V2-5d185	ES3DV3 - SN3169	DAE4 Sn854	9.99	39.40	39.96	1.42
2020/6/29	1900	50	D1900V2-5d185	EX3DV4 - SN7590	DAE3 Sn495	1.99	39.40	39.8	1.02
2020/6/26	2300	250	D2300V2-1006	ES3DV3 - SN3169	DAE4 Sn854	12.20	48.70	48.8	0.21
2020/6/13	2600	250	D2600V2-1008	EX3DV4 - SN3925	DAE4 Sn1311	14.60	56.40	58.4	3.55
2020/6/19	2600	250	D2600V2-1008	EX3DV4 - SN3925	DAE4 Sn1311	14.70	56.40	58.8	4.26
2020/6/27	2600	250	D2600V2-1008	ES3DV3 - SN3169	DAE4 Sn854	15.00	56.40	60	6.38
2020/7/1	2600	50	D2600V2-1008	EX3DV4 - SN7590	DAE3 Sn495	2.85	56.40	57	1.06
2020/6/28	3500	100	D3500V2-1014	EX3DV4 - SN3931	DAE4 Sn1424	6.93	67.90	69.3	2.06
2020/6/28	3700	100	D3700V2-1006	EX3DV4 - SN3931	DAE4 Sn1424	6.48	67.30	64.8	-3.71

Date	Frequency (MHz)	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)
2020/6/24	2450	250	D2450V2-929	EX3DV4 - SN3931	DAE4 Sn1424	13.40	53.10	53.6	0.94
2020/6/28	2450	250	D2450V2-929	EX3DV4 - SN3931	DAE4 Sn1424	13.50	53.10	54	1.69
2020/6/24	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3931	DAE4 Sn1424	8.17	80.70	81.7	1.24
2020/6/29	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3931	DAE4 Sn1424	8.70	80.70	87	7.81
2020/6/24	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3931	DAE4 Sn1424	8.73	83.30	87.3	4.80
2020/6/29	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3931	DAE4 Sn1424	8.34	83.30	83.4	0.12
2020/6/24	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3931	DAE4 Sn1424	7.64	80.40	76.4	-4.98
2020/6/29	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3931	DAE4 Sn1424	8.00	80.40	80	-0.50

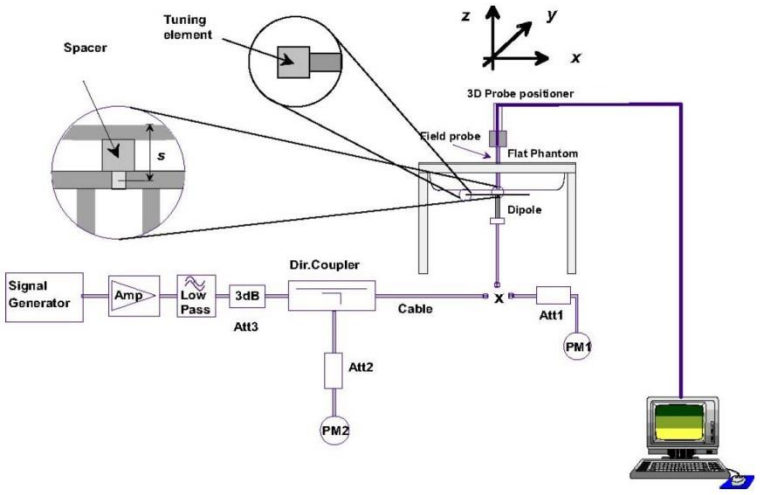


Fig 8.3.1 System Performance Check Setup

Fig 8.3.2 Setup Photo

11. RF Exposure Positions

11.1 Ear and handset reference point

Figure 9.1.1 shows the front, back, and side views of the SAM phantom. The center-of-mouth reference point is labeled “M,” the left ear reference point (ERP) is marked “LE,” and the right ERP is marked “RE.” Each ERP is 15 mm along the B-M (back-mouth) line behind the entrance-to-ear-canal (EEC) point, as shown in Figure 9.1.2 The Reference Plane is defined as passing through the two ear reference points and point M. The line N-F (neck-front), also called the reference pivoting line, is normal to the Reference Plane and perpendicular to both a line passing through RE and LE and the B-M line (see Figure 9.1.3). Both N-F and B-M lines should be marked on the exterior of the phantom shell to facilitate handset positioning. Posterior to the N-F line the ear shape is a flat surface with 6 mm thickness at each ERP, and forward of the N-F line the ear is truncated, as illustrated in Figure 9.1.2. The ear truncation is introduced to preclude the ear lobe from interfering with handset tilt, which could lead to unstable positioning at the cheek.

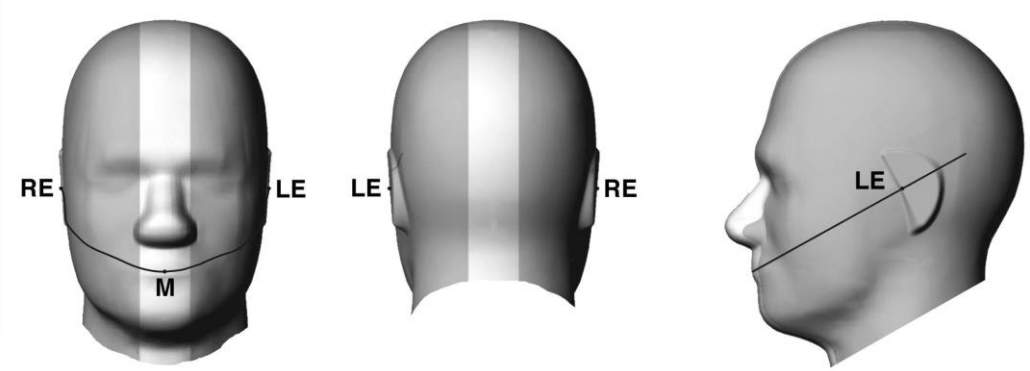


Fig 9.1.1 Front, back, and side views of SAM twin phantom

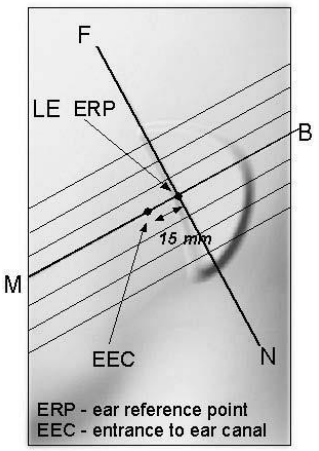


Fig 9.1.2 Close-up side view of phantom showing the ear region.

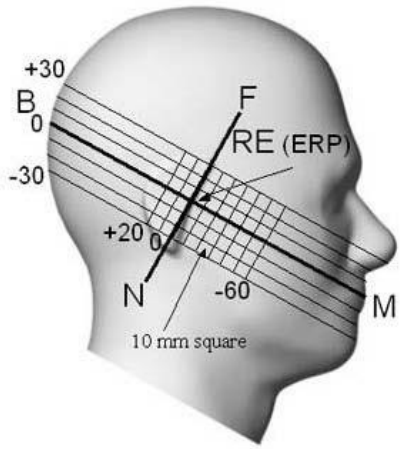


Fig 9.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

11.2 Definition of the cheek position

1. Ready the handset for talk operation, if necessary. For example, for handsets with a cover piece (flip cover), open the cover. If the handset can transmit with the cover closed, both configurations must be tested.
2. Define two imaginary lines on the handset—the vertical centerline and the horizontal line. The vertical centerline passes through two points on the front side of the handset—the midpoint of the width wt of the handset at the level of the acoustic output (point A in Figure 9.2.1 and Figure 9.2.2), and the midpoint of the width wb of the bottom of the handset (point B). The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output (see Figure 9.2.1). The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily parallel to the front face of the handset (see Figure 9.2.2), especially for clamshell handsets, handsets with flip covers, and other irregularly-shaped handsets.
3. Position the handset close to the surface of the phantom such that point A is on the (virtual) extension of the line passing through points RE and LE on the phantom (see Figure 9.2.3), such that the plane defined by the vertical centerline and the horizontal line of the handset is approximately parallel to the sagittal plane of the phantom.
4. Translate the handset towards the phantom along the line passing through RE and LE until handset point A touches the pinna at the ERP.
5. While maintaining the handset in this plane, rotate it around the LE-RE line until the vertical centerline is in the plane normal to the plane containing B-M and N-F lines, i.e., the Reference Plane.
6. Rotate the handset around the vertical centerline until the handset (horizontal line) is parallel to the N-F line.
7. While maintaining the vertical centerline in the Reference Plane, keeping point A on the line passing through RE and LE, and maintaining the handset contact with the pinna, rotate the handset about the N-F line until any point on the handset is in contact with a phantom point below the pinna on the cheek. See Figure 9.2.3. The actual rotation angles should be documented in the test report.

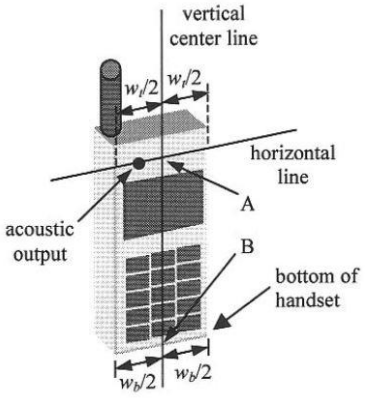


Fig 9.2.1 Handset vertical and horizontal reference lines—"fixed case

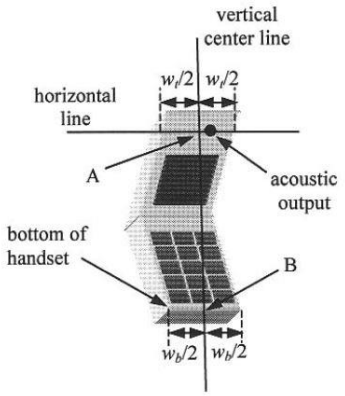


Fig 9.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

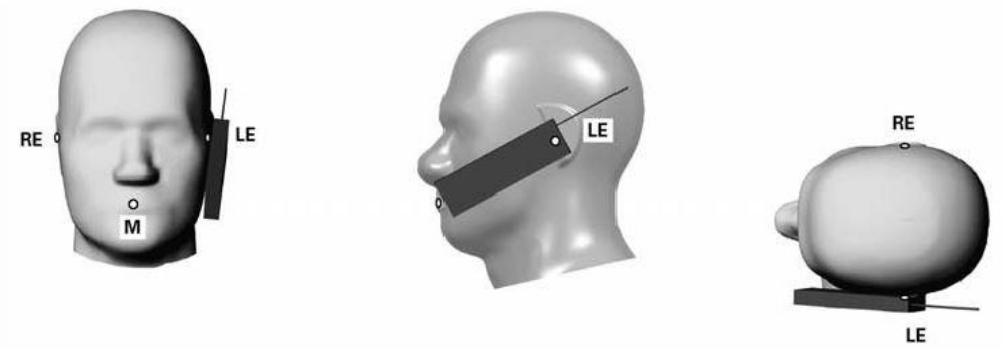


Fig 9.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

11.3 Definition of the tilt position

1. Ready the handset for talk operation, if necessary. For example, for handsets with a cover piece (flip cover), open the cover. If the handset can transmit with the cover closed, both configurations must be tested.
2. While maintaining the orientation of the handset, move the handset away from the pinna along the line passing through RE and LE far enough to allow a rotation of the handset away from the cheek by 15°.
3. Rotate the handset around the horizontal line by 15°.
4. While maintaining the orientation of the handset, move the handset towards the phantom on the line passing through RE and LE until any part of the handset touches the ear. The tilt position is obtained when the contact point is on the pinna. See Figure 9.3.1. If contact occurs at any location other than the pinna, e.g., the antenna at the back of the phantom head, the angle of the handset should be reduced. In this case, the tilt position is obtained if any point on the handset is in contact with the pinna and a second point

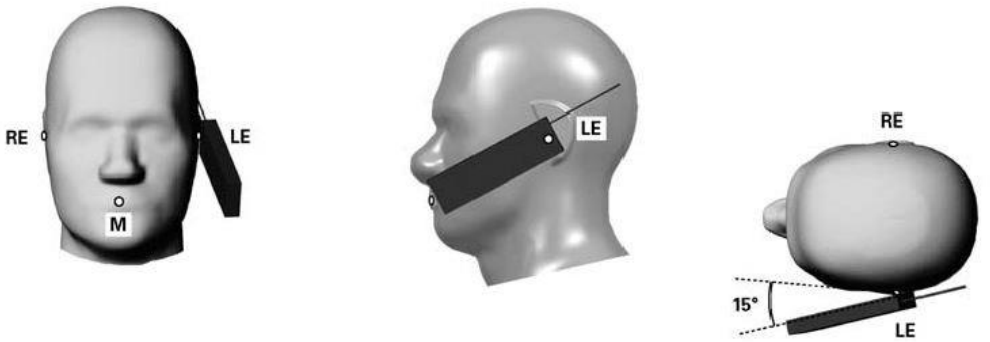


Fig 9.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

11.4 Body Worn Accessory

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 9.4). Per KDB648474 D04v01r03, 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 447498 D01v06 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 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 handset 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 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 test with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-chip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

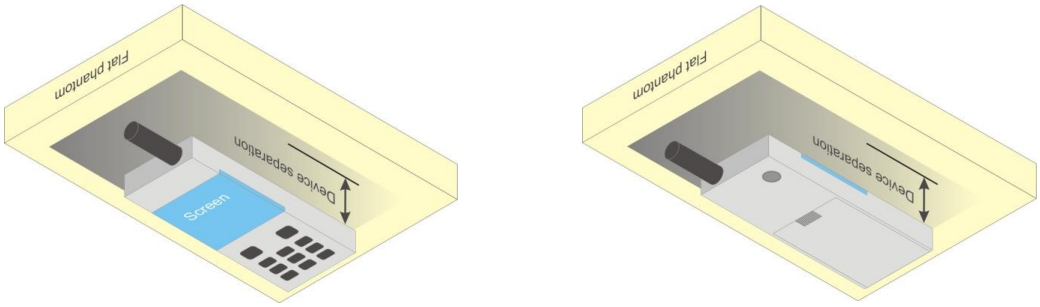


Fig 9.4 Body Worn Position

11.5 Wireless Router

Some battery-operated handsets have the capability to transmit and receive user through simultaneous transmission of WIFI simultaneously with a separate licensed transmitter. The FCC has provided guidance in FCC KDB Publication 941225 D06 v02r01 where SAR test considerations for handsets (L x W ≥ 9 cm x 5 cm) are based on a composite test separation distance of 10mm from the front, back and edges of the device containing transmitting antennas within 2.5cm of their edges, determined form general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.

When the user enables the personal wireless router functions for the handset, actual operations include simultaneous transmission of both the WIFI transmitter and another licensed transmitter. Both transmitters often do not transmit at the same transmitting frequency and thus cannot be evaluated for SAR under actual use conditions due to the limitations of the SAR assessment probes. Therefore, SAR must be evaluated for each frequency transmission and mode separately and spatially summed with the WIFI transmitter according to FCC KDB Publication 447498 D01v06 publication procedures. The “Portable Hotspot” feature on the handset was NOT activated during SAR assessments, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal at a time.

12. Measurement procedure for output power and SAR

Power measurements for licensed transmitters are performed using a base station simulator under digital average power, and the detail output power measurement include in appendix D

<GSM Note>

1. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The 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. Therefore, the GPRS (4Tx slots) for GSM850/GSM1900 is considered as the primary mode.
2. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, 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, SAR measurement is not required for the secondary mode.

<WCDMA Note>

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”.
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is ≤ ¼ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA, and according to the following RF output power, the output power results of the secondary modes (HSUPA, HSDPA, DC-HSDPA) are less than ¼ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.
3. The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification.
4. The procedures in KDB 941225 D01v03r01 are applied for 3GPP Rel. 6 HSPA to configure the device in the required sub-test mode(s) to determine SAR test exclusion.
5. For DC-HSDPA, the device was configured according to the H-Set 12, Fixed Reference Channel (FRC) configuration in Table C.8.1.12 of 3GPP TS 34.121-1, with the primary and the secondary serving HS-DSCH Cell enabled during the power measurement.

A summary of these settings are illustrated below:

HSDPA Setup Configuration:

a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
b. The RF path losses were compensated into the measurements.
c. A call was established between EUT and Base Station with following setting:
   i. Set Gain Factors (β_c and β_d) and parameters were set according to each
   ii. Specific sub-test in the following table, C10.1.4, quoted from the TS 34.121
   iii. Set RMC 12.2Kbps + HSDPA mode.
   iv. Set Cell Power = -86 dBm
   v. Set HS-DSCH Configuration Type to FRC (H-set 1, QPSK)
   vi. Select HSDPA Uplink Parameters
   vii. Set Delta ACK, Delta NACK and Delta CQI = 8
   viii. Set Ack-Nack Repetition Factor to 3
   ix. Set CQI Feedback Cycle (k) to 4 ms
   x. Set CQI Repetition Factor to 2
   xi. Power Ctrl Mode = All Up bits
d. The transmitted maximum output power was recorded.

Table C.10.1.4: β values for transmitter characteristics tests with HS-DPCCH

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
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} = 30/15 with β_{hs} = 30/15 * β_c.

Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and Δ_{NACK} = 30/15 with β_{hs} = 30/15 * β_c, and Δ_{CQI} = 24/15 with β_{hs} = 24/15 * β_c.

Note 3: CM = 1 for β_c/β_d =12/15, β_{hs}/β_c=24/15. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 4: 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 signalled gain factors for the reference TFC (TF1, TF1) to β_c = 11/15 and β_d = 15/15.

Setup Configuration

HSUPA Setup Configuration:

a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
b. The RF path losses were compensated into the measurements.
c. A call was established between EUT and Base Station with following setting * :
   i. Call Configs = 5.2B, 5.9B, 5.10B, and 5.13.2B with QPSK
   ii. Set the Gain Factors (β_c and β_d) and parameters (AG Index) were set according to each specific sub-test in the following table, C11.1.3, quoted from the TS 34.121
   iii. Set Cell Power = -86 dBm
   iv. Set Channel Type = 12.2k + HSPA
   v. Set UE Target Power
   vi. Power Ctrl Mode= Alternating bits
   vii. Set and observe the E-TFCI
   viii. Confirm that E-TFCI is equal to the target E-TFCI of 75 for sub-test 1, and other subtest's E-TFCI
d. The transmitted maximum output power was recorded.

Table C.11.1.3: β values for transmitter characteristics tests with HS-DPCCH and E-DCH

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note1)	β_{ec}	β_{ed} (Note 4) (Note 5)	β_{ed} (SF)	β_{ed} (Codes)	CM (dB) (Note 2)	MPR (dB) (Note 2) (Note 6)	AG Index (Note 5)	E-TFCI
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/225	1309/225	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	$\beta_{ed}1$: 47/15 $\beta_{ed}2$: 47/15	4 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	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67

Note 1: For sub-test 1 to 4, Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with β_{hs} = 30/15 * β_c. For sub-test 5, Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 5/15 with β_{hs} = 5/15 * 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 signalled gain factors for the reference TFC (TF1, TF1) to β_c = 10/15 and β_d = 15/15.

Note 4: In case of testing by UE using E-DPDCH Physical Layer category 1, Sub-test 3 is omitted according to TS25.306 Table 5.1g.

Note 5: β_{ed} can not be set directly; it is set by Absolute Grant Value.

Note 6: For subtests 2, 3 and 4, UE may perform E-DPDCH power scaling at max power which could results in slightly smaller MPR values.

Setup Configuration

DC-HSDPA 3GPP release 8 Setup Configuration:

a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration below
b. The RF path losses were compensated into the measurements.
c. A call was established between EUT and Base Station with following setting:
   i. Set RMC 12.2Kbps + HSDPA mode.
   ii. Set Cell Power = -25 dBm
   iii. Set HS-DSCH Configuration Type to FRC (H-set 12, QPSK)
   iv. Select HSDPA Uplink Parameters
   v. Set Gain Factors (β_c and β_d) and parameters were set according to each Specific sub-test in the following table, C10.1.4, quoted from the TS 34.121
      a). Subtest 1: β_c/β_d=2/15
      b). Subtest 2: β_c/β_d=12/15
      c). Subtest 3: β_c/β_d=15/8
      d). Subtest 4: β_c/β_d=15/4
   vi. Set Delta ACK, Delta NACK and Delta CQI = 8
   vii. Set Ack-Nack Repetition Factor to 3
   viii. Set CQI Feedback Cycle (k) to 4 ms
   ix. Set CQI Repetition Factor to 2
   x. Power Ctrl Mode = All Up bits
d. The transmitted maximum output power was recorded.

The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification.
A summary of these settings are illustrated below:

C.8.1.12 Fixed Reference Channel Definition H-Set 12

Table C.8.1.12: Fixed Reference Channel H-Set 12

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	kbps	60
Inter-TTI Distance	TTI's	1
Number of HARQ Processes	Proces ses	6
Information Bit Payload (N_{INF})	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codes	Codes	1
Modulation		QPSK
Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table.		
Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.		

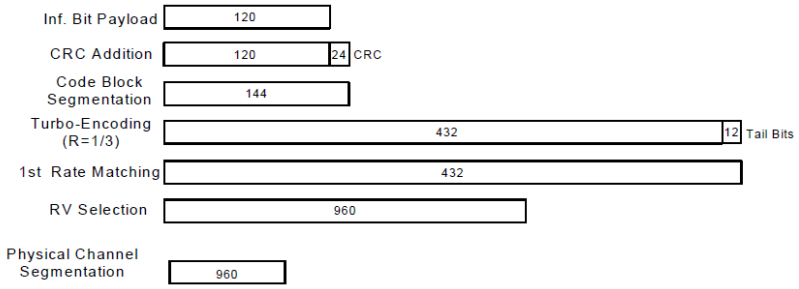
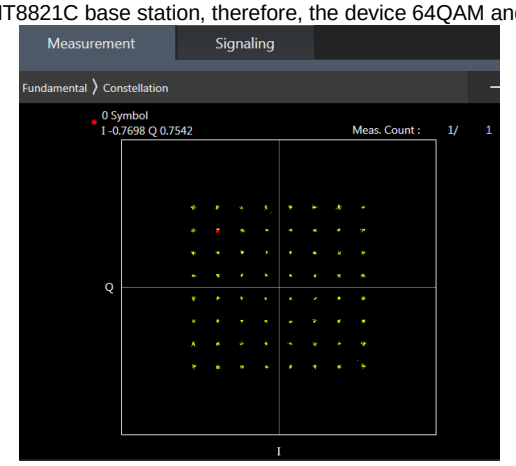


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

Setup Configuration

<LTE Note>

1. Anritsu MT8821C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05v02r05, 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.
4. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 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.
6. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is > not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B12/B26/B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
9. LTE B2/B4/B5/B17/B38 SAR test was covered by B12/B25/B26/B66/B41; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
   a. the maximum output power, including tolerance, for the smaller band is ≤ the larger band to qualify for the SAR test exclusion
   b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band
10. According to 2017 TCB workshop, for 64 QAM and 16 QAM should be verified by checking the signal constellation with a call box to avoid incorrect maximum power levels due to MPR and other requirements associated with signal modulation, and the following figure is taken from the "Fundamental Measurement >> Modulation Analysis >> constellation" mode of the device connect to the MT8821C base station, therefore, the device 64QAM and 16QAM signal modulation are correct.



64QAM

16QAM

<Additional information for TDD LTE>

TDD LTE configuration setup for SAR measurement

SAR was tested with a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by 3GPP.

a. 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations

b. "special subframe S" contains both uplink and downlink transmissions, it has been taken into consideration to determine the transmission duty factor according to the worst case uplink and downlink cyclic prefix requirements for UpPTS

c. Establishing connections with base station simulators ensure a consistent means for testing SAR and recommended for evaluating SAR. The Anritsu MT8820C (firmware: #22.52#004) was used for LTE output power measurements and SAR testing.

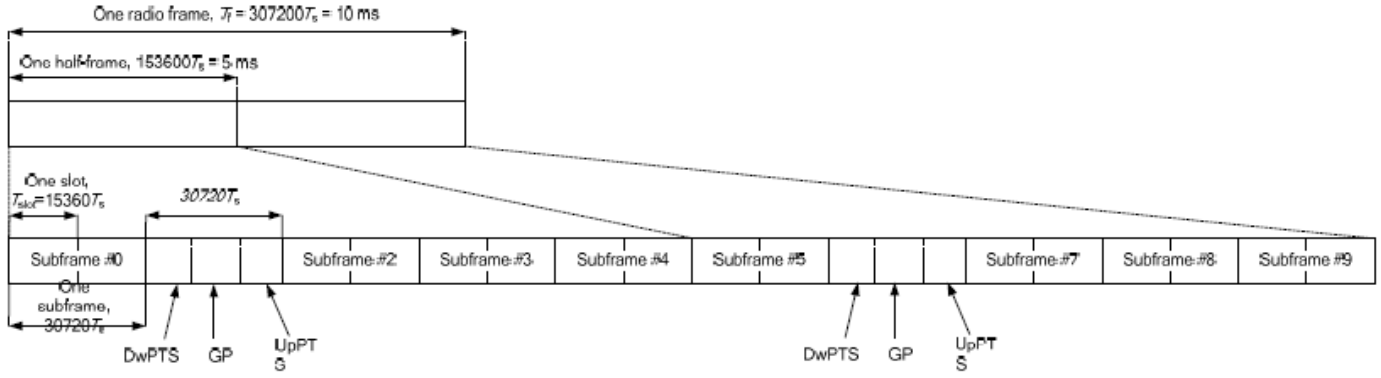


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: 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

Table 4.2-1: 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	$13168 \cdot T_s$			-	-	-

Special subframe (30720·T_s): Normal cyclic prefix in downlink (UpPTS)			
	Special subframe configuration	**Normal cyclic prefix in uplink**	**Extended cyclic prefix in uplink**
Uplink duty factor in one special subframe	**0~4**	7.13%	8.33%
	5~9	14.3%	16.7%

Special subframe(30720·T_s): Extended cyclic prefix in downlink (UpPTS)			
	Special subframe configuration	**Normal cyclic prefix in uplink**	**Extended cyclic prefix in uplink**
Uplink duty factor in one special subframe	**0~3**	7.13%	8.33%
	4~7	14.3%	16.7%

The highest duty factor is resulted from:

i. Uplink-downlink configuration: 0. In a half-frame consisted of 5 subfames, uplink operation is in 3 uplink subframes and 1 special subframe.

ii. special subframe configuration: 5-9 for normal cyclic prefix in downlink, 4-7 for extended cyclic prefix in downlink

iii. for special subframe with extended cyclic prefix in uplink, the total uplink duty factor in one half-frame is: (3+0.167)/5 = 63.3%

iv. for special subframe with normal cyclic prefix in uplink, the total uplink duty factor in one half-frame is: (3+0.143)/5 = 62.9%

v. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The scaled TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.

vi. The device supports Power Class 3 uplink-downlink configurations 0 and 6, and Power Class 2 uplink-downlink configurations 1 to 5.

vii. The highest available duty cycle for Power Class 2 operation is 43.3% using UL-DL configuration 1, for Power Class 3 operation is 63.3% using UL-DL configuration 0. Per FCC Guidance, all SAR tests were performed using Power Class 3. SAR with Power Class 2 at the available duty factor was additionally performed for the Power Class 3 configuration with the highest SAR among all exposure condition.

<5G FR1 Note>

1. NR implementation of n2, n5, n12, n25, n41, n66 and n71 is limited to EN-DC operations only (NSA), with LTE Bands 2/4/5/7/12/13/14/25/26/30/66/71/41/48 acting as anchor bands, SAR tests for NR Bands and LTE Anchors Bands were performed separately due to limitations in SAR probe calibration factors. the detail EN-DC combination include in section3.3
2. 5G NR support SCS 15KHz / 30KHz, DFT-s/CP-OFDM, PI/2 BPSK/QPSK/16QAM/64QAM/256QAM and support Bandwidth include in section3.3
3. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
   a. For DFT-s-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class 2 and 3, the CP-OFDM mode will not higher than DFT-s-OFDM mode, therefore, similar FCC KDB 941225 D05 procedure for other modulation output power for each RB allocation configuration is > not ½ dB higher than the same configuration in DFT-s-Pi/2 BPSK and the reported SAR for the DFT-s-Pi/2 BPSK configuration is ≤ 1.45 W/kg; CP-OFDM measurement is unnecessary.
   b. For DFT-s-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class 3, full measurement on Pi/2 BPSK/QPSK with larger bandwidth, for16QAM/64QMA/256QAM spot check 1RB 1offset configuration to ensure the output power will not ½ dB higher than Pi/2 BPSK and QPSK, for smaller bandwidth output power also spot check 1RB 1offset configuration at Pi/2 BPSK to ensure output power will not ½ dB higher than largest supported bandwidth.
   c. SAR testing start with the largest channel bandwidth and measure SAR for PI/2 BPSK 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.
   d. 50% RB allocation for PI/2 BPSK SAR testing follows 1RB PI/2 BPSK allocation procedure
   e. PI/2 BPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 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.
   f. QPSK/16QAM/64QAM/256QAM output powers are not ½ dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/16QAM/64QAM/256QAM SAR testing are not required.
   g. Smaller bandwidth output power for each RB allocation configuration for this device will not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device

<3GPP 38.101 MPR for EN-DC>

Table 6.2.2-1 Maximum power reduction (MPR) for power class 3

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	≤ 3.5[1]	≤ 1.2[1]	≤ 0.2[1]
		≤ 0.5[2]	≤ 0.5[2]	0[2]
	QPSK	≤ 1		0
	16 QAM	≤ 2		≤ 1
	64 QAM	≤ 2.5		
	256 QAM	≤ 4.5		
CP-OFDM	QPSK	≤ 3		≤ 1.5
	16 QAM	≤ 3		≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		

NOTE 1: Applicable for UE operating in TDD mode with Pi/2 BPSK modulation and UE indicates support for UE capability *powerBoosting-pi2BPSK* and if the IE *powerBoostPi2BPSK* is set to 1 and 40 % or less slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79. The reference power of 0 dB MPR is 26 dBm.

NOTE 2: Applicable for UE operating in FDD mode, or in TDD mode in bands other than n40, n41, n77, n78 and n79 with Pi/2 BPSK modulation and if the IE *powerBoostPi2BPSK* is set to 0 and if more than 40 % of slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79.

Table 6.2.2-2 Maximum power reduction (MPR) for power class 2

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	≤ 3.5	≤ 0.5	0
	QPSK	≤ 3.5	≤ 1	0
	16 QAM	≤ 3.5	≤ 2	≤ 1
	64 QAM	≤ 3.5	≤ 2.5	
	256 QAM	≤ 4.5		
CP-OFDM	QPSK	≤ 3.5	≤ 3	≤ 1.5
	16 QAM	≤ 3.5	≤ 3	≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		

<WLAN Note>

1. When MIMO mode was not performed, for each antenna, transmit power in SISO operation is larger than (or equal to) the power in MIMO operation, RF exposure compliance of MIMO mode can be deduced from the compliance simultaneous transmission of antennas operating in SISO mode.
2. When MIMO mode was not performed, per KDB 248227 D01v02r02, the simultaneous SAR provisions in KDB publication 447498 should be applied to determine simultaneous transmission SAR test exclusion for WiFi MIMO. If the sum of 1g single transmission chain SAR measurements is < 1.6W/kg and SAR peak to location ratio ≤ 0.04, no additional SAR measurements for MIMO.
3. The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures. For “Not required”, SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band or when MIMO mode was not performed, due to for each antenna, transmit power in SISO operation is larger than (or equal to) the power in MIMO operation, RF exposure compliance of MIMO mode can be deduced from the compliance simultaneous transmission of antennas operating in SISO mode. Additional output power measurements were not deemed necessary.
4. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. For OFDM, in both 2.4 and 5 GHz bands, an initial test configuration must be determined for each standalone and aggregated frequency band, according to the transmission mode configuration with the highest maximum output power specified for production units to perform SAR measurements. If the same highest maximum output power applies to different combinations of channel bandwidths, modulations and data rates, additional procedures are applied to determine which test configurations require SAR measurement. When applicable, an initial test position may be applied to reduce the number of SAR measurements required for next to the ear, UMPC mini-tablet or hotspot mode configurations with multiple test positions.
5. For 2.4 GHz 802.11b DSSS, either the initial test position procedure for multiple exposure test positions or the DSSS procedure for fixed exposure position is applied; these are mutually exclusive. For 2.4 GHz and 5 GHz OFDM configurations, the initial test configuration is applied to measure SAR using either the initial test position procedure for multiple exposure test position configurations or the initial test configuration procedures for fixed exposure test conditions. Based on the reported SAR of the measured configurations and maximum output power of the transmission mode configurations that are not included in the initial test configuration, the subsequent test configuration and initial test position procedures are applied to determine if SAR measurements are required for the remaining OFDM transmission configurations. In general, the number of test channels that require SAR measurement is minimized based on maximum output power measured for the test sample(s).
6. For OFDM transmission configurations in the 2.4 GHz and 5 GHz bands, When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel for each frequency band.
7. DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures.18 The initial test position procedure is described in the following:
    a. When the reported SAR of 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 802.11 transmission mode combinations within the frequency band or aggregated band.
    b. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode 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 report SAR is ≤ 0.8 W/kg or all required test position are tested.
    c. For all positions/configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

<Bluetooth>

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps due to its highest average power and duty cycle is 77.13% considered in SAR testing, and the duty cycle would be scaled to theoretical 83.3% in reported SAR calculation, for the duty cycle figure include in appendix D.

13. DL/UL carrier aggregation

<LTE Carrier Aggregation combinations>

General Note:

1. This device supports Carrier Aggregation on downlink for inter and intra band. For the device supports combination bands and configurations are according to 3GPP.
2. In applying the existing power measurement procedure of KDB 941225 D05A for DL CA SAR test exclusion, only the subset with the largest number of combinations of the frequency band and CCs in each row need consideration, and that configurations require power measurement should be highlighted in the below table.

2CC Downlink Carrier Aggregation			3CC Downlink Carrier Aggregation			4CC Downlink Carrier Aggregation		
Number	Combination	Covered by Measurement Superset	Number	Combination	Covered by Measurement Superset	Number	Combination	Covered by Measurement Superset
1	2C	44	30	2A-2A-4A		55	41D	
2	2A-2A	30	31	2A-2A-7A		56	42D	
3	2A-4A	37	32	2A-2A-30A		57	48D	
4	2A-7A	41	33	2A-2A-66A		58	2A-48A-48C	
5	2A-30A	34	34	2A-30A-66A		59	2A-66A-48C	
6	2A-48A	35	35	2A-48A-66A		60	2A-4A-7C	
7	2A-66A	39	36	2A-4A-30A		61	48A-48A-66B	
8	48C	54	37	2A-4A-4A		62	48A-48A-66C	
9	4A-7A	47	38	2A-4A-7A	60	63	48A-66A-48C	
10	66B	39	39	2A-66B	40	64	66A-66A-2C	
11	66C	40	40	2A-66C				
12	4A-4A	46	41	2A-7A-66A				
13	4A-30A		42	2A-7A-7A				
14	30A-66A	49	43	2A-7C	60			
15	48A-48A	52	44	2C-66A	64			
16	48A-66A	53	45	4A-48C				
17	7A-7A	42	46	4A-4A-7A				
18	66A-66A	51	47	4A-7C				
19	7A-66A	48	48	7A-66A-66A				
20	7B		49	30A-66A-66A				
21	7C	43	50	41A-41C				
22	7A-38A		51	66A-66C				
23	42C		52	48A-48C	63			
24	38C		53	48A-66C	62			
25	41C	50	54	48C-66A	63			
26	25A-25A							
27	25A-41A							
28	41A-41A	50						
29	42A-42A							

<Power verification when LTE Carrier Aggregation Active>

General Note:

i. According to KDB941225 D05A v01r02, Uplink maximum output power measurement with downlink carrier aggregation active should be measured, using the highest output channel measured without downlink carrier aggregation, to confirm that uplink maximum output power with downlink carrier aggregation active remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output measured without downlink carrier aggregation active.

ii. Uplink maximum output power with downlink carrier aggregation active does not show more than ¼ dB higher than the maximum output power without downlink carrier aggregation active, therefore SAR evaluation with downlink carrier aggregation active can be excluded.

iii. The device supports downlink two carrier aggregation. For power measurement were control and acknowledge data is sent on uplink channels that operate identical to specifications when downlink carrier aggregation is inactive.

iv. Selected highest measured power when downlink carrier aggregation is inactive for conducted power comparison with downlink carrier aggregation is active, to confirm that when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output power measured when downlink carrier aggregation inactive.

v. For non-contiguous intra-band CA, the SCC selected to provide maximum separation from the PCC and must remain fully within the downlink transmission band.

vi. For Intra-band, contiguous CA, the downlink channels selected to perform the uplink power measurement must satisfy 3GPP channel spacing (5.4.1A of 3GPP TS 36.521 or equivalent) and channel bandwidth (5.4.2A) requirements.

$$\text{Nominal channel spacing} = \left\lfloor \frac{BW_{Channel(1)} + BW_{Channel(2)} - 0.1\left|BW_{Channel(1)} - BW_{Channel(2)}\right|}{0.6} \right\rfloor 0.3 \ \text{[MHz]}$$

<Two Carrier power verification>

Configure		CA Configuration (BCS)	PCC							SCC				Power	
			LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band		4A-30A	4	20	1745	20300	QPSK	1	0	30	10	2355	9820	23.92	23.98
		7A-38A	7	20	2510	20850	QPSK	1	0	38	20	2595	38000	24.40	24.38
		25A-41A	25	20	1880	26340	QPSK	1	0	25	20	1985	8590	24.56	24.62
Intra-Band	Non-Contiguous	25A-25A	25	20	1880	26340	QPSK	1	0	25	20	1985	8590	24.65	24.62
		42A-42A	42	20	3590	43490	QPSK	1	0	42	20	3590	43490	24.81	24.76
	Contiguous	7B	7	20	2535	21100	QPSK	1	0	7	20	2554.8	21298	24.61	24.63
		38C	38	20	2595	38000	QPSK	1	0	38	20	2614.8	38198	25.94	26.06
		42C	42	20	3575	43340	QPSK	1	0	42	20	3594.8	43538	24.65	24.68

<Three Carrier power verification>

Configure	CA Configuration (BCS)	PCC							SCC				SCC2				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band	2A-2A-4A	2	20	1880	18900	QPSK	1	0	2	20	1980	1100	4	20	2132.5	2175	24.58	24.63
	2A-2A-7A	2	20	1880	18900	QPSK	1	0	2	20	1980	1100	7	20	2655	3100	24.64	24.63
	2A-2A-30A	2	20	1880	18900	QPSK	1	0	2	20	1980	1100	30	10	2355	9820	24.70	24.63
	2A-2A-66A	2	20	1880	18900	QPSK	1	0	2	20	1980	1100	66	20	2155	66886	24.52	24.63
	2A-30A-66A	2	20	1880	18900	QPSK	1	0	30	10	2355	9820	66	20	2155	66886	24.57	24.63
	2A-48A-66A	2	20	1880	18900	QPSK	1	0	48	20	3625	55990	66	20	2155	66886	24.69	24.63
	2A-4A-30A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	30	10	2355	9820	24.65	24.63
	2A-66C	2	20	1880	18900	QPSK	1	0	66	20	2155	66886	66	20	2190	67236	24.71	24.63
	2A-7A-66A	2	20	1880	18900	QPSK	1	0	7	20	2655	3100	66	20	2155	66886	24.50	24.63
	2A-7A-7A	2	20	1880	18900	QPSK	1	0	7	20	2655	3100	7	20	2655	3100	24.66	24.63
	4A-48C	4	20	1745	20300	QPSK	1	0	48	20	3625	55990	48	20	3700	56739	23.96	23.98
	4A-4A-7A	4	20	1745	20300	QPSK	1	0	4	20	2145	2300	7	20	2655	3100	23.89	23.98
	4A-7C	4	20	1745	20300	QPSK	1	0	7	20	2655	3100	7	20	2680	3350	23.99	23.98
	7A-66A-66A	7	20	2510	20850	QPSK	1	0	66	20	2155	66886	66	20	2190	67236	24.35	24.38
	30A-66A-66A	30	10	2310	27710	QPSK	1	0	66	20	2155	66886	66	20	2190	67236	24.37	24.48
	41A-41C	41	20	2506	39750	QPSK	1	0	41	20	2593	40620	41	20	2680	41490	24.40	24.47
	66A-66C	66	20	1770	132572	QPSK	1	0	66	20	2155	66886	66	20	2190	67236	23.85	23.94

<Four Carrier power verification>

Configure		CA Configuration (BCS)	PCC							SCC1				SCC2				SCC3				Power	
			LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band		2A-48A-48C	2	20	1880	18900	QPSK	1	0	48	20	3625	55990	48	20	3625	55990	48	20	3700	56739	23.18	23.22
		2A-66A-48C	2	20	1880	18900	QPSK	1	0	66	28	2155	66886	48	20	3625	55990	48	20	3700	56739	23.15	23.22
		2A-4A-7C	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	7	20	2655	3100	7	20	2680	3350	23.27	23.22
		48A-48A-66B	48	20	3641	56150	QPSK	1	0	48	20	3700	56739	66	20	2155	66886	66	20	2190	67236	25.52	24.55
		48A-48A-66C	48	20	3641	56150	QPSK	1	0	48	20	3700	56739	66	20	2155	66886	66	20	2190	67236	24.63	24.55
		48A-66A-48C	48	20	3641	56150	QPSK	1	0	66	20	2155	66886	48	20	3625	55990	48	20	3700	56739	24.58	24.55
		66A-66A-2C	66	20	1770	132572	QPSK	1	0	66	20	2190	67236	2	20	1960	900	2	20	1979.8	1098	23.85	23.94
Intra-Band	Contiguous	41D	41	20	2593	40620	QPSK	1	0	41	20	2612.8	40818	41	20	2680	41490	41	20	2699.8	41698	25.58	25.66
		42D	42	20	3575	43340	QPSK	1	0	42	20	3594.8	43538	42	20	3590	43490	42	20	3609.8	43688	24.63	24.68
		48D	48	20	3625	55990	QPSK	1	0	48	20	3644.8	56188	48	20	3700	56739	48	20	3719.8	56937	24.35	24.41

<Uplink Carrier Aggregation Active>

<Intra-Band Uplink carrier aggregation>

General Note:

1. The device supports intra-band uplink carrier aggregation for LTE B5/7/41/48/66 with a maximum of two 20MHz component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when not-contiguous RB allocation is implemented. The conducted power and MPR setting in this device are permanently implemented pre 3GPP requirement.
2. According TCB workshop, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.
3. Uplink CA is only operating with power class3, and additional SAR measurement for LTE UL CA whit other DL CA combinations active were not required since the maximum output power for this configuration was not > 0.25dB higher than the maximum output power for UL CA active.

2CC uplink Carrier Aggregation		
Number	Combination	Covered by Measurement Superset
1	5B	
2	7C	
3	41C	
4	48C	
5	66B	6
6	66C	

Config 0

CA_5B_DSI 2/6/7										
Combination 10MHz+10MHz (50RB+50RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20450	20549	QPSK	1	49	1	0	1	0	24.53	25
20575	20476	QPSK	1	0	1	49	2	0	24.88	25
20600	20501	QPSK	1	0	1	49	2	0	24.91	25

CA_7C_DSI 2/7										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	99	1	0	1	0	24.66	25
21100	20902	QPSK	1	0	1	99	2	0	24.97	25
21350	21152	QPSK	1	0	1	99	2	0	24.93	25

CA_41C_DSI 2/7										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	99	1	0	1	0	24.98	25
40185	39987	QPSK	1	0	1	99	2	0	24.94	25
40620	40422	QPSK	1	0	1	99	2	0	24.96	25
41055	40857	QPSK	1	0	1	99	2	0	24.92	25
41490	41292	QPSK	1	0	1	99	2	0	24.5	25

CA_48C_DSI 2/4/6/7/8									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
55340	55538	QPSK	1	99	1	0	1	0	13.85	14
55830	55632	QPSK	1	0	1	99	2	0	13.86	14
56150	55952	QPSK	1	0	1	99	2	0	13.95	14

CA_66C_DSI 2/4/6/7/8									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	99	1	0	1	0	24.79	25
132322	132124	QPSK	1	0	1	99	2	0	24.94	25
132572	132374	QPSK	1	0	1	99	2	0	24.98	25

CA_7C_DSI 6									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	99	1	0	1	0	17.67	18.7
21100	20902	QPSK	1	0	1	99	2	0	17.86	18.7
21350	21152	QPSK	1	0	1	99	2	0	17.7	18.7

CA_41C_DSI 6									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	99	1	0	1	0	20.1	20.2
40185	39987	QPSK	1	0	1	99	2	0	20.08	20.2
40620	40422	QPSK	1	0	1	99	2	0	20.08	20.2
41055	40857	QPSK	1	0	1	99	2	0	20.02	20.2
41490	41292	QPSK	1	0	1	99	2	0	19.11	20.2

CA_7C_DSI 4									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	99	1	0	1	0	21.14	23.1
21100	20902	QPSK	1	0	1	99	2	0	21.26	23.1
21350	21152	QPSK	1	0	1	99	2	0	21.25	23.1

CA_7C_DSI 8									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	99	1	0	1	0	21.04	22.3
21100	20902	QPSK	1	0	1	99	2	0	20.96	22.3
21350	21152	QPSK	1	0	1	99	2	0	21.05	22.3

CA_41C_DSI 4									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	99	1	0	1	0	24.25	25
40185	39987	QPSK	1	0	1	99	2	0	24.13	25
40620	40422	QPSK	1	0	1	99	2	0	24.16	25
41055	40857	QPSK	1	0	1	99	2	0	24.09	25
41490	41292	QPSK	1	0	1	99	2	0	23.12	25

CA_41C_DSI 8									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	99	1	0	1	0	24.25	24.3
40185	39987	QPSK	1	0	1	99	2	0	24.13	24.3
40620	40422	QPSK	1	0	1	99	2	0	24.16	24.3
41055	40857	QPSK	1	0	1	99	2	0	24.09	24.3
41490	41292	QPSK	1	0	1	99	2	0	23.12	24.3

Config 1

CA_5B_DSI 2/6/7									
Combination 10MHz+10MHz (50RB+50RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20450	20549	QPSK	1	49	1	0	1	0	24.33	25
20575	20476	QPSK	1	0	1	49	2	0	24.88	25
20600	20501	QPSK	1	0	1	49	2	0	24.90	25

CA_7C_DSI 2/7									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	99	1	0	1	0	24.49	25
21100	20902	QPSK	1	0	1	99	2	0	24.47	25
21350	21152	QPSK	1	0	1	99	2	0	24.71	25

CA_41C_DSI 2/4/6/7/8									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	99	1	0	1	0	24.49	25
40185	39987	QPSK	1	0	1	99	2	0	24.61	25
40620	40422	QPSK	1	0	1	99	2	0	24.95	25
41055	40857	QPSK	1	0	1	99	2	0	24.8	25
41490	41292	QPSK	1	0	1	99	2	0	23.9	25

CA_48C_DSI 2/4/6/7/8									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
55340	55538	QPSK	1	99	1	0	1	0	13.85	14
55830	55632	QPSK	1	0	1	99	2	0	13.86	14
56150	55952	QPSK	1	0	1	99	2	0	13.95	14

CA_66C_DSI 2/7									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	99	1	0	1	0	24.87	25
132322	132124	QPSK	1	0	1	99	2	0	24.91	25
132572	132374	QPSK	1	0	1	99	2	0	24.96	25

CA_7C_DSI 6									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	99	1	0	1	0	23.80	24.7
21100	20902	QPSK	1	0	1	99	2	0	23.86	24.7
21350	21152	QPSK	1	0	1	99	2	0	23.97	24.7

CA_66C_DSI 6									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	99	1	0	1	0	20.92	21.7
132322	132124	QPSK	1	0	1	99	2	0	20.89	21.7
132572	132374	QPSK	1	0	1	99	2	0	20.91	21.7

CA_7C_DSI 4									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	99	1	0	1	0	23.81	25.0
21100	20902	QPSK	1	0	1	99	2	0	23.79	25.0
21350	21152	QPSK	1	0	1	99	2	0	24.03	25.0

CA_7C_DSI 8									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	99	1	0	1	0	23.81	24.7
21100	20902	QPSK	1	0	1	99	2	0	23.79	24.7
21350	21152	QPSK	1	0	1	99	2	0	24.03	24.7

CA_66C_DSI 4									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	99	1	0	1	0	21.46	23.0
132322	132124	QPSK	1	0	1	99	2	0	21.38	23.0
132572	132374	QPSK	1	0	1	99	2	0	21.43	23.0

CA_66C_DSI 8									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	99	1	0	1	0	21.46	22.2
132322	132124	QPSK	1	0	1	99	2	0	21.38	22.2
132572	132374	QPSK	1	0	1	99	2	0	21.43	22.2

14. RF Exposure position consideration

Distance of the Antenna to the EUT surface/edge						
Antennas	Front	Back	Top Side	Bottom Side	Right Side	Left Side
WWAN Ant 0	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	≤ 25mm
WWAN Ant 1	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm
WWAN Ant 2	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	≤ 25mm
WWAN Ant 5	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm
WWAN Ant 7	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	≤ 25mm
2.4GHz WLAN Ant 3	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm
2.4GHz WLAN/BT Ant 4	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm
5GHz WLAN Ant 3	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm
5GHz WLAN Ant 4	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm

Positions for SAR tests; Hotspot mode						
Antennas	Front	Back	Top Side	Bottom Side	Right Side	Left Side
WWAN Ant 0	Yes	Yes	No	Yes	Yes	Yes
WWAN Ant 1	Yes	Yes	Yes	No	Yes	Yes
WWAN Ant 2	Yes	Yes	No	Yes	Yes	Yes
WWAN Ant 5	Yes	Yes	Yes	No	Yes	Yes
WWAN Ant 7	Yes	Yes	No	Yes	Yes	Yes
2.4GHz WLAN Ant 3	Yes	Yes	Yes	No	Yes	Yes
2.4GHz WLAN/BT Ant 4	Yes	Yes	Yes	No	Yes	Yes
5GHz WLAN Ant 3	Yes	Yes	Yes	No	Yes	Yes
5GHz WLAN Ant 4	Yes	Yes	Yes	No	Yes	Yes

General Note:

1. Referring to KDB 941225 D06 v02r01, when the overall device length and width are ≥ 9cm*5cm, the test distance is 10 mm. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge
2. The detail antenna location refers to operation description.

15. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
   a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
   b. For SAR testing of signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
   c. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
   d. For WLAN/Bluetooth: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
   e. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The Reported TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required 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:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥0.8W/kg.
4. Per KDB 648474 D04v01r03, when the reported SAR for a body-worn accessory measured without a headset connected to the handset is ≤ 1.2 W/kg, SAR testing with a headset connected to the handset is not required.

GSM Note:

1. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The 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. Therefore, the GPRS (4Tx slots) for GSM850/GSM1900 is considered as the primary mode.
2. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, 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, SAR measurement is not required for the secondary mode.

UMTS Note:

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”.
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is ≤ ¼ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA, and according to the following RF output power, the output power results of the secondary modes (HSUPA, HSDPA, DC-HSDPA) are less than ¼ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.

LTE Note:

1. Per KDB 941225 D05v02r05, 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.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 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. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is > not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B12/B26/B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
7. LTE B2/B4/B5/B17/B38 SAR test was covered by B12/B25/B26/B66/B41; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
   a. The maximum output power, including tolerance, for the smaller band is ≤ the larger band to qualify for the SAR test exclusion.
   b. The channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.
8. For UL CA, SAR was first measured with only a single carrier active in the uplink (CA non-active) for each exposure condition; the uplink CA scenario with two component carriers was additionally tested for the configuration with the highest SAR when UL CA was not acive. The SCC was configuraed with the closest available contiguous channel. The two component carriers were configured so the resource blocks are physically allocated side by side to achieve the maximum output power
9. TCB Workshop Notes, SAR tests were performed with Power Class 3 (given the specific UL/DL limitations for Power Class 2). Additionally, SAR testing for the power class condition was evaluated for the highest configuration in Power Class 3 for each test configuration to confirm the results were scalable linearly.

5G NR Note:

1. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
   a. SAR testing start with the largest channel bandwidth and measure SAR for PI/2 BPSK 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.
   b. 50% RB allocation for PI/2 BPSK SAR testing follows 1RB PI/2 BPSK allocation procedure
   c. PI/2 BPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 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.
   d. QPSK/16QAM/64QAM/256QAM output powers are not ½ dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/16QAM/64QAM/256QAM SAR testing are not required.
   e. Smaller bandwidth output power for each RB allocation configuration for this device will not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
   f. For 5G FR1 n5/n12/n41/n71 the maximum bandwidth does not support three non-overlapping channels, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

WLAN Note:

1. Per KDB 248227 D01v02r02, for 2.4GHz 802.11g/n SAR testing is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.
2. Per KDB 248227 D01v02r02, U-NII-1 SAR testing is not required when the U-NII-2A band highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band.
3. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode 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 report SAR is ≤ 0.8 W/kg or all required test position are tested.
4. For all positions / configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
5. When MIMO mode was not performed when 2.4GHz WLAN operate at head/hotspot/body-worn and 5GHz WLAN when operate at head condition, due to for each antenna, transmit power in SISO operation is larger than (or equal to) the power in MIMO operation, RF exposure compliance of MIMO mode can be deduced from the compliance simultaneous transmission of antennas operating in SISO mode
6. When MIMO mode was not performed, per KDB 248227 D01v02r02, the simultaneous SAR provisions in KDB publication 447498 should be applied to determine simultaneous transmission SAR test exclusion for WiFi MIMO. If the sum of 1g single transmission chain SAR measurements is < 1.6W/kg and SAR peak to location ratio ≤ 0.04, no additional SAR measurements for MIMO.
7. When in MIMO SAR testing, if the hot spots are separated the scaling factor would scale each hot spot based on the difference between the power for that transmit antenna and the maximum rated power, if the hot spot were not separable or too much overlap which the scaling factor is the worst case rated power/measured power across the two chains in SAR calculation.
8. During SAR testing the WLAN transmission was verified using a spectrum analyzer.

15.1 Head SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 2/7	189	836.4	Config 0	28.74	30.00	1.337	0.01	0.197	0.263
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Tilted	0mm	DSI 2/7	189	836.4	Config 0	28.74	30.00	1.337	0.14	0.159	0.213
01	GSM850_Ant 0	GPRS(4 Tx slots)	Left Cheek	0mm	DSI 2/7	189	836.4	Config 0	28.74	30.00	1.337	-0.15	0.270	0.361
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Tilted	0mm	DSI 2/7	189	836.4	Config 0	28.74	30.00	1.337	-0.02	0.204	0.273
02	GSM1900_Ant 2	GPRS(4 Tx slots)	Right Cheek	0mm	DSI 2/7	661	1880	Config 0	26.94	28.00	1.276	-0.09	0.291	0.371
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Tilted	0mm	DSI 2/7	661	1880	Config 0	26.94	28.00	1.276	0.1	0.211	0.269
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Cheek	0mm	DSI 2/7	661	1880	Config 0	26.94	28.00	1.276	0.19	0.200	0.255
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Tilted	0mm	DSI 2/7	661	1880	Config 0	26.94	28.00	1.276	-0.13	0.164	0.209

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
03	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	9262	1852.4	Config 0	24.78	25.00	1.052	-0.14	0.432	0.454
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	9262	1852.4	Config 0	24.78	25.00	1.052	-0.12	0.159	0.167
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	9262	1852.4	Config 0	24.78	25.00	1.052	-0.17	0.323	0.340
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	9262	1852.4	Config 0	24.78	25.00	1.052	-0.12	0.172	0.181
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	9262	1852.4	Config 1	24.87	25.00	1.030	-0.18	0.213	0.219
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	9262	1852.4	Config 1	24.87	25.00	1.030	-0.17	0.122	0.126
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	9262	1852.4	Config 1	24.87	25.00	1.030	0.03	0.420	0.433
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	9262	1852.4	Config 1	24.87	25.00	1.030	0	0.148	0.152
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	1413	1732.6	Config 0	24.10	25.00	1.230	-0.09	0.281	0.346
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	1413	1732.6	Config 0	24.10	25.00	1.230	-0.15	0.204	0.251
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	1413	1732.6	Config 0	24.10	25.00	1.230	0.04	0.188	0.231
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	1413	1732.6	Config 0	24.10	25.00	1.230	0.1	0.151	0.186
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	1413	1732.6	Config 1	24.75	25.00	1.059	0.1	0.114	0.121
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	1413	1732.6	Config 1	24.75	25.00	1.059	0.15	0.090	0.095
04	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	1413	1732.6	Config 1	24.75	25.00	1.059	-0.16	0.398	0.422
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	1413	1732.6	Config 1	24.75	25.00	1.059	-0.02	0.294	0.311
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	4132	826.4	Config 0	24.78	25.00	1.052	-0.12	0.220	0.231
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	4132	826.4	Config 0	24.78	25.00	1.052	0.02	0.162	0.170
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	4132	826.4	Config 0	24.78	25.00	1.052	0.14	0.291	0.306
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	4132	826.4	Config 0	24.78	25.00	1.052	0.04	0.170	0.179
05	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	4182	836.4	Config 1	24.76	25.00	1.057	-0.19	0.520	0.550
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	4182	836.4	Config 1	24.76	25.00	1.057	-0.16	0.492	0.520
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	4182	836.4	Config 1	24.76	25.00	1.057	-0.13	0.246	0.260
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	4182	836.4	Config 1	24.76	25.00	1.057	-0.11	0.208	0.220

<CDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	CDMA BC0_Ant 0	RC3 SO55	Right Cheek	0mm	DSI 2/7	384	836.52	Config 0	24.70	25.00	1.072	0.03	0.150	0.161
	CDMA BC0_Ant 0	RC3 SO55	Right Tilted	0mm	DSI 2/7	384	836.52	Config 0	24.70	25.00	1.072	0.01	0.114	0.122
	CDMA BC0_Ant 0	RC3 SO55	Left Cheek	0mm	DSI 2/7	384	836.52	Config 0	24.70	25.00	1.072	-0.02	0.251	0.269
	CDMA BC0_Ant 0	RC3 SO55	Left Tilted	0mm	DSI 2/7	384	836.52	Config 0	24.70	25.00	1.072	0.11	0.146	0.156
06	CDMA BC0_Ant 1	RC3 SO55	Right Cheek	0mm	DSI 2/7	384	836.52	Config 1	24.75	25.00	1.059	-0.05	0.559	0.592
	CDMA BC0_Ant 1	RC3 SO55	Right Tilted	0mm	DSI 2/7	384	836.52	Config 1	24.75	25.00	1.059	-0.01	0.291	0.308
	CDMA BC0_Ant 1	RC3 SO55	Left Cheek	0mm	DSI 2/7	384	836.52	Config 1	24.75	25.00	1.059	0.03	0.170	0.180
	CDMA BC0_Ant 1	RC3 SO55	Left Tilted	0mm	DSI 2/7	384	836.52	Config 1	24.75	25.00	1.059	0.18	0.152	0.161
	CDMA BC1_Ant 2	RC3 SO55	Right Cheek	0mm	DSI 2/7	600	1880	Config 0	24.70	25.00	1.072	-0.01	0.421	0.451
	CDMA BC1_Ant 2	RC3 SO55	Right Tilted	0mm	DSI 2/7	600	1880	Config 0	24.70	25.00	1.072	-0.11	0.131	0.140
	CDMA BC1_Ant 2	RC3 SO55	Left Cheek	0mm	DSI 2/7	600	1880	Config 0	24.70	25.00	1.072	0.05	0.325	0.348
	CDMA BC1_Ant 2	RC3 SO55	Left Tilted	0mm	DSI 2/7	600	1880	Config 0	24.70	25.00	1.072	-0.19	0.140	0.150
	CDMA BC1_Ant 0	RC3 SO55	Right Cheek	0mm	DSI 2/7	600	1880	Config 1	24.77	25.00	1.054	0.18	0.159	0.168
	CDMA BC1_Ant 0	RC3 SO55	Right Tilted	0mm	DSI 2/7	600	1880	Config 1	24.77	25.00	1.054	-0.16	0.101	0.106
07	CDMA BC1_Ant 0	RC3 SO55	Left Cheek	0mm	DSI 2/7	600	1880	Config 1	24.77	25.00	1.054	-0.08	0.470	0.496
	CDMA BC1_Ant 0	RC3 SO55	Left Tilted	0mm	DSI 2/7	600	1880	Config 1	24.77	25.00	1.054	0.09	0.112	0.118
	CDMA BC10_Ant 0	RC3 SO55	Right Cheek	0mm	DSI 2/7	580	820.5	Config 0	24.64	25.00	1.086	0.11	0.137	0.149
	CDMA BC10_Ant 0	RC3 SO55	Right Tilted	0mm	DSI 2/7	580	820.5	Config 0	24.64	25.00	1.086	0.14	0.109	0.118
	CDMA BC10_Ant 0	RC3 SO55	Left Cheek	0mm	DSI 2/7	580	820.5	Config 0	24.64	25.00	1.086	0.11	0.206	0.224
	CDMA BC10_Ant 0	RC3 SO55	Left Tilted	0mm	DSI 2/7	580	820.5	Config 0	24.64	25.00	1.086	-0.17	0.138	0.150
08	CDMA BC10_Ant 1	RC3 SO55	Right Cheek	0mm	DSI 2/7	580	820.5	Config 1	24.48	25.00	1.127	-0.13	0.446	0.503
	CDMA BC10_Ant 1	RC3 SO55	Right Tilted	0mm	DSI 2/7	580	820.5	Config 1	24.48	25.00	1.127	0.06	0.283	0.319
	CDMA BC10_Ant 1	RC3 SO55	Left Cheek	0mm	DSI 2/7	580	820.5	Config 1	24.48	25.00	1.127	-0.15	0.154	0.174
	CDMA BC10_Ant 1	RC3 SO55	Left Tilted	0mm	DSI 2/7	580	820.5	Config 1	24.48	25.00	1.127	0.03	0.140	0.158

<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
09	LTE Band 7_Ant 2	20M	QPSK	1	99	Right Cheek	0mm	DSI 2/7	20850	2510	Config 0	24.42	25.00	1.143	0.13	0.644	0.736
	LTE Band 7_Ant 2	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	20850	2510	Config 0	23.55	24.00	1.109	-0.06	0.568	0.630
	LTE Band 7_Ant 2	20M	QPSK	1	99	Right Tilted	0mm	DSI 2/7	20850	2510	Config 0	24.42	25.00	1.143	-0.01	0.211	0.242
	LTE Band 7_Ant 2	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	20850	2510	Config 0	23.55	24.00	1.109	0.01	0.137	0.152
	LTE Band 7_Ant 2	20M	QPSK	1	99	Left Cheek	0mm	DSI 2/7	20850	2510	Config 0	24.42	25.00	1.143	0.02	0.287	0.328
	LTE Band 7_Ant 2	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	20850	2510	Config 0	23.55	24.00	1.109	-0.01	0.262	0.290
	LTE Band 7_Ant 2	20M	QPSK	1	99	Left Tilted	0mm	DSI 2/7	20850	2510	Config 0	24.42	25.00	1.143	0.01	0.108	0.123
	LTE Band 7_Ant 2	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	20850	2510	Config 0	23.55	24.00	1.109	0.06	0.060	0.067
	LTE Band 7C_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	21100+20902	2535	Config 0	24.97	25.00	1.007	0.07	0.705	0.710
	LTE Band 7_Ant 0	20M	QPSK	1	99	Right Cheek	0mm	DSI 2/7	21100	2535	Config 1	24.98	25.00	1.005	-0.11	0.233	0.234
	LTE Band 7_Ant 0	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	21100	2535	Config 1	24.00	24.00	1.000	0.05	0.197	0.197
	LTE Band 7_Ant 0	20M	QPSK	1	99	Right Tilted	0mm	DSI 2/7	21100	2535	Config 1	24.98	25.00	1.005	0.02	0.130	0.131
	LTE Band 7_Ant 0	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	21100	2535	Config 1	24.00	24.00	1.000	0.14	0.112	0.112
	LTE Band 7_Ant 0	20M	QPSK	1	99	Left Cheek	0mm	DSI 2/7	21100	2535	Config 1	24.98	25.00	1.005	-0.05	0.628	0.631
	LTE Band 7_Ant 0	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	21100	2535	Config 1	24.00	24.00	1.000	-0.19	0.502	0.502
	LTE Band 7_Ant 0	20M	QPSK	1	99	Left Tilted	0mm	DSI 2/7	21100	2535	Config 1	24.98	25.00	1.005	-0.08	0.167	0.168
	LTE Band 7_Ant 0	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	21100	2535	Config 1	24.00	24.00	1.000	-0.13	0.114	0.114
	LTE Band 7C_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	21350+21152	2560	Config 1	24.71	25.00	1.069	0.11	0.581	0.621
	LTE Band 12_Ant 0	10M	QPSK	1	49	Right Cheek	0mm	DSI 2/7	23095	707.5	Config 0	24.38	25.00	1.153	-0.01	0.117	0.135
	LTE Band 12_Ant 0	10M	QPSK	25	25	Right Cheek	0mm	DSI 2/7	23095	707.5	Config 0	23.53	24.00	1.114	-0.02	0.105	0.117
	LTE Band 12_Ant 0	10M	QPSK	1	49	Right Tilted	0mm	DSI 2/7	23095	707.5	Config 0	24.38	25.00	1.153	-0.09	0.095	0.110
	LTE Band 12_Ant 0	10M	QPSK	25	25	Right Tilted	0mm	DSI 2/7	23095	707.5	Config 0	23.53	24.00	1.114	-0.05	0.079	0.088
	LTE Band 12_Ant 0	10M	QPSK	1	49	Left Cheek	0mm	DSI 2/7	23095	707.5	Config 0	24.38	25.00	1.153	-0.14	0.207	0.239
	LTE Band 12_Ant 0	10M	QPSK	25	25	Left Cheek	0mm	DSI 2/7	23095	707.5	Config 0	23.53	24.00	1.114	-0.07	0.122	0.136
	LTE Band 12_Ant 0	10M	QPSK	1	49	Left Tilted	0mm	DSI 2/7	23095	707.5	Config 0	24.38	25.00	1.153	-0.02	0.130	0.150
	LTE Band 12_Ant 0	10M	QPSK	25	25	Left Tilted	0mm	DSI 2/7	23095	707.5	Config 0	23.53	24.00	1.114	-0.02	0.107	0.119
10	LTE Band 12_Ant 1	10M	QPSK	1	49	Right Cheek	0mm	DSI 2/7	23095	707.5	Config 1	24.34	25.00	1.164	-0.08	0.350	0.407
	LTE Band 12_Ant 1	10M	QPSK	25	12	Right Cheek	0mm	DSI 2/7	23095	707.5	Config 1	23.38	24.00	1.153	0	0.258	0.298
	LTE Band 12_Ant 1	10M	QPSK	1	49	Right Tilted	0mm	DSI 2/7	23095	707.5	Config 1	24.34	25.00	1.164	0.14	0.278	0.324
	LTE Band 12_Ant 1	10M	QPSK	25	12	Right Tilted	0mm	DSI 2/7	23095	707.5	Config 1	23.38	24.00	1.153	0.02	0.242	0.279
	LTE Band 12_Ant 1	10M	QPSK	1	49	Left Cheek	0mm	DSI 2/7	23095	707.5	Config 1	24.34	25.00	1.164	-0.19	0.120	0.140
	LTE Band 12_Ant 1	10M	QPSK	25	12	Left Cheek	0mm	DSI 2/7	23095	707.5	Config 1	23.38	24.00	1.153	-0.19	0.103	0.119
	LTE Band 12_Ant 1	10M	QPSK	1	49	Left Tilted	0mm	DSI 2/7	23095	707.5	Config 1	24.34	25.00	1.164	-0.08	0.081	0.094
	LTE Band 12_Ant 1	10M	QPSK	25	12	Left Tilted	0mm	DSI 2/7	23095	707.5	Config 1	23.38	24.00	1.153	-0.13	0.069	0.080
	LTE Band 13_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	23230	782	Config 0	24.45	25.00	1.135	-0.19	0.118	0.134
	LTE Band 13_Ant 0	10M	QPSK	25	25	Right Cheek	0mm	DSI 2/7	23230	782	Config 0	23.61	24.00	1.094	-0.17	0.097	0.106
	LTE Band 13_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	23230	782	Config 0	24.45	25.00	1.135	0.02	0.102	0.116
	LTE Band 13_Ant 0	10M	QPSK	25	25	Right Tilted	0mm	DSI 2/7	23230	782	Config 0	23.61	24.00	1.094	-0.04	0.084	0.092
	LTE Band 13_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	23230	782	Config 0	24.45	25.00	1.135	0.05	0.208	0.236
	LTE Band 13_Ant 0	10M	QPSK	25	25	Left Cheek	0mm	DSI 2/7	23230	782	Config 0	23.61	24.00	1.094	-0.18	0.133	0.145
	LTE Band 13_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	23230	782	Config 0	24.45	25.00	1.135	-0.09	0.137	0.155
	LTE Band 13_Ant 0	10M	QPSK	25	25	Left Tilted	0mm	DSI 2/7	23230	782	Config 0	23.61	24.00	1.094	-0.02	0.114	0.125
11	LTE Band 13_Ant 1	10M	QPSK	1	49	Right Cheek	0mm	DSI 2/7	23230	782	Config 1	24.47	25.00	1.130	0.07	0.417	0.471
	LTE Band 13_Ant 1	10M	QPSK	25	25	Right Cheek	0mm	DSI 2/7	23230	782	Config 1	23.51	24.00	1.119	0.01	0.226	0.253
	LTE Band 13_Ant 1	10M	QPSK	1	49	Right Tilted	0mm	DSI 2/7	23230	782	Config 1	24.47	25.00	1.130	0.1	0.335	0.378
	LTE Band 13_Ant 1	10M	QPSK	25	25	Right Tilted	0mm	DSI 2/7	23230	782	Config 1	23.51	24.00	1.119	0.18	0.300	0.336
	LTE Band 13_Ant 1	10M	QPSK	1	49	Left Cheek	0mm	DSI 2/7	23230	782	Config 1	24.47	25.00	1.130	-0.12	0.150	0.169
	LTE Band 13_Ant 1	10M	QPSK	25	25	Left Cheek	0mm	DSI 2/7	23230	782	Config 1	23.51	24.00	1.119	-0.04	0.124	0.139
	LTE Band 13_Ant 1	10M	QPSK	1	49	Left Tilted	0mm	DSI 2/7	23230	782	Config 1	24.47	25.00	1.130	-0.11	0.117	0.132
	LTE Band 13_Ant 1	10M	QPSK	25	25	Left Tilted	0mm	DSI 2/7	23230	782	Config 1	23.51	24.00	1.119	-0.13	0.094	0.105

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 14_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	23330	793	Config 0	24.45	25.00	1.135	-0.19	0.114	0.129
	LTE Band 14_Ant 0	10M	QPSK	25	25	Right Cheek	0mm	DSI 2/7	23330	793	Config 0	23.56	24.00	1.107	-0.12	0.096	0.106
	LTE Band 14_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	23330	793	Config 0	24.45	25.00	1.135	-0.06	0.108	0.123
	LTE Band 14_Ant 0	10M	QPSK	25	25	Right Tilted	0mm	DSI 2/7	23330	793	Config 0	23.56	24.00	1.107	-0.05	0.083	0.092
	LTE Band 14_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	23330	793	Config 0	24.45	25.00	1.135	-0.05	0.210	0.238
	LTE Band 14_Ant 0	10M	QPSK	25	25	Left Cheek	0mm	DSI 2/7	23330	793	Config 0	23.56	24.00	1.107	-0.16	0.118	0.131
	LTE Band 14_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	23330	793	Config 0	24.45	25.00	1.135	-0.04	0.139	0.158
	LTE Band 14_Ant 0	10M	QPSK	25	25	Left Tilted	0mm	DSI 2/7	23330	793	Config 0	23.56	24.00	1.107	-0.02	0.111	0.123
12	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	23330	793	Config 1	24.41	25.00	1.146	0.09	0.439	0.503
	LTE Band 14_Ant 1	10M	QPSK	25	25	Right Cheek	0mm	DSI 2/7	23330	793	Config 1	23.47	24.00	1.130	-0.12	0.311	0.351
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	23330	793	Config 1	24.41	25.00	1.146	-0.16	0.357	0.409
	LTE Band 14_Ant 1	10M	QPSK	25	25	Right Tilted	0mm	DSI 2/7	23330	793	Config 1	23.47	24.00	1.130	-0.06	0.301	0.340
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	23330	793	Config 1	24.41	25.00	1.146	-0.15	0.187	0.214
	LTE Band 14_Ant 1	10M	QPSK	25	25	Left Cheek	0mm	DSI 2/7	23330	793	Config 1	23.47	24.00	1.130	-0.1	0.159	0.180
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	23330	793	Config 1	24.41	25.00	1.146	-0.09	0.123	0.141
	LTE Band 14_Ant 1	10M	QPSK	25	25	Left Tilted	0mm	DSI 2/7	23330	793	Config 1	23.47	24.00	1.130	-0.1	0.099	0.112
	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	26340	1880	Config 0	24.62	25.00	1.091	-0.07	0.425	0.464
	LTE Band 25_Ant 2	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	26340	1880	Config 0	23.77	24.00	1.054	-0.09	0.288	0.304
	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	26340	1880	Config 0	24.62	25.00	1.091	0.02	0.153	0.167
	LTE Band 25_Ant 2	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	26340	1880	Config 0	23.77	24.00	1.054	0.03	0.117	0.123
	LTE Band 25_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	26340	1880	Config 0	24.62	25.00	1.091	-0.05	0.261	0.285
	LTE Band 25_Ant 2	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	26340	1880	Config 0	23.77	24.00	1.054	0.08	0.107	0.113
	LTE Band 25_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	26340	1880	Config 0	24.62	25.00	1.091	-0.11	0.333	0.363
	LTE Band 25_Ant 2	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	26340	1880	Config 0	23.77	24.00	1.054	-0.06	0.108	0.114
	LTE Band 25_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	26140	1860	Config 1	24.77	25.00	1.054	0.1	0.206	0.217
	LTE Band 25_Ant 0	20M	QPSK	50	50	Right Cheek	0mm	DSI 2/7	26140	1860	Config 1	23.82	24.00	1.042	-0.05	0.169	0.176
	LTE Band 25_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	26140	1860	Config 1	24.77	25.00	1.054	0.02	0.139	0.147
	LTE Band 25_Ant 0	20M	QPSK	50	50	Right Tilted	0mm	DSI 2/7	26140	1860	Config 1	23.82	24.00	1.042	-0.06	0.111	0.116
13	LTE Band 25_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	26140	1860	Config 1	24.77	25.00	1.054	-0.07	0.521	0.549
	LTE Band 25_Ant 0	20M	QPSK	50	50	Left Cheek	0mm	DSI 2/7	26140	1860	Config 1	23.82	24.00	1.042	0.14	0.334	0.348
	LTE Band 25_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	26140	1860	Config 1	24.77	25.00	1.054	0.11	0.176	0.186
	LTE Band 25_Ant 0	20M	QPSK	50	50	Left Tilted	0mm	DSI 2/7	26140	1860	Config 1	23.82	24.00	1.042	0.03	0.138	0.144
	LTE Band 26_Ant 0	15M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	26865	831.5	Config 0	24.31	25.00	1.172	0.13	0.210	0.246
	LTE Band 26_Ant 0	15M	QPSK	36	20	Right Cheek	0mm	DSI 2/7	26865	831.5	Config 0	23.45	24.00	1.135	0.03	0.180	0.204
	LTE Band 26_Ant 0	15M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	26865	831.5	Config 0	24.31	25.00	1.172	-0.08	0.161	0.189
	LTE Band 26_Ant 0	15M	QPSK	36	20	Right Tilted	0mm	DSI 2/7	26865	831.5	Config 0	23.45	24.00	1.135	-0.01	0.139	0.158
	LTE Band 26_Ant 0	15M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	26865	831.5	Config 0	24.31	25.00	1.172	0.02	0.270	0.316
	LTE Band 26_Ant 0	15M	QPSK	36	20	Left Cheek	0mm	DSI 2/7	26865	831.5	Config 0	23.45	24.00	1.135	0.04	0.208	0.236
	LTE Band 26_Ant 0	15M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	26865	831.5	Config 0	24.31	25.00	1.172	-0.02	0.167	0.196
	LTE Band 26_Ant 0	15M	QPSK	36	20	Left Tilted	0mm	DSI 2/7	26865	831.5	Config 0	23.45	24.00	1.135	-0.15	0.141	0.160
	LTE Band 5B_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	20600+20501	844	Config 0	24.91	25.00	1.021	0.15	0.303	0.309
14	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	26865	831.5	Config 1	24.21	25.00	1.199	0.15	0.573	0.687
	LTE Band 26_Ant 1	15M	QPSK	36	20	Right Cheek	0mm	DSI 2/7	26865	831.5	Config 1	23.34	24.00	1.164	0.13	0.504	0.587
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	26865	831.5	Config 1	24.21	25.00	1.199	0.03	0.559	0.671
	LTE Band 26_Ant 1	15M	QPSK	36	20	Right Tilted	0mm	DSI 2/7	26865	831.5	Config 1	23.34	24.00	1.164	0.07	0.467	0.544
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	26865	831.5	Config 1	24.21	25.00	1.199	0.09	0.269	0.323
	LTE Band 26_Ant 1	15M	QPSK	36	20	Left Cheek	0mm	DSI 2/7	26865	831.5	Config 1	23.34	24.00	1.164	-0.01	0.219	0.255
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	26865	831.5	Config 1	24.21	25.00	1.199	-0.09	0.223	0.267
	LTE Band 26_Ant 1	15M	QPSK	36	20	Left Tilted	0mm	DSI 2/7	26865	831.5	Config 1	23.34	24.00	1.164	0.01	0.189	0.220
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	20600+20501	844	Config 1	24.90	25.00	1.023	0.12	0.648	0.663

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 30_Ant 2	10M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	27710	2310	Config 0	24.48	25.00	1.127	0.12	0.500	0.564
	LTE Band 30_Ant 2	10M	QPSK	25	25	Right Cheek	0mm	DSI 2/7	27710	2310	Config 0	23.49	24.00	1.125	0.07	0.477	0.536
	LTE Band 30_Ant 2	10M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	27710	2310	Config 0	24.48	25.00	1.127	-0.04	0.075	0.085
	LTE Band 30_Ant 2	10M	QPSK	25	25	Right Tilted	0mm	DSI 2/7	27710	2310	Config 0	23.49	24.00	1.125	-0.01	0.056	0.063
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	27710	2310	Config 0	24.48	25.00	1.127	0.04	0.108	0.122
	LTE Band 30_Ant 2	10M	QPSK	25	25	Left Cheek	0mm	DSI 2/7	27710	2310	Config 0	23.49	24.00	1.125	0.05	0.084	0.094
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	27710	2310	Config 0	24.48	25.00	1.127	-0.1	0.064	0.072
	LTE Band 30_Ant 2	10M	QPSK	25	25	Left Tilted	0mm	DSI 2/7	27710	2310	Config 0	23.49	24.00	1.125	0.1	0.032	0.036
	LTE Band 30_Ant 0	10M	QPSK	1	25	Right Cheek	0mm	DSI 2/7	27710	2310	Config 1	24.65	25.00	1.084	0.11	0.255	0.276
	LTE Band 30_Ant 0	10M	QPSK	25	25	Right Cheek	0mm	DSI 2/7	27710	2310	Config 1	23.71	24.00	1.069	0.03	0.211	0.226
	LTE Band 30_Ant 0	10M	QPSK	1	25	Right Tilted	0mm	DSI 2/7	27710	2310	Config 1	24.65	25.00	1.084	0.15	0.206	0.223
	LTE Band 30_Ant 0	10M	QPSK	25	25	Right Tilted	0mm	DSI 2/7	27710	2310	Config 1	23.71	24.00	1.069	-0.07	0.162	0.173
15	LTE Band 30_Ant 0	10M	QPSK	1	25	Left Cheek	0mm	DSI 2/7	27710	2310	Config 1	24.65	25.00	1.084	0.11	0.713	0.773
	LTE Band 30_Ant 0	10M	QPSK	25	25	Left Cheek	0mm	DSI 2/7	27710	2310	Config 1	23.71	24.00	1.069	0.08	0.527	0.563
	LTE Band 30_Ant 0	10M	QPSK	1	25	Left Tilted	0mm	DSI 2/7	27710	2310	Config 1	24.65	25.00	1.084	0.1	0.181	0.196
	LTE Band 30_Ant 0	10M	QPSK	25	25	Left Tilted	0mm	DSI 2/7	27710	2310	Config 1	23.71	24.00	1.069	0.16	0.155	0.166
16	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	132572	1770	Config 0	23.94	25.00	1.276	-0.1	0.461	0.588
	LTE Band 66_Ant 2	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	132572	1770	Config 0	23.25	24.00	1.189	0.12	0.326	0.387
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	132572	1770	Config 0	23.94	25.00	1.276	0.09	0.175	0.223
	LTE Band 66_Ant 2	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	132572	1770	Config 0	23.25	24.00	1.189	0.11	0.142	0.169
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	132572	1770	Config 0	23.94	25.00	1.276	0.16	0.340	0.434
	LTE Band 66_Ant 2	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	132572	1770	Config 0	23.25	24.00	1.189	0.03	0.296	0.352
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	132572	1770	Config 0	23.94	25.00	1.276	0.17	0.289	0.369
	LTE Band 66_Ant 2	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	132572	1770	Config 0	23.25	24.00	1.189	0.1	0.271	0.322
	LTE Band 66C_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	132572+132374	1770	Config 0	24.98	25.00	1.005	0.11	0.556	0.559
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	132572	1770	Config 1	24.98	25.00	1.005	0.02	0.278	0.279
	LTE Band 66_Ant 0	20M	QPSK	50	0	Right Cheek	0mm	DSI 2/7	132572	1770	Config 1	23.96	24.00	1.009	0.06	0.256	0.258
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	132572	1770	Config 1	24.98	25.00	1.005	0.17	0.177	0.178
	LTE Band 66_Ant 0	20M	QPSK	50	0	Right Tilted	0mm	DSI 2/7	132572	1770	Config 1	23.96	24.00	1.009	0.14	0.150	0.151
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	132572	1770	Config 1	24.98	25.00	1.005	-0.11	0.547	0.550
	LTE Band 66_Ant 0	20M	QPSK	50	0	Left Cheek	0mm	DSI 2/7	132572	1770	Config 1	23.96	24.00	1.009	-0.1	0.384	0.388
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	132572	1770	Config 1	24.98	25.00	1.005	-0.16	0.119	0.120
	LTE Band 66_Ant 0	20M	QPSK	50	0	Left Tilted	0mm	DSI 2/7	132572	1770	Config 1	23.96	24.00	1.009	0.05	0.105	0.106
	LTE Band 66C_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	132572+132374	1770	Config 1	24.96	25.00	1.009	0.12	0.522	0.527
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	133322	683	Config 0	24.33	25.00	1.167	-0.15	0.093	0.109
	LTE Band 71_Ant 0	20M	QPSK	50	0	Right Cheek	0mm	DSI 2/7	133322	683	Config 0	23.49	24.00	1.125	-0.13	0.081	0.091
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	133322	683	Config 0	24.33	25.00	1.167	-0.09	0.086	0.100
	LTE Band 71_Ant 0	20M	QPSK	50	0	Right Tilted	0mm	DSI 2/7	133322	683	Config 0	23.49	24.00	1.125	-0.13	0.071	0.080
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	133322	683	Config 0	24.33	25.00	1.167	0.18	0.163	0.190
	LTE Band 71_Ant 0	20M	QPSK	50	0	Left Cheek	0mm	DSI 2/7	133322	683	Config 0	23.49	24.00	1.125	-0.18	0.108	0.121
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	133322	683	Config 0	24.33	25.00	1.167	-0.07	0.103	0.120
	LTE Band 71_Ant 0	20M	QPSK	50	0	Left Tilted	0mm	DSI 2/7	133322	683	Config 0	23.49	24.00	1.125	-0.07	0.088	0.099
17	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	133322	683	Config 1	24.34	25.00	1.164	0.08	0.344	0.400
	LTE Band 71_Ant 1	20M	QPSK	50	0	Right Cheek	0mm	DSI 2/7	133322	683	Config 1	23.52	24.00	1.117	0.18	0.280	0.313
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	133322	683	Config 1	24.34	25.00	1.164	0.11	0.299	0.348
	LTE Band 71_Ant 1	20M	QPSK	50	0	Right Tilted	0mm	DSI 2/7	133322	683	Config 1	23.52	24.00	1.117	0.02	0.275	0.307
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	133322	683	Config 1	24.34	25.00	1.164	-0.09	0.064	0.075
	LTE Band 71_Ant 1	20M	QPSK	50	0	Left Cheek	0mm	DSI 2/7	133322	683	Config 1	23.52	24.00	1.117	-0.14	0.085	0.095
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	133322	683	Config 1	24.34	25.00	1.164	-0.15	0.062	0.072
	LTE Band 71_Ant 1	20M	QPSK	50	0	Left Tilted	0mm	DSI 2/7	133322	683	Config 1	23.52	24.00	1.117	-0.09	0.064	0.071

<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41_Ant 2	20M	QPSK	1	49	Right Cheek	0mm	DSI 2/7	39750	2506	Config 0	24.51	25.00	1.119	62.9	1.006	-0.17	0.391	0.440
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	DSI 2/7	39750	2506	Config 0	23.62	24.00	1.091	62.9	1.006	0.06	0.306	0.336
	LTE Band 41_Ant 2	20M	QPSK	1	49	Right Tilted	0mm	DSI 2/7	39750	2506	Config 0	24.51	25.00	1.119	62.9	1.006	-0.08	0.104	0.117
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	DSI 2/7	39750	2506	Config 0	23.62	24.00	1.091	62.9	1.006	0.04	0.093	0.102
	LTE Band 41_Ant 2	20M	QPSK	1	49	Left Cheek	0mm	DSI 2/7	39750	2506	Config 0	24.51	25.00	1.119	62.9	1.006	-0.02	0.193	0.217
	LTE Band 41_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	DSI 2/7	39750	2506	Config 0	23.62	24.00	1.091	62.9	1.006	-0.07	0.139	0.153
	LTE Band 41_Ant 2	20M	QPSK	1	49	Left Tilted	0mm	DSI 2/7	39750	2506	Config 0	24.51	25.00	1.119	62.9	1.006	-0.1	0.093	0.105
	LTE Band 41_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	DSI 2/7	39750	2506	Config 0	23.62	24.00	1.091	62.9	1.006	-0.05	0.065	0.072
18	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	39750	2506	Config 0	26.15	27.50	1.365	42.9	1.009	0	0.394	0.542
	LTE Band 41C_Ant 2	20M	QPSK	1	99	Right Cheek	0mm	DSI 2/7	39750+39948	2506	Config 0	24.98	25.00	1.005	62.9	1.006	0.02	0.419	0.423
	LTE Band 41_Ant 0	20M	QPSK	1	99	Right Cheek	0mm	DSI 2/7	40620	2593	Config 1	24.96	25.00	1.009	62.9	1.006	0.11	0.114	0.116
	LTE Band 41_Ant 0	20M	QPSK	50	0	Right Cheek	0mm	DSI 2/7	40185	2549.5	Config 1	23.99	24.00	1.002	62.9	1.006	0.14	0.110	0.111
	LTE Band 41_Ant 0	20M	QPSK	1	99	Right Tilted	0mm	DSI 2/7	40620	2593	Config 1	24.96	25.00	1.009	62.9	1.006	0.01	0.106	0.108
	LTE Band 41_Ant 0	20M	QPSK	50	0	Right Tilted	0mm	DSI 2/7	40185	2549.5	Config 1	23.99	24.00	1.002	62.9	1.006	0.06	0.099	0.100
	LTE Band 41_Ant 0	20M	QPSK	1	99	Left Cheek	0mm	DSI 2/7	40620	2593	Config 1	24.96	25.00	1.009	62.9	1.006	-0.07	0.379	0.385
	LTE Band 41_Ant 0	20M	QPSK	50	0	Left Cheek	0mm	DSI 2/7	40185	2549.5	Config 1	23.99	24.00	1.002	62.9	1.006	-0.11	0.267	0.269
	LTE Band 41_Ant 0	20M	QPSK	1	99	Left Tilted	0mm	DSI 2/7	40620	2593	Config 1	24.96	25.00	1.009	62.9	1.006	-0.02	0.098	0.100
	LTE Band 41_Ant 0	20M	QPSK	50	0	Left Tilted	0mm	DSI 2/7	40185	2549.5	Config 1	23.99	24.00	1.002	62.9	1.006	0.01	0.086	0.087
	LTE Band 41_HPUE_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	DSI 2/7	41055	2636.5	Config 1	26.86	27.50	1.159	42.9	1.009	-0.17	0.426	0.498
	LTE Band 41C_Ant 0	20M	QPSK	1	99	Left Cheek	0mm	DSI 2/7	40620+40422	2593	Config 1	24.95	25.00	1.012	62.9	1.006	0.11	0.355	0.361
	LTE Band 48_Ant 7	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	56150	3641	Config 0	24.55	25.00	1.109	62.9	1.006	0.08	0.370	0.413
	LTE Band 48_Ant 7	20M	QPSK	50	0	Right Cheek	0mm	DSI 2/7	56150	3641	Config 0	23.58	24.00	1.102	62.9	1.006	0.09	0.254	0.281
	LTE Band 48_Ant 7	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	56150	3641	Config 0	24.55	25.00	1.109	62.9	1.006	0.1	0.346	0.386
	LTE Band 48_Ant 7	20M	QPSK	50	0	Right Tilted	0mm	DSI 2/7	56150	3641	Config 0	23.58	24.00	1.102	62.9	1.006	0.06	0.221	0.245
19	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	56150	3641	Config 0	24.55	25.00	1.109	62.9	1.006	-0.06	0.709	0.791
	LTE Band 48_Ant 7	20M	QPSK	50	0	Left Cheek	0mm	DSI 2/7	56150	3641	Config 0	23.58	24.00	1.102	62.9	1.006	-0.13	0.607	0.673
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	56150	3641	Config 0	24.55	25.00	1.109	62.9	1.006	0.01	0.235	0.262
	LTE Band 48_Ant 7	20M	QPSK	50	0	Left Tilted	0mm	DSI 2/7	56150	3641	Config 0	23.58	24.00	1.102	62.9	1.006	0.05	0.114	0.126
	LTE Band 48C_Ant 7	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	56150+55952	3641	Config 0	13.95	14.00	1.012	62.9	1.006	-0.02	0.184	0.187
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	56150	3641	Config 1	23.37	23.50	1.030	62.9	1.006	-0.04	0.240	0.249
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	DSI 2/7	56150	3641	Config 1	22.33	22.50	1.040	62.9	1.006	0.11	0.196	0.205
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	56150	3641	Config 1	23.37	23.50	1.030	62.9	1.006	0.05	0.107	0.111
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	DSI 2/7	56150	3641	Config 1	22.33	22.50	1.040	62.9	1.006	0.03	0.076	0.080
	LTE Band 48_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	56150	3641	Config 1	23.37	23.50	1.030	62.9	1.006	0.1	0.122	0.126
	LTE Band 48_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	DSI 2/7	56150	3641	Config 1	22.33	22.50	1.040	62.9	1.006	-0.09	0.103	0.108
	LTE Band 48_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	56150	3641	Config 1	23.37	23.50	1.030	62.9	1.006	-0.05	0.091	0.094
	LTE Band 48_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	DSI 2/7	56150	3641	Config 1	22.33	22.50	1.040	62.9	1.006	0	0.080	0.084
	LTE Band 48C_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	56150+55952	3641	Config 1	13.95	14.00	1.012	62.9	1.006	-0.06	0.095	0.097

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n5_Ant 0	20M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	1673000	836.5	Config 0	24.80	25.00	1.047	-0.19	0.126	0.132
	FR1 n5_Ant 0	20M	BPSK	50	0	Right Cheek	0mm	DSI 2/7	1673000	836.5	Config 0	24.51	25.00	1.119	-0.1	0.104	0.116
	FR1 n5_Ant 0	20M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	1673000	836.5	Config 0	24.80	25.00	1.047	-0.11	0.114	0.119
	FR1 n5_Ant 0	20M	BPSK	50	0	Right Tilted	0mm	DSI 2/7	1673000	836.5	Config 0	24.51	25.00	1.119	-0.03	0.108	0.121
	FR1 n5_Ant 0	20M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	1673000	836.5	Config 0	24.80	25.00	1.047	-0.07	0.173	0.181
	FR1 n5_Ant 0	20M	BPSK	50	0	Left Cheek	0mm	DSI 2/7	1673000	836.5	Config 0	24.51	25.00	1.119	0.06	0.147	0.165
	FR1 n5_Ant 0	20M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	1673000	836.5	Config 0	24.80	25.00	1.047	0.15	0.119	0.125
	FR1 n5_Ant 0	20M	BPSK	50	0	Left Tilted	0mm	DSI 2/7	1673000	836.5	Config 0	24.51	25.00	1.119	-0.02	0.108	0.121
20	FR1 n5_Ant 1	20M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	1673000	836.5	Config 1	24.97	25.00	1.007	-0.18	0.473	0.476
	FR1 n5_Ant 1	20M	BPSK	50	0	Right Cheek	0mm	DSI 2/7	1673000	836.5	Config 1	24.76	25.00	1.057	-0.06	0.390	0.412
	FR1 n5_Ant 1	20M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	1673000	836.5	Config 1	24.97	25.00	1.007	0.08	0.435	0.438
	FR1 n5_Ant 1	20M	BPSK	50	0	Right Tilted	0mm	DSI 2/7	1673000	836.5	Config 1	24.76	25.00	1.057	0.07	0.090	0.095
	FR1 n5_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	1673000	836.5	Config 1	24.97	25.00	1.007	-0.09	0.241	0.243
	FR1 n5_Ant 1	20M	BPSK	50	0	Left Cheek	0mm	DSI 2/7	1673000	836.5	Config 1	24.76	25.00	1.057	-0.02	0.143	0.151
	FR1 n5_Ant 1	20M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	1673000	836.5	Config 1	24.97	25.00	1.007	-0.02	0.213	0.214
	FR1 n5_Ant 1	20M	BPSK	50	0	Left Tilted	0mm	DSI 2/7	1673000	836.5	Config 1	24.76	25.00	1.057	-0.08	0.091	0.096
21	FR1 n7_Ant 2	20M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	502000	2510	Config 0	24.99	25.00	1.002	0.08	0.454	0.455
	FR1 n7_Ant 2	20M	BPSK	50	0	Right Cheek	0mm	DSI 2/7	502000	2510	Config 0	24.62	25.00	1.091	0.14	0.399	0.435
	FR1 n7_Ant 2	20M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	502000	2510	Config 0	24.99	25.00	1.002	0.15	0.055	0.055
	FR1 n7_Ant 2	20M	BPSK	50	0	Right Tilted	0mm	DSI 2/7	502000	2510	Config 0	24.62	25.00	1.091	0.08	0.043	0.047
	FR1 n7_Ant 2	20M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	502000	2510	Config 0	24.99	25.00	1.002	-0.12	0.090	0.090
	FR1 n7_Ant 2	20M	BPSK	50	0	Left Cheek	0mm	DSI 2/7	502000	2510	Config 0	24.62	25.00	1.091	0.15	0.073	0.080
	FR1 n7_Ant 2	20M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	502000	2510	Config 0	24.99	25.00	1.002	-0.06	0.075	0.075
	FR1 n7_Ant 2	20M	BPSK	50	0	Left Tilted	0mm	DSI 2/7	502000	2510	Config 0	24.62	25.00	1.091	0.14	0.072	0.079
	FR1 n7_Ant 0	20M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	512000	2560	Config 1	24.77	25.00	1.054	-0.09	0.103	0.109
	FR1 n7_Ant 0	20M	BPSK	50	0	Right Cheek	0mm	DSI 2/7	512000	2560	Config 1	24.55	25.00	1.109	-0.18	0.125	0.139
	FR1 n7_Ant 0	20M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	512000	2560	Config 1	24.77	25.00	1.054	-0.14	0.054	0.057
	FR1 n7_Ant 0	20M	BPSK	50	0	Right Tilted	0mm	DSI 2/7	512000	2560	Config 1	24.55	25.00	1.109	0.11	0.105	0.116
	FR1 n7_Ant 0	20M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	512000	2560	Config 1	24.77	25.00	1.054	0.13	0.253	0.267
	FR1 n7_Ant 0	20M	BPSK	50	0	Left Cheek	0mm	DSI 2/7	512000	2560	Config 1	24.55	25.00	1.109	-0.13	0.209	0.232
	FR1 n7_Ant 0	20M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	512000	2560	Config 1	24.77	25.00	1.054	0.15	0.047	0.050
	FR1 n7_Ant 0	20M	BPSK	50	0	Left Tilted	0mm	DSI 2/7	512000	2560	Config 1	24.55	25.00	1.109	0.17	0.041	0.045
	FR1 n12_Ant 0	15M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	141500	707.5	Config 0	24.64	25.00	1.086	0.05	0.068	0.074
	FR1 n12_Ant 0	15M	BPSK	36	0	Right Cheek	0mm	DSI 2/7	141500	707.5	Config 0	24.24	25.00	1.191	-0.04	0.061	0.073
	FR1 n12_Ant 0	15M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	141500	707.5	Config 0	24.64	25.00	1.086	-0.17	0.066	0.072
	FR1 n12_Ant 0	15M	BPSK	36	0	Right Tilted	0mm	DSI 2/7	141500	707.5	Config 0	24.24	25.00	1.191	0.04	0.060	0.071
	FR1 n12_Ant 0	15M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	141500	707.5	Config 0	24.64	25.00	1.086	-0.07	0.098	0.106
	FR1 n12_Ant 0	15M	BPSK	36	0	Left Cheek	0mm	DSI 2/7	141500	707.5	Config 0	24.24	25.00	1.191	-0.02	0.075	0.089
	FR1 n12_Ant 0	15M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	141500	707.5	Config 0	24.64	25.00	1.086	-0.05	0.077	0.084
	FR1 n12_Ant 0	15M	BPSK	36	0	Left Tilted	0mm	DSI 2/7	141500	707.5	Config 0	24.24	25.00	1.191	0	0.072	0.086
22	FR1 n12_Ant 1	15M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	141500	707.5	Config 1	24.44	25.00	1.138	0.03	0.386	0.439
	FR1 n12_Ant 1	15M	BPSK	36	0	Right Cheek	0mm	DSI 2/7	141500	707.5	Config 1	24.25	25.00	1.189	-0.12	0.344	0.409
	FR1 n12_Ant 1	15M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	141500	707.5	Config 1	24.44	25.00	1.138	-0.1	0.345	0.392
	FR1 n12_Ant 1	15M	BPSK	36	0	Right Tilted	0mm	DSI 2/7	141500	707.5	Config 1	24.25	25.00	1.189	-0.02	0.275	0.327
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	141500	707.5	Config 1	24.44	25.00	1.138	-0.15	0.157	0.179
	FR1 n12_Ant 1	15M	BPSK	36	0	Left Cheek	0mm	DSI 2/7	141500	707.5	Config 1	24.25	25.00	1.189	-0.19	0.142	0.169
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	141500	707.5	Config 1	24.44	25.00	1.138	0.17	0.130	0.148
	FR1 n12_Ant 1	15M	BPSK	36	0	Left Tilted	0mm	DSI 2/7	141500	707.5	Config 1	24.25	25.00	1.189	0.04	0.096	0.114

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n25_Ant 2	20M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	376500	1882.5	Config 0	24.99	25.00	1.002	-0.16	0.326	0.327
	FR1 n25_Ant 2	20M	BPSK	50	0	Right Cheek	0mm	DSI 2/7	376500	1882.5	Config 0	24.84	25.00	1.038	-0.13	0.324	0.336
	FR1 n25_Ant 2	20M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	376500	1882.5	Config 0	24.99	25.00	1.002	-0.06	0.227	0.228
	FR1 n25_Ant 2	20M	BPSK	50	0	Right Tilted	0mm	DSI 2/7	376500	1882.5	Config 0	24.84	25.00	1.038	0	0.176	0.183
23	FR1 n25_Ant 2	20M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	376500	1882.5	Config 0	24.99	25.00	1.002	0.02	0.570	0.571
	FR1 n25_Ant 2	20M	BPSK	50	0	Left Cheek	0mm	DSI 2/7	376500	1882.5	Config 0	24.84	25.00	1.038	-0.11	0.310	0.322
	FR1 n25_Ant 2	20M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	376500	1882.5	Config 0	24.99	25.00	1.002	0.02	0.168	0.168
	FR1 n25_Ant 2	20M	BPSK	50	0	Left Tilted	0mm	DSI 2/7	376500	1882.5	Config 0	24.84	25.00	1.038	-0.01	0.163	0.169
	FR1 n25_Ant 0	20M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	376500	1882.5	Config 1	24.91	25.00	1.021	-0.12	0.160	0.163
	FR1 n25_Ant 0	20M	BPSK	50	0	Right Cheek	0mm	DSI 2/7	376500	1882.5	Config 1	24.68	25.00	1.076	-0.1	0.132	0.142
	FR1 n25_Ant 0	20M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	376500	1882.5	Config 1	24.91	25.00	1.021	-0.1	0.102	0.104
	FR1 n25_Ant 0	20M	BPSK	50	0	Right Tilted	0mm	DSI 2/7	376500	1882.5	Config 1	24.68	25.00	1.076	0.13	0.087	0.094
	FR1 n25_Ant 0	20M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	376500	1882.5	Config 1	24.91	25.00	1.021	-0.03	0.368	0.376
	FR1 n25_Ant 0	20M	BPSK	50	0	Left Cheek	0mm	DSI 2/7	376500	1882.5	Config 1	24.68	25.00	1.076	-0.13	0.287	0.309
	FR1 n25_Ant 0	20M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	376500	1882.5	Config 1	24.91	25.00	1.021	0.18	0.145	0.148
	FR1 n25_Ant 0	20M	BPSK	50	0	Left Tilted	0mm	DSI 2/7	376500	1882.5	Config 1	24.68	25.00	1.076	-0.07	0.128	0.138
	FR1 n66_Ant 2	40M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	349000	1745	Config 0	24.97	25.00	1.007	-0.15	0.348	0.350
	FR1 n66_Ant 2	40M	BPSK	108	0	Right Cheek	0mm	DSI 2/7	349000	1745	Config 0	24.74	25.00	1.062	-0.17	0.265	0.281
	FR1 n66_Ant 2	40M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	349000;	1745	Config 0	24.97	25.00	1.007	0.14	0.166	0.167
	FR1 n66_Ant 2	40M	BPSK	108	0	Right Tilted	0mm	DSI 2/7	349000	1745	Config 0	24.74	25.00	1.062	0.1	0.124	0.132
24	FR1 n66_Ant 2	40M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	349000	1745	Config 0	24.97	25.00	1.007	-0.06	0.361	0.364
	FR1 n66_Ant 2	40M	BPSK	108	0	Left Cheek	0mm	DSI 2/7	349000	1745	Config 0	24.74	25.00	1.062	0.04	0.191	0.203
	FR1 n66_Ant 2	40M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	349000	1745	Config 0	24.97	25.00	1.007	-0.04	0.140	0.141
	FR1 n66_Ant 2	40M	BPSK	108	0	Left Tilted	0mm	DSI 2/7	349000	1745	Config 0	24.74	25.00	1.062	0.04	0.103	0.109
	FR1 n66_Ant 0	40M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	349000	1745	Config 1	24.85	25.00	1.035	-0.1	0.093	0.096
	FR1 n66_Ant 0	40M	BPSK	108	0	Right Cheek	0mm	DSI 2/7	349000	1745	Config 1	24.77	25.00	1.054	-0.1	0.080	0.084
	FR1 n66_Ant 0	40M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	349000	1745	Config 1	24.85	25.00	1.035	-0.16	0.070	0.072
	FR1 n66_Ant 0	40M	BPSK	108	0	Right Tilted	0mm	DSI 2/7	349000	1745	Config 1	24.77	25.00	1.054	-0.11	0.063	0.066
	FR1 n66_Ant 0	40M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	349000	1745	Config 1	24.85	25.00	1.035	-0.07	0.176	0.182
	FR1 n66_Ant 0	40M	BPSK	108	0	Left Cheek	0mm	DSI 2/7	349000	1745	Config 1	24.77	25.00	1.054	-0.16	0.167	0.176
	FR1 n66_Ant 0	40M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	349000	1745	Config 1	24.85	25.00	1.035	0.07	0.060	0.062
	FR1 n66_Ant 0	40M	BPSK	108	0	Left Tilted	0mm	DSI 2/7	349000	1745	Config 1	24.77	25.00	1.054	0.18	0.054	0.057
	FR1 n71_Ant 0	20M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	136100	680.5	Config 0	24.97	25.00	1.007	-0.18	0.031	0.031
	FR1 n71_Ant 0	20M	BPSK	50	0	Right Cheek	0mm	DSI 2/7	136100	680.5	Config 0	24.61	25.00	1.094	-0.12	0.026	0.028
	FR1 n71_Ant 0	20M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	136100	680.5	Config 0	24.97	25.00	1.007	-0.08	0.026	0.026
	FR1 n71_Ant 0	20M	BPSK	50	0	Right Tilted	0mm	DSI 2/7	136100	680.5	Config 0	24.61	25.00	1.094	0	0.024	0.026
	FR1 n71_Ant 0	20M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	136100	680.5	Config 0	24.97	25.00	1.007	-0.13	0.046	0.046
	FR1 n71_Ant 0	20M	BPSK	50	0	Left Cheek	0mm	DSI 2/7	136100	680.5	Config 0	24.61	25.00	1.094	-0.14	0.038	0.042
	FR1 n71_Ant 0	20M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	136100	680.5	Config 0	24.97	25.00	1.007	-0.01	0.028	0.028
	FR1 n71_Ant 0	20M	BPSK	50	0	Left Tilted	0mm	DSI 2/7	136100	680.5	Config 0	24.61	25.00	1.094	-0.15	0.026	0.028
25	FR1 n71_Ant 1	20M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	136100	680.5	Config 1	24.88	25.00	1.028	-0.11	0.312	0.321
	FR1 n71_Ant 1	20M	BPSK	50	0	Right Cheek	0mm	DSI 2/7	136100	680.5	Config 1	24.65	25.00	1.084	-0.08	0.295	0.320
	FR1 n71_Ant 1	20M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	136100	680.5	Config 1	24.88	25.00	1.028	-0.01	0.230	0.236
	FR1 n71_Ant 1	20M	BPSK	50	0	Right Tilted	0mm	DSI 2/7	136100	680.5	Config 1	24.65	25.00	1.084	-0.19	0.210	0.228
	FR1 n71_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	136100	680.5	Config 1	24.88	25.00	1.028	-0.05	0.118	0.121
	FR1 n71_Ant 1	20M	BPSK	50	0	Left Cheek	0mm	DSI 2/7	136100	680.5	Config 1	24.65	25.00	1.084	0	0.114	0.124
	FR1 n71_Ant 1	20M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	136100	680.5	Config 1	24.88	25.00	1.028	-0.13	0.084	0.086
	FR1 n71_Ant 1	20M	BPSK	50	0	Left Tilted	0mm	DSI 2/7	136100	680.5	Config 1	24.65	25.00	1.084	0.06	0.083	0.090

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	518598	2592.99	Config 0	24.45	25.00	1.135	25	1.332	-0.11	0.192	0.290
	FR1 n41_Ant 2	100M	BPSK	135	0	Right Cheek	0mm	DSI 2/7	518598	2592.99	Config 0	24.44	25.00	1.138	25	1.332	0	0.169	0.256
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	518598	2592.99	Config 0	24.45	25.00	1.135	25	1.332	-0.18	0.120	0.181
	FR1 n41_Ant 2	100M	BPSK	135	0	Right Tilted	0mm	DSI 2/7	518598	2592.99	Config 0	24.44	25.00	1.138	25	1.332	-0.15	0.029	0.044
	FR1 n41_Ant 2	100M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	518598	2592.99	Config 0	24.45	25.00	1.135	25	1.332	0.19	0.039	0.059
	FR1 n41_Ant 2	100M	BPSK	135	0	Left Cheek	0mm	DSI 2/7	518598	2592.99	Config 0	24.44	25.00	1.138	25	1.332	0.17	0.069	0.105
	FR1 n41_Ant 2	100M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	518598	2592.99	Config 0	24.45	25.00	1.135	25	1.332	-0.03	0.039	0.059
	FR1 n41_Ant 2	100M	BPSK	135	0	Left Tilted	0mm	DSI 2/7	518598	2592.99	Config 0	24.44	25.00	1.138	25	1.332	-0.17	0.071	0.108
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	DSI 7	518598	2592.99	Config 0	24.03	24.40	1.089	25	1.332	-0.1	0.089	0.129
	FR1 n41_HPUE_Ant 5	100M	BPSK	135	0	Right Cheek	0mm	DSI 7	518598	2592.99	Config 0	23.80	24.40	1.148	25	1.332	-0.18	0.101	0.154
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Right Tilted	0mm	DSI 7	518598	2592.99	Config 0	24.03	24.40	1.089	25	1.332	-0.1	0.094	0.136
	FR1 n41_HPUE_Ant 5	100M	BPSK	135	0	Right Tilted	0mm	DSI 7	518598	2592.99	Config 0	23.80	24.40	1.148	25	1.332	-0.03	0.100	0.153
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	DSI 7	518598	2592.99	Config 0	24.03	24.40	1.089	25	1.332	0.1	0.666	0.966
	FR1 n41_HPUE_Ant 5	100M	BPSK	135	0	Left Cheek	0mm	DSI 7	518598	2592.99	Config 0	23.80	24.40	1.148	25	1.332	-0.1	0.544	0.832
	FR1 n41_HPUE_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	DSI 7	518598	2592.99	Config 0	23.77	24.40	1.156	25	1.332	-0.09	0.417	0.642
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Left Tilted	0mm	DSI 7	518598	2592.99	Config 0	24.03	24.40	1.089	25	1.332	-0.12	0.238	0.345
	FR1 n41_HPUE_Ant 5	100M	BPSK	135	0	Left Tilted	0mm	DSI 7	518598	2592.99	Config 0	23.80	24.40	1.148	25	1.332	-0.18	0.295	0.451
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	DSI 2	518598	2592.99	Config 0	24.03	25.20	1.309	25	1.332	-0.1	0.089	0.155
	FR1 n41_HPUE_Ant 5	100M	BPSK	135	0	Right Cheek	0mm	DSI 2	518598	2592.99	Config 0	23.80	25.20	1.380	25	1.332	-0.18	0.101	0.186
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Right Tilted	0mm	DSI 2	518598	2592.99	Config 0	24.03	25.20	1.309	25	1.332	-0.1	0.094	0.164
	FR1 n41_HPUE_Ant 5	100M	BPSK	135	0	Right Tilted	0mm	DSI 2	518598	2592.99	Config 0	23.80	25.20	1.380	25	1.332	-0.03	0.100	0.184
26	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	DSI 2	518598	2592.99	Config 0	24.03	25.20	1.309	25	1.332	0.1	0.666	1.161
	FR1 n41_HPUE_Ant 5	100M	BPSK	135	0	Left Cheek	0mm	DSI 2	518598	2592.99	Config 0	23.80	25.20	1.380	25	1.332	-0.1	0.544	1.000
	FR1 n41_HPUE_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	DSI 2	518598	2592.99	Config 0	23.77	25.20	1.390	25	1.332	-0.09	0.518	0.959
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Left Tilted	0mm	DSI 2	518598	2592.99	Config 0	24.03	25.20	1.309	25	1.332	-0.12	0.238	0.415
	FR1 n41_HPUE_Ant 5	100M	BPSK	135	0	Left Tilted	0mm	DSI 2	518598	2592.99	Config 0	23.80	25.20	1.380	25	1.332	-0.18	0.295	0.542
	FR1 n41_Ant 0	100M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	518598	2592.99	Config 1	24.75	25.00	1.059	25	1.332	0	0.061	0.086
	FR1 n41_Ant 0	100M	BPSK	135	0	Right Cheek	0mm	DSI 2/7	518598	2592.99	Config 1	24.69	25.00	1.074	25	1.332	-0.15	0.056	0.080
	FR1 n41_Ant 0	100M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	518598	2592.99	Config 1	24.75	25.00	1.059	25	1.332	0.19	0.030	0.042
	FR1 n41_Ant 0	100M	BPSK	135	0	Right Tilted	0mm	DSI 2/7	518598	2592.99	Config 1	24.69	25.00	1.074	25	1.332	0.1	0.031	0.044
	FR1 n41_Ant 0	100M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	518598	2592.99	Config 1	24.75	25.00	1.059	25	1.332	0.1	0.173	0.244
	FR1 n41_Ant 0	100M	BPSK	135	0	Left Cheek	0mm	DSI 2/7	518598	2592.99	Config 1	24.69	25.00	1.074	25	1.332	0	0.121	0.173
	FR1 n41_Ant 0	100M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	518598;	2592.99	Config 1	24.75	25.00	1.059	25	1.332	0.08	0.035	0.049
	FR1 n41_Ant 0	100M	BPSK	135	0	Left Tilted	0mm	DSI 2/7	518598;	2592.99	Config 1	24.69	25.00	1.074	25	1.332	-0.1	0.039	0.056

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power table	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4	2	11	2462	15.80	16.00	1.047	100	1.000	-0.09	0.068	0.071
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4	2	11	2462	15.80	16.00	1.047	100	1.000	-0.05	0.096	0.101
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	2	11	2462	15.80	16.00	1.047	100	1.000	-0.06	0.090	0.094
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4	2	11	2462	15.80	16.00	1.047	100	1.000	0.05	0.241	0.252
27	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	2	13	2472	17.40	17.50	1.023	100	1.000	0.03	0.291	0.298
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 3	2	13	2472	17.40	17.50	1.023	100	1.000	0.11	0.102	0.104
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	2	13	2472	17.40	17.50	1.023	100	1.000	-0.05	0.268	0.274
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3	2	13	2472	17.40	17.50	1.023	100	1.000	0.03	0.058	0.059
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	2	58	5290	9.30	9.50	1.047	92.07	1.086	-0.09	0.066	0.075
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	2	58	5290	9.30	9.50	1.047	92.07	1.086	-0.18	0.068	0.077
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	58	5290	9.30	9.50	1.047	92.07	1.086	0.08	0.175	0.199
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	2	58	5290	9.30	9.50	1.047	92.07	1.086	-0.14	0.198	0.225
28	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3	2	58	5290	11.49	11.50	1.002	92	1.087	0.06	0.230	0.251
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3	2	58	5290	11.49	11.50	1.002	92	1.087	-0.02	0.066	0.072
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3	2	58	5290	11.49	11.50	1.002	92	1.087	0.09	0.106	0.115
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3	2	58	5290	11.49	11.50	1.002	92	1.087	-0.11	0.050	0.054
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	2	138	5690	8.90	9.00	1.023	92.07	1.086	-0.01	0.074	0.082
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	2	138	5690	8.90	9.00	1.023	92.07	1.086	-0.09	0.092	0.102
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	138	5690	8.90	9.00	1.023	92.07	1.086	0.06	0.189	0.210
29	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	2	138	5690	8.90	9.00	1.023	92.07	1.086	-0.15	0.208	0.231
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3	2	106	5530	11.88	12.00	1.028	92	1.087	0.1	0.192	0.215
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 3	2	106	5530	11.88	12.00	1.028	92	1.087	-0.05	0.059	0.066
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3	2	106	5530	11.88	12.00	1.028	92	1.087	0.03	0.070	0.078
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 3	2	106	5530	11.88	12.00	1.028	92	1.087	-0.1	0.043	0.048
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	2	155	5775	8.68	9.00	1.076	92.07	1.086	-0.09	0.060	0.070
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	2	155	5775	8.68	9.00	1.076	92.07	1.086	0.05	0.061	0.071
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	155	5775	8.68	9.00	1.076	92.07	1.086	0.01	0.167	0.195
30	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	2	155	5775	8.68	9.00	1.076	92.07	1.086	-0.02	0.190	0.222
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3	2	155	5775	12.12	12.50	1.091	92	1.087	0.19	0.180	0.214
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 3	2	155	5775	12.12	12.50	1.091	92	1.087	0.06	0.095	0.113
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3	2	155	5775	12.12	12.50	1.091	92	1.087	-0.05	0.095	0.113
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 3	2	155	5775	12.12	12.50	1.091	92	1.087	-0.15	0.041	0.049

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power table	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 4	2	39	2441	11.86	12.00	1.034	77.13	1.080	0.01	0.057	0.064
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 4	2	39	2441	11.86	12.00	1.034	77.13	1.080	0.05	0.065	0.073
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 4	2	39	2441	11.86	12.00	1.034	77.13	1.080	-0.11	0.064	0.071
31	Bluetooth	1Mbps	Left Tilted	0mm	Ant 4	2	39	2441	11.86	12.00	1.034	77.13	1.080	-0.05	0.101	0.113

15.2 Hotspot SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850_Ant 0	GPRS (4 Tx slots)	Front	10mm	DSI 6	189	836.4	Config 0	28.74	30.00	1.337	-0.19	0.296	0.396
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 6	189	836.4	Config 0	28.74	30.00	1.337	-0.15	0.219	0.293
32	GSM850_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	DSI 6	189	836.4	Config 0	28.74	30.00	1.337	0.17	0.400	0.535
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Side	10mm	DSI 6	189	836.4	Config 0	28.74	30.00	1.337	-0.13	0.330	0.441
	GSM850_Ant 0	GPRS (4 Tx slots)	Bottom Side	10mm	DSI 6	189	836.4	Config 0	28.74	30.00	1.337	-0.08	0.338	0.452
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	DSI 6	661	1880	Config 0	26.94	28.00	1.276	-0.12	0.700	0.894
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	DSI 6	512	1850.02	Config 0	26.55	28.00	1.396	-0.1	0.621	0.867
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	DSI 6	810	1909.8	Config 0	26.23	28.00	1.503	-0.07	0.586	0.881
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	DSI 6	661	1880	Config 0	26.94	28.00	1.276	-0.18	0.612	0.781
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Side	10mm	DSI 6	661	1880	Config 0	26.94	28.00	1.276	0.17	0.619	0.790
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Side	10mm	DSI 6	661	1880	Config 0	26.94	28.00	1.276	-0.11	0.202	0.258
33	GSM1900_Ant 2	GPRS (4 Tx slots)	Bottom Side	10mm	DSI 6	661	1880	Config 0	26.94	28.00	1.276	0	0.749	0.956
	GSM1900_Ant 2	GPRS (4 Tx slots)	Bottom Side	10mm	DSI 6	512	1850.2	Config 0	26.55	28.00	1.396	-0.08	0.647	0.903
	GSM1900_Ant 2	GPRS (4 Tx slots)	Bottom Side	10mm	DSI 6	810	1909.8	Config 0	26.23	28.00	1.503	-0.04	0.606	0.911

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 6	9400	1880	Config 0	23.31	24.20	1.227	0.06	0.566	0.695
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 6	9400	1880	Config 0	23.31	24.20	1.227	-0.1	0.233	0.286
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Side	10mm	DSI 6	9400	1880	Config 0	23.31	24.20	1.227	0.11	0.529	0.649
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Side	10mm	DSI 6	9400	1880	Config 0	23.31	24.20	1.227	0.02	0.112	0.137
34	WCDMA II_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	9400	1880	Config 0	23.31	24.20	1.227	-0.09	0.723	0.887
	WCDMA II_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	9262	1852.4	Config 0	23.24	24.20	1.247	0.06	0.710	0.886
	WCDMA II_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	9538	1907.6	Config 0	23.05	24.20	1.303	-0.01	0.674	0.878
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 6	9262	1852.4	Config 1	24.87	25.00	1.030	0.01	0.397	0.409
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	9262	1852.4	Config 1	24.87	25.00	1.030	-0.15	0.568	0.585
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Side	10mm	DSI 6	9262	1852.4	Config 1	24.87	25.00	1.030	0.18	0.550	0.567
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Side	10mm	DSI 6	9262	1852.4	Config 1	24.87	25.00	1.030	-0.04	0.120	0.124
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	9262	1852.4	Config 1	24.87	25.00	1.030	-0.18	0.799	0.823
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	9400	1880	Config 1	24.83	25.00	1.040	0.01	0.788	0.819
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	9538	1907.6	Config 1	24.80	25.00	1.047	0.12	0.717	0.751
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 6	1513	1752.6	Config 0	23.74	24.80	1.276	-0.12	0.595	0.759
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 6	1513	1752.6	Config 0	23.74	24.80	1.276	0.04	0.571	0.729
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Side	10mm	DSI 6	1513	1752.6	Config 0	23.74	24.80	1.276	0.15	0.324	0.414
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Side	10mm	DSI 6	1513	1752.6	Config 0	23.74	24.80	1.276	-0.11	0.154	0.197
35	WCDMA IV_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	1513	1752.6	Config 0	23.74	24.80	1.276	-0.06	0.731	0.933
	WCDMA IV_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	1312	1712.4	Config 0	23.63	24.80	1.309	0.02	0.643	0.842
	WCDMA IV_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	1413	1732.6	Config 0	23.72	24.80	1.282	-0.11	0.609	0.781
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 6	1413	1732.6	Config 1	21.24	21.90	1.164	0.1	0.389	0.453
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	1413	1732.6	Config 1	21.24	21.90	1.164	0.08	0.675	0.786
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Side	10mm	DSI 6	1413	1732.6	Config 1	21.24	21.90	1.164	0.19	0.311	0.362
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Side	10mm	DSI 6	1413	1732.6	Config 1	21.24	21.90	1.164	-0.11	0.097	0.113
	WCDMA IV_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	1413	1732.6	Config 1	21.24	21.90	1.164	-0.05	0.765	0.891
	WCDMA IV_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	1312	1712.4	Config 1	21.09	21.90	1.205	0.01	0.714	0.860
	WCDMA IV_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	1513	1752.6	Config 1	21.19	21.90	1.178	-0.12	0.738	0.869
	WCDMA V_Ant 0	RMC12.2Kbps	Front	10mm	DSI 6	4132	826.4	Config 0	24.78	25.00	1.052	-0.04	0.374	0.393
	WCDMA V_Ant 0	RMC12.2Kbps	Back	10mm	DSI 6	4132	826.4	Config 0	24.78	25.00	1.052	-0.16	0.288	0.303
36	WCDMA V_Ant 0	RMC12.2Kbps	Left Side	10mm	DSI 6	4132	826.4	Config 0	24.78	25.00	1.052	-0.1	0.534	0.562
	WCDMA V_Ant 0	RMC12.2Kbps	Right Side	10mm	DSI 6	4132	826.4	Config 0	24.78	25.00	1.052	-0.13	0.322	0.339
	WCDMA V_Ant 0	RMC12.2Kbps	Bottom Side	10mm	DSI 6	4132	826.4	Config 0	24.78	25.00	1.052	-0.08	0.330	0.347
	WCDMA V_Ant 1	RMC12.2Kbps	Front	10mm	DSI 6	4182	836.4	Config 1	24.76	25.00	1.057	-0.14	0.428	0.452
	WCDMA V_Ant 1	RMC12.2Kbps	Back	10mm	DSI 6	4182	836.4	Config 1	24.76	25.00	1.057	-0.18	0.256	0.271
	WCDMA V_Ant 1	RMC12.2Kbps	Left Side	10mm	DSI 6	4182	836.4	Config 1	24.76	25.00	1.057	0	0.398	0.421
	WCDMA V_Ant 1	RMC12.2Kbps	Right Side	10mm	DSI 6	4182	836.4	Config 1	24.76	25.00	1.057	-0.04	0.376	0.397
	WCDMA V_Ant 1	RMC12.2Kbps	Top Side	10mm	DSI 6	4182	836.4	Config 1	24.76	25.00	1.057	0.19	0.095	0.100

<CDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	CDMA BC0_Ant 0	RTAP 153.6Kbps	Front	10mm	DSI 6	384	836.52	Config 0	24.74	25.00	1.062	-0.04	0.205	0.218
	CDMA BC0_Ant 0	RTAP 153.6Kbps	Back	10mm	DSI 6	384	836.52	Config 0	24.74	25.00	1.062	-0.14	0.262	0.278
37	CDMA BC0_Ant 0	RTAP 153.6Kbps	Left Side	10mm	DSI 6	384	836.52	Config 0	24.74	25.00	1.062	-0.11	0.523	0.555
	CDMA BC0_Ant 0	RTAP 153.6Kbps	Right Side	10mm	DSI 6	384	836.52	Config 0	24.74	25.00	1.062	0.11	0.328	0.348
	CDMA BC0_Ant 0	RTAP 153.6Kbps	Bottom Side	10mm	DSI 6	384	836.52	Config 0	24.74	25.00	1.062	-0.05	0.292	0.310
	CDMA BC0_Ant 1	RTAP 153.6Kbps	Front	10mm	DSI 6	384	836.52	Config 1	24.67	25.00	1.079	-0.06	0.153	0.165
	CDMA BC0_Ant 1	RTAP 153.6Kbps	Back	10mm	DSI 6	384	836.52	Config 1	24.67	25.00	1.079	-0.03	0.296	0.319
	CDMA BC0_Ant 1	RTAP 153.6Kbps	Left Side	10mm	DSI 6	384	836.52	Config 1	24.67	25.00	1.079	0.02	0.188	0.203
	CDMA BC0_Ant 1	RTAP 153.6Kbps	Right Side	10mm	DSI 6	384	836.52	Config 1	24.67	25.00	1.079	0.09	0.110	0.119
	CDMA BC0_Ant 1	RTAP 153.6Kbps	Top Side	10mm	DSI 6	384	836.52	Config 1	24.67	25.00	1.079	0.03	0.084	0.091
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Front	10mm	DSI 6	600	1880	Config 0	23.00	23.70	1.175	0.16	0.665	0.781
38	CDMA BC1_Ant 2	RTAP 153.6Kbps	Back	10mm	DSI 6	600	1880	Config 0	23.00	23.70	1.175	-0.18	0.778	0.914
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Back	10mm	DSI 6	25	1851.25	Config 0	22.99	23.70	1.178	0.05	0.717	0.844
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Back	10mm	DSI 6	1175	1908.75	Config 0	22.74	23.70	1.247	-0.11	0.692	0.863
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Left Side	10mm	DSI 6	600	1880	Config 0	23.00	23.70	1.175	0.02	0.034	0.040
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Right Side	10mm	DSI 6	600	1880	Config 0	23.00	23.70	1.175	-0.13	0.519	0.609
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Bottom Side	10mm	DSI 6	600	1880	Config 0	23.00	23.70	1.175	0.06	0.477	0.561
	CDMA BC1_Ant 0	RTAP 153.6Kbps	Front	10mm	DSI 6	1175	1908.75	Config 1	23.52	24.10	1.143	0.03	0.358	0.409
	CDMA BC1_Ant 0	RTAP 153.6Kbps	Back	10mm	DSI 6	1175	1908.75	Config 1	23.52	24.10	1.143	-0.1	0.430	0.491
	CDMA BC1_Ant 0	RTAP 153.6Kbps	Left Side	10mm	DSI 6	1175	1908.75	Config 1	23.52	24.10	1.143	-0.12	0.691	0.790
	CDMA BC1_Ant 0	RTAP 153.6Kbps	Right Side	10mm	DSI 6	1175	1908.75	Config 1	23.52	24.10	1.143	0.11	0.043	0.049
	CDMA BC1_Ant 0	RTAP 153.6Kbps	Bottom Side	10mm	DSI 6	1175	1908.75	Config 1	23.52	24.10	1.143	-0.07	0.430	0.491
	CDMA BC10_Ant 0	RTAP 153.6Kbps	Front	10mm	DSI 6	580	820.5	Config 0	24.75	25.00	1.059	-0.04	0.251	0.266
	CDMA BC10_Ant 0	RTAP 153.6Kbps	Back	10mm	DSI 6	580	820.5	Config 0	24.75	25.00	1.059	-0.04	0.262	0.278
39	CDMA BC10_Ant 0	RTAP 153.6Kbps	Left Side	10mm	DSI 6	580	820.5	Config 0	24.75	25.00	1.059	0.05	0.460	0.487
	CDMA BC10_Ant 0	RTAP 153.6Kbps	Right Side	10mm	DSI 6	580	820.5	Config 0	24.75	25.00	1.059	-0.08	0.292	0.309
	CDMA BC10_Ant 0	RTAP 153.6Kbps	Bottom Side	10mm	DSI 6	580	820.5	Config 0	24.75	25.00	1.059	-0.07	0.258	0.273
	CDMA BC10_Ant 1	RTAP 153.6Kbps	Front	10mm	DSI 6	580	820.5	Config 1	24.42	25.00	1.143	-0.06	0.143	0.163
	CDMA BC10_Ant 1	RTAP 153.6Kbps	Back	10mm	DSI 6	580	820.5	Config 1	24.42	25.00	1.143	-0.04	0.268	0.306
	CDMA BC10_Ant 1	RTAP 153.6Kbps	Left Side	10mm	DSI 6	580	820.5	Config 1	24.42	25.00	1.143	0.02	0.185	0.211
	CDMA BC10_Ant 1	RTAP 153.6Kbps	Right Side	10mm	DSI 6	580	820.5	Config 1	24.42	25.00	1.143	-0.14	0.113	0.129
	CDMA BC10_Ant 1	RTAP 153.6Kbps	Top Side	10mm	DSI 6	580	820.5	Config 1	24.42	25.00	1.143	0.03	0.094	0.107

<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 7_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	21350	2560	Config 0	17.74	18.70	1.247	0.03	0.374	0.467
	LTE Band 7_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 6	21350	2560	Config 0	17.50	18.70	1.318	-0.04	0.356	0.469
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	21350	2560	Config 0	17.74	18.70	1.247	0.15	0.121	0.151
	LTE Band 7_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 6	21350	2560	Config 0	17.50	18.70	1.318	0.15	0.108	0.142
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Side	10mm	DSI 6	21350	2560	Config 0	17.74	18.70	1.247	0	0.008	0.010
	LTE Band 7_Ant 2	20M	QPSK	50	0	Left Side	10mm	DSI 6	21350	2560	Config 0	17.50	18.70	1.318	-0.05	0.006	0.008
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	21350	2560	Config 0	17.74	18.70	1.247	0.1	0.756	0.943
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	20850	2510	Config 0	17.56	18.70	1.300	0.04	0.714	0.928
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	21100	2535	Config 0	17.69	18.70	1.262	0.17	0.722	0.911
	LTE Band 7_Ant 2	20M	QPSK	50	0	Right Side	10mm	DSI 6	21350	2560	Config 0	17.50	18.70	1.318	-0.08	0.705	0.929
	LTE Band 7_Ant 2	20M	QPSK	50	0	Right Side	10mm	DSI 6	20850	2510	Config 0	17.48	18.70	1.324	0.13	0.692	0.916
	LTE Band 7_Ant 2	20M	QPSK	50	0	Right Side	10mm	DSI 6	21100	2535	Config 0	17.49	18.70	1.321	0.06	0.691	0.913
	LTE Band 7_Ant 2	20M	QPSK	100	0	Right Side	10mm	DSI 6	21350	2560	Config 0	17.45	18.70	1.334	0.05	0.672	0.896
	LTE Band 7_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	21350	2560	Config 0	17.74	18.70	1.247	0.14	0.115	0.143
	LTE Band 7_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	DSI 6	21350	2560	Config 0	17.50	18.70	1.318	0.08	0.109	0.144
	LTE Band 7C_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	21100+20902	2535	Config 0	17.86	18.70	1.213	0.12	0.772	0.937
	LTE Band 7_Ant 0	20M	QPSK	1	99	Front	10mm	DSI 6	20850	2510	Config 1	24.05	24.70	1.161	0.06	0.632	0.734
	LTE Band 7_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 6	20850	2510	Config 1	23.87	24.00	1.030	-0.03	0.574	0.591
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 6	20850	2510	Config 1	24.05	24.70	1.161	-0.13	0.797	0.926
40	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 6	21100	2535	Config 1	23.86	24.70	1.213	-0.09	0.795	0.965
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 6	21350	2560	Config 1	23.86	24.70	1.213	-0.04	0.783	0.950
	LTE Band 7_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	20850	2510	Config 1	23.87	24.00	1.030	0.09	0.762	0.785
	LTE Band 7_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 6	20850	2510	Config 1	23.81	24.00	1.045	-0.16	0.702	0.733
	LTE Band 7_Ant 0	20M	QPSK	1	99	Left Side	10mm	DSI 6	20850	2510	Config 1	24.05	24.70	1.161	0	0.514	0.597
	LTE Band 7_Ant 0	20M	QPSK	50	24	Left Side	10mm	DSI 6	20850	2510	Config 1	23.87	24.00	1.030	-0.07	0.362	0.373
	LTE Band 7_Ant 0	20M	QPSK	1	99	Right Side	10mm	DSI 6	20850	2510	Config 1	24.05	24.70	1.161	0.02	0.075	0.087
	LTE Band 7_Ant 0	20M	QPSK	50	24	Right Side	10mm	DSI 6	20850	2510	Config 1	23.87	24.00	1.030	-0.17	0.055	0.057
	LTE Band 7_Ant 0	20M	QPSK	1	99	Bottom Side	10mm	DSI 6	20850	2510	Config 1	24.05	24.70	1.161	-0.12	0.616	0.715
	LTE Band 7_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	20850	2510	Config 1	23.87	24.00	1.030	0.06	0.550	0.567
	LTE Band 7C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	21350+21152	2560	Config 1	23.97	24.70	1.183	-0.02	0.784	0.928
	LTE Band 12_Ant 0	10M	QPSK	1	49	Front	10mm	DSI 6	23095	707.5	Config 0	24.38	25.00	1.153	0.03	0.155	0.179
	LTE Band 12_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 6	23095	707.5	Config 0	23.53	24.00	1.114	0.05	0.134	0.149
	LTE Band 12_Ant 0	10M	QPSK	1	49	Back	10mm	DSI 6	23095	707.5	Config 0	24.38	25.00	1.153	-0.02	0.258	0.298
	LTE Band 12_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 6	23095	707.5	Config 0	23.53	24.00	1.114	0.01	0.140	0.156
41	LTE Band 12_Ant 0	10M	QPSK	1	49	Left Side	10mm	DSI 6	23095	707.5	Config 0	24.38	25.00	1.153	-0.1	0.264	0.305
	LTE Band 12_Ant 0	10M	QPSK	25	25	Left Side	10mm	DSI 6	23095	707.5	Config 0	23.53	24.00	1.114	0.08	0.170	0.189
	LTE Band 12_Ant 0	10M	QPSK	1	49	Right Side	10mm	DSI 6	23095	707.5	Config 0	24.38	25.00	1.153	-0.19	0.101	0.116
	LTE Band 12_Ant 0	10M	QPSK	25	25	Right Side	10mm	DSI 6	23095	707.5	Config 0	23.53	24.00	1.114	-0.02	0.083	0.092
	LTE Band 12_Ant 0	10M	QPSK	1	49	Bottom Side	10mm	DSI 6	23095	707.5	Config 0	24.38	25.00	1.153	0.05	0.077	0.089
	LTE Band 12_Ant 0	10M	QPSK	25	25	Bottom Side	10mm	DSI 6	23095	707.5	Config 0	23.53	24.00	1.114	0.03	0.064	0.071
	LTE Band 12_Ant 1	10M	QPSK	1	49	Front	10mm	DSI 6	23095	707.5	Config 1	24.34	25.00	1.164	-0.12	0.170	0.198
	LTE Band 12_Ant 1	10M	QPSK	25	12	Front	10mm	DSI 6	23095	707.5	Config 1	23.46	24.00	1.132	-0.1	0.156	0.177
	LTE Band 12_Ant 1	10M	QPSK	1	49	Back	10mm	DSI 6	23095	707.5	Config 1	24.34	25.00	1.164	-0.01	0.192	0.224
	LTE Band 12_Ant 1	10M	QPSK	25	12	Back	10mm	DSI 6	23095	707.5	Config 1	23.46	24.00	1.132	-0.09	0.172	0.195
	LTE Band 12_Ant 1	10M	QPSK	1	49	Left Side	10mm	DSI 6	23095	707.5	Config 1	24.34	25.00	1.164	-0.01	0.202	0.235
	LTE Band 12_Ant 1	10M	QPSK	25	12	Left Side	10mm	DSI 6	23095	707.5	Config 1	23.46	24.00	1.132	-0.03	0.189	0.214
	LTE Band 12_Ant 1	10M	QPSK	1	49	Right Side	10mm	DSI 6	23095	707.5	Config 1	24.34	25.00	1.164	-0.06	0.134	0.156
	LTE Band 12_Ant 1	10M	QPSK	25	12	Right Side	10mm	DSI 6	23095	707.5	Config 1	23.46	24.00	1.132	-0.11	0.110	0.125
	LTE Band 12_Ant 1	10M	QPSK	1	49	Top Side	10mm	DSI 6	23095	707.5	Config 1	24.34	25.00	1.164	-0.02	0.129	0.150
	LTE Band 12_Ant 1	10M	QPSK	25	12	Top Side	10mm	DSI 6	23095	707.5	Config 1	23.46	24.00	1.132	-0.05	0.111	0.126

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 13_Ant 0	10M	QPSK	1	0	Front	10mm	DSI 6	23230	782	Config 0	24.52	25.00	1.117	-0.09	0.200	0.223
	LTE Band 13_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 6	23230	782	Config 0	23.61	24.00	1.094	0.01	0.169	0.185
	LTE Band 13_Ant 0	10M	QPSK	1	0	Back	10mm	DSI 6	23230	782	Config 0	24.52	25.00	1.117	-0.12	0.301	0.336
	LTE Band 13_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 6	23230	782	Config 0	23.61	24.00	1.094	0.03	0.171	0.187
42	LTE Band 13_Ant 0	10M	QPSK	1	0	Left Side	10mm	DSI 6	23230	782	Config 0	24.52	25.00	1.117	-0.15	0.403	0.450
	LTE Band 13_Ant 0	10M	QPSK	25	25	Left Side	10mm	DSI 6	23230	782	Config 0	23.61	24.00	1.094	-0.01	0.239	0.261
	LTE Band 13_Ant 0	10M	QPSK	1	0	Right Side	10mm	DSI 6	23230	782	Config 0	24.52	25.00	1.117	-0.13	0.145	0.162
	LTE Band 13_Ant 0	10M	QPSK	25	25	Right Side	10mm	DSI 6	23230	782	Config 0	23.61	24.00	1.094	0.05	0.131	0.143
	LTE Band 13_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	DSI 6	23230	782	Config 0	24.52	25.00	1.117	0.03	0.109	0.122
	LTE Band 13_Ant 0	10M	QPSK	25	25	Bottom Side	10mm	DSI 6	23230	782	Config 0	23.61	24.00	1.094	0.05	0.092	0.101
	LTE Band 13_Ant 1	10M	QPSK	1	49	Front	10mm	DSI 6	23230	782	Config 1	24.47	25.00	1.130	-0.1	0.188	0.212
	LTE Band 13_Ant 1	10M	QPSK	25	12	Front	10mm	DSI 6	23230	782	Config 1	23.53	24.00	1.114	-0.1	0.174	0.194
	LTE Band 13_Ant 1	10M	QPSK	1	49	Back	10mm	DSI 6	23230	782	Config 1	24.47	25.00	1.130	-0.1	0.215	0.243
	LTE Band 13_Ant 1	10M	QPSK	25	12	Back	10mm	DSI 6	23230	782	Config 1	23.53	24.00	1.114	-0.04	0.199	0.222
	LTE Band 13_Ant 1	10M	QPSK	1	49	Left Side	10mm	DSI 6	23230	782	Config 1	24.47	25.00	1.130	-0.05	0.201	0.227
	LTE Band 13_Ant 1	10M	QPSK	25	12	Left Side	10mm	DSI 6	23230	782	Config 1	23.53	24.00	1.114	-0.06	0.179	0.199
	LTE Band 13_Ant 1	10M	QPSK	1	49	Right Side	10mm	DSI 6	23230	782	Config 1	24.47	25.00	1.130	0.06	0.134	0.151
	LTE Band 13_Ant 1	10M	QPSK	25	12	Right Side	10mm	DSI 6	23230	782	Config 1	23.53	24.00	1.114	-0.09	0.130	0.145
	LTE Band 13_Ant 1	10M	QPSK	1	49	Top Side	10mm	DSI 6	23230	782	Config 1	24.47	25.00	1.130	-0.08	0.101	0.114
	LTE Band 13_Ant 1	10M	QPSK	25	12	Top Side	10mm	DSI 6	23230	782	Config 1	23.53	24.00	1.114	-0.08	0.100	0.111
	LTE Band 14_Ant 0	10M	QPSK	1	0	Front	10mm	DSI 6	23330	793	Config 0	24.45	25.00	1.135	-0.11	0.242	0.275
	LTE Band 14_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 6	23330	793	Config 0	23.56	24.00	1.107	-0.12	0.212	0.235
	LTE Band 14_Ant 0	10M	QPSK	1	0	Back	10mm	DSI 6	23330	793	Config 0	24.45	25.00	1.135	-0.12	0.293	0.333
	LTE Band 14_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 6	23330	793	Config 0	23.56	24.00	1.107	-0.08	0.237	0.262
43	LTE Band 14_Ant 0	10M	QPSK	1	0	Left Side	10mm	DSI 6	23330	793	Config 0	24.45	25.00	1.135	-0.16	0.387	0.439
	LTE Band 14_Ant 0	10M	QPSK	25	25	Left Side	10mm	DSI 6	23330	793	Config 0	23.56	24.00	1.107	0.03	0.275	0.304
	LTE Band 14_Ant 0	10M	QPSK	1	0	Right Side	10mm	DSI 6	23330	793	Config 0	24.45	25.00	1.135	0.05	0.162	0.184
	LTE Band 14_Ant 0	10M	QPSK	25	25	Right Side	10mm	DSI 6	23330	793	Config 0	23.56	24.00	1.107	0.02	0.141	0.156
	LTE Band 14_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	DSI 6	23330	793	Config 0	24.45	25.00	1.135	-0.08	0.115	0.131
	LTE Band 14_Ant 0	10M	QPSK	25	25	Bottom Side	10mm	DSI 6	23330	793	Config 0	23.56	24.00	1.107	-0.05	0.085	0.094
	LTE Band 14_Ant 1	10M	QPSK	1	0	Front	10mm	DSI 6	23330	793	Config 1	24.41	25.00	1.146	-0.01	0.201	0.230
	LTE Band 14_Ant 1	10M	QPSK	25	25	Front	10mm	DSI 6	23330	793	Config 1	23.47	24.00	1.130	-0.02	0.194	0.219
	LTE Band 14_Ant 1	10M	QPSK	1	0	Back	10mm	DSI 6	23330	793	Config 1	24.41	25.00	1.146	-0.12	0.236	0.270
	LTE Band 14_Ant 1	10M	QPSK	25	25	Back	10mm	DSI 6	23330	793	Config 1	23.47	24.00	1.130	-0.08	0.211	0.238
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Side	10mm	DSI 6	23330	793	Config 1	24.41	25.00	1.146	-0.1	0.196	0.225
	LTE Band 14_Ant 1	10M	QPSK	25	25	Left Side	10mm	DSI 6	23330	793	Config 1	23.47	24.00	1.130	-0.05	0.184	0.208
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Side	10mm	DSI 6	23330	793	Config 1	24.41	25.00	1.146	-0.06	0.114	0.131
	LTE Band 14_Ant 1	10M	QPSK	25	25	Right Side	10mm	DSI 6	23330	793	Config 1	23.47	24.00	1.130	-0.07	0.104	0.117
	LTE Band 14_Ant 1	10M	QPSK	1	0	Top Side	10mm	DSI 6	23330	793	Config 1	24.41	25.00	1.146	0.03	0.169	0.194
	LTE Band 14_Ant 1	10M	QPSK	25	25	Top Side	10mm	DSI 6	23330	793	Config 1	23.47	24.00	1.130	-0.01	0.139	0.157

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	26340	1880	Config 0	23.66	24.20	1.132	0.1	0.672	0.761
	LTE Band 25_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 6	26340	1880	Config 0	23.41	24.00	1.146	-0.14	0.637	0.730
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	26340	1880	Config 0	23.66	24.20	1.132	0.02	0.738	0.836
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	26140	1860	Config 0	23.59	24.20	1.151	0.05	0.705	0.811
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	26590	1905	Config 0	23.50	24.20	1.175	-0.17	0.701	0.824
	LTE Band 25_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 6	26340	1880	Config 0	23.41	24.00	1.146	-0.04	0.693	0.794
	LTE Band 25_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 6	26340	1880	Config 0	23.32	24.00	1.169	0.05	0.699	0.817
	LTE Band 25_Ant 2	20M	QPSK	1	0	Left Side	10mm	DSI 6	26340	1880	Config 0	23.66	24.20	1.132	0.01	0.087	0.098
	LTE Band 25_Ant 2	20M	QPSK	50	0	Left Side	10mm	DSI 6	26340	1880	Config 0	23.41	24.00	1.146	0.15	0.080	0.091
	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	26340	1880	Config 0	23.66	24.20	1.132	0.04	0.539	0.611
	LTE Band 25_Ant 2	20M	QPSK	50	0	Right Side	10mm	DSI 6	26340	1880	Config 0	23.41	24.00	1.146	-0.1	0.460	0.527
44	LTE Band 25_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	26340	1880	Config 0	23.66	24.20	1.132	0	0.768	0.870
	LTE Band 25_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	26140	1860	Config 0	23.59	24.20	1.151	0.02	0.733	0.844
	LTE Band 25_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	26590	1905	Config 0	23.50	24.20	1.175	-0.01	0.725	0.852
	LTE Band 25_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	DSI 6	26340	1880	Config 0	23.41	24.00	1.146	0.09	0.688	0.788
	LTE Band 25_Ant 2	20M	QPSK	100	0	Bottom Side	10mm	DSI 6	26340	1880	Config 0	23.32	24.00	1.169	0.05	0.667	0.780
	LTE Band 25_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 6	26140	1860	Config 1	24.85	25.00	1.035	0.14	0.447	0.463
	LTE Band 25_Ant 0	20M	QPSK	50	0	Front	10mm	DSI 6	26140	1860	Config 1	23.84	24.00	1.038	0.05	0.426	0.442
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	26140	1860	Config 1	24.85	25.00	1.035	0.1	0.473	0.490
	LTE Band 25_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 6	26140	1860	Config 1	23.84	24.00	1.038	-0.05	0.451	0.468
	LTE Band 25_Ant 0	20M	QPSK	1	0	Left Side	10mm	DSI 6	26140	1860	Config 1	24.85	25.00	1.035	0.02	0.599	0.620
	LTE Band 25_Ant 0	20M	QPSK	50	0	Left Side	10mm	DSI 6	26140	1860	Config 1	23.84	24.00	1.038	-0.18	0.514	0.533
	LTE Band 25_Ant 0	20M	QPSK	1	0	Right Side	10mm	DSI 6	26140	1860	Config 1	24.85	25.00	1.035	0.17	0.079	0.082
	LTE Band 25_Ant 0	20M	QPSK	50	0	Right Side	10mm	DSI 6	26140	1860	Config 1	23.84	24.00	1.038	0.01	0.070	0.073
	LTE Band 25_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	26140	1860	Config 1	24.85	25.00	1.035	-0.07	0.811	0.840
	LTE Band 25_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	26340	1880	Config 1	24.77	25.00	1.054	-0.15	0.786	0.829
	LTE Band 25_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	26590	1905	Config 1	24.61	25.00	1.094	-0.19	0.759	0.830
	LTE Band 25_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	DSI 6	26140	1860	Config 1	23.84	24.00	1.038	0.12	0.674	0.699
	LTE Band 25_Ant 0	20M	QPSK	100	0	Bottom Side	10mm	DSI 6	26140	1860	Config 1	23.85	24.00	1.035	0.09	0.682	0.706
	LTE Band 26_Ant 0	15M	QPSK	1	0	Front	10mm	DSI 6	26865	831.5	Config 0	24.31	25.00	1.172	0.02	0.152	0.178
	LTE Band 26_Ant 0	15M	QPSK	36	0	Front	10mm	DSI 6	26865	831.5	Config 0	23.45	24.00	1.135	0.04	0.124	0.141
	LTE Band 26_Ant 0	15M	QPSK	1	0	Back	10mm	DSI 6	26865	831.5	Config 0	24.31	25.00	1.172	-0.17	0.273	0.320
	LTE Band 26_Ant 0	15M	QPSK	36	0	Back	10mm	DSI 6	26865	831.5	Config 0	23.45	24.00	1.135	-0.12	0.216	0.245
45	LTE Band 26_Ant 0	15M	QPSK	1	0	Left Side	10mm	DSI 6	26865	831.5	Config 0	24.31	25.00	1.172	-0.17	0.409	0.479
	LTE Band 26_Ant 0	15M	QPSK	36	0	Left Side	10mm	DSI 6	26865	831.5	Config 0	23.45	24.00	1.135	0.01	0.339	0.385
	LTE Band 26_Ant 0	15M	QPSK	1	0	Right Side	10mm	DSI 6	26865	831.5	Config 0	24.31	25.00	1.172	0.01	0.249	0.292
	LTE Band 26_Ant 0	15M	QPSK	36	0	Right Side	10mm	DSI 6	26865	831.5	Config 0	23.45	24.00	1.135	0.02	0.212	0.241
	LTE Band 26_Ant 0	15M	QPSK	1	0	Bottom Side	10mm	DSI 6	26865	831.5	Config 0	24.31	25.00	1.172	0.01	0.326	0.382
	LTE Band 26_Ant 0	15M	QPSK	36	0	Bottom Side	10mm	DSI 6	26865	831.5	Config 0	23.45	24.00	1.135	-0.05	0.275	0.312
	LTE Band 5B_Ant 0	10M	QPSK	1	0	Left Side	10mm	DSI 6	20600+20501	844	Config 0	24.91	25.00	1.021	0.03	0.442	0.451
	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	10mm	DSI 6	26865	831.5	Config 1	24.21	25.00	1.199	-0.16	0.211	0.253
	LTE Band 26_Ant 1	15M	QPSK	36	20	Front	10mm	DSI 6	26865	831.5	Config 1	23.34	24.00	1.164	-0.02	0.176	0.205
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	10mm	DSI 6	26865	831.5	Config 1	24.21	25.00	1.199	-0.13	0.226	0.271
	LTE Band 26_Ant 1	15M	QPSK	36	20	Back	10mm	DSI 6	26865	831.5	Config 1	23.34	24.00	1.164	-0.16	0.241	0.281
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Side	10mm	DSI 6	26865	831.5	Config 1	24.21	25.00	1.199	-0.04	0.207	0.248
	LTE Band 26_Ant 1	15M	QPSK	36	20	Left Side	10mm	DSI 6	26865	831.5	Config 1	23.34	24.00	1.164	-0.05	0.157	0.183
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Side	10mm	DSI 6	26865	831.5	Config 1	24.21	25.00	1.199	-0.02	0.131	0.157
	LTE Band 26_Ant 1	15M	QPSK	36	20	Right Side	10mm	DSI 6	26865	831.5	Config 1	23.34	24.00	1.164	-0.04	0.108	0.126
	LTE Band 26_Ant 1	15M	QPSK	1	0	Top Side	10mm	DSI 6	26865	831.5	Config 1	24.21	25.00	1.199	-0.11	0.109	0.131
	LTE Band 26_Ant 1	15M	QPSK	36	20	Top Side	10mm	DSI 6	26865	831.5	Config 1	23.34	24.00	1.164	0.02	0.097	0.113
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Left Side	10mm	DSI 6	20600+20501	844	Config 1	24.90	25.00	1.023	0.08	0.258	0.264

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 30_Ant 2	10M	QPSK	1	0	Front	10mm	DSI 6	27710	2310	Config 0	19.01	19.70	1.172	0.15	0.413	0.484
	LTE Band 30_Ant 2	10M	QPSK	25	12	Front	10mm	DSI 6	27710	2310	Config 0	18.81	19.70	1.227	0.11	0.388	0.476
	LTE Band 30_Ant 2	10M	QPSK	1	0	Back	10mm	DSI 6	27710	2310	Config 0	19.01	19.70	1.172	-0.13	0.550	0.645
	LTE Band 30_Ant 2	10M	QPSK	25	12	Back	10mm	DSI 6	27710	2310	Config 0	18.81	19.70	1.227	-0.08	0.539	0.662
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Side	10mm	DSI 6	27710	2310	Config 0	19.01	19.70	1.172	0	0.019	0.022
	LTE Band 30_Ant 2	10M	QPSK	25	12	Left Side	10mm	DSI 6	27710	2310	Config 0	18.81	19.70	1.227	0.03	0.015	0.018
	LTE Band 30_Ant 2	10M	QPSK	1	0	Right Side	10mm	DSI 6	27710	2310	Config 0	19.01	19.70	1.172	0.01	0.764	0.896
	LTE Band 30_Ant 2	10M	QPSK	25	12	Right Side	10mm	DSI 6	27710	2310	Config 0	18.81	19.70	1.227	-0.06	0.725	0.890
46	LTE Band 30_Ant 2	10M	QPSK	50	0	Right Side	10mm	DSI 6	27710	2310	Config 0	18.74	19.70	1.247	-0.03	0.791	0.987
	LTE Band 30_Ant 2	10M	QPSK	1	0	Bottom Side	10mm	DSI 6	27710	2310	Config 0	19.01	19.70	1.172	0.08	0.215	0.252
	LTE Band 30_Ant 2	10M	QPSK	25	12	Bottom Side	10mm	DSI 6	27710	2310	Config 0	18.81	19.70	1.227	-0.01	0.197	0.242
	LTE Band 30_Ant 0	10M	QPSK	1	49	Front	10mm	DSI 6	27710	2310	Config 1	24.19	24.70	1.125	-0.17	0.379	0.426
	LTE Band 30_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 6	27710	2310	Config 1	23.29	24.00	1.178	-0.13	0.332	0.391
	LTE Band 30_Ant 0	10M	QPSK	1	49	Back	10mm	DSI 6	27710	2310	Config 1	24.19	24.70	1.125	-0.17	0.649	0.730
	LTE Band 30_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 6	27710	2310	Config 1	23.29	24.00	1.178	-0.06	0.585	0.689
	LTE Band 30_Ant 0	10M	QPSK	1	49	Left Side	10mm	DSI 6	27710	2310	Config 1	24.19	24.70	1.125	-0.13	0.753	0.847
	LTE Band 30_Ant 0	10M	QPSK	25	25	Left Side	10mm	DSI 6	27710	2310	Config 1	23.29	24.00	1.178	0.19	0.669	0.788
	LTE Band 30_Ant 0	10M	QPSK	50	0	Left Side	10mm	DSI 6	27710	2310	Config 1	23.26	24.00	1.186	0.15	0.642	0.761
	LTE Band 30_Ant 0	10M	QPSK	1	49	Right Side	10mm	DSI 6	27710	2310	Config 1	24.19	24.70	1.125	0.06	0.025	0.028
	LTE Band 30_Ant 0	10M	QPSK	25	25	Right Side	10mm	DSI 6	27710	2310	Config 1	23.29	24.00	1.178	0	0.013	0.015
	LTE Band 30_Ant 0	10M	QPSK	1	49	Bottom Side	10mm	DSI 6	27710	2310	Config 1	24.19	24.70	1.125	-0.04	0.312	0.351
	LTE Band 30_Ant 0	10M	QPSK	25	25	Bottom Side	10mm	DSI 6	27710	2310	Config 1	23.29	24.00	1.178	-0.09	0.264	0.311
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	132572	1770	Config 0	23.94	25.00	1.276	0.1	0.604	0.771
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 6	132572	1770	Config 0	23.30	24.00	1.175	0.03	0.584	0.686
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	132572	1770	Config 0	23.94	25.00	1.276	-0.14	0.615	0.785
	LTE Band 66_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	132572	1770	Config 0	23.30	24.00	1.175	0.11	0.596	0.700
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Side	10mm	DSI 6	132572	1770	Config 0	23.94	25.00	1.276	0.19	0.092	0.117
	LTE Band 66_Ant 2	20M	QPSK	50	24	Left Side	10mm	DSI 6	132572	1770	Config 0	23.30	24.00	1.175	0.07	0.084	0.099
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	132572	1770	Config 0	23.94	25.00	1.276	0.06	0.347	0.443
	LTE Band 66_Ant 2	20M	QPSK	50	24	Right Side	10mm	DSI 6	132572	1770	Config 0	23.30	24.00	1.175	0.18	0.307	0.361
47	LTE Band 66_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	132572	1770	Config 0	23.94	25.00	1.276	0.02	0.727	0.928
	LTE Band 66_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	132072	1720	Config 0	23.83	25.00	1.309	-0.06	0.688	0.901
	LTE Band 66_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	132322	1745	Config 0	23.92	25.00	1.282	0.14	0.701	0.899
	LTE Band 66_Ant 2	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	132572	1770	Config 0	23.30	24.00	1.175	0.09	0.621	0.730
	LTE Band 66_Ant 2	20M	QPSK	100	0	Bottom Side	10mm	DSI 6	132572	1770	Config 0	23.32	24.00	1.169	0.01	0.617	0.722
	LTE Band 66C_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	132572+132374	1770	Config 0	24.98	25.00	1.005	0.06	0.832	0.836
	LTE Band 66_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 6	132322	1745	Config 1	21.19	21.70	1.125	0.19	0.499	0.561
	LTE Band 66_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 6	132072	1720	Config 1	20.98	21.70	1.180	0.15	0.465	0.549
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	132322	1745	Config 1	21.19	21.70	1.125	-0.06	0.705	0.793
	LTE Band 66_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	132072	1720	Config 1	20.98	21.70	1.180	-0.01	0.671	0.792
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Side	10mm	DSI 6	132322	1745	Config 1	21.19	21.70	1.125	0	0.367	0.413
	LTE Band 66_Ant 0	20M	QPSK	50	24	Left Side	10mm	DSI 6	132072	1720	Config 1	20.98	21.70	1.180	0.03	0.359	0.424
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Side	10mm	DSI 6	132322	1745	Config 1	21.19	21.70	1.125	0.11	0.038	0.043
	LTE Band 66_Ant 0	20M	QPSK	50	24	Right Side	10mm	DSI 6	132072	1720	Config 1	20.98	21.70	1.180	0.1	0.030	0.035
	LTE Band 66_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	132322	1745	Config 1	21.19	21.70	1.125	0.02	0.748	0.841
	LTE Band 66_Ant 0	20M	QPSK	1	99	Bottom Side	10mm	DSI 6	132072	1720	Config 1	21.18	21.70	1.127	0.01	0.729	0.822
	LTE Band 66_Ant 0	20M	QPSK	1	49	Bottom Side	10mm	DSI 6	132572	1770	Config 1	21.18	21.70	1.127	0.11	0.727	0.819
	LTE Band 66_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	132072	1720	Config 1	20.98	21.70	1.180	0.08	0.672	0.793
	LTE Band 66_Ant 0	20M	QPSK	100	0	Bottom Side	10mm	DSI 6	132072	1720	Config 1	20.95	21.70	1.189	0.03	0.689	0.819
	LTE Band 66C_Ant 0	20M	QPSK	1	99	Bottom Side	10mm	DSI 6	132072+132270	1720	Config 1	20.92	21.70	1.197	0.15	0.699	0.837

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Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 71_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 6	133322	683	Config 0	24.33	25.00	1.167	0.02	0.136	0.159
	LTE Band 71_Ant 0	20M	QPSK	50	0	Front	10mm	DSI 6	133322	683	Config 0	23.49	24.00	1.125	0	0.114	0.128
48	LTE Band 71_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	133322	683	Config 0	24.33	25.00	1.167	0	0.205	0.239
	LTE Band 71_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 6	133322	683	Config 0	23.49	24.00	1.125	-0.04	0.152	0.171
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Side	10mm	DSI 6	133322	683	Config 0	24.33	25.00	1.167	-0.07	0.199	0.232
	LTE Band 71_Ant 0	20M	QPSK	50	0	Left Side	10mm	DSI 6	133322	683	Config 0	23.49	24.00	1.125	-0.03	0.164	0.184
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Side	10mm	DSI 6	133322	683	Config 0	24.33	25.00	1.167	-0.03	0.090	0.105
	LTE Band 71_Ant 0	20M	QPSK	50	0	Right Side	10mm	DSI 6	133322	683	Config 0	23.49	24.00	1.125	0	0.078	0.088
	LTE Band 71_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	133322	683	Config 0	24.33	25.00	1.167	-0.05	0.082	0.096
	LTE Band 71_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	DSI 6	133322	683	Config 0	23.49	24.00	1.125	0.02	0.067	0.075
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	DSI 6	133322	683	Config 1	24.34	25.00	1.164	-0.17	0.091	0.106
	LTE Band 71_Ant 1	20M	QPSK	50	0	Front	10mm	DSI 6	133322	683	Config 1	23.52	24.00	1.117	-0.1	0.079	0.088
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	DSI 6	133322	683	Config 1	24.34	25.00	1.164	0	0.151	0.176
	LTE Band 71_Ant 1	20M	QPSK	50	0	Back	10mm	DSI 6	133322	683	Config 1	23.52	24.00	1.117	-0.02	0.139	0.155
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 6	133322	683	Config 1	24.34	25.00	1.164	0.08	0.199	0.232
	LTE Band 71_Ant 1	20M	QPSK	50	0	Left Side	10mm	DSI 6	133322	683	Config 1	23.52	24.00	1.117	0	0.178	0.199
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Side	10mm	DSI 6	133322	683	Config 1	24.34	25.00	1.164	-0.09	0.033	0.038
	LTE Band 71_Ant 1	20M	QPSK	50	0	Right Side	10mm	DSI 6	133322	683	Config 1	23.52	24.00	1.117	0.11	0.029	0.032
	LTE Band 71_Ant 1	20M	QPSK	1	0	Top Side	10mm	DSI 6	133322	683	Config 1	24.34	25.00	1.164	0.05	0.089	0.104
	LTE Band 71_Ant 1	20M	QPSK	50	0	Top Side	10mm	DSI 6	133322	683	Config 1	23.52	24.00	1.117	0.13	0.061	0.068

<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	39750	2506	Config 0	19.70	20.20	1.122	62.9	1.006	-0.1	0.312	0.352
	LTE Band 41_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 6	39750	2506	Config 0	19.66	20.20	1.132	62.9	1.006	0	0.275	0.313
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	39750	2506	Config 0	19.70	20.20	1.122	62.9	1.006	0	0.307	0.347
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 6	39750	2506	Config 0	19.66	20.20	1.132	62.9	1.006	-0.04	0.320	0.364
	LTE Band 41_Ant 2	20M	QPSK	1	0	Left Side	10mm	DSI 6	39750	2506	Config 0	19.70	20.20	1.122	62.9	1.006	0.09	0.126	0.143
	LTE Band 41_Ant 2	20M	QPSK	50	0	Left Side	10mm	DSI 6	39750	2506	Config 0	19.66	20.20	1.132	62.9	1.006	0.01	0.104	0.119
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	39750	2506	Config 0	19.70	20.20	1.122	62.9	1.006	-0.14	0.714	0.806
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	40185	2549.5	Config 0	19.53	20.20	1.167	62.9	1.006	0.02	0.629	0.738
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	40620	2593	Config 0	19.52	20.20	1.169	62.9	1.006	-0.11	0.633	0.745
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	41055	2636.5	Config 0	19.43	20.20	1.194	62.9	1.006	0.03	0.611	0.734
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	41490	2680	Config 0	19.36	20.20	1.213	62.9	1.006	0.05	0.479	0.585
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Side	10mm	DSI 6	39750	2506	Config 0	19.66	20.20	1.132	62.9	1.006	-0.05	0.650	0.741
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Side	10mm	DSI 6	40185	2549.5	Config 0	19.45	20.20	1.189	62.9	1.006	0.06	0.615	0.735
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Side	10mm	DSI 6	40620	2593	Config 0	19.41	20.20	1.199	62.9	1.006	-0.16	0.622	0.751
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Side	10mm	DSI 6	41055	2636.5	Config 0	19.29	20.20	1.233	62.9	1.006	0.02	0.594	0.737
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Side	10mm	DSI 6	41490	2680	Config 0	19.21	20.20	1.256	62.9	1.006	0.18	0.456	0.576
	LTE Band 41_Ant 2	20M	QPSK	100	0	Right Side	10mm	DSI 6	41490	2680	Config 0	19.32	20.20	1.225	62.9	1.006	0.05	0.453	0.558
	LTE Band 41_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	39750	2506	Config 0	19.70	20.20	1.122	62.9	1.006	-0.08	0.086	0.098
	LTE Band 41_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	DSI 6	39750	2506	Config 0	19.66	20.20	1.132	62.9	1.006	0.08	0.055	0.063
49	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	39750	2506	Config 0	21.24	21.80	1.138	42.9	1.009	-0.13	0.752	0.863
	LTE Band 41C_Ant 2	20M	QPSK	1	99	Right Side	10mm	DSI 6	39750+39948	2506	Config 0	20.10	20.20	1.023	62.9	1.006	0.11	0.751	0.773
	LTE Band 41_Ant 0	20M	QPSK	1	99	Front	10mm	DSI 6	40620	2593	Config 1	24.96	25.00	1.009	62.9	1.006	-0.06	0.322	0.327
	LTE Band 41_Ant 0	20M	QPSK	50	0	Front	10mm	DSI 6	40185	2549.5	Config 1	23.99	24.00	1.002	62.9	1.006	-0.06	0.285	0.288
	LTE Band 41_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 6	40620	2593	Config 1	24.96	25.00	1.009	62.9	1.006	0.08	0.344	0.349
	LTE Band 41_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 6	40185	2549.5	Config 1	23.99	24.00	1.002	62.9	1.006	-0.05	0.318	0.321
	LTE Band 41_Ant 0	20M	QPSK	1	99	Left Side	10mm	DSI 6	40620	2593	Config 1	24.96	25.00	1.009	62.9	1.006	-0.15	0.348	0.353
	LTE Band 41_Ant 0	20M	QPSK	50	0	Left Side	10mm	DSI 6	40185	2549.5	Config 1	23.99	24.00	1.002	62.9	1.006	0.07	0.268	0.271
	LTE Band 41_Ant 0	20M	QPSK	1	99	Right Side	10mm	DSI 6	40620	2593	Config 1	24.96	25.00	1.009	62.9	1.006	0	0.115	0.116
	LTE Band 41_Ant 0	20M	QPSK	50	0	Right Side	10mm	DSI 6	40185	2549.5	Config 1	23.99	24.00	1.002	62.9	1.006	0.05	0.104	0.105
	LTE Band 41_Ant 0	20M	QPSK	1	99	Bottom Side	10mm	DSI 6	40620	2593	Config 1	24.96	25.00	1.009	62.9	1.006	-0.05	0.272	0.276
	LTE Band 41_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	DSI 6	40185	2549.5	Config 1	23.99	24.00	1.002	62.9	1.006	-0.01	0.250	0.252
	LTE Band 41_HPUE_Ant 0	20M	QPSK	1	49	Left Side	10mm	DSI 6	41055	2636.5	Config 1	26.86	27.50	1.159	42.9	1.009	-0.19	0.373	0.436
	LTE Band 41C_Ant 0	20M	QPSK	1	0	Left Side	10mm	DSI 6	40620+40422	2593	Config 1	24.95	25.00	1.012	62.9	1.006	0.04	0.329	0.335

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 48_Ant 7	20M	QPSK	1	0	Front	10mm	DSI 6	56150	3641	Config 0	24.55	25.00	1.109	62.9	1.006	0.05	0.412	0.460
	LTE Band 48_Ant 7	20M	QPSK	50	0	Front	10mm	DSI 6	56150	3641	Config 0	23.64	24.00	1.086	62.9	1.006	0.02	0.375	0.410
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 6	56150	3641	Config 0	24.55	25.00	1.109	62.9	1.006	0.05	0.485	0.541
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 6	56150	3641	Config 0	23.64	24.00	1.086	62.9	1.006	-0.03	0.427	0.467
50	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Side	10mm	DSI 6	56150	3641	Config 0	24.55	25.00	1.109	62.9	1.006	0.11	0.870	0.971
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Side	10mm	DSI 6	55340	3560	Config 0	20.90	21.00	1.023	62.9	1.006	0.06	0.402	0.414
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Side	10mm	DSI 6	55830	3609	Config 0	24.44	25.00	1.138	62.9	1.006	-0.11	0.819	0.937
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Side	10mm	DSI 6	56640	3690	Config 0	20.98	21.00	1.005	62.9	1.006	0.02	0.456	0.461
	LTE Band 48_Ant 7	20M	QPSK	50	0	Left Side	10mm	DSI 6	56150	3641	Config 0	23.64	24.00	1.086	62.9	1.006	0.08	0.843	0.921
	LTE Band 48_Ant 7	20M	QPSK	50	0	Left Side	10mm	DSI 6	55340	3560	Config 0	19.88	20.00	1.028	62.9	1.006	0.05	0.342	0.354
	LTE Band 48_Ant 7	20M	QPSK	50	24	Left Side	10mm	DSI 6	55830	3609	Config 0	23.52	24.00	1.117	62.9	1.006	-0.14	0.762	0.856
	LTE Band 48_Ant 7	20M	QPSK	50	0	Left Side	10mm	DSI 6	56640	3690	Config 0	19.96	20.00	1.009	62.9	1.006	0.19	0.351	0.356
	LTE Band 48_Ant 7	20M	QPSK	100	0	Left Side	10mm	DSI 6	56150	3641	Config 0	23.45	24.00	1.135	62.9	1.006	0.07	0.731	0.835
	LTE Band 48_Ant 7	20M	QPSK	1	0	Right Side	10mm	DSI 6	56150	3641	Config 0	24.55	25.00	1.109	62.9	1.006	0.1	0.039	0.044
	LTE Band 48_Ant 7	20M	QPSK	50	0	Right Side	10mm	DSI 6	56150	3641	Config 0	23.64	24.00	1.086	62.9	1.006	0.09	0.024	0.026
	LTE Band 48_Ant 7	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	56150	3641	Config 0	24.55	25.00	1.109	62.9	1.006	-0.08	0.147	0.164
	LTE Band 48_Ant 7	20M	QPSK	50	0	Bottom Side	10mm	DSI 6	56150	3641	Config 0	23.64	24.00	1.086	62.9	1.006	0.03	0.115	0.126
	LTE Band 48C_Ant 7	20M	QPSK	1	0	Left Side	10mm	DSI 6	56150+55952	3641	Config 0	13.95	14.00	1.012	62.9	1.006	0.15	0.102	0.104
	LTE Band 48_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	56150	3641	Config 1	23.37	23.50	1.030	62.9	1.006	-0.01	0.128	0.133
	LTE Band 48_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 6	56150	3641	Config 1	22.33	22.50	1.040	62.9	1.006	0.07	0.118	0.123
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	56150	3641	Config 1	23.37	23.50	1.030	62.9	1.006	-0.01	0.245	0.254
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 6	56150	3641	Config 1	22.33	22.50	1.040	62.9	1.006	-0.1	0.224	0.234
	LTE Band 48_Ant 2	20M	QPSK	1	0	Left Side	10mm	DSI 6	56150	3641	Config 1	23.37	23.50	1.030	62.9	1.006	0.1	0.098	0.102
	LTE Band 48_Ant 2	20M	QPSK	50	0	Left Side	10mm	DSI 6	56150	3641	Config 1	22.33	22.50	1.040	62.9	1.006	-0.03	0.072	0.075
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	56150	3641	Config 1	23.37	23.50	1.030	62.9	1.006	0.13	0.359	0.372
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Side	10mm	DSI 6	56150	3641	Config 1	22.33	22.50	1.040	62.9	1.006	0.01	0.320	0.335
	LTE Band 48_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	56150	3641	Config 1	23.37	23.50	1.030	62.9	1.006	0.05	0.077	0.080
	LTE Band 48_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	DSI 6	56150	3641	Config 1	22.33	22.50	1.040	62.9	1.006	0.06	0.061	0.064
	LTE Band 48C_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	56150	3641	Config 1	13.95	14.00	1.012	62.9	1.006	0.07	0.066	0.067

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n5_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 6	1673000	836.5	Config 0	24.80	25.00	1.047	0.12	0.077	0.081
	FR1 n5_Ant 0	20M	BPSK	50	0	Front	10mm	DSI 6	1673000	836.5	Config 0	24.51	25.00	1.119	0.03	0.033	0.037
	FR1 n5_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 6	1673000	836.5	Config 0	24.80	25.00	1.047	-0.16	0.104	0.109
	FR1 n5_Ant 0	20M	BPSK	50	0	Back	10mm	DSI 6	1673000	836.5	Config 0	24.51	25.00	1.119	-0.14	0.049	0.055
	FR1 n5_Ant 0	20M	BPSK	1	1	Left Side	10mm	DSI 6	1673000	837	Config 0	24.80	25.00	1.047	-0.18	0.125	0.131
	FR1 n5_Ant 0	20M	BPSK	50	0	Left Side	10mm	DSI 6	1673000	836.5	Config 0	24.51	25.00	1.119	-0.06	0.067	0.075
	FR1 n5_Ant 0	20M	BPSK	1	1	Right Side	10mm	DSI 6	1673000	836.5	Config 0	24.80	25.00	1.047	-0.17	0.018	0.019
	FR1 n5_Ant 0	20M	BPSK	50	0	Right Side	10mm	DSI 6	1673000	836.5	Config 0	24.51	25.00	1.119	-0.13	0.014	0.016
	FR1 n5_Ant 0	20M	BPSK	1	1	Bottom Side	10mm	DSI 6	1673000	836.5	Config 0	24.80	25.00	1.047	-0.04	0.026	0.027
	FR1 n5_Ant 0	20M	BPSK	50	0	Bottom Side	10mm	DSI 6	1673000	836.5	Config 0	24.51	25.00	1.119	0.02	0.016	0.018
	FR1 n5_Ant 1	20M	BPSK	1	1	Front	10mm	DSI 6	1673000	836.5	Config 1	24.97	25.00	1.007	-0.18	0.197	0.198
	FR1 n5_Ant 1	20M	BPSK	50	0	Front	10mm	DSI 6	1673000	836.5	Config 1	24.76	25.00	1.057	-0.16	0.178	0.188
51	FR1 n5_Ant 1	20M	BPSK	1	1	Back	10mm	DSI 6	1673000	836.5	Config 1	24.97	25.00	1.007	-0.14	0.235	0.237
	FR1 n5_Ant 1	20M	BPSK	50	0	Back	10mm	DSI 6	1673000	836.5	Config 1	24.76	25.00	1.057	-0.19	0.215	0.227
	FR1 n5_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 6	1673000	836.5	Config 1	24.97	25.00	1.007	-0.04	0.178	0.179
	FR1 n5_Ant 1	20M	BPSK	50	0	Left Side	10mm	DSI 6	1673000	836.5	Config 1	24.76	25.00	1.057	-0.17	0.152	0.161
	FR1 n5_Ant 1	20M	BPSK	1	1	Right Side	10mm	DSI 6	1673000	836.5	Config 1	24.97	25.00	1.007	-0.13	0.067	0.067
	FR1 n5_Ant 1	20M	BPSK	50	0	Right Side	10mm	DSI 6	1673000	836.5	Config 1	24.76	25.00	1.057	-0.19	0.041	0.043
	FR1 n5_Ant 1	20M	BPSK	1	1	Top Side	10mm	DSI 6	1673000	836.5	Config 1	24.97	25.00	1.007	-0.06	0.003	0.003
	FR1 n5_Ant 1	20M	BPSK	50	0	Top Side	10mm	DSI 6	1673000	836.5	Config 1	24.76	25.00	1.057	-0.1	0.003	0.003
	FR1 n7_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 6	502000	2510	Config 0	18.22	19.20	1.253	0.01	0.295	0.370
	FR1 n7_Ant 2	20M	BPSK	50	0	Front	10mm	DSI 6	502000	2510	Config 0	17.88	19.20	1.355	-0.08	0.246	0.333
	FR1 n7_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 6	502000	2510	Config 0	18.22	19.20	1.253	0.12	0.414	0.519
	FR1 n7_Ant 2	20M	BPSK	50	0	Back	10mm	DSI 6	502000	2510	Config 0	17.88	19.20	1.355	-0.09	0.359	0.487
	FR1 n7_Ant 2	20M	BPSK	1	1	Left Side	10mm	DSI 6	502000	2510	Config 0	18.22	19.20	1.253	-0.01	0.012	0.015
	FR1 n7_Ant 2	20M	BPSK	50	0	Left Side	10mm	DSI 6	502000	2510	Config 0	17.88	19.20	1.355	0.15	0.008	0.011
	FR1 n7_Ant 2	20M	BPSK	1	1	Right Side	10mm	DSI 6	502000	2510	Config 0	18.22	19.20	1.253	0	0.722	0.905
	FR1 n7_Ant 2	20M	BPSK	1	1	Right Side	10mm	DSI 6	507000	2535	Config 0	18.01	19.20	1.315	0.04	0.713	0.938
52	FR1 n7_Ant 2	20M	BPSK	1	1	Right Side	10mm	DSI 6	512000	2560	Config 0	17.77	19.20	1.390	-0.18	0.688	0.956
	FR1 n7_Ant 2	20M	BPSK	50	0	Right Side	10mm	DSI 6	502000	2510	Config 0	17.88	19.20	1.355	-0.03	0.623	0.844
	FR1 n7_Ant 2	20M	BPSK	50	0	Right Side	10mm	DSI 6	507000	2535	Config 0	17.78	19.20	1.387	-0.05	0.683	0.947
	FR1 n7_Ant 2	20M	BPSK	50	0	Right Side	10mm	DSI 6	512000	2560	Config 0	17.65	19.20	1.429	0.01	0.611	0.873
	FR1 n7_Ant 2	20M	BPSK	100	0	Right Side	10mm	DSI 6	502000	2560	Config 0	17.86	19.20	1.361	0.05	0.605	0.824
	FR1 n7_Ant 2	20M	BPSK	1	1	Bottom Side	10mm	DSI 6	502000	2510	Config 0	18.22	19.20	1.253	-0.09	0.093	0.117
	FR1 n7_Ant 2	20M	BPSK	50	0	Bottom Side	10mm	DSI 6	502000	2510	Config 0	17.88	19.20	1.355	0.01	0.077	0.104
	FR1 n7_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 6	502000	2510	Config 1	23.88	24.80	1.236	0.02	0.574	0.709
	FR1 n7_Ant 0	20M	BPSK	50	0	Front	10mm	DSI 6	502000	2510	Config 1	23.84	24.80	1.247	-0.09	0.481	0.600
	FR1 n7_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 6	502000	2510	Config 1	23.88	24.80	1.236	0.01	0.701	0.867
	FR1 n7_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 6	507000	2535	Config 1	23.84	24.80	1.247	-0.02	0.716	0.893
	FR1 n7_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 6	512000	2560	Config 1	23.75	24.80	1.274	-0.08	0.661	0.841
	FR1 n7_Ant 0	20M	BPSK	50	0	Back	10mm	DSI 6	502000	2510	Config 1	23.84	24.80	1.247	0.11	0.628	0.783
	FR1 n7_Ant 0	20M	BPSK	100	0	Back	10mm	DSI 6	502000	2510	Config 1	23.80	24.80	1.259	0.11	0.631	0.794
	FR1 n7_Ant 0	20M	BPSK	1	1	Left Side	10mm	DSI 6	502000	2510	Config 1	23.88	24.80	1.236	0.15	0.495	0.612
	FR1 n7_Ant 0	20M	BPSK	50	0	Left Side	10mm	DSI 6	502000	2510	Config 1	23.84	24.80	1.247	0.02	0.484	0.604
	FR1 n7_Ant 0	20M	BPSK	1	1	Right Side	10mm	DSI 6	502000	2510	Config 1	23.88	24.80	1.236	0.07	0.058	0.072
	FR1 n7_Ant 0	20M	BPSK	50	0	Right Side	10mm	DSI 6	502000	2510	Config 1	23.84	24.80	1.247	0	0.035	0.043
	FR1 n7_Ant 0	20M	BPSK	1	1	Bottom Side	10mm	DSI 6	502000	2510	Config 1	23.88	24.80	1.236	-0.03	0.585	0.723
	FR1 n7_Ant 0	20M	BPSK	50	0	Bottom Side	10mm	DSI 6	502000	2510	Config 1	23.84	24.80	1.247	0.12	0.566	0.706

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n12_Ant 0	15M	BPSK	1	1	Front	10mm	DSI 6	141500	707.5	Config 0	24.64	25.00	1.086	-0.1	0.005	0.005
	FR1 n12_Ant 0	15M	BPSK	36	0	Front	10mm	DSI 6	141500	707.5	Config 0	24.24	25.00	1.191	-0.06	0.005	0.006
	FR1 n12_Ant 0	15M	BPSK	1	1	Back	10mm	DSI 6	141500	707.5	Config 0	24.64	25.00	1.086	-0.09	0.006	0.006
	FR1 n12_Ant 0	15M	BPSK	36	0	Back	10mm	DSI 6	141500	707.5	Config 0	24.24	25.00	1.191	-0.1	0.006	0.007
	FR1 n12_Ant 0	15M	BPSK	1	1	Left Side	10mm	DSI 6	141500	707.5	Config 0	24.64	25.00	1.086	-0.08	0.013	0.014
	FR1 n12_Ant 0	15M	BPSK	36	0	Left Side	10mm	DSI 6	141500	707.5	Config 0	24.24	25.00	1.191	-0.1	0.011	0.013
	FR1 n12_Ant 0	15M	BPSK	1	1	Right Side	10mm	DSI 6	141500	707.5	Config 0	24.64	25.00	1.086	-0.1	0.004	0.004
	FR1 n12_Ant 0	15M	BPSK	36	0	Right Side	10mm	DSI 6	141500	707.5	Config 0	24.24	25.00	1.191	-0.19	0.002	0.003
	FR1 n12_Ant 0	15M	BPSK	1	1	Bottom Side	10mm	DSI 6	141500	707.5	Config 0	24.64	25.00	1.086	-0.06	0.009	0.010
	FR1 n12_Ant 0	15M	BPSK	36	0	Bottom Side	10mm	DSI 6	141500	707.5	Config 0	24.24	25.00	1.191	-0.04	0.007	0.009
	FR1 n12_Ant 1	15M	BPSK	1	1	Front	10mm	DSI 6	141500	707.5	Config 1	24.44	25.00	1.138	-0.16	0.191	0.217
	FR1 n12_Ant 1	15M	BPSK	36	0	Front	10mm	DSI 6	141500	707.5	Config 1	24.25	25.00	1.189	0.02	0.172	0.204
	FR1 n12_Ant 1	15M	BPSK	1	1	Back	10mm	DSI 6	141500	707.5	Config 1	24.44	25.00	1.138	-0.18	0.192	0.218
	FR1 n12_Ant 1	15M	BPSK	36	0	Back	10mm	DSI 6	141500	707.5	Config 1	24.25	25.00	1.189	0.15	0.176	0.209
53	FR1 n12_Ant 1	15M	BPSK	1	1	Left Side	10mm	DSI 6	141500	707.5	Config 1	24.44	25.00	1.138	-0.14	0.200	0.228
	FR1 n12_Ant 1	15M	BPSK	36	0	Left Side	10mm	DSI 6	141500	707.5	Config 1	24.25	25.00	1.189	0.02	0.185	0.220
	FR1 n12_Ant 1	15M	BPSK	1	1	Right Side	10mm	DSI 6	141500	707.5	Config 1	24.44	25.00	1.138	-0.16	0.096	0.109
	FR1 n12_Ant 1	15M	BPSK	36	0	Right Side	10mm	DSI 6	141500	707.5	Config 1	24.25	25.00	1.189	-0.11	0.081	0.096
	FR1 n12_Ant 1	15M	BPSK	1	1	Top Side	10mm	DSI 6	141500	707.5	Config 1	24.44	25.00	1.138	0.01	0.076	0.086
	FR1 n12_Ant 1	15M	BPSK	36	0	Top Side	10mm	DSI 6	141500	707.5	Config 1	24.25	25.00	1.189	0.12	0.045	0.053
	FR1 n25_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 6	372000	1860	Config 0	22.98	24.10	1.294	0.13	0.712	0.921
	FR1 n25_Ant 2	20M	BPSK	50	0	Front	10mm	DSI 6	372000	1860	Config 0	22.87	24.10	1.327	-0.09	0.626	0.831
54	FR1 n25_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 6	372000	1860	Config 0	22.98	24.10	1.294	-0.12	0.721	0.933
	FR1 n25_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 6	376000	1880	Config 0	22.93	24.10	1.309	0.01	0.652	0.853
	FR1 n25_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 6	381000	1905	Config 0	22.80	24.10	1.349	0.08	0.560	0.755
	FR1 n25_Ant 2	20M	BPSK	50	0	Back	10mm	DSI 6	372000	1860	Config 0	22.87	24.10	1.327	-0.02	0.601	0.798
	FR1 n25_Ant 2	20M	BPSK	100	1	Back	10mm	DSI 6	372000	1860	Config 0	22.81	24.10	1.346	0.05	0.604	0.813
	FR1 n25_Ant 2	20M	BPSK	1	1	Left Side	10mm	DSI 6	372000	1860	Config 0	22.98	24.10	1.294	0.03	0.084	0.109
	FR1 n25_Ant 2	20M	BPSK	50	0	Left Side	10mm	DSI 6	372000	1860	Config 0	22.87	24.10	1.327	-0.01	0.072	0.096
	FR1 n25_Ant 2	20M	BPSK	1	1	Right Side	10mm	DSI 6	372000	1860	Config 0	22.98	24.10	1.294	0	0.521	0.675
	FR1 n25_Ant 2	20M	BPSK	50	0	Right Side	10mm	DSI 6	372000	1860	Config 0	22.87	24.10	1.327	0.14	0.497	0.660
	FR1 n25_Ant 2	20M	BPSK	1	1	Bottom Side	10mm	DSI 6	372000	1860	Config 0	22.98	24.10	1.294	0.01	0.591	0.765
	FR1 n25_Ant 2	20M	BPSK	50	0	Bottom Side	10mm	DSI 6	372000	1860	Config 0	22.87	24.10	1.327	0.15	0.568	0.754
	FR1 n25_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 6	376000	1880	Config 1	24.91	25.00	1.021	0.01	0.116	0.118
	FR1 n25_Ant 0	20M	BPSK	50	0	Front	10mm	DSI 6	376000	1880	Config 1	24.68	25.00	1.076	0.03	0.110	0.118
	FR1 n25_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 6	376000	1880	Config 1	24.91	25.00	1.021	-0.08	0.151	0.154
	FR1 n25_Ant 0	20M	BPSK	50	0	Back	10mm	DSI 6	376000	1880	Config 1	24.68	25.00	1.076	-0.05	0.138	0.149
	FR1 n25_Ant 0	20M	BPSK	1	1	Right Side	10mm	DSI 6	376000	1880	Config 1	24.91	25.00	1.021	0.17	0.085	0.087
	FR1 n25_Ant 0	20M	BPSK	50	0	Right Side	10mm	DSI 6	376000	1880	Config 1	24.68	25.00	1.076	0.11	0.074	0.080
	FR1 n25_Ant 0	20M	BPSK	1	1	Left Side	10mm	DSI 6	376000	1860	Config 1	24.91	25.00	1.021	-0.08	0.166	0.169
	FR1 n25_Ant 0	20M	BPSK	50	0	Left Side	10mm	DSI 6	376000	1880	Config 1	24.68	25.00	1.076	0.12	0.145	0.156
	FR1 n25_Ant 0	20M	BPSK	1	1	Bottom Side	10mm	DSI 6	376000	1880	Config 1	24.91	25.00	1.021	0.01	0.141	0.144
	FR1 n25_Ant 0	20M	BPSK	50	0	Bottom Side	10mm	DSI 6	376000	1880	Config 1	24.68	25.00	1.076	-0.16	0.109	0.117

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n66_Ant 2	40M	BPSK	1	1	Front	10mm	DSI 6	349000	1745	Config 0	24.97	25.00	1.007	-0.05	0.584	0.588
	FR1 n66_Ant 2	40M	BPSK	108	0	Front	10mm	DSI 6	349000	1745	Config 0	24.74	25.00	1.062	0.03	0.542	0.575
	FR1 n66_Ant 2	40M	BPSK	1	1	Back	10mm	DSI 6	349000	1745	Config 0	24.97	25.00	1.007	-0.12	0.583	0.587
	FR1 n66_Ant 2	40M	BPSK	108	0	Back	10mm	DSI 6	349000	1745	Config 0	24.74	25.00	1.062	-0.06	0.536	0.569
	FR1 n66_Ant 2	40M	BPSK	1	1	Left Side	10mm	DSI 6	349000	1745	Config 0	24.97	25.00	1.007	0.02	0.090	0.091
	FR1 n66_Ant 2	40M	BPSK	108	0	Left Side	10mm	DSI 6	349000	1745	Config 0	24.74	25.00	1.062	0.15	0.056	0.059
	FR1 n66_Ant 2	40M	BPSK	1	1	Right Side	10mm	DSI 6	349000	1745	Config 0	24.97	25.00	1.007	0.01	0.572	0.576
	FR1 n66_Ant 2	40M	BPSK	108	0	Right Side	10mm	DSI 6	349000	1745	Config 0	24.74	25.00	1.062	0.16	0.506	0.537
55	FR1 n66_Ant 2	40M	BPSK	1	1	Bottom Side	10mm	DSI 6	349000	1745	Config 0	24.97	25.00	1.007	-0.02	0.616	0.620
	FR1 n66_Ant 2	40M	BPSK	108	0	Bottom Side	10mm	DSI 6	349000	1745	Config 0	24.74	25.00	1.062	0.05	0.557	0.591
	FR1 n66_Ant 0	40M	BPSK	1	1	Front	10mm	DSI 6	349000	1745	Config 1	24.85	25.00	1.035	0.02	0.101	0.105
	FR1 n66_Ant 0	40M	BPSK	108	0	Front	10mm	DSI 6	349000	1745	Config 1	24.77	25.00	1.054	0.1	0.098	0.103
	FR1 n66_Ant 0	40M	BPSK	1	1	Back	10mm	DSI 6	349000	1745	Config 1	24.85	25.00	1.035	-0.07	0.112	0.116
	FR1 n66_Ant 0	40M	BPSK	108	0	Back	10mm	DSI 6	349000	1745	Config 1	24.77	25.00	1.054	-0.12	0.109	0.115
	FR1 n66_Ant 0	40M	BPSK	1	1	Left Side	10mm	DSI 6	349000	1745	Config 1	24.85	25.00	1.035	0.13	0.110	0.114
	FR1 n66_Ant 0	40M	BPSK	108	0	Left Side	10mm	DSI 6	349000	1745	Config 1	24.77	25.00	1.054	-0.02	0.094	0.099
	FR1 n66_Ant 0	40M	BPSK	1	1	Right Side	10mm	DSI 6	349000	1745	Config 1	24.85	25.00	1.035	0.1	0.017	0.018
	FR1 n66_Ant 0	40M	BPSK	108	0	Right Side	10mm	DSI 6	349000	1745	Config 1	24.77	25.00	1.054	0.14	0.011	0.012
	FR1 n66_Ant 0	40M	BPSK	1	1	Bottom Side	10mm	DSI 6	349000	1745	Config 1	24.85	25.00	1.035	0.11	0.105	0.109
	FR1 n66_Ant 0	40M	BPSK	108	0	Bottom Side	10mm	DSI 6	349000	1745	Config 1	24.77	25.00	1.054	0.15	0.100	0.105
	FR1 n71_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 6	136100	680.5	Config 0	24.97	25.00	1.007	0.04	0.049	0.049
	FR1 n71_Ant 0	20M	BPSK	50	0	Front	10mm	DSI 6	136100	680.5	Config 0	24.61	25.00	1.094	0.01	0.034	0.037
	FR1 n71_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 6	136100	680.5	Config 0	24.97	25.00	1.007	-0.06	0.055	0.055
	FR1 n71_Ant 0	20M	BPSK	50	0	Back	10mm	DSI 6	136100	680.5	Config 0	24.61	25.00	1.094	0.11	0.032	0.035
	FR1 n71_Ant 0	20M	BPSK	1	1	Left Side	10mm	DSI 6	136100	680.5	Config 0	24.97	25.00	1.007	-0.06	0.072	0.072
	FR1 n71_Ant 0	20M	BPSK	50	0	Left Side	10mm	DSI 6	136100	680.5	Config 0	24.61	25.00	1.094	0	0.069	0.075
	FR1 n71_Ant 0	20M	BPSK	1	1	Right Side	10mm	DSI 6	136100	680.5	Config 0	24.97	25.00	1.007	0.05	0.045	0.045
	FR1 n71_Ant 0	20M	BPSK	50	0	Right Side	10mm	DSI 6	136100	680.5	Config 0	24.61	25.00	1.094	-0.1	0.038	0.042
	FR1 n71_Ant 0	20M	BPSK	1	1	Bottom Side	10mm	DSI 6	136100	680.5	Config 0	24.97	25.00	1.007	-0.13	0.044	0.044
	FR1 n71_Ant 0	20M	BPSK	50	0	Bottom Side	10mm	DSI 6	136100	680.5	Config 0	24.61	25.00	1.094	0.1	0.035	0.038
	FR1 n71_Ant 1	20M	BPSK	1	1	Front	10mm	DSI 6	136100	680.5	Config 1	24.88	25.00	1.028	0.12	0.116	0.119
	FR1 n71_Ant 1	20M	BPSK	50	0	Front	10mm	DSI 6	136100	680.5	Config 1	24.65	25.00	1.084	0.03	0.100	0.108
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	10mm	DSI 6	136100	680.5	Config 1	24.88	25.00	1.028	0.05	0.123	0.126
	FR1 n71_Ant 1	20M	BPSK	50	0	Back	10mm	DSI 6	136100	680.5	Config 1	24.65	25.00	1.084	-0.11	0.114	0.124
56	FR1 n71_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 6	136100	680.5	Config 1	24.88	25.00	1.028	-0.16	0.188	0.193
	FR1 n71_Ant 1	20M	BPSK	50	0	Left Side	10mm	DSI 6	136100	680.5	Config 1	24.65	25.00	1.084	0.11	0.156	0.169
	FR1 n71_Ant 1	20M	BPSK	1	1	Right Side	10mm	DSI 6	136100	680.5	Config 1	24.88	25.00	1.028	0.06	0.051	0.052
	FR1 n71_Ant 1	20M	BPSK	50	0	Right Side	10mm	DSI 6	136100	680.5	Config 1	24.65	25.00	1.084	0.17	0.042	0.046
	FR1 n71_Ant 1	20M	BPSK	1	1	Bottom Side	10mm	DSI 6	136100	680.5	Config 1	24.88	25.00	1.028	-0.02	0.060	0.062
	FR1 n71_Ant 1	20M	BPSK	50	0	Bottom Side	10mm	DSI 6	136100	680.5	Config 1	24.65	25.00	1.084	-0.18	0.055	0.060

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n41_Ant 2	100M	BPSK	1	1	Front	10mm	DSI 6	518598	2592.99	Config 0	24.45	25.00	1.135	25	1.332	0.06	0.294	0.444
	FR1 n41_Ant 2	100M	BPSK	135	0	Front	10mm	DSI 6	518598	2592.99	Config 0	24.44	25.00	1.138	25	1.332	0.09	0.282	0.427
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	10mm	DSI 6	518598	2592.99	Config 0	24.45	25.00	1.135	25	1.332	-0.18	0.342	0.517
	FR1 n41_Ant 2	100M	BPSK	135	0	Back	10mm	DSI 6	518598	2592.99	Config 0	24.44	25.00	1.138	25	1.332	-0.11	0.334	0.506
	FR1 n41_Ant 2	100M	BPSK	1	1	Left Side	10mm	DSI 6	518598	2592.99	Config 0	24.45	25.00	1.135	25	1.332	-0.13	0.001	0.002
	FR1 n41_Ant 2	100M	BPSK	135	0	Left Side	10mm	DSI 6	518598	2592.99	Config 0	24.44	25.00	1.138	25	1.332	-0.1	0.001	0.002
57	FR1 n41_Ant 2	100M	BPSK	1	1	Right Side	10mm	DSI 6	518598	2592.99	Config 0	24.45	25.00	1.135	25	1.332	-0.18	0.576	0.871
	FR1 n41_Ant 2	100M	BPSK	135	0	Right Side	10mm	DSI 6	518598	2592.99	Config 0	24.44	25.00	1.138	25	1.332	-0.09	0.566	0.858
	FR1 n41_Ant 2	100M	BPSK	270	0	Right Side	10mm	DSI 6	518598	2592.99	Config 0	24.38	24.50	1.028	25	1.332	-0.11	0.571	0.782
	FR1 n41_Ant 2	100M	BPSK	1	1	Bottom Side	10mm	DSI 6	518598	2592.99	Config 0	24.45	25.00	1.135	25	1.332	0.13	0.087	0.132
	FR1 n41_Ant 2	100M	BPSK	135	0	Bottom Side	10mm	DSI 6	518598	2592.99	Config 0	24.44	25.00	1.138	25	1.332	0.16	0.078	0.118
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Front	10mm	DSI 6	518598	2592.99	Config 0	27.25	27.50	1.059	25	1.332	-0.06	0.188	0.265
	FR1 n41_HPUE_Ant 5	100M	BPSK	135	0	Front	10mm	DSI 6	518598	2592.99	Config 0	27.11	27.50	1.094	25	1.332	-0.11	0.175	0.255
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Back	10mm	DSI 6	518598	2592.99	Config 0	27.25	27.50	1.059	25	1.332	-0.17	0.303	0.428
	FR1 n41_HPUE_Ant 5	100M	BPSK	135	0	Back	10mm	DSI 6	518598	2592.99	Config 0	27.11	27.50	1.094	25	1.332	-0.19	0.238	0.347
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Left Side	10mm	DSI 6	518598	2592.99	Config 0	27.25	27.50	1.059	25	1.332	0.01	0.021	0.030
	FR1 n41_HPUE_Ant 5	100M	BPSK	135	0	Left Side	10mm	DSI 6	518598	2592.99	Config 0	27.11	27.50	1.094	25	1.332	0.03	0.016	0.023
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Right Side	10mm	DSI 6	518598	2592.99	Config 0	27.25	27.50	1.059	25	1.332	-0.07	0.436	0.615
	FR1 n41_HPUE_Ant 5	100M	BPSK	135	0	Right Side	10mm	DSI 6	518598	2592.99	Config 0	27.11	27.50	1.094	25	1.332	-0.04	0.404	0.589
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Top Side	10mm	DSI 6	518598	2592.99	Config 0	27.05	27.50	1.109	25	1.332	0.1	0.384	0.567
	FR1 n41_HPUE_Ant 5	100M	BPSK	135	0	Top Side	10mm	DSI 6	518598	2592.99	Config 0	27.25	27.50	1.059	25	1.332	0.08	0.025	0.035
	FR1 n41_Ant 0	100M	BPSK	1	1	Front	10mm	DSI 6	518598	2592.99	Config 1	24.75	25.00	1.059	25	1.332	0	0.098	0.138
	FR1 n41_Ant 0	100M	BPSK	135	0	Front	10mm	DSI 6	518598	2592.99	Config 1	24.69	25.00	1.074	25	1.332	0.03	0.088	0.126
	FR1 n41_Ant 0	100M	BPSK	1	1	Back	10mm	DSI 6	518598	2592.99	Config 1	24.75	25.00	1.059	25	1.332	-0.13	0.253	0.357
	FR1 n41_Ant 0	100M	BPSK	135	0	Back	10mm	DSI 6	518598	2592.99	Config 1	24.69	25.00	1.074	25	1.332	-0.11	0.241	0.345
	FR1 n41_Ant 0	100M	BPSK	1	1	Left Side	10mm	DSI 6	518598	2592.99	Config 1	24.75	25.00	1.059	25	1.332	0.04	0.090	0.127
	FR1 n41_Ant 0	100M	BPSK	135	0	Left Side	10mm	DSI 6	518598	2592.99	Config 1	24.69	25.00	1.074	25	1.332	0.09	0.086	0.123
	FR1 n41_Ant 0	100M	BPSK	1	1	Right Side	10mm	DSI 6	518598	2592.99	Config 1	24.75	25.00	1.059	25	1.332	0.1	0.025	0.035
	FR1 n41_Ant 0	100M	BPSK	135	0	Right Side	10mm	DSI 6	518598	2592.99	Config 1	24.69	25.00	1.074	25	1.332	-0.01	0.019	0.027
	FR1 n41_Ant 0	100M	BPSK	1	1	Bottom Side	10mm	DSI 6	518598	2592.99	Config 1	24.75	25.00	1.059	25	1.332	-0.05	0.092	0.130
	FR1 n41_Ant 0	100M	BPSK	135	0	Bottom Side	10mm	DSI 6	518598	2592.99	Config 1	24.69	25.00	1.074	25	1.332	0.02	0.086	0.123

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power table	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4	3	1	2412	22.90	23.00	1.023	100	1.000	0.02	0.190	0.194
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4	3	1	2412	22.90	23.00	1.023	100	1.000	-0.03	0.224	0.229
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 4	3	1	2412	22.90	23.00	1.023	100	1.000	-0.11	0.043	0.044
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 4	3	1	2412	22.90	23.00	1.023	100	1.000	0.05	0.092	0.094
58	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4	3	1	2412	22.90	23.00	1.023	100	1.000	-0.02	0.271	0.277
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 3	3	1	2412	22.20	23.00	1.202	100	1.000	0.05	0.122	0.147
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	3	1	2412	22.20	23.00	1.202	100	1.000	-0.1	0.137	0.165
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3	3	1	2412	22.20	23.00	1.202	100	1.000	0.02	0.213	0.256
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 3	3	1	2412	22.20	23.00	1.202	100	1.000	0.06	0.020	0.024
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 3	3	1	2412	22.20	23.00	1.202	100	1.000	0.03	0.016	0.019
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4	3	46	5230	20.30	21.00	1.175	95.45	1.048	-0.05	0.451	0.555
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4	3	46	5230	20.30	21.00	1.175	95.45	1.048	0.01	0.268	0.330
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 4	3	46	5230	20.30	21.00	1.175	95.45	1.048	0.03	0.051	0.063
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 4	3	46	5230	20.30	21.00	1.175	95.45	1.048	-0.09	0.193	0.238
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4	3	46	5230	20.30	21.00	1.175	95.45	1.048	0.12	0.216	0.266
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 3	3	46	5230	19.90	20.50	1.148	95.45	1.048	0.03	0.095	0.114
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3	3	46	5230	19.90	20.50	1.148	95.45	1.048	-0.01	0.112	0.135
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 3	3	46	5230	19.90	20.50	1.148	95.45	1.048	0.06	0.458	0.551
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 3	3	46	5230	19.90	20.50	1.148	95.45	1.048	0.02	0.046	0.055
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 3	3	46	5230	19.90	20.50	1.148	95.45	1.048	-0.01	0.059	0.071
	WLAN 5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3 (4)	3	46	5230	20.30	21.00	1.175	95.45	1.048	-0.13	0.382	0.470
				10mm	Ant 4+3 (3)	3	46	5230	19.90	20.50	1.148	95.45	1.048	-0.13	0.207	0.249
	WLAN 5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3 (4)	3	46	5230	20.30	21.00	1.175	95.45	1.048	0.17	0.305	0.376
				10mm	Ant 4+3 (3)	3	46	5230	19.90	20.50	1.148	95.45	1.048	0.17	0.179	0.215
59	WLAN 5GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 4+3 (4)	3	46	5230	20.30	21.00	1.175	95.45	1.048	0.06	0.103	0.127
				10mm	Ant 4+3 (3)	3	46	5230	19.90	20.50	1.148	95.45	1.048	0.06	0.485	0.584
	WLAN 5GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 4+3 (4)	3	46	5230	20.30	21.00	1.175	95.45	1.048	-0.07	0.231	0.284
				10mm	Ant 4+3 (3)	3	46	5230	19.90	20.50	1.148	95.45	1.048	-0.07	0.070	0.084
	WLAN 5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4+3 (4)	3	46	5230	20.30	21.00	1.175	95.45	1.048	-0.19	0.261	0.321
				10mm	Ant 4+3 (3)	3	46	5230	19.90	20.50	1.148	95.45	1.048	-0.19	0.088	0.106
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4	3	155	5775	20.40	21.00	1.148	92.06	1.086	-0.11	0.448	0.559
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4	3	155	5775	20.40	21.00	1.148	92.06	1.086	0.06	0.162	0.202
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 4	3	155	5775	20.40	21.00	1.148	92.06	1.086	-0.12	0.052	0.065
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 4	3	155	5775	20.40	21.00	1.148	92.06	1.086	0.09	0.301	0.375
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4	3	155	5775	20.40	21.00	1.148	92.06	1.086	0.11	0.209	0.261
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3	3	155	5775	20.10	21.00	1.230	92.06	1.086	0.05	0.029	0.039
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3	3	155	5775	20.10	21.00	1.230	92.06	1.086	0.11	0.037	0.049
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 3	3	155	5775	20.10	21.00	1.230	92.06	1.086	-0.03	0.149	0.199
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 3	3	155	5775	20.10	21.00	1.230	92.06	1.086	0.01	0.029	0.039
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 3	3	155	5775	20.10	21.00	1.230	92.06	1.086	0.09	0.088	0.118
60	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3 (4)	3	155	5775	20.40	21.00	1.148	92	1.087	-0.09	0.451	0.563
				10mm	Ant 4+3 (3)	3	155	5775	20.10	21.00	1.230	92	1.087	-0.09	0.098	0.131
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (4)	3	155	5775	20.40	21.00	1.148	92	1.087	0.09	0.151	0.188
				10mm	Ant 4+3 (3)	3	155	5775	20.10	21.00	1.230	92	1.087	0.09	0.052	0.070
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 4+3 (4)	3	155	5775	20.40	21.00	1.148	92	1.087	0.08	0.093	0.116
				10mm	Ant 4+3 (3)	3	155	5775	20.10	21.00	1.230	92	1.087	0.08	0.163	0.218
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 4+3 (4)	3	155	5775	20.40	21.00	1.148	92	1.087	-0.06	0.311	0.388
				10mm	Ant 4+3 (3)	3	155	5775	20.10	21.00	1.230	92	1.087	-0.06	0.083	0.111
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4+3 (4)	3	155	5775	20.40	21.00	1.148	92	1.087	0.02	0.188	0.235
				10mm	Ant 4+3 (3)	3	155	5775	20.10	21.00	1.230	92	1.087	0.02	0.093	0.124

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power table	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Front	10mm	Ant 4	1/3	00	2402	18.30	19.50	1.318	77.13	1.080	0.03	0.011	0.016
	Bluetooth	1Mbps	Back	10mm	Ant 4	1/3	00	2402	18.30	19.50	1.318	77.13	1.080	-0.06	0.016	0.023
	Bluetooth	1Mbps	Left Side	10mm	Ant 4	1/3	00	2402	18.30	19.50	1.318	77.13	1.080	-0.03	0.001	0.001
	Bluetooth	1Mbps	Right Side	10mm	Ant 4	1/3	00	2402	18.30	19.50	1.318	77.13	1.080	0.01	0.001	0.001
61	Bluetooth	1Mbps	Top Side	10mm	Ant 4	1/3	00	2402	18.30	19.50	1.318	77.13	1.080	0.04	0.051	0.073

15.3 Body Worn Accessory SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850_Ant 0	GPRS (4 Tx slots)	Front	10mm	DSI 4/8	189	836.4	Config 0	28.74	30.00	1.337	-0.19	0.189	0.253
62	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 4/8	189	836.4	Config 0	28.74	30.00	1.337	-0.15	0.219	0.293
63	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	DSI 4/8	661	1880	Config 0	26.94	28.00	1.276	-0.12	0.700	0.894
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	DSI 4/8	512	1850.02	Config 0	26.55	28.00	1.396	-0.1	0.621	0.867
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	DSI 4/8	810	1909.8	Config 0	26.23	28.00	1.503	-0.07	0.586	0.881
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	DSI 4/8	661	1880	Config 0	26.94	28.00	1.276	-0.18	0.612	0.781

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 8	9400	1880	Config 0	24.03	24.70	1.167	-0.01	0.536	0.625
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 8	9400	1880	Config 0	24.03	24.70	1.167	-0.01	0.812	0.947
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 8	9262	1852.4	Config 0	23.89	24.70	1.205	0.06	0.759	0.915
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 8	9538	1907.6	Config 0	24.00	24.70	1.175	-0.13	0.776	0.912
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 4	9400	1880	Config 0	24.03	25.00	1.250	-0.01	0.536	0.670
64	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 4	9400	1880	Config 0	24.03	25.00	1.250	-0.01	0.812	1.015
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 4	9262	1852.4	Config 0	23.89	25.00	1.291	0.06	0.759	0.980
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 4	9538	1907.6	Config 0	24.00	25.00	1.259	-0.13	0.776	0.977
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 4/8	9262	1852.4	Config 1	24.87	25.00	1.030	0.01	0.397	0.409
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4/8	9262	1852.4	Config 1	24.87	25.00	1.030	-0.15	0.568	0.585
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 4/8	1413	1732.6	Config 0	24.10	25.00	1.230	0.02	0.551	0.678
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 4/8	1413	1732.6	Config 0	24.10	25.00	1.230	-0.05	0.587	0.722
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 8	1413	1732.6	Config 1	21.47	22.20	1.183	0.01	0.438	0.518
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	1413	1732.6	Config 1	21.47	22.20	1.183	0.02	0.721	0.853
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	1312	1712.4	Config 1	21.45	22.20	1.189	0.02	0.682	0.811
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	1513	1752.6	Config 1	21.32	22.20	1.225	0.02	0.689	0.844
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 4	1413	1732.6	Config 1	21.47	23.00	1.422	0.01	0.438	0.623
65	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4	1413	1732.6	Config 1	21.47	23.00	1.422	0.02	0.721	1.025
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4	1312	1712.4	Config 1	21.45	23.00	1.429	0.02	0.682	0.975
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4	1513	1752.6	Config 1	21.32	23.00	1.472	0.02	0.689	1.014
	WCDMA V_Ant 0	RMC12.2Kbps	Front	10mm	DSI 4/8	4132	826.4	Config 0	24.78	25.00	1.052	-0.04	0.174	0.183
66	WCDMA V_Ant 0	RMC12.2Kbps	Back	10mm	DSI 4/8	4132	826.4	Config 0	24.78	25.00	1.052	-0.16	0.288	0.303
	WCDMA V_Ant 1	RMC12.2Kbps	Front	10mm	DSI 4/8	4182	836.4	Config 1	24.76	25.00	1.057	-0.14	0.128	0.135
	WCDMA V_Ant 1	RMC12.2Kbps	Back	10mm	DSI 4/8	4182	836.4	Config 1	24.76	25.00	1.057	-0.18	0.256	0.271

<CDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	CDMA BC0_Ant 0	1xRTT RC3 SO32	Front	10mm	DSI 4/8	384	836.52	Config 0	24.73	25.00	1.064	-0.11	0.255	0.271
67	CDMA BC0_Ant 0	1xRTT RC3 SO32	Back	10mm	DSI 4/8	384	836.52	Config 0	24.73	25.00	1.064	-0.13	0.293	0.312
	CDMA BC0_Ant 1	1xRTT RC3 SO32	Front	10mm	DSI 4/8	384	836.52	Config 1	24.71	25.00	1.069	-0.11	0.218	0.233
	CDMA BC0_Ant 1	1xRTT RC3 SO32	Back	10mm	DSI 4/8	384	836.52	Config 1	24.71	25.00	1.069	-0.04	0.280	0.299
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Front	10mm	DSI 8	600	1880	Config 0	23.27	23.90	1.156	0.18	0.677	0.783
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Back	10mm	DSI 8	600	1880	Config 0	23.27	23.90	1.156	-0.02	0.788	0.911
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Back	10mm	DSI 8	25	1851.25	Config 0	23.10	23.90	1.202	0.03	0.735	0.884
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Back	10mm	DSI 8	1175	1908.75	Config 0	23.05	23.90	1.216	-0.04	0.714	0.868
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Front	10mm	DSI 4	600	1880	Config 0	23.27	24.70	1.390	0.18	0.677	0.941
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Front	10mm	DSI 4	25	1851.25	Config 0	23.10	24.70	1.445	0.09	0.632	0.914
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Front	10mm	DSI 4	1175	1908.75	Config 0	23.05	24.70	1.462	-0.04	0.615	0.899
68	CDMA BC1_Ant 2	1xRTT RC3 SO32	Back	10mm	DSI 4	600	1880	Config 0	23.27	24.70	1.390	-0.02	0.788	1.095
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Back	10mm	DSI 4	25	1851.25	Config 0	23.10	24.70	1.445	0.03	0.735	1.062
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Back	10mm	DSI 4	1175	1908.75	Config 0	23.05	24.70	1.462	-0.04	0.714	1.044
	CDMA BC1_Ant 0	1xRTT RC3 SO32	Front	10mm	DSI 4/8	600	1880	Config 1	24.69	25.00	1.074	0.1	0.314	0.337
	CDMA BC1_Ant 0	1xRTT RC3 SO32	Back	10mm	DSI 4/8	600	1880	Config 1	24.69	25.00	1.074	-0.12	0.546	0.586
	CDMA BC10_Ant 0	1xRTT RC3 SO32	Front	10mm	DSI 4/8	580	820.5	Config 0	24.73	25.00	1.064	0.1	0.214	0.228
	CDMA BC10_Ant 0	1xRTT RC3 SO32	Back	10mm	DSI 4/8	580	820.5	Config 0	24.73	25.00	1.064	-0.08	0.266	0.283
	CDMA BC10_Ant 1	1xRTT RC3 SO32	Front	10mm	DSI 4/8	580	820.5	Config 1	24.45	25.00	1.135	-0.16	0.236	0.268
69	CDMA BC10_Ant 1	1xRTT RC3 SO32	Back	10mm	DSI 4/8	580	820.5	Config 1	24.45	25.00	1.135	-0.01	0.264	0.300

<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 7_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 8	21350	2560	Config 0	21.43	22.30	1.222	0.06	0.633	0.773
	LTE Band 7_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 8	20850	2510	Config 0	21.40	22.30	1.230	0.01	0.615	0.757
	LTE Band 7_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 8	21100	2535	Config 0	21.42	22.30	1.225	0.06	0.598	0.732
	LTE Band 7_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 8	21350	2560	Config 0	21.39	22.30	1.233	-0.03	0.601	0.741
	LTE Band 7_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 8	20850	2510	Config 0	21.35	22.30	1.245	0.04	0.513	0.638
	LTE Band 7_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 8	21100	2535	Config 0	21.36	22.30	1.242	0.11	0.554	0.688
	LTE Band 7_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 8	21350	2560	Config 0	21.37	22.30	1.239	0.04	0.521	0.645
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	21350	2560	Config 0	21.43	22.30	1.222	-0.13	0.721	0.881
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	20850	2510	Config 0	21.40	22.30	1.230	-0.13	0.715	0.880
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	21100	2535	Config 0	21.42	22.30	1.225	-0.04	0.798	0.977
	LTE Band 7_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 8	21350	2560	Config 0	21.39	22.30	1.233	0.09	0.718	0.885
	LTE Band 7_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 8	20850	2510	Config 0	21.35	22.30	1.245	0.09	0.713	0.887
	LTE Band 7_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 8	21100	2535	Config 0	21.36	22.30	1.242	0.09	0.754	0.936
	LTE Band 7_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 8	21350	2560	Config 0	21.37	22.30	1.239	-0.16	0.721	0.893
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	21350+21152	2560	Config 0	21.05	22.30	1.334	0.05	0.707	0.943
	LTE Band 7_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	21350	2560	Config 0	21.43	23.10	1.469	0.06	0.633	0.930
	LTE Band 7_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	20850	2510	Config 0	21.40	23.10	1.479	0.01	0.615	0.910
	LTE Band 7_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	21100	2535	Config 0	21.42	23.10	1.472	0.06	0.598	0.880
	LTE Band 7_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 4	21350	2560	Config 0	21.39	23.10	1.483	-0.03	0.601	0.891
	LTE Band 7_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 4	20850	2510	Config 0	21.35	23.10	1.496	0.04	0.513	0.768
	LTE Band 7_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 4	21100	2535	Config 0	21.36	23.10	1.493	0.11	0.554	0.827
	LTE Band 7_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 4	21350	2560	Config 0	21.37	23.10	1.489	0.04	0.521	0.776
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	21350	2560	Config 0	21.43	23.10	1.469	-0.13	0.721	1.059
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	20850	2510	Config 0	21.40	23.10	1.479	-0.13	0.715	1.058
70	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	21100	2535	Config 0	21.42	23.10	1.472	-0.04	0.798	1.175
	LTE Band 7_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 4	21350	2560	Config 0	21.39	23.10	1.483	0.09	0.718	1.064
	LTE Band 7_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 4	20850	2510	Config 0	21.35	23.10	1.496	0.09	0.713	1.067
	LTE Band 7_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 4	21100	2535	Config 0	21.36	23.10	1.493	0.09	0.754	1.126
	LTE Band 7_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 4	21350	2560	Config 0	21.37	23.10	1.489	-0.16	0.721	1.074
	LTE Band 7C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	21350+21152	2560	Config 0	21.25	23.10	1.531	0.05	0.743	1.138
	LTE Band 7_Ant 0	20M	QPSK	1	99	Front	10mm	DSI 8	21350	2560	Config 1	24.68	24.70	1.005	0.06	0.672	0.675
	LTE Band 7_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 8	20850	2510	Config 1	23.68	24.00	1.076	-0.03	0.604	0.650
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 8	21350	2560	Config 1	24.68	24.70	1.005	-0.04	0.803	0.807
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 8	20850	2510	Config 1	24.58	24.70	1.028	-0.13	0.927	0.953
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 8	21100	2535	Config 1	24.62	24.70	1.019	-0.09	0.900	0.917
	LTE Band 7_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	20850	2510	Config 1	23.68	24.00	1.076	0.09	0.772	0.831
	LTE Band 7_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 8	21100	2535	Config 1	23.67	24.00	1.079	0.05	0.754	0.814
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 8	21350	2560	Config 1	23.53	24.00	1.114	-0.17	0.766	0.854
	LTE Band 7_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 8	21100	2535	Config 1	23.63	24.00	1.089	-0.16	0.702	0.764
	LTE Band 7C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	21350+21152	2560	Config 1	24.03	24.70	1.167	0.07	0.807	0.942
	LTE Band 7_Ant 0	20M	QPSK	1	99	Front	10mm	DSI 4	21350	2560	Config 1	24.68	25.00	1.076	0.06	0.672	0.723
	LTE Band 7_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 4	20850	2510	Config 1	23.68	24.00	1.076	-0.03	0.604	0.650
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 4	21350	2560	Config 1	24.68	25.00	1.076	-0.04	0.803	0.864
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 4	20850	2510	Config 1	24.58	25.00	1.102	-0.13	0.927	1.021
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 4	21100	2535	Config 1	24.62	25.00	1.091	-0.09	0.900	0.982
	LTE Band 7_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	20850	2510	Config 1	23.68	24.00	1.076	0.09	0.772	0.831
	LTE Band 7_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 4	21100	2535	Config 1	23.67	24.00	1.079	0.05	0.754	0.814
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 4	21350	2560	Config 1	23.53	24.00	1.114	-0.17	0.766	0.854
	LTE Band 7_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 4	21100	2535	Config 1	23.63	24.00	1.089	-0.16	0.702	0.764
	LTE Band 7C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	21350+21152	2560	Config 1	24.03	25.00	1.250	0.07	0.807	1.009
	LTE Band 12_Ant 0	10M	QPSK	1	49	Front	10mm	DSI 4/8	23095	707.5	Config 0	24.38	25.00	1.153	0.03	0.155	0.179
	LTE Band 12_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 4/8	23095	707.5	Config 0	23.53	24.00	1.114	0.05	0.134	0.149
71	LTE Band 12_Ant 0	10M	QPSK	1	49	Back	10mm	DSI 4/8	23095	707.5	Config 0	24.38	25.00	1.153	-0.02	0.258	0.298
	LTE Band 12_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 4/8	23095	707.5	Config 0	23.53	24.00	1.114	0.01	0.140	0.156
	LTE Band 12_Ant 1	10M	QPSK	1	49	Front	10mm	DSI 4/8	23095	707.5	Config 1	24.34	25.00	1.164	-0.12	0.170	0.198
	LTE Band 12_Ant 1	10M	QPSK	25	12	Front	10mm	DSI 4/8	23095	707.5	Config 1	23.46	24.00	1.132	-0.1	0.156	0.177
	LTE Band 12_Ant 1	10M	QPSK	1	49	Back	10mm	DSI 4/8	23095	707.5	Config 1	24.34	25.00	1.164	-0.01	0.192	0.224
	LTE Band 12_Ant 1	10M	QPSK	25	12	Back	10mm	DSI 4/8	23095	707.5	Config 1	23.46	24.00	1.132	-0.09	0.172	0.195

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 13_Ant 0	10M	QPSK	1	0	Front	10mm	DSI 4/8	23230	782	Config 0	24.45	25.00	1.135	-0.09	0.200	0.227
	LTE Band 13_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 4/8	23230	782	Config 0	23.61	24.00	1.094	0.01	0.169	0.185
72	LTE Band 13_Ant 0	10M	QPSK	1	0	Back	10mm	DSI 4/8	23230	782	Config 0	24.45	25.00	1.135	-0.12	0.301	0.342
	LTE Band 13_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 4/8	23230	782	Config 0	23.61	24.00	1.094	0.03	0.171	0.187
	LTE Band 13_Ant 1	10M	QPSK	1	49	Front	10mm	DSI 4/8	23230	782	Config 1	24.47	25.00	1.130	-0.1	0.188	0.212
	LTE Band 13_Ant 1	10M	QPSK	25	12	Front	10mm	DSI 4/8	23230	782	Config 1	23.53	24.00	1.114	-0.1	0.174	0.194
	LTE Band 13_Ant 1	10M	QPSK	1	49	Back	10mm	DSI 4/8	23230	782	Config 1	24.47	25.00	1.130	-0.1	0.215	0.243
	LTE Band 13_Ant 1	10M	QPSK	25	12	Back	10mm	DSI 4/8	23230	782	Config 1	23.53	24.00	1.114	-0.04	0.199	0.222
	LTE Band 14_Ant 0	10M	QPSK	1	0	Front	10mm	DSI 4/8	23330	793	Config 0	24.45	25.00	1.135	-0.11	0.242	0.275
	LTE Band 14_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 4/8	23330	793	Config 0	23.56	24.00	1.107	-0.12	0.212	0.235
73	LTE Band 14_Ant 0	10M	QPSK	1	0	Back	10mm	DSI 4/8	23330	793	Config 0	24.45	25.00	1.135	-0.12	0.293	0.333
	LTE Band 14_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 4/8	23330	793	Config 0	23.56	24.00	1.107	-0.08	0.237	0.262
	LTE Band 14_Ant 1	10M	QPSK	1	0	Front	10mm	DSI 4/8	23330	793	Config 1	24.41	25.00	1.146	-0.01	0.201	0.230
	LTE Band 14_Ant 1	10M	QPSK	25	25	Front	10mm	DSI 4/8	23330	793	Config 1	23.47	24.00	1.130	-0.02	0.194	0.219
	LTE Band 14_Ant 1	10M	QPSK	1	0	Back	10mm	DSI 4/8	23330	793	Config 1	24.41	25.00	1.146	-0.12	0.236	0.270
	LTE Band 14_Ant 1	10M	QPSK	25	25	Back	10mm	DSI 4/8	23330	793	Config 1	23.47	24.00	1.130	-0.08	0.211	0.238
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 8	26340	1880	Config 0	23.66	24.20	1.132	0.1	0.672	0.761
	LTE Band 25_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 8	26340	1880	Config 0	23.41	24.00	1.146	-0.14	0.637	0.730
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	26340	1880	Config 0	23.66	24.20	1.132	0.02	0.768	0.870
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	26140	1860	Config 0	23.59	24.20	1.151	0.05	0.705	0.811
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	26590	1905	Config 0	23.50	24.20	1.175	-0.17	0.701	0.824
	LTE Band 25_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 8	26340	1880	Config 0	23.41	24.00	1.146	-0.04	0.693	0.794
	LTE Band 25_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 8	26340	1880	Config 0	23.32	24.00	1.169	0.05	0.699	0.817
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	26340	1880	Config 0	23.66	25.00	1.361	0.1	0.672	0.915
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	26140	1860	Config 0	23.59	25.00	1.384	0.06	0.612	0.847
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	26590	1905	Config 0	23.50	25.00	1.413	-0.03	0.623	0.880
	LTE Band 25_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 4	26340	1880	Config 0	23.41	24.00	1.146	-0.14	0.637	0.730
	LTE Band 25_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 4	26340	1880	Config 0	23.32	24.00	1.169	0.05	0.654	0.765
74	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	26340	1880	Config 0	23.66	25.00	1.361	-0.03	0.768	1.046
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	26140	1860	Config 0	23.59	25.00	1.384	0.05	0.705	0.975
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	26590	1905	Config 0	23.50	25.00	1.413	-0.17	0.701	0.990
	LTE Band 25_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 4	26340	1880	Config 0	23.41	24.00	1.146	-0.04	0.693	0.794
	LTE Band 25_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 4	26340	1880	Config 0	23.32	24.00	1.169	0.06	0.699	0.817
	LTE Band 25_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 4/8	26140	1860	Config 1	24.85	25.00	1.035	0.04	0.403	0.417
	LTE Band 25_Ant 0	20M	QPSK	50	0	Front	10mm	DSI 4/8	26140	1860	Config 1	23.84	24.00	1.038	0.14	0.387	0.402
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4/8	26140	1860	Config 1	24.85	25.00	1.035	0.15	0.492	0.509
	LTE Band 25_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 4/8	26140	1860	Config 1	23.84	24.00	1.038	-0.11	0.456	0.473
	LTE Band 26_Ant 0	15M	QPSK	1	0	Front	10mm	DSI 4/8	26865	831.5	Config 0	24.31	25.00	1.172	0.02	0.152	0.178
	LTE Band 26_Ant 0	15M	QPSK	36	0	Front	10mm	DSI 4/8	26865	831.5	Config 0	23.45	24.00	1.135	0.04	0.124	0.141
75	LTE Band 26_Ant 0	15M	QPSK	1	0	Back	10mm	DSI 4/8	26865	831.5	Config 0	24.31	25.00	1.172	-0.17	0.273	0.320
	LTE Band 26_Ant 0	15M	QPSK	36	0	Back	10mm	DSI 4/8	26865	831.5	Config 0	23.45	24.00	1.135	-0.12	0.216	0.245
	LTE Band 5B_Ant 0	10M	QPSK	1	0	Back	10mm	DSI 4/8	20600+20501	844	Config 0	24.91	25.00	1.021	0.07	0.308	0.314
	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	10mm	DSI 4/8	26865	831.5	Config 1	24.21	25.00	1.199	-0.16	0.211	0.253
	LTE Band 26_Ant 1	15M	QPSK	36	20	Front	10mm	DSI 4/8	26865	831.5	Config 1	23.34	24.00	1.164	-0.02	0.176	0.205
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	10mm	DSI 4/8	26865	831.5	Config 1	24.21	25.00	1.199	-0.13	0.226	0.271
	LTE Band 26_Ant 1	15M	QPSK	36	20	Back	10mm	DSI 4/8	26865	831.5	Config 1	23.34	24.00	1.164	-0.16	0.211	0.246
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Back	10mm	DSI 4/8	20600+20501	844	Config 1	24.90	25.00	1.023	0.17	0.277	0.283

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 30_Ant 2	10M	QPSK	1	25	Front	10mm	DSI 8	27710	2310	Config 0	21.16	22.10	1.242	-0.09	0.402	0.499
	LTE Band 30_Ant 2	10M	QPSK	25	25	Front	10mm	DSI 8	27710	2310	Config 0	20.89	22.10	1.321	-0.06	0.370	0.489
	LTE Band 30_Ant 2	10M	QPSK	1	25	Back	10mm	DSI 8	27710	2310	Config 0	21.16	22.10	1.242	0.11	0.792	0.983
	LTE Band 30_Ant 2	10M	QPSK	25	25	Back	10mm	DSI 8	27710	2310	Config 0	20.89	22.10	1.321	0.17	0.734	0.970
	LTE Band 30_Ant 2	10M	QPSK	50	0	Back	10mm	DSI 8	27710	2310	Config 0	20.88	22.10	1.324	0.13	0.739	0.979
	LTE Band 30_Ant 2	10M	QPSK	1	25	Front	10mm	DSI 4	27710	2310	Config 0	21.16	22.90	1.493	-0.09	0.402	0.600
	LTE Band 30_Ant 2	10M	QPSK	25	25	Front	10mm	DSI 4	27710	2310	Config 0	20.89	22.90	1.589	-0.06	0.370	0.588
76	LTE Band 30_Ant 2	10M	QPSK	1	25	Back	10mm	DSI 4	27710	2310	Config 0	21.16	22.90	1.493	0.11	0.792	1.182
	LTE Band 30_Ant 2	10M	QPSK	25	25	Back	10mm	DSI 4	27710	2310	Config 0	20.89	22.90	1.589	0.17	0.734	1.166
	LTE Band 30_Ant 2	10M	QPSK	50	0	Back	10mm	DSI 4	27710	2310	Config 0	20.88	22.90	1.592	0.13	0.739	1.177
	LTE Band 30_Ant 0	10M	QPSK	1	25	Front	10mm	DSI 4/8	27710	2310	Config 1	24.65	25.00	1.084	0.15	0.392	0.425
	LTE Band 30_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 4/8	27710	2310	Config 1	23.71	24.00	1.069	0.1	0.303	0.324
	LTE Band 30_Ant 0	10M	QPSK	1	25	Back	10mm	DSI 4/8	27710	2310	Config 1	24.65	25.00	1.084	-0.02	0.544	0.590
	LTE Band 30_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 4/8	27710	2310	Config 1	23.71	24.00	1.069	-0.08	0.464	0.496
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4/8	132572	1770	Config 0	23.94	25.00	1.276	0.1	0.604	0.771
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 4/8	132572	1770	Config 0	23.30	24.00	1.175	0.03	0.584	0.686
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4/8	132572	1770	Config 0	23.94	25.00	1.276	-0.14	0.615	0.785
	LTE Band 66_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 4/8	132572	1770	Config 0	23.30	24.00	1.175	0.11	0.596	0.700
	LTE Band 66C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4/8	132572+132374	1770	Config 0	24.98	25.00	1.005	0.06	0.743	0.746
	LTE Band 66_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 8	132572	1770	Config 1	21.80	22.20	1.096	-0.03	0.600	0.658
	LTE Band 66_Ant 0	20M	QPSK	50	50	Front	10mm	DSI 8	132572	1770	Config 1	21.50	22.20	1.175	-0.08	0.553	0.650
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	132572	1770	Config 1	21.80	22.20	1.096	0	0.789	0.865
	LTE Band 66_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 8	132572	1770	Config 1	21.50	22.20	1.175	0.03	0.731	0.859
	LTE Band 66_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 8	132572	1770	Config 1	21.45	22.20	1.189	0.01	0.722	0.858
	LTE Band 66C_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 8	132072+132270	1720	Config 1	21.46	22.20	1.186	0	0.722	0.856
	LTE Band 66_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 4	132572	1770	Config 1	21.80	23.00	1.318	-0.03	0.600	0.791
	LTE Band 66_Ant 0	20M	QPSK	50	50	Front	10mm	DSI 4	132572	1770	Config 1	21.50	23.00	1.413	-0.08	0.553	0.781
77	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	132572	1770	Config 1	21.80	23.00	1.318	0	0.789	1.040
	LTE Band 66_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 4	132572	1770	Config 1	21.50	23.00	1.413	0.03	0.731	1.033
	LTE Band 66_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 4	132572	1770	Config 1	21.45	23.00	1.429	0.01	0.722	1.032
	LTE Band 66C_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 4	132072+132270	1720	Config 1	21.46	23.00	1.426	0	0.722	1.029
	LTE Band 71_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 4/8	133322	683	Config 0	24.33	25.00	1.167	0.02	0.136	0.159
	LTE Band 71_Ant 0	20M	QPSK	50	0	Front	10mm	DSI 4/8	133322	683	Config 0	23.49	24.00	1.125	0	0.114	0.128
78	LTE Band 71_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4/8	133322	683	Config 0	24.33	25.00	1.167	0	0.205	0.239
	LTE Band 71_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 4/8	133322	683	Config 0	23.49	24.00	1.125	-0.04	0.152	0.171
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	DSI 4/8	133322	683	Config 1	24.34	25.00	1.164	-0.17	0.091	0.106
	LTE Band 71_Ant 1	20M	QPSK	50	0	Front	10mm	DSI 4/8	133322	683	Config 1	23.52	24.00	1.117	-0.1	0.079	0.088
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	DSI 4/8	133322	683	Config 1	24.34	25.00	1.164	0	0.151	0.176
	LTE Band 71_Ant 1	20M	QPSK	50	0	Back	10mm	DSI 4/8	133322	683	Config 1	23.52	24.00	1.117	-0.02	0.139	0.155

<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 8	39750	2506	Config 0	23.41	24.20	1.199	62.9	1.006	0.02	0.425	0.513
	LTE Band 41_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 8	39750	2506	Config 0	23.27	24.00	1.183	62.9	1.006	0.14	0.411	0.489
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	39750	2506	Config 0	23.41	24.20	1.199	62.9	1.006	0.17	0.756	0.912
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	40185	2549.5	Config 0	23.25	24.20	1.245	62.9	1.006	-0.02	0.653	0.818
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	40620	2593	Config 0	23.24	24.20	1.247	62.9	1.006	-0.05	0.703	0.882
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	41055	2636.5	Config 0	23.14	24.20	1.276	62.9	1.006	0.06	0.666	0.855
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	41490	2680	Config 0	23.15	24.20	1.274	62.9	1.006	-0.14	0.647	0.829
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 8	39750	2506	Config 0	23.27	24.00	1.183	62.9	1.006	0.18	0.621	0.739
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 8	40185	2549.5	Config 0	23.09	24.00	1.233	62.9	1.006	0.02	0.623	0.773
	LTE Band 41_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 8	40620	2593	Config 0	23.18	24.00	1.208	62.9	1.006	0.04	0.643	0.781
	LTE Band 41_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 8	41055	2636.5	Config 0	23.12	24.00	1.225	62.9	1.006	0.09	0.652	0.803
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 8	41490	2680	Config 0	23.13	24.00	1.222	62.9	1.006	-0.06	0.632	0.777
	LTE Band 41_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 8	39750	2510	Config 0	23.35	24.00	1.161	62.9	1.006	0.03	0.629	0.735
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 8	41055	2536.5	Config 0	25.76	25.80	1.009	42.9	1.009	-0.16	0.802	0.817
	LTE Band 41C_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 8	39750+39948	2506	Config 0	24.15	24.20	1.012	62.9	1.006	0.11	0.787	0.801
	LTE Band 41_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	39750	2506	Config 0	23.41	25.00	1.442	62.9	1.006	0.02	0.425	0.617
	LTE Band 41_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 4	39750	2506	Config 0	23.27	24.00	1.183	62.9	1.006	0.14	0.411	0.489
79	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	39750	2506	Config 0	23.41	25.00	1.442	62.9	1.006	-0.15	0.756	1.097
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	40185	2549.5	Config 0	23.25	25.00	1.496	62.9	1.006	-0.02	0.653	0.983
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	40620	2593	Config 0	23.24	25.00	1.500	62.9	1.006	-0.05	0.703	1.061
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	41055	2636.5	Config 0	23.14	25.00	1.535	62.9	1.006	0.06	0.666	1.028
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	41490	2680	Config 0	23.15	25.00	1.531	62.9	1.006	-0.14	0.647	0.997
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 4	39750	2506	Config 0	23.27	24.00	1.183	62.9	1.006	0.18	0.621	0.739
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 4	40185	2549.5	Config 0	23.09	24.00	1.233	62.9	1.006	0.02	0.623	0.773
	LTE Band 41_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 4	40620	2593	Config 0	23.18	24.00	1.208	62.9	1.006	0.04	0.643	0.781
	LTE Band 41_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 4	41055	2636.5	Config 0	23.12	24.00	1.225	62.9	1.006	0.09	0.652	0.803
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 4	41490	2680	Config 0	23.13	24.00	1.222	62.9	1.006	-0.06	0.632	0.777
	LTE Band 41_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 4	39750	2510	Config 0	23.35	24.00	1.161	62.9	1.006	0.03	0.629	0.735
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 4	41055	2536.5	Config 0	25.76	26.60	1.213	42.9	1.009	-0.16	0.802	0.982
	LTE Band 41C_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 4	39750+39948	2506	Config 0	24.25	25.00	1.189	62.9	1.006	0.11	0.787	0.941
	LTE Band 41_Ant 0	20M	QPSK	1	99	Front	10mm	DSI 4/8	40620	2593	Config 1	24.96	25.00	1.009	62.9	1.006	0	0.372	0.378
	LTE Band 41_Ant 0	20M	QPSK	50	0	Front	10mm	DSI 4/8	40185	2549.5	Config 1	23.99	24.00	1.002	62.9	1.006	0.02	0.314	0.316
	LTE Band 41_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 4/8	40620	2593	Config 1	24.96	25.00	1.009	62.9	1.006	-0.13	0.412	0.418
	LTE Band 41_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 4/8	40185	2549.5	Config 1	23.99	24.00	1.002	62.9	1.006	-0.07	0.394	0.398
	LTE Band 41_HPUE_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 4/8	41055	2636.5	Config 1	26.86	27.50	1.159	42.9	1.009	0.1	0.440	0.514
	LTE Band 41C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4/8	40620+40422	2593	Config 1	24.95	25.00	1.012	62.9	1.006	0.03	0.392	0.399
	LTE Band 48_Ant 7	20M	QPSK	1	0	Front	10mm	DSI 4/8	56150	3641	Config 0	24.55	25.00	1.109	62.9	1.006	0.02	0.533	0.595
	LTE Band 48_Ant 7	20M	QPSK	50	0	Front	10mm	DSI 4/8	56150	3641	Config 0	23.58	24.00	1.102	62.9	1.006	0.01	0.492	0.545
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 4/8	56150	3641	Config 0	24.55	25.00	1.109	62.9	1.006	-0.02	0.658	0.734
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 4/8	55340	3560	Config 0	20.89	22.00	1.291	62.9	1.006	0.06	0.292	0.379
80	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 4/8	55830	3609	Config 0	24.38	25.00	1.153	62.9	1.006	0.04	0.767	0.890
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 4/8	56640	3690	Config 0	20.93	22.00	1.279	62.9	1.006	0.05	0.316	0.407
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 4/8	56150	3641	Config 0	23.58	24.00	1.102	62.9	1.006	-0.02	0.539	0.597
	LTE Band 48_Ant 7	20M	QPSK	100	0	Back	10mm	DSI 4/8	55830	3609	Config 0	23.52	24.00	1.117	62.9	1.006	0.03	0.551	0.619
	LTE Band 48C_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 4/8	56150+55952	3641	Config 0	13.95	14.00	1.012	62.9	1.006	0.13	0.078	0.079
	LTE Band 48_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4/8	56150	3641	Config 1	23.37	23.50	1.030	62.9	1.006	0.01	0.147	0.152
	LTE Band 48_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 4/8	56150	3641	Config 1	22.33	22.50	1.040	62.9	1.006	-0.08	0.101	0.106
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4/8	56150	3641	Config 1	23.37	23.50	1.030	62.9	1.006	-0.13	0.321	0.333
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 4/8	56150	3641	Config 1	22.33	22.50	1.040	62.9	1.006	-0.04	0.268	0.280
	LTE Band 48C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4/8	56150+55952	3641	Config 1	13.95	14.00	1.012	62.9	1.006	0.03	0.032	0.033

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n5_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 4/8	1673000	836.5	Config 0	24.80	25.00	1.047	0.12	0.077	0.081
	FR1 n5_Ant 0	20M	BPSK	50	0	Front	10mm	DSI 4/8	1673000	836.5	Config 0	24.51	25.00	1.119	0.03	0.033	0.037
	FR1 n5_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 4/8	1673000	836.5	Config 0	24.80	25.00	1.047	-0.16	0.104	0.109
	FR1 n5_Ant 0	20M	BPSK	50	0	Back	10mm	DSI 4/8	1673000	836.5	Config 0	24.51	25.00	1.119	-0.14	0.049	0.055
	FR1 n5_Ant 1	20M	BPSK	1	1	Front	10mm	DSI 4/8	1673000	836.5	Config 1	24.97	25.00	1.007	-0.18	0.197	0.198
	FR1 n5_Ant 1	20M	BPSK	50	0	Front	10mm	DSI 4/8	1673000	836.5	Config 1	24.76	25.00	1.057	-0.16	0.178	0.188
81	FR1 n5_Ant 1	20M	BPSK	1	1	Back	10mm	DSI 4/8	1673000	836.5	Config 1	24.97	25.00	1.007	-0.14	0.235	0.237
	FR1 n5_Ant 1	20M	BPSK	50	0	Back	10mm	DSI 4/8	1673000	836.5	Config 1	24.76	25.00	1.057	-0.19	0.215	0.227
	FR1 n7_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 8	502000	2510	Config 0	20.82	21.80	1.253	0.12	0.585	0.733
	FR1 n7_Ant 2	20M	BPSK	50	0	Front	10mm	DSI 8	502000	2510	Config 0	20.78	21.80	1.265	-0.09	0.537	0.679
	FR1 n7_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 8	502000	2510	Config 0	20.82	21.80	1.253	0.02	0.741	0.929
	FR1 n7_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 8	507000	2535	Config 0	20.76	21.80	1.271	0.01	0.714	0.907
	FR1 n7_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 8	512000	2560	Config 0	20.66	21.80	1.300	0	0.701	0.911
	FR1 n7_Ant 2	20M	BPSK	50	0	Back	10mm	DSI 8	502000	2560	Config 0	20.78	21.80	1.265	0.04	0.605	0.765
	FR1 n7_Ant 2	20M	BPSK	100	0	Back	10mm	DSI 8	502000	2510	Config 0	20.75	21.80	1.274	0.14	0.711	0.905
	FR1 n7_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 4	502000	2510	Config 0	20.82	22.60	1.507	0.12	0.585	0.881
	FR1 n7_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 4	507000	2535	Config 0	20.76	22.60	1.528	0.01	0.514	0.785
	FR1 n7_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 4	512000	2560	Config 0	20.66	22.60	1.563	0	0.501	0.783
	FR1 n7_Ant 2	20M	BPSK	50	0	Front	10mm	DSI 4	502000	2510	Config 0	20.78	22.60	1.521	-0.09	0.537	0.817
	FR1 n7_Ant 2	20M	BPSK	50	0	Front	10mm	DSI 4	507000	2535	Config 0	20.73	22.60	1.538	0.05	0.496	0.763
	FR1 n7_Ant 2	20M	BPSK	50	0	Front	10mm	DSI 4	512000	2560	Config 0	20.64	22.60	1.570	0.09	0.482	0.757
	FR1 n7_Ant 2	20M	BPSK	100	0	Front	10mm	DSI 4	502000	2510	Config 0	20.75	22.60	1.531	0.14	0.501	0.767
82	FR1 n7_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 4	502000	2510	Config 0	20.82	22.60	1.507	0.02	0.741	1.116
	FR1 n7_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 4	507000	2535	Config 0	20.76	22.60	1.528	0.01	0.714	1.091
	FR1 n7_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 4	512000	2560	Config 0	20.66	22.60	1.563	0	0.701	1.096
	FR1 n7_Ant 2	20M	BPSK	50	0	Back	10mm	DSI 4	502000	2560	Config 0	20.78	22.60	1.521	0.04	0.605	0.919
	FR1 n7_Ant 2	20M	BPSK	50	0	Back	10mm	DSI 4	507000	2535	Config 0	20.73	22.60	1.538	0.05	0.596	0.917
	FR1 n7_Ant 2	20M	BPSK	50	0	Back	10mm	DSI 4	512000	2560	Config 0	20.64	22.60	1.570	0.09	0.582	0.914
	FR1 n7_Ant 2	20M	BPSK	100	0	Back	10mm	DSI 4	502000	2510	Config 0	20.75	22.60	1.531	0.14	0.711	1.089
	FR1 n7_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 8	502000	2510	Config 1	23.88	24.80	1.236	0.02	0.574	0.709
	FR1 n7_Ant 0	20M	BPSK	50	0	Front	10mm	DSI 8	502000	2510	Config 1	23.84	24.80	1.247	-0.09	0.481	0.600
	FR1 n7_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 8	502000	2510	Config 1	23.88	24.80	1.236	0.01	0.701	0.867
	FR1 n7_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 8	507000	2535	Config 1	23.84	24.80	1.247	-0.02	0.716	0.893
	FR1 n7_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 8	512000	2560	Config 1	23.75	24.80	1.274	-0.08	0.661	0.841
	FR1 n7_Ant 0	20M	BPSK	50	0	Back	10mm	DSI 8	502000	2510	Config 1	23.84	24.80	1.247	0.11	0.638	0.796
	FR1 n7_Ant 0	20M	BPSK	100	0	Back	10mm	DSI 8	502000	2510	Config 1	23.80	24.80	1.259	0.11	0.642	0.808
	FR1 n7_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 4	502000	2510	Config 1	23.88	25.00	1.294	0.02	0.574	0.742
	FR1 n7_Ant 0	20M	BPSK	50	0	Front	10mm	DSI 4	502000	2510	Config 1	23.84	25.00	1.306	-0.09	0.481	0.628
	FR1 n7_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 4	502000	2510	Config 1	23.88	25.00	1.294	0.01	0.701	0.907
	FR1 n7_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 4	507000	2535	Config 1	23.84	25.00	1.306	-0.02	0.716	0.935
	FR1 n7_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 4	512000	2560	Config 1	23.75	25.00	1.334	-0.08	0.661	0.881
	FR1 n7_Ant 0	20M	BPSK	50	0	Back	10mm	DSI 4	502000	2510	Config 1	23.84	25.00	1.306	0.11	0.605	0.790
	FR1 n7_Ant 0	20M	BPSK	100	0	Back	10mm	DSI 4	502000	2510	Config 1	23.80	25.00	1.318	0.09	0.611	0.805
	FR1 n12_Ant 0	15M	BPSK	1	1	Front	10mm	DSI 4/8	141500	707.5	Config 0	24.64	25.00	1.086	-0.1	0.005	0.005
	FR1 n12_Ant 0	15M	BPSK	36	0	Front	10mm	DSI 4/8	141500	707.5	Config 0	24.24	25.00	1.191	-0.06	0.005	0.006
	FR1 n12_Ant 0	15M	BPSK	1	1	Back	10mm	DSI 4/8	141500	707.5	Config 0	24.64	25.00	1.086	-0.09	0.006	0.006
	FR1 n12_Ant 0	15M	BPSK	36	0	Back	10mm	DSI 4/8	141500	707.5	Config 0	24.24	25.00	1.191	-0.1	0.006	0.007
	FR1 n12_Ant 1	15M	BPSK	1	1	Front	10mm	DSI 4/8	141500	707.5	Config 1	24.44	25.00	1.138	-0.16	0.191	0.217
	FR1 n12_Ant 1	15M	BPSK	36	0	Front	10mm	DSI 4/8	141500	707.5	Config 1	24.25	25.00	1.189	0.02	0.172	0.204
83	FR1 n12_Ant 1	15M	BPSK	1	1	Back	10mm	DSI 4/8	141500	707.5	Config 1	24.44	25.00	1.138	-0.18	0.192	0.218
	FR1 n12_Ant 1	15M	BPSK	36	0	Back	10mm	DSI 4/8	141500	707.5	Config 1	24.25	25.00	1.189	0.15	0.176	0.209

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n25_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 8	372000	1860	Config 0	22.98	24.10	1.294	0.13	0.712	0.921
	FR1 n25_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 8	376000	1880	Config 0	22.93	24.10	1.309	0.01	0.612	0.801
	FR1 n25_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 8	381000	1905	Config 0	22.95	24.10	1.303	0.08	0.514	0.670
	FR1 n25_Ant 2	20M	BPSK	50	0	Front	10mm	DSI 8	372000	1860	Config 0	22.97	24.10	1.297	-0.09	0.626	0.812
	FR1 n25_Ant 2	20M	BPSK	50	0	Front	10mm	DSI 8	376000	1880	Config 0	22.91	24.10	1.315	0.08	0.489	0.643
	FR1 n25_Ant 2	20M	BPSK	50	0	Front	10mm	DSI 8	381000	1905	Config 0	22.93	24.10	1.309	-0.14	0.478	0.626
	FR1 n25_Ant 2	20M	BPSK	100	0	Front	10mm	DSI 8	372000	1860	Config 0	22.91	24.10	1.315	0.05	0.503	0.662
	FR1 n25_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 8	372000	1860	Config 0	22.98	24.10	1.294	-0.12	0.721	0.933
	FR1 n25_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 8	376000	1880	Config 0	22.93	24.10	1.309	0.01	0.652	0.853
	FR1 n25_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 8	381000	1905	Config 0	22.95	24.10	1.303	0.08	0.560	0.729
	FR1 n25_Ant 2	20M	BPSK	50	0	Back	10mm	DSI 8	372000	1860	Config 0	22.97	24.10	1.297	-0.02	0.591	0.767
	FR1 n25_Ant 2	20M	BPSK	50	0	Back	10mm	DSI 8	376000	1880	Config 0	22.91	24.10	1.315	0.08	0.559	0.735
	FR1 n25_Ant 2	20M	BPSK	50	0	Back	10mm	DSI 8	381000	1905	Config 0	22.93	24.10	1.309	-0.14	0.548	0.717
	FR1 n25_Ant 2	20M	BPSK	100	1	Back	10mm	DSI 8	372000	1860	Config 0	22.91	24.10	1.315	0.05	0.596	0.784
	FR1 n25_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 4	372000	1860	Config 0	22.98	24.90	1.556	0.13	0.712	1.108
	FR1 n25_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 4	376000	1880	Config 0	22.93	24.90	1.574	0.01	0.612	0.963
	FR1 n25_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 4	381000	1905	Config 0	22.95	24.90	1.567	0.08	0.514	0.805
	FR1 n25_Ant 2	20M	BPSK	50	0	Front	10mm	DSI 4	372000	1860	Config 0	22.97	24.90	1.560	-0.09	0.626	0.977
	FR1 n25_Ant 2	20M	BPSK	50	0	Front	10mm	DSI 4	376000	1880	Config 0	22.91	24.90	1.581	0.08	0.489	0.773
	FR1 n25_Ant 2	20M	BPSK	50	0	Front	10mm	DSI 4	381000	1905	Config 0	22.93	24.90	1.574	-0.14	0.478	0.752
	FR1 n25_Ant 2	20M	BPSK	100	0	Front	10mm	DSI 4	372000	1860	Config 0	22.91	24.90	1.581	0.05	0.503	0.795
84	FR1 n25_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 4	372000	1860	Config 0	22.98	24.90	1.556	-0.12	0.721	1.122
	FR1 n25_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 4	376000	1880	Config 0	22.93	24.90	1.574	0.01	0.652	1.026
	FR1 n25_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 4	381000	1905	Config 0	22.95	24.90	1.567	0.08	0.560	0.877
	FR1 n25_Ant 2	20M	BPSK	50	0	Back	10mm	DSI 4	372000	1860	Config 0	22.97	24.90	1.560	-0.02	0.591	0.922
	FR1 n25_Ant 2	20M	BPSK	50	0	Back	10mm	DSI 4	376000	1880	Config 0	22.91	24.90	1.581	0.08	0.559	0.884
	FR1 n25_Ant 2	20M	BPSK	50	0	Back	10mm	DSI 4	381000	1905	Config 0	22.93	24.90	1.574	-0.14	0.548	0.863
	FR1 n25_Ant 2	20M	BPSK	100	1	Back	10mm	DSI 4	372000	1860	Config 0	22.91	24.90	1.581	0.05	0.596	0.942
	FR1 n25_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 4/8	376000	1880	Config 1	24.91	25.00	1.021	0.01	0.116	0.118
	FR1 n25_Ant 0	20M	BPSK	50	0	Front	10mm	DSI 4/8	376000	1880	Config 1	24.68	25.00	1.076	0.03	0.110	0.118
	FR1 n25_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 4/8	376000	1880	Config 1	24.91	25.00	1.021	-0.08	0.151	0.154
	FR1 n25_Ant 0	20M	BPSK	50	0	Back	10mm	DSI 4/8	376000	1880	Config 1	24.68	25.00	1.076	-0.05	0.138	0.149
85	FR1 n66_Ant 2	40M	BPSK	1	1	Front	10mm	DSI 4/8	349000	1745	Config 0	24.97	25.00	1.007	-0.05	0.584	0.588
	FR1 n66_Ant 2	40M	BPSK	108	0	Front	10mm	DSI 4/8	349000	1745	Config 0	24.74	25.00	1.062	0.03	0.542	0.575
	FR1 n66_Ant 2	40M	BPSK	1	1	Back	10mm	DSI 4/8	349000	1745	Config 0	24.97	25.00	1.007	-0.12	0.583	0.587
	FR1 n66_Ant 2	40M	BPSK	108	0	Back	10mm	DSI 4/8	349000	1745	Config 0	24.74	25.00	1.062	-0.06	0.536	0.569
	FR1 n66_Ant 0	40M	BPSK	1	1	Front	10mm	DSI 4/8	349000	1745	Config 1	24.85	25.00	1.035	0.02	0.101	0.105
	FR1 n66_Ant 0	40M	BPSK	108	0	Front	10mm	DSI 4/8	349000	1745	Config 1	24.77	25.00	1.054	0.1	0.098	0.103
	FR1 n66_Ant 0	40M	BPSK	1	1	Back	10mm	DSI 4/8	349000	1745	Config 1	24.85	25.00	1.035	-0.07	0.112	0.116
	FR1 n66_Ant 0	40M	BPSK	108	0	Back	10mm	DSI 4/8	349000	1745	Config 1	24.77	25.00	1.054	-0.12	0.109	0.115
	FR1 n71_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 4/8	136100	680.5	Config 0	24.97	25.00	1.007	0.04	0.049	0.049
	FR1 n71_Ant 0	20M	BPSK	50	0	Front	10mm	DSI 4/8	136100	680.5	Config 0	24.61	25.00	1.094	0.01	0.034	0.037
	FR1 n71_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 4/8	136100	680.5	Config 0	24.97	25.00	1.007	-0.06	0.055	0.055
	FR1 n71_Ant 0	20M	BPSK	50	0	Back	10mm	DSI 4/8	136100	680.5	Config 0	24.61	25.00	1.094	0.11	0.032	0.035
	FR1 n71_Ant 1	20M	BPSK	1	1	Front	10mm	DSI 4/8	136100	680.5	Config 1	24.88	25.00	1.028	0.12	0.116	0.119
	FR1 n71_Ant 1	20M	BPSK	50	0	Front	10mm	DSI 4/8	136100	680.5	Config 1	24.65	25.00	1.084	0.03	0.100	0.108
86	FR1 n71_Ant 1	20M	BPSK	1	1	Back	10mm	DSI 4/8	136100	680.5	Config 1	24.88	25.00	1.028	0.05	0.123	0.126
	FR1 n71_Ant 1	20M	BPSK	50	0	Back	10mm	DSI 4/8	136100	680.5	Config 1	24.65	25.00	1.084	-0.11	0.114	0.124

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n41_Ant 2	100M	BPSK	1	1	Front	10mm	DSI 4/8	518598	2592.99	Config 0	24.45	25.00	1.135	25	1.332	0.06	0.294	0.444
	FR1 n41_Ant 2	100M	BPSK	135	0	Front	10mm	DSI 4/8	518598	2592.99	Config 0	24.44	25.00	1.138	25	1.332	0.09	0.282	0.427
87	FR1 n41_Ant 2	100M	BPSK	1	1	Back	10mm	DSI 4/8	518598	2592.99	Config 0	24.45	25.00	1.135	25	1.332	-0.18	0.342	0.517
	FR1 n41_Ant 2	100M	BPSK	135	0	Back	10mm	DSI 4/8	518598	2592.99	Config 0	24.44	25.00	1.138	25	1.332	-0.11	0.334	0.506
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Front	10mm	DSI 4/8	518598	2592.99	Config 0	27.25	27.50	1.059	25	1.332	-0.06	0.188	0.265
	FR1 n41_HPUE_Ant 5	100M	BPSK	135	0	Front	10mm	DSI 4/8	518598	2592.99	Config 0	27.11	27.50	1.094	25	1.332	-0.11	0.175	0.255
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	1	Back	10mm	DSI 4/8	518598	2592.99	Config 0	27.25	27.50	1.059	25	1.332	-0.17	0.303	0.428
	FR1 n41_HPUE_Ant 5	100M	BPSK	135	0	Back	10mm	DSI 4/8	518598	2592.99	Config 0	27.11	27.50	1.094	25	1.332	-0.19	0.238	0.347
	FR1 n41_Ant 0	100M	BPSK	1	1	Front	10mm	DSI 4/8	518598	2592.99	Config 1	24.75	25.00	1.059	25	1.332	0	0.098	0.138
	FR1 n41_Ant 0	100M	BPSK	135	0	Front	10mm	DSI 4/8	518598	2592.99	Config 1	24.69	25.00	1.074	25	1.332	0.03	0.088	0.126
	FR1 n41_Ant 0	100M	BPSK	1	1	Back	10mm	DSI 4/8	518598	2592.99	Config 1	24.75	25.00	1.059	25	1.332	-0.13	0.253	0.357
	FR1 n41_Ant 0	100M	BPSK	135	0	Back	10mm	DSI 4/8	518598	2592.99	Config 1	24.69	25.00	1.074	25	1.332	-0.11	0.241	0.345

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power table	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4	1/3	1	2412	22.90	23.00	1.023	100	1.000	0.02	0.190	0.194
88	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4	1/3	1	2412	22.90	23.00	1.023	100	1.000	-0.03	0.224	0.229
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 3	1/3	1	2412	22.20	23.00	1.202	100	1.000	0.05	0.122	0.147
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	1/3	1	2412	22.20	23.00	1.202	100	1.000	-0.1	0.137	0.165
89	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4	1/3	54	5270	20.30	21.00	1.175	95.45	1.048	-0.07	0.470	0.579
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4	1/3	54	5270	20.30	21.00	1.175	95.45	1.048	-0.11	0.306	0.377
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 3	1/3	54	5270	19.90	21.00	1.288	95.45	1.048	0.05	0.172	0.232
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3	1/3	54	5270	19.90	21.00	1.288	95.45	1.048	-0.06	0.216	0.292
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3 (4)	1/3	54	5270	20.30	21.00	1.175	95.45	1.048	0.07	0.470	0.579
				10mm	Ant 4+3 (3)	1/3	54	5270	19.90	21.00	1.288	95.45	1.048	0.07	0.189	0.255
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3 (4)	1/3	54	5270	20.30	21.00	1.175	95.45	1.048	-0.1	0.348	0.428
				10mm	Ant 4+3 (3)	1/3	54	5270	19.90	21.00	1.288	95.45	1.048	-0.1	0.242	0.327
90	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4	1	122	5610	19.90	21.00	1.288	92.06	1.086	-0.05	0.508	0.711
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4	1	122	5610	19.90	21.00	1.288	92.06	1.086	0.11	0.212	0.297
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3	1	122	5610	20.80	21.00	1.047	92.06	1.086	0.12	0.072	0.082
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3	1	122	5610	20.80	21.00	1.047	92.06	1.086	-0.09	0.098	0.111
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4	3	122	5610	19.90	20.00	1.023	92.06	1.086	-0.05	0.508	0.565
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4	3	122	5610	19.90	20.00	1.023	92.06	1.086	0.11	0.212	0.236
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3	3	122	5610	20.80	21.00	1.047	92.06	1.086	0.12	0.072	0.082
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3	3	122	5610	20.80	21.00	1.047	92.06	1.086	-0.09	0.098	0.111
	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3 (4)	3	122	5610	19.90	20.00	1.023	92	1.087	-0.14	0.418	0.465
				10mm	Ant 4+3 (3)	3	122	5610	20.80	21.00	1.047	92	1.087	-0.14	0.163	0.186
	WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (4)	3	122	5610	19.90	20.00	1.023	92	1.087	0.1	0.190	0.211
				10mm	Ant 4+3 (3)	3	122	5610	20.80	21.00	1.047	92	1.087	0.1	0.102	0.116
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4	1/3	155	5775	20.40	21.00	1.148	92.06	1.086	-0.11	0.448	0.559
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4	1/3	155	5775	20.40	21.00	1.148	92.06	1.086	0.06	0.162	0.202
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3	1/3	155	5775	20.10	21.00	1.230	92.06	1.086	0.05	0.029	0.039
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3	1/3	155	5775	20.10	21.00	1.230	92.06	1.086	0.11	0.037	0.049
91	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3 (4)	1/3	155	5775	20.40	21.00	1.148	92	1.087	-0.09	0.451	0.563
				10mm	Ant 4+3 (3)	1/3	155	5775	20.10	21.00	1.230	92	1.087	-0.09	0.098	0.131
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (4)	1/3	155	5775	20.40	21.00	1.148	92	1.087	0.09	0.151	0.188
				10mm	Ant 4+3 (3)	1/3	155	5775	20.10	21.00	1.230	92	1.087	0.09	0.052	0.070

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power table	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Front	10mm	Ant 4	1/3	00	2402	18.30	19.50	1.318	77.13	1.080	0.03	0.011	0.016
92	Bluetooth	1Mbps	Back	10mm	Ant 4	1/3	00	2402	18.30	19.50	1.318	77.13	1.080	-0.06	0.016	0.023

15.4 Repeated SAR Measurement

Plot No.	Band	Mode	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	LTE Band 48_Ant 7	20M_QPSK_1_0	Left Side	10mm	DSI 6	56150	3641	Config 0	24.55	25.00	1.109	62.9	1.006	0.11	0.870	-	0.971
2nd	LTE Band 48_Ant 7	20M_QPSK_1_0	Left Side	10mm	DSI 6	56150	3641	Config 0	24.55	25.00	1.109	62.9	1.006	-0.06	0.859	1.01	0.958
1st	LTE Band 66C_Ant 2	20M_QPSK_1_0	Bottom Side	10mm	DSI 6	132572+132374	1770	Config 0	24.98	25.00	1.005	-	-	0.06	0.832	-	0.836
2nd	LTE Band 66C_Ant 2	20M_QPSK_1_0	Bottom Side	10mm	DSI 6	132572+132374	1770	Config 0	24.98	25.00	1.005	-	-	0.09	0.812	1.02	0.816
1st	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 4	9400	1880	Config 0	24.03	25.00	1.250	-	-	-0.01	0.812	-	1.015
2nd	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 4	9400	1880	Config 0	24.03	25.00	1.250	-	-	0.04	0.785	1.03	0.981
1st	LTE Band 7_Ant 0	20M_QPSK_1_99	Back	10mm	DSI 4	20850	2510	Config 1	24.58	25.00	1.102	-	-	-0.13	0.927	-	1.021
2nd	LTE Band 7_Ant 0	20M_QPSK_1_99	Back	10mm	DSI 4	20850	2510	Config 1	24.58	25.00	1.102	-	-	-0.06	0.914	1.01	1.007

General Note:

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥0.8W/kg.
2. Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is ≤ 1.2 and the measured SAR <1.45W/kg, only one repeated measurement is required.
3. The ratio is the difference in percentage between original and repeated *measured SAR*.
4. All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

15.5 LTE Band 41 Power Class 2 and Power Class 3 Linearity

This device support Power Class 2 and Power Class 3 operations for LTE Band 41. The highest available duty cycle for Power Class 2 operation is 43.3% using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each LTE configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg, Separate SAR testing for Power Class 2 is not required

<LTE Band 41 Linearity Data for Head>

Config 0	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25	27.5
Reported 1g SAR (W/kg)	0.44	0.542
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	200.17	243.49
Linearity SAR(W/kg)	0.54	
% deviation from expected linearity		1.27%

Config 1	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25	27.5
Reported 1g SAR (W/kg)	0.385	0.498
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	200.17	243.49
Linearity SAR(W/kg)	0.47	
% deviation from expected linearity		6.34%

<LTE Band 41 Linearity Data for Hotspot>

Config 0	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	20.2	21.8
Reported 1g SAR (W/kg)	0.806	0.863
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	66.28	65.54
Linearity SAR(W/kg)	0.80	
% deviation from expected linearity		8.29%

Config 1	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25	27.5
Reported 1g SAR (W/kg)	0.353	0.436
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	200.17	243.49
Linearity SAR(W/kg)	0.43	
% deviation from expected linearity		1.54%

<LTE Band 41 Linearity Data for body-wron>

Config 0	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	25	26.6
Reported 1g SAR (W/kg)	1.097	0.982
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	200.17	197.92
Linearity SAR(W/kg)	1.08	
% deviation from expected linearity		-9.46%

Config 0	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	25	27.5
Reported 1g SAR (W/kg)	0.418	0.514
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	200.17	243.49
Linearity SAR(W/kg)	0.51	
% deviation from expected linearity		1.09%

16. Simultaneous Transmission Analysis

Config	Mode	Capable TX Configurations	Support
1	WWAN OFF (Cellular off)	WiFi 5G SISO (Ant3) + Bluetooth (Ant4)	Y
2		WiFi 5G SISO (Ant4) + Bluetooth (Ant4)	Y
3		WiFi 5G MIMO (Ant3+Ant4) + Bluetooth (Ant4)	Y
4		WiFi 5G MIMO (Ant3+4)	Y
5		WiFi 2.4G SISO (Ant3) + Bluetooth (Ant4)	N
6		WiFi 2.4G MIMO/CDD (Ant4+3)	Y
7		WiFi 2.4G SISO (Ant4) + WiFi 5G SISO (Ant3)	Y
8	WWAN ON (Cellular on)	WiFi 5G SISO (Ant3) + Bluetooth (Ant4)	Y
9		WiFi 5G SISO (Ant4) + Bluetooth (Ant4)	Y
10		WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4)	Y
11		WiFi 5G SISO (Ant3)	Y
12		WiFi 5G SISO (Ant4)	Y
13		WiFi 5G MIMO (Ant3+4)	Y
14		WiFi 2.4G SISO (Ant4)	Y
15		WiFi 2.4G SISO (Ant3)	Y
16		WiFi 2.4G SISO (Ant3) + Bluetooth (Ant4)	N
17		WiFi 2.4G MIMO/CDD (Ant4+3)	Y
18		Bluetooth (Ant4)	Y
19		WiFi 2.4G SISO (Ant4) + WiFi 5G SISO (Ant3)	Y
20	LTE + FR1/FR2 (EN-DC)	WiFi 5G SISO (Ant3) + Bluetooth (Ant4)	Y
21		WiFi 5G SISO (Ant4) + Bluetooth (Ant4)	Y
22		WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4)	Y
23		WiFi 5G SISO (Ant3)	Y
24		WiFi 5G SISO (Ant4)	Y
25		WiFi 5G MIMO (Ant3+4)	Y
26		WiFi 2.4G SISO (Ant4)	Y
27		WiFi 2.4G SISO (Ant3)	Y
28		WiFi 2.4G SISO (Ant3) + Bluetooth (Ant4)	N
29		WiFi 2.4G MIMO/CDD (Ant4+3)	Y
30		Bluetooth (Ant4)	Y
31		WiFi 2.4G SISO (Ant4) + WiFi 5G SISO (Ant3)	Y

General Note:

1. Simultaneous operation at maximum power levels when the device is neither against the body nor the head (i.e. in a mobile RF exposure condition) is addressed in Sporton test report FA011718-01B
2. This device WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications.
3. The worst case WLAN reported SAR for each configuration was used for SAR summation, regardless of whether the WLAN channel has WiFi Direct and Hotspot capability. Therefore, the following summations represent the absolute worst cases for simultaneous transmission with WLAN.
4. The Scaled SAR summation is calculated based on the same configuration and test position.
5. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
   i) Scalar SAR summation < 1.6W/kg.
   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 for 1g SAR, if SPLSR < 0.1 for 10g SAR, simultaneously transmission SAR measurement is not necessary.
   iv) Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.

16.1 5G NR + LTE + WLAN + BT Sim-Tx analysis

In 5G NR + LTE + WLAN + BT simultaneous transmission, 5G NR and LTE transmission are managed and controlled by Qualcomm® Smart Transmit, while the RF exposure from WLAN and BT radios is managed using legacy approach, i.e., through a fixed power back-off if needed.

Since WLAN and BT do not employ time-averaging, 1gSAR and 10gSAR measurement for WLAN and BT need to be conducted at their corresponding rated power following current FCC test procedures to determine reported SAR values.

Smart Transmit current implementation assumes hotspots from 5G NR and LTE are collocated. Therefore, for a total of 100% exposure margin, if LTE uses x%, then the exposure margin left for 5G NR is capped to (100-x)%. Thus, the compliance equation for LTE + 5G NR is

*x% * A + (100-x)% * B ≤ 1.0,*

Where, A is normalized reported time-averaged SAR exposure ratio from LTE, and A ≤ 1.0; B is normalized reported time-averaged exposure ratio from 5G NR (i.e., PD exposure for 5G FR2 or SAR exposure for 5G FR1), and B ≤1.0.

Let C = normalized reported SAR exposure ratio from WLAN+BT, then for compliance,

*x% * A + (100-x)% * B + C ≤ 1.0* (1)

x% * A + (100-x)% * B ≤ x% * max(A, B) + (100-x)% * max(A, B) ≤ max(A, B)

*x% * A + (100-x)% * B + C ≤ max(A, B) + C ≤ 1.0* (2)

if A + C ≤ 1.0 and B + C ≤ 1.0 can be proven, then “x% * A + (100-x)% * B + C ≤ 1.0”. Therefore simultaneous transmission analysis for 5G NR + LTE + WLAN + BT can be performed in two steps

Step 1: Prove total exposure ratio (TER) of LTE + WLAN + BT < 1
Step 2: Prove total exposure ratio (TER) of 5G NR + WLAN + BT < 1

16.2 Head Exposure Conditions

<Standalone WWAN OFF>

Exposure Position	1 2.4GHz WLAN Ant 4 1g SAR (W/kg)	2 2.4GHz WLAN Ant 3 1g SAR (W/kg)	3 5GHz WLAN Ant 4 1g SAR (W/kg)	4 5GHz WLAN Ant 3 1g SAR (W/kg)	6 Bluetooth Ant 4 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	3+4+6 Summed 1g SAR (W/kg)
Right Cheek	0.071	0.298	0.082	0.251	0.064	**0.369**	**0.322**	**0.397**
Right Tilted	0.101	0.104	0.102	0.113	0.073	**0.205**	**0.214**	**0.288**
Left Cheek	0.094	0.274	0.210	0.115	0.071	**0.368**	**0.209**	**0.396**
Left Tilted	0.252	0.059	0.231	0.054	0.113	**0.311**	**0.306**	**0.398**

<Simultaneous Transmission is active WWAN ON>

WWAN Band	Exposure Position	1 WWAN 1g SAR (W/kg)	2 2.4GHz WLAN Ant 4 1g SAR (W/kg)	3 2.4GHz WLAN Ant 3 1g SAR (W/kg)	4 5GHz WLAN Ant 4 1g SAR (W/kg)	5 5GHz WLAN Ant 3 1g SAR (W/kg)	7 Bluetooth Ant 4 1g SAR (W/kg)	1+2+3 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)	1+4+7 Summed 1g SAR (W/kg)	1+5+7 Summed 1g SAR (W/kg)	1+4+5+7 Summed 1g SAR (W/kg)
GSM850_Ant 0	Right Cheek	0.263	0.071	0.298	0.082	0.251	0.064	**0.632**	**0.585**	**0.409**	**0.578**	**0.660**
	Right Tilted	0.213	0.101	0.104	0.102	0.113	0.073	**0.418**	**0.427**	**0.388**	**0.399**	**0.501**
	Left Cheek	0.361	0.094	0.274	0.210	0.115	0.071	**0.729**	**0.570**	**0.642**	**0.547**	**0.757**
	Left Tilted	0.273	0.252	0.059	0.231	0.054	0.113	**0.584**	**0.579**	**0.617**	**0.440**	**0.671**
GSM1900_Ant 2	Right Cheek	0.371	0.071	0.298	0.082	0.251	0.064	**0.740**	**0.693**	**0.517**	**0.686**	**0.768**
	Right Tilted	0.269	0.101	0.104	0.102	0.113	0.073	**0.474**	**0.483**	**0.444**	**0.455**	**0.557**
	Left Cheek	0.255	0.094	0.274	0.210	0.115	0.071	**0.623**	**0.464**	**0.536**	**0.441**	**0.651**
	Left Tilted	0.209	0.252	0.059	0.231	0.054	0.113	**0.520**	**0.515**	**0.553**	**0.376**	**0.607**
WCDMA II_Ant 2	Right Cheek	0.454	0.071	0.298	0.082	0.251	0.064	**0.823**	**0.776**	**0.600**	**0.769**	**0.851**
	Right Tilted	0.167	0.101	0.104	0.102	0.113	0.073	**0.372**	**0.381**	**0.342**	**0.353**	**0.455**
	Left Cheek	0.340	0.094	0.274	0.210	0.115	0.071	**0.708**	**0.549**	**0.621**	**0.526**	**0.736**
	Left Tilted	0.181	0.252	0.059	0.231	0.054	0.113	**0.492**	**0.487**	**0.525**	**0.348**	**0.579**
WCDMA II_Ant 0	Right Cheek	0.219	0.071	0.298	0.082	0.251	0.064	**0.588**	**0.541**	**0.365**	**0.534**	**0.616**
	Right Tilted	0.126	0.101	0.104	0.102	0.113	0.073	**0.331**	**0.340**	**0.301**	**0.312**	**0.414**
	Left Cheek	0.433	0.094	0.274	0.210	0.115	0.071	**0.801**	**0.642**	**0.714**	**0.619**	**0.829**
	Left Tilted	0.152	0.252	0.059	0.231	0.054	0.113	**0.463**	**0.458**	**0.496**	**0.319**	**0.550**
WCDMA IV_Ant 2	Right Cheek	0.346	0.071	0.298	0.082	0.251	0.064	**0.715**	**0.668**	**0.492**	**0.661**	**0.743**
	Right Tilted	0.251	0.101	0.104	0.102	0.113	0.073	**0.456**	**0.465**	**0.426**	**0.437**	**0.539**
	Left Cheek	0.231	0.094	0.274	0.210	0.115	0.071	**0.599**	**0.440**	**0.512**	**0.417**	**0.627**
	Left Tilted	0.186	0.252	0.059	0.231	0.054	0.113	**0.497**	**0.492**	**0.530**	**0.353**	**0.584**
WCDMA IV_Ant 0	Right Cheek	0.121	0.071	0.298	0.082	0.251	0.064	**0.490**	**0.443**	**0.267**	**0.436**	**0.518**
	Right Tilted	0.095	0.101	0.104	0.102	0.113	0.073	**0.300**	**0.309**	**0.270**	**0.281**	**0.383**
	Left Cheek	0.422	0.094	0.274	0.210	0.115	0.071	**0.790**	**0.631**	**0.703**	**0.608**	**0.818**
	Left Tilted	0.311	0.252	0.059	0.231	0.054	0.113	**0.622**	**0.617**	**0.655**	**0.478**	**0.709**
WCDMA V_Ant 0	Right Cheek	0.231	0.071	0.298	0.082	0.251	0.064	**0.600**	**0.553**	**0.377**	**0.546**	**0.628**
	Right Tilted	0.170	0.101	0.104	0.102	0.113	0.073	**0.375**	**0.384**	**0.345**	**0.356**	**0.458**
	Left Cheek	0.306	0.094	0.274	0.210	0.115	0.071	**0.674**	**0.515**	**0.587**	**0.492**	**0.702**
	Left Tilted	0.179	0.252	0.059	0.231	0.054	0.113	**0.490**	**0.485**	**0.523**	**0.346**	**0.577**
WCDMA V_Ant 1	Right Cheek	0.550	0.071	0.298	0.082	0.251	0.064	**0.919**	**0.872**	**0.696**	**0.865**	**0.947**
	Right Tilted	0.520	0.101	0.104	0.102	0.113	0.073	**0.725**	**0.734**	**0.695**	**0.706**	**0.808**
	Left Cheek	0.260	0.094	0.274	0.210	0.115	0.071	**0.628**	**0.469**	**0.541**	**0.446**	**0.656**
	Left Tilted	0.220	0.252	0.059	0.231	0.054	0.113	**0.531**	**0.526**	**0.564**	**0.387**	**0.618**
CDMA BC0_Ant 0	Right Cheek	0.161	0.071	0.298	0.082	0.251	0.064	**0.530**	**0.483**	**0.307**	**0.476**	**0.558**
	Right Tilted	0.122	0.101	0.104	0.102	0.113	0.073	**0.327**	**0.336**	**0.297**	**0.308**	**0.410**
	Left Cheek	0.269	0.094	0.274	0.210	0.115	0.071	**0.637**	**0.478**	**0.550**	**0.455**	**0.665**
	Left Tilted	0.156	0.252	0.059	0.231	0.054	0.113	**0.467**	**0.462**	**0.500**	**0.323**	**0.554**
CDMA BC0_Ant 1	Right Cheek	0.592	0.071	0.298	0.082	0.251	0.064	**0.961**	**0.914**	**0.738**	**0.907**	**0.989**
	Right Tilted	0.308	0.101	0.104	0.102	0.113	0.073	**0.513**	**0.522**	**0.483**	**0.494**	**0.596**
	Left Cheek	0.180	0.094	0.274	0.210	0.115	0.071	**0.548**	**0.389**	**0.461**	**0.366**	**0.576**

	Left Tilted	0.161	0.252	0.059	0.231	0.054	0.113	**0.472**	**0.467**	**0.505**	**0.328**	**0.559**
CDMA BC1_Ant 2	Right Cheek	0.451	0.071	0.298	0.082	0.251	0.064	**0.820**	**0.773**	**0.597**	**0.766**	**0.848**
	Right Tilted	0.140	0.101	0.104	0.102	0.113	0.073	**0.345**	**0.354**	**0.315**	**0.326**	**0.428**
	Left Cheek	0.348	0.094	0.274	0.210	0.115	0.071	**0.716**	**0.557**	**0.629**	**0.534**	**0.744**
	Left Tilted	0.150	0.252	0.059	0.231	0.054	0.113	**0.461**	**0.456**	**0.494**	**0.317**	**0.548**
CDMA BC1_Ant 0	Right Cheek	0.168	0.071	0.298	0.082	0.251	0.064	**0.537**	**0.490**	**0.314**	**0.483**	**0.565**
	Right Tilted	0.106	0.101	0.104	0.102	0.113	0.073	**0.311**	**0.320**	**0.281**	**0.292**	**0.394**
	Left Cheek	0.496	0.094	0.274	0.210	0.115	0.071	**0.864**	**0.705**	**0.777**	**0.682**	**0.892**
	Left Tilted	0.118	0.252	0.059	0.231	0.054	0.113	**0.429**	**0.424**	**0.462**	**0.285**	**0.516**
CDMA BC10_Ant 0	Right Cheek	0.149	0.071	0.298	0.082	0.251	0.064	**0.518**	**0.471**	**0.295**	**0.464**	**0.546**
	Right Tilted	0.118	0.101	0.104	0.102	0.113	0.073	**0.323**	**0.332**	**0.293**	**0.304**	**0.406**
	Left Cheek	0.224	0.094	0.274	0.210	0.115	0.071	**0.592**	**0.433**	**0.505**	**0.410**	**0.620**
	Left Tilted	0.150	0.252	0.059	0.231	0.054	0.113	**0.461**	**0.456**	**0.494**	**0.317**	**0.548**
CDMA BC10_Ant 1	Right Cheek	0.503	0.071	0.298	0.082	0.251	0.064	**0.872**	**0.825**	**0.649**	**0.818**	**0.900**
	Right Tilted	0.319	0.101	0.104	0.102	0.113	0.073	**0.524**	**0.533**	**0.494**	**0.505**	**0.607**
	Left Cheek	0.174	0.094	0.274	0.210	0.115	0.071	**0.542**	**0.383**	**0.455**	**0.360**	**0.570**
	Left Tilted	0.158	0.252	0.059	0.231	0.054	0.113	**0.469**	**0.464**	**0.502**	**0.325**	**0.556**
LTE Band 7_Ant 2	Right Cheek	0.736	0.071	0.298	0.082	0.251	0.064	**1.105**	**1.058**	**0.882**	**1.051**	**1.133**
	Right Tilted	0.242	0.101	0.104	0.102	0.113	0.073	**0.447**	**0.456**	**0.417**	**0.428**	**0.530**
	Left Cheek	0.328	0.094	0.274	0.210	0.115	0.071	**0.696**	**0.537**	**0.609**	**0.514**	**0.724**
	Left Tilted	0.123	0.252	0.059	0.231	0.054	0.113	**0.434**	**0.429**	**0.467**	**0.290**	**0.521**
LTE Band 7_Ant 0	Right Cheek	0.234	0.071	0.298	0.082	0.251	0.064	**0.603**	**0.556**	**0.380**	**0.549**	**0.631**
	Right Tilted	0.131	0.101	0.104	0.102	0.113	0.073	**0.336**	**0.345**	**0.306**	**0.317**	**0.419**
	Left Cheek	0.631	0.094	0.274	0.210	0.115	0.071	**0.999**	**0.840**	**0.912**	**0.817**	**1.027**
	Left Tilted	0.168	0.252	0.059	0.231	0.054	0.113	**0.479**	**0.474**	**0.512**	**0.335**	**0.566**
LTE Band 12_Ant 0	Right Cheek	0.135	0.071	0.298	0.082	0.251	0.064	**0.504**	**0.457**	**0.281**	**0.450**	**0.532**
	Right Tilted	0.110	0.101	0.104	0.102	0.113	0.073	**0.315**	**0.324**	**0.285**	**0.296**	**0.398**
	Left Cheek	0.239	0.094	0.274	0.210	0.115	0.071	**0.607**	**0.448**	**0.520**	**0.425**	**0.635**
	Left Tilted	0.150	0.252	0.059	0.231	0.054	0.113	**0.461**	**0.456**	**0.494**	**0.317**	**0.548**
LTE Band 12_Ant 1	Right Cheek	0.407	0.071	0.298	0.082	0.251	0.064	**0.776**	**0.729**	**0.553**	**0.722**	**0.804**
	Right Tilted	0.324	0.101	0.104	0.102	0.113	0.073	**0.529**	**0.538**	**0.499**	**0.510**	**0.612**
	Left Cheek	0.140	0.094	0.274	0.210	0.115	0.071	**0.508**	**0.349**	**0.421**	**0.326**	**0.536**
	Left Tilted	0.094	0.252	0.059	0.231	0.054	0.113	**0.405**	**0.400**	**0.438**	**0.261**	**0.492**
LTE Band 13_Ant 0	Right Cheek	0.134	0.071	0.298	0.082	0.251	0.064	**0.503**	**0.456**	**0.280**	**0.449**	**0.531**
	Right Tilted	0.116	0.101	0.104	0.102	0.113	0.073	**0.321**	**0.330**	**0.291**	**0.302**	**0.404**
	Left Cheek	0.236	0.094	0.274	0.210	0.115	0.071	**0.604**	**0.445**	**0.517**	**0.422**	**0.632**
	Left Tilted	0.155	0.252	0.059	0.231	0.054	0.113	**0.466**	**0.461**	**0.499**	**0.322**	**0.553**
LTE Band 13_Ant 1	Right Cheek	0.471	0.071	0.298	0.082	0.251	0.064	**0.840**	**0.793**	**0.617**	**0.786**	**0.868**
	Right Tilted	0.378	0.101	0.104	0.102	0.113	0.073	**0.583**	**0.592**	**0.553**	**0.564**	**0.666**
	Left Cheek	0.169	0.094	0.274	0.210	0.115	0.071	**0.537**	**0.378**	**0.450**	**0.355**	**0.565**
	Left Tilted	0.132	0.252	0.059	0.231	0.054	0.113	**0.443**	**0.438**	**0.476**	**0.299**	**0.530**
LTE Band 14_Ant 0	Right Cheek	0.129	0.071	0.298	0.082	0.251	0.064	**0.498**	**0.451**	**0.275**	**0.444**	**0.526**
	Right Tilted	0.123	0.101	0.104	0.102	0.113	0.073	**0.328**	**0.337**	**0.298**	**0.309**	**0.411**
	Left Cheek	0.238	0.094	0.274	0.210	0.115	0.071	**0.606**	**0.447**	**0.519**	**0.424**	**0.634**
	Left Tilted	0.158	0.252	0.059	0.231	0.054	0.113	**0.469**	**0.464**	**0.502**	**0.325**	**0.556**
LTE Band 14_Ant 1	Right Cheek	0.503	0.071	0.298	0.082	0.251	0.064	**0.872**	**0.825**	**0.649**	**0.818**	**0.900**
	Right Tilted	0.409	0.101	0.104	0.102	0.113	0.073	**0.614**	**0.623**	**0.584**	**0.595**	**0.697**
	Left Cheek	0.214	0.094	0.274	0.210	0.115	0.071	**0.582**	**0.423**	**0.495**	**0.400**	**0.610**
	Left Tilted	0.141	0.252	0.059	0.231	0.054	0.113	**0.452**	**0.447**	**0.485**	**0.308**	**0.539**
LTE Band 25_Ant 2	Right Cheek	0.464	0.071	0.298	0.082	0.251	0.064	**0.833**	**0.786**	**0.610**	**0.779**	**0.861**
	Right Tilted	0.167	0.101	0.104	0.102	0.113	0.073	**0.372**	**0.381**	**0.342**	**0.353**	**0.455**
	Left Cheek	0.285	0.094	0.274	0.210	0.115	0.071	**0.653**	**0.494**	**0.566**	**0.471**	**0.681**
	Left Tilted	0.363	0.252	0.059	0.231	0.054	0.113	**0.674**	**0.669**	**0.707**	**0.530**	**0.761**
LTE Band 25_Ant 0	Right Cheek	0.217	0.071	0.298	0.082	0.251	0.064	**0.586**	**0.539**	**0.363**	**0.532**	**0.614**
	Right Tilted	0.147	0.101	0.104	0.102	0.113	0.073	**0.352**	**0.361**	**0.322**	**0.333**	**0.435**
	Left Cheek	0.549	0.094	0.274	0.210	0.115	0.071	**0.917**	**0.758**	**0.830**	**0.735**	**0.945**

	Left Tilted	0.186	0.252	0.059	0.231	0.054	0.113	**0.497**	**0.492**	**0.530**	**0.353**	**0.584**
LTE Band 26_Ant 0	Right Cheek	0.246	0.071	0.298	0.082	0.251	0.064	**0.615**	**0.568**	**0.392**	**0.561**	**0.643**
	Right Tilted	0.189	0.101	0.104	0.102	0.113	0.073	**0.394**	**0.403**	**0.364**	**0.375**	**0.477**
	Left Cheek	0.316	0.094	0.274	0.210	0.115	0.071	**0.684**	**0.525**	**0.597**	**0.502**	**0.712**
	Left Tilted	0.196	0.252	0.059	0.231	0.054	0.113	**0.507**	**0.502**	**0.540**	**0.363**	**0.594**
LTE Band 26_Ant 1	Right Cheek	0.687	0.071	0.298	0.082	0.251	0.064	**1.056**	**1.009**	**0.833**	**1.002**	**1.084**
	Right Tilted	0.671	0.101	0.104	0.102	0.113	0.073	**0.876**	**0.885**	**0.846**	**0.857**	**0.959**
	Left Cheek	0.323	0.094	0.274	0.210	0.115	0.071	**0.691**	**0.532**	**0.604**	**0.509**	**0.719**
	Left Tilted	0.267	0.252	0.059	0.231	0.054	0.113	**0.578**	**0.573**	**0.611**	**0.434**	**0.665**
LTE Band 30_Ant 2	Right Cheek	0.564	0.071	0.298	0.082	0.251	0.064	**0.933**	**0.886**	**0.710**	**0.879**	**0.961**
	Right Tilted	0.085	0.101	0.104	0.102	0.113	0.073	**0.290**	**0.299**	**0.260**	**0.271**	**0.373**
	Left Cheek	0.122	0.094	0.274	0.210	0.115	0.071	**0.490**	**0.331**	**0.403**	**0.308**	**0.518**
	Left Tilted	0.072	0.252	0.059	0.231	0.054	0.113	**0.383**	**0.378**	**0.416**	**0.239**	**0.470**
LTE Band 30_Ant 0	Right Cheek	0.276	0.071	0.298	0.082	0.251	0.064	**0.645**	**0.598**	**0.422**	**0.591**	**0.673**
	Right Tilted	0.223	0.101	0.104	0.102	0.113	0.073	**0.428**	**0.437**	**0.398**	**0.409**	**0.511**
	Left Cheek	0.773	0.094	0.274	0.210	0.115	0.071	**1.141**	**0.982**	**1.054**	**0.959**	**1.169**
	Left Tilted	0.196	0.252	0.059	0.231	0.054	0.113	**0.507**	**0.502**	**0.540**	**0.363**	**0.594**
LTE Band 41_Ant 2	Right Cheek	0.542	0.071	0.298	0.082	0.251	0.064	**0.911**	**0.864**	**0.688**	**0.857**	**0.939**
	Right Tilted	0.117	0.101	0.104	0.102	0.113	0.073	**0.322**	**0.331**	**0.292**	**0.303**	**0.405**
	Left Cheek	0.217	0.094	0.274	0.210	0.115	0.071	**0.585**	**0.426**	**0.498**	**0.403**	**0.613**
	Left Tilted	0.105	0.252	0.059	0.231	0.054	0.113	**0.416**	**0.411**	**0.449**	**0.272**	**0.503**
LTE Band 41_Ant 0	Right Cheek	0.116	0.071	0.298	0.082	0.251	0.064	**0.485**	**0.438**	**0.262**	**0.431**	**0.513**
	Right Tilted	0.108	0.101	0.104	0.102	0.113	0.073	**0.313**	**0.322**	**0.283**	**0.294**	**0.396**
	Left Cheek	0.498	0.094	0.274	0.210	0.115	0.071	**0.866**	**0.707**	**0.779**	**0.684**	**0.894**
	Left Tilted	0.100	0.252	0.059	0.231	0.054	0.113	**0.411**	**0.406**	**0.444**	**0.267**	**0.498**
LTE Band 48_Ant 7	Right Cheek	0.413	0.071	0.298	0.082	0.251	0.064	**0.782**	**0.735**	**0.559**	**0.728**	**0.810**
	Right Tilted	0.386	0.101	0.104	0.102	0.113	0.073	**0.591**	**0.600**	**0.561**	**0.572**	**0.674**
	Left Cheek	0.791	0.094	0.274	0.210	0.115	0.071	**1.159**	**1.000**	**1.072**	**0.977**	**1.187**
	Left Tilted	0.262	0.252	0.059	0.231	0.054	0.113	**0.573**	**0.568**	**0.606**	**0.429**	**0.660**
LTE Band 48_Ant 2	Right Cheek	0.249	0.071	0.298	0.082	0.251	0.064	**0.618**	**0.571**	**0.395**	**0.564**	**0.646**
	Right Tilted	0.111	0.101	0.104	0.102	0.113	0.073	**0.316**	**0.325**	**0.286**	**0.297**	**0.399**
	Left Cheek	0.126	0.094	0.274	0.210	0.115	0.071	**0.494**	**0.335**	**0.407**	**0.312**	**0.522**
	Left Tilted	0.094	0.252	0.059	0.231	0.054	0.113	**0.405**	**0.400**	**0.438**	**0.261**	**0.492**
LTE Band 66_Ant 2	Right Cheek	0.588	0.071	0.298	0.082	0.251	0.064	**0.957**	**0.910**	**0.734**	**0.903**	**0.985**
	Right Tilted	0.223	0.101	0.104	0.102	0.113	0.073	**0.428**	**0.437**	**0.398**	**0.409**	**0.511**
	Left Cheek	0.434	0.094	0.274	0.210	0.115	0.071	**0.802**	**0.643**	**0.715**	**0.620**	**0.830**
	Left Tilted	0.369	0.252	0.059	0.231	0.054	0.113	**0.680**	**0.675**	**0.713**	**0.536**	**0.767**
LTE Band 66_Ant 0	Right Cheek	0.279	0.071	0.298	0.082	0.251	0.064	**0.648**	**0.601**	**0.425**	**0.594**	**0.676**
	Right Tilted	0.178	0.101	0.104	0.102	0.113	0.073	**0.383**	**0.392**	**0.353**	**0.364**	**0.466**
	Left Cheek	0.550	0.094	0.274	0.210	0.115	0.071	**0.918**	**0.759**	**0.831**	**0.736**	**0.946**
	Left Tilted	0.120	0.252	0.059	0.231	0.054	0.113	**0.431**	**0.426**	**0.464**	**0.287**	**0.518**
LTE Band 71_Ant 0	Right Cheek	0.109	0.071	0.298	0.082	0.251	0.064	**0.478**	**0.431**	**0.255**	**0.424**	**0.506**
	Right Tilted	0.100	0.101	0.104	0.102	0.113	0.073	**0.305**	**0.314**	**0.275**	**0.286**	**0.388**
	Left Cheek	0.190	0.094	0.274	0.210	0.115	0.071	**0.558**	**0.399**	**0.471**	**0.376**	**0.586**
	Left Tilted	0.120	0.252	0.059	0.231	0.054	0.113	**0.431**	**0.426**	**0.464**	**0.287**	**0.518**
LTE Band 71_Ant 1	Right Cheek	0.400	0.071	0.298	0.082	0.251	0.064	**0.769**	**0.722**	**0.546**	**0.715**	**0.797**
	Right Tilted	0.348	0.101	0.104	0.102	0.113	0.073	**0.553**	**0.562**	**0.523**	**0.534**	**0.636**
	Left Cheek	0.095	0.094	0.274	0.210	0.115	0.071	**0.463**	**0.304**	**0.376**	**0.281**	**0.491**
	Left Tilted	0.072	0.252	0.059	0.231	0.054	0.113	**0.383**	**0.378**	**0.416**	**0.239**	**0.470**

WWAN Band	Exposure Position	1	2	3	4	5	7	1+2+3 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)	1+4+7 Summed 1g SAR (W/kg)	1+5+7 Summed 1g SAR (W/kg)	1+4+5+7 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3	5GHz WLAN Ant 4	5GHz WLAN Ant 3	Bluetooth Ant 4					
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)					
FR1 n5_Ant 0	Right Cheek	0.132	0.071	0.298	0.082	0.251	0.064	**0.501**	**0.454**	**0.278**	**0.447**	**0.529**
	Right Tilted	0.121	0.101	0.104	0.102	0.113	0.073	**0.326**	**0.335**	**0.296**	**0.307**	**0.409**
	Left Cheek	0.181	0.094	0.274	0.210	0.115	0.071	**0.549**	**0.390**	**0.462**	**0.367**	**0.577**
	Left Tilted	0.125	0.252	0.059	0.231	0.054	0.113	**0.436**	**0.431**	**0.469**	**0.292**	**0.523**
FR1 n5_Ant 1	Right Cheek	0.476	0.071	0.298	0.082	0.251	0.064	**0.845**	**0.798**	**0.622**	**0.791**	**0.873**
	Right Tilted	0.438	0.101	0.104	0.102	0.113	0.073	**0.643**	**0.652**	**0.613**	**0.624**	**0.726**
	Left Cheek	0.243	0.094	0.274	0.210	0.115	0.071	**0.611**	**0.452**	**0.524**	**0.429**	**0.639**
	Left Tilted	0.214	0.252	0.059	0.231	0.054	0.113	**0.525**	**0.520**	**0.558**	**0.381**	**0.612**
FR1 n7_Ant 2	Right Cheek	0.455	0.071	0.298	0.082	0.251	0.064	**0.824**	**0.777**	**0.601**	**0.770**	**0.852**
	Right Tilted	0.055	0.101	0.104	0.102	0.113	0.073	**0.260**	**0.269**	**0.230**	**0.241**	**0.343**
	Left Cheek	0.090	0.094	0.274	0.210	0.115	0.071	**0.458**	**0.299**	**0.371**	**0.276**	**0.486**
	Left Tilted	0.079	0.252	0.059	0.231	0.054	0.113	**0.390**	**0.385**	**0.423**	**0.246**	**0.477**
FR1 n7_Ant 0	Right Cheek	0.139	0.071	0.298	0.082	0.251	0.064	**0.508**	**0.461**	**0.285**	**0.454**	**0.536**
	Right Tilted	0.116	0.101	0.104	0.102	0.113	0.073	**0.321**	**0.330**	**0.291**	**0.302**	**0.404**
	Left Cheek	0.267	0.094	0.274	0.210	0.115	0.071	**0.635**	**0.476**	**0.548**	**0.453**	**0.663**
	Left Tilted	0.050	0.252	0.059	0.231	0.054	0.113	**0.361**	**0.356**	**0.394**	**0.217**	**0.448**
FR1 n12_Ant 0	Right Cheek	0.074	0.071	0.298	0.082	0.251	0.064	**0.443**	**0.396**	**0.220**	**0.389**	**0.471**
	Right Tilted	0.072	0.101	0.104	0.102	0.113	0.073	**0.277**	**0.286**	**0.247**	**0.258**	**0.360**
	Left Cheek	0.106	0.094	0.274	0.210	0.115	0.071	**0.474**	**0.315**	**0.387**	**0.292**	**0.502**
	Left Tilted	0.086	0.252	0.059	0.231	0.054	0.113	**0.397**	**0.392**	**0.430**	**0.253**	**0.484**
FR1 n12_Ant 1	Right Cheek	0.439	0.071	0.298	0.082	0.251	0.064	**0.808**	**0.761**	**0.585**	**0.754**	**0.836**
	Right Tilted	0.392	0.101	0.104	0.102	0.113	0.073	**0.597**	**0.606**	**0.567**	**0.578**	**0.680**
	Left Cheek	0.179	0.094	0.274	0.210	0.115	0.071	**0.547**	**0.388**	**0.460**	**0.365**	**0.575**
	Left Tilted	0.148	0.252	0.059	0.231	0.054	0.113	**0.459**	**0.454**	**0.492**	**0.315**	**0.546**
FR1 n25_Ant 2	Right Cheek	0.336	0.071	0.298	0.082	0.251	0.064	**0.705**	**0.658**	**0.482**	**0.651**	**0.733**
	Right Tilted	0.228	0.101	0.104	0.102	0.113	0.073	**0.433**	**0.442**	**0.403**	**0.414**	**0.516**
	Left Cheek	0.571	0.094	0.274	0.210	0.115	0.071	**0.939**	**0.780**	**0.852**	**0.757**	**0.967**
	Left Tilted	0.169	0.252	0.059	0.231	0.054	0.113	**0.480**	**0.475**	**0.513**	**0.336**	**0.567**
FR1 n25_Ant 0	Right Cheek	0.163	0.071	0.298	0.082	0.251	0.064	**0.532**	**0.485**	**0.309**	**0.478**	**0.560**
	Right Tilted	0.104	0.101	0.104	0.102	0.113	0.073	**0.309**	**0.318**	**0.279**	**0.290**	**0.392**
	Left Cheek	0.376	0.094	0.274	0.210	0.115	0.071	**0.744**	**0.585**	**0.657**	**0.562**	**0.772**
	Left Tilted	0.148	0.252	0.059	0.231	0.054	0.113	**0.459**	**0.454**	**0.492**	**0.315**	**0.546**
FR1 n41_Ant 2	Right Cheek	0.290	0.071	0.298	0.082	0.251	0.064	**0.659**	**0.612**	**0.436**	**0.605**	**0.687**
	Right Tilted	0.181	0.101	0.104	0.102	0.113	0.073	**0.386**	**0.395**	**0.356**	**0.367**	**0.469**
	Left Cheek	0.105	0.094	0.274	0.210	0.115	0.071	**0.473**	**0.314**	**0.386**	**0.291**	**0.501**
	Left Tilted	0.108	0.252	0.059	0.231	0.054	0.113	**0.419**	**0.414**	**0.452**	**0.275**	**0.506**
FR1 n41_Ant 5	Right Cheek	0.154	0.071	0.298	0.082	0.251	0.064	**0.523**	**0.476**	**0.300**	**0.469**	**0.551**
	Right Tilted	0.153	0.101	0.104	0.102	0.113	0.073	**0.358**	**0.367**	**0.328**	**0.339**	**0.441**
	Left Cheek	0.966	0.094	0.274	0.210	0.115	0.071	**1.334**	**1.175**	**1.247**	**1.152**	**1.362**
	Left Tilted	0.451	0.252	0.059	0.231	0.054	0.113	**0.762**	**0.757**	**0.795**	**0.618**	**0.849**
FR1 n41_Ant 0	Right Cheek	0.086	0.071	0.298	0.082	0.251	0.064	**0.455**	**0.408**	**0.232**	**0.401**	**0.483**
	Right Tilted	0.044	0.101	0.104	0.102	0.113	0.073	**0.249**	**0.258**	**0.219**	**0.230**	**0.332**
	Left Cheek	0.244	0.094	0.274	0.210	0.115	0.071	**0.612**	**0.453**	**0.525**	**0.430**	**0.640**
	Left Tilted	0.056	0.252	0.059	0.231	0.054	0.113	**0.367**	**0.362**	**0.400**	**0.223**	**0.454**
FR1 n66_Ant 2	Right Cheek	0.350	0.071	0.298	0.082	0.251	0.064	**0.719**	**0.672**	**0.496**	**0.665**	**0.747**
	Right Tilted	0.167	0.101	0.104	0.102	0.113	0.073	**0.372**	**0.381**	**0.342**	**0.353**	**0.455**
	Left Cheek	0.364	0.094	0.274	0.210	0.115	0.071	**0.732**	**0.573**	**0.645**	**0.550**	**0.760**
	Left Tilted	0.141	0.252	0.059	0.231	0.054	0.113	**0.452**	**0.447**	**0.485**	**0.308**	**0.539**
FR1 n66_Ant 0	Right Cheek	0.096	0.071	0.298	0.082	0.251	0.064	**0.465**	**0.418**	**0.242**	**0.411**	**0.493**
	Right Tilted	0.072	0.101	0.104	0.102	0.113	0.073	**0.277**	**0.286**	**0.247**	**0.258**	**0.360**
	Left Cheek	0.182	0.094	0.274	0.210	0.115	0.071	**0.550**	**0.391**	**0.463**	**0.368**	**0.578**
	Left Tilted	0.062	0.252	0.059	0.231	0.054	0.113	**0.373**	**0.368**	**0.406**	**0.229**	**0.460**
FR1 n71_Ant 0	Right Cheek	0.031	0.071	0.298	0.082	0.251	0.064	**0.400**	**0.353**	**0.177**	**0.346**	**0.428**
	Right Tilted	0.026	0.101	0.104	0.102	0.113	0.073	**0.231**	**0.240**	**0.201**	**0.212**	**0.314**
	Left Cheek	0.046	0.094	0.274	0.210	0.115	0.071	**0.414**	**0.255**	**0.327**	**0.232**	**0.442**
	Left Tilted	0.028	0.252	0.059	0.231	0.054	0.113	**0.339**	**0.334**	**0.372**	**0.195**	**0.426**
FR1 n71_Ant 1	Right Cheek	0.321	0.071	0.298	0.082	0.251	0.064	**0.690**	**0.643**	**0.467**	**0.636**	**0.718**
	Right Tilted	0.236	0.101	0.104	0.102	0.113	0.073	**0.441**	**0.450**	**0.411**	**0.422**	**0.524**
	Left Cheek	0.124	0.094	0.274	0.210	0.115	0.071	**0.492**	**0.333**	**0.405**	**0.310**	**0.520**
	Left Tilted	0.090	0.252	0.059	0.231	0.054	0.113	**0.401**	**0.396**	**0.434**	**0.257**	**0.488**

16.3 Hotspot Exposure Conditions

<Simultaneous Transmission is active WWAN ON>

WWAN Band	Exposure Position	1	2	3	4	5	6	7	1+2+3 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)	1+4+7 Summed 1g SAR (W/kg)	1+5+7 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3	5GHz WLAN Ant 4	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4					
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)					
GSM850_Ant 0	Front	0.396	0.194	0.147	0.559	0.114	0.563	0.016	**0.737**	**0.704**	**0.971**	**0.526**	**0.975**
	Back	0.293	0.229	0.165	0.330	0.135	0.376	0.023	**0.687**	**0.657**	**0.646**	**0.451**	**0.692**
	Left side	0.535	0.044	0.256	0.065	0.551	0.584	0.001	**0.835**	**1.130**	**0.601**	**1.087**	**1.120**
	Right side	0.441	0.094	0.024	0.375	0.055	0.388	0.001	**0.559**	**0.590**	**0.817**	**0.497**	**0.830**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.452							**0.452**	**0.452**	**0.452**	**0.452**	**0.452**
GSM1900_Ant 2	Front	0.894	0.194	0.147	0.559	0.114	0.563	0.016	**1.235**	**1.202**	**1.469**	**1.024**	**1.473**
	Back	0.781	0.229	0.165	0.330	0.135	0.376	0.023	**1.175**	**1.145**	**1.134**	**0.939**	**1.180**
	Left side	0.790	0.044	0.256	0.065	0.551	0.584	0.001	**1.090**	**1.385**	**0.856**	**1.342**	**1.375**
	Right side	0.258	0.094	0.024	0.375	0.055	0.388	0.001	**0.376**	**0.407**	**0.634**	**0.314**	**0.647**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.956							**0.956**	**0.956**	**0.956**	**0.956**	**0.956**
WCDMA II_Ant 2	Front	0.695	0.194	0.147	0.559	0.114	0.563	0.016	**1.036**	**1.003**	**1.270**	**0.825**	**1.274**
	Back	0.286	0.229	0.165	0.330	0.135	0.376	0.023	**0.680**	**0.650**	**0.639**	**0.444**	**0.685**
	Left side	0.649	0.044	0.256	0.065	0.551	0.584	0.001	**0.949**	**1.244**	**0.715**	**1.201**	**1.234**
	Right side	0.137	0.094	0.024	0.375	0.055	0.388	0.001	**0.255**	**0.286**	**0.513**	**0.193**	**0.526**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.887							**0.887**	**0.887**	**0.887**	**0.887**	**0.887**
WCDMA II_Ant 0	Front	0.409	0.194	0.147	0.559	0.114	0.563	0.016	**0.750**	**0.717**	**0.984**	**0.539**	**0.988**
	Back	0.585	0.229	0.165	0.330	0.135	0.376	0.023	**0.979**	**0.949**	**0.938**	**0.743**	**0.984**
	Left side	0.567	0.044	0.256	0.065	0.551	0.584	0.001	**0.867**	**1.162**	**0.633**	**1.119**	**1.152**
	Right side	0.124	0.094	0.024	0.375	0.055	0.388	0.001	**0.242**	**0.273**	**0.500**	**0.180**	**0.513**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.823							**0.823**	**0.823**	**0.823**	**0.823**	**0.823**
WCDMA IV_Ant 2	Front	0.759	0.194	0.147	0.559	0.114	0.563	0.016	**1.100**	**1.067**	**1.334**	**0.889**	**1.338**
	Back	0.729	0.229	0.165	0.330	0.135	0.376	0.023	**1.123**	**1.093**	**1.082**	**0.887**	**1.128**
	Left side	0.414	0.044	0.256	0.065	0.551	0.584	0.001	**0.714**	**1.009**	**0.480**	**0.966**	**0.999**
	Right side	0.197	0.094	0.024	0.375	0.055	0.388	0.001	**0.315**	**0.346**	**0.573**	**0.253**	**0.586**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.933							**0.933**	**0.933**	**0.933**	**0.933**	**0.933**
WCDMA IV_Ant 0	Front	0.453	0.194	0.147	0.559	0.114	0.563	0.016	**0.794**	**0.761**	**1.028**	**0.583**	**1.032**
	Back	0.786	0.229	0.165	0.330	0.135	0.376	0.023	**1.180**	**1.150**	**1.139**	**0.944**	**1.185**
	Left side	0.362	0.044	0.256	0.065	0.551	0.584	0.001	**0.662**	**0.957**	**0.428**	**0.914**	**0.947**
	Right side	0.113	0.094	0.024	0.375	0.055	0.388	0.001	**0.231**	**0.262**	**0.489**	**0.169**	**0.502**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.891							**0.891**	**0.891**	**0.891**	**0.891**	**0.891**
WCDMA V_Ant 0	Front	0.393	0.194	0.147	0.559	0.114	0.563	0.016	**0.734**	**0.701**	**0.968**	**0.523**	**0.972**
	Back	0.303	0.229	0.165	0.330	0.135	0.376	0.023	**0.697**	**0.667**	**0.656**	**0.461**	**0.702**
	Left side	0.562	0.044	0.256	0.065	0.551	0.584	0.001	**0.862**	**1.157**	**0.628**	**1.114**	**1.147**
	Right side	0.339	0.094	0.024	0.375	0.055	0.388	0.001	**0.457**	**0.488**	**0.715**	**0.395**	**0.728**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.347							**0.347**	**0.347**	**0.347**	**0.347**	**0.347**
WCDMA V_Ant 1	Front	0.452	0.194	0.147	0.559	0.114	0.563	0.016	**0.793**	**0.760**	**1.027**	**0.582**	**1.031**
	Back	0.271	0.229	0.165	0.330	0.135	0.376	0.023	**0.665**	**0.635**	**0.624**	**0.429**	**0.670**
	Left side	0.421	0.044	0.256	0.065	0.551	0.584	0.001	**0.721**	**1.016**	**0.487**	**0.973**	**1.006**
	Right side	0.397	0.094	0.024	0.375	0.055	0.388	0.001	**0.515**	**0.546**	**0.773**	**0.453**	**0.786**
	Top side	0.100	0.277	0.019	0.266	0.118	0.321	0.073	**0.396**	**0.495**	**0.439**	**0.291**	**0.494**
	Bottom side								**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
CDMA BC0_Ant 0	Front	0.218	0.194	0.147	0.559	0.114	0.563	0.016	**0.559**	**0.526**	**0.793**	**0.348**	**0.797**

	Back	0.278	0.229	0.165	0.330	0.135	0.376	0.023	**0.672**	**0.642**	**0.631**	**0.436**	**0.677**
	Left side	0.555	0.044	0.256	0.065	0.551	0.584	0.001	**0.855**	**1.150**	**0.621**	**1.107**	**1.140**
	Right side	0.348	0.094	0.024	0.375	0.055	0.388	0.001	**0.466**	**0.497**	**0.724**	**0.404**	**0.737**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.310							**0.310**	**0.310**	**0.310**	**0.310**	**0.310**
CDMA BC0_Ant 1	Front	0.165	0.194	0.147	0.559	0.114	0.563	0.016	**0.506**	**0.473**	**0.740**	**0.295**	**0.744**
	Back	0.319	0.229	0.165	0.330	0.135	0.376	0.023	**0.713**	**0.683**	**0.672**	**0.477**	**0.718**
	Left side	0.203	0.044	0.256	0.065	0.551	0.584	0.001	**0.503**	**0.798**	**0.269**	**0.755**	**0.788**
	Right side	0.119	0.094	0.024	0.375	0.055	0.388	0.001	**0.237**	**0.268**	**0.495**	**0.175**	**0.508**
	Top side	0.091	0.277	0.019	0.266	0.118	0.321	0.073	**0.387**	**0.486**	**0.430**	**0.282**	**0.485**
	Bottom side								**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
CDMA BC1_Ant 2	Front	0.781	0.194	0.147	0.559	0.114	0.563	0.016	**1.122**	**1.089**	**1.356**	**0.911**	**1.360**
	Back	0.914	0.229	0.165	0.330	0.135	0.376	0.023	**1.308**	**1.278**	**1.267**	**1.072**	**1.313**
	Left side	0.040	0.044	0.256	0.065	0.551	0.584	0.001	**0.340**	**0.635**	**0.106**	**0.592**	**0.625**
	Right side	0.609	0.094	0.024	0.375	0.055	0.388	0.001	**0.727**	**0.758**	**0.985**	**0.665**	**0.998**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.561							**0.561**	**0.561**	**0.561**	**0.561**	**0.561**
CDMA BC1_Ant 0	Front	0.409	0.194	0.147	0.559	0.114	0.563	0.016	**0.750**	**0.717**	**0.984**	**0.539**	**0.988**
	Back	0.491	0.229	0.165	0.330	0.135	0.376	0.023	**0.885**	**0.855**	**0.844**	**0.649**	**0.890**
	Left side	0.790	0.044	0.256	0.065	0.551	0.584	0.001	**1.090**	**1.385**	**0.856**	**1.342**	**1.375**
	Right side	0.049	0.094	0.024	0.375	0.055	0.388	0.001	**0.167**	**0.198**	**0.425**	**0.105**	**0.438**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.491							**0.491**	**0.491**	**0.491**	**0.491**	**0.491**
CDMA BC10_Ant 0	Front	0.266	0.194	0.147	0.559	0.114	0.563	0.016	**0.607**	**0.574**	**0.841**	**0.396**	**0.845**
	Back	0.278	0.229	0.165	0.330	0.135	0.376	0.023	**0.672**	**0.642**	**0.631**	**0.436**	**0.677**
	Left side	0.487	0.044	0.256	0.065	0.551	0.584	0.001	**0.787**	**1.082**	**0.553**	**1.039**	**1.072**
	Right side	0.309	0.094	0.024	0.375	0.055	0.388	0.001	**0.427**	**0.458**	**0.685**	**0.365**	**0.698**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.273							**0.273**	**0.273**	**0.273**	**0.273**	**0.273**
CDMA BC10_Ant 1	Front	0.163	0.194	0.147	0.559	0.114	0.563	0.016	**0.504**	**0.471**	**0.738**	**0.293**	**0.742**
	Back	0.306	0.229	0.165	0.330	0.135	0.376	0.023	**0.700**	**0.670**	**0.659**	**0.464**	**0.705**
	Left side	0.211	0.044	0.256	0.065	0.551	0.584	0.001	**0.511**	**0.806**	**0.277**	**0.763**	**0.796**
	Right side	0.129	0.094	0.024	0.375	0.055	0.388	0.001	**0.247**	**0.278**	**0.505**	**0.185**	**0.518**
	Top side	0.107	0.277	0.019	0.266	0.118	0.321	0.073	**0.403**	**0.502**	**0.446**	**0.298**	**0.501**
	Bottom side								**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
LTE Band 7_Ant 2	Front	0.469	0.194	0.147	0.559	0.114	0.563	0.016	**0.810**	**0.777**	**1.044**	**0.599**	**1.048**
	Back	0.151	0.229	0.165	0.330	0.135	0.376	0.023	**0.545**	**0.515**	**0.504**	**0.309**	**0.550**
	Left side	0.010	0.044	0.256	0.065	0.551	0.584	0.001	**0.310**	**0.605**	**0.076**	**0.562**	**0.595**
	Right side	0.943	0.094	0.024	0.375	0.055	0.388	0.001	**1.061**	**1.092**	**1.319**	**0.999**	**1.332**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.144							**0.144**	**0.144**	**0.144**	**0.144**	**0.144**
LTE Band 7_Ant 0	Front	0.734	0.194	0.147	0.559	0.114	0.563	0.016	**1.075**	**1.042**	**1.309**	**0.864**	**1.313**
	Back	0.965	0.229	0.165	0.330	0.135	0.376	0.023	**1.359**	**1.329**	**1.318**	**1.123**	**1.364**
	Left side	0.597	0.044	0.256	0.065	0.551	0.584	0.001	**0.897**	**1.192**	**0.663**	**1.149**	**1.182**
	Right side	0.087	0.094	0.024	0.375	0.055	0.388	0.001	**0.205**	**0.236**	**0.463**	**0.143**	**0.476**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.715							**0.715**	**0.715**	**0.715**	**0.715**	**0.715**
LTE Band 12_Ant 0	Front	0.179	0.194	0.147	0.559	0.114	0.563	0.016	**0.520**	**0.487**	**0.754**	**0.309**	**0.758**
	Back	0.298	0.229	0.165	0.330	0.135	0.376	0.023	**0.692**	**0.662**	**0.651**	**0.456**	**0.697**
	Left side	0.305	0.044	0.256	0.065	0.551	0.584	0.001	**0.605**	**0.900**	**0.371**	**0.857**	**0.890**
	Right side	0.116	0.094	0.024	0.375	0.055	0.388	0.001	**0.234**	**0.265**	**0.492**	**0.172**	**0.505**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.089							**0.089**	**0.089**	**0.089**	**0.089**	**0.089**
LTE Band 12_Ant 1	Front	0.198	0.194	0.147	0.559	0.114	0.563	0.016	**0.539**	**0.506**	**0.773**	**0.328**	**0.777**
	Back	0.224	0.229	0.165	0.330	0.135	0.376	0.023	**0.618**	**0.588**	**0.577**	**0.382**	**0.623**
	Left side	0.235	0.044	0.256	0.065	0.551	0.584	0.001	**0.535**	**0.830**	**0.301**	**0.787**	**0.820**

	Right side	0.156	0.094	0.024	0.375	0.055	0.388	0.001	**0.274**	**0.305**	**0.532**	**0.212**	**0.545**
	Top side	0.150	0.277	0.019	0.266	0.118	0.321	0.073	**0.446**	**0.545**	**0.489**	**0.341**	**0.544**
	Bottom side								**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
LTE Band 13_Ant 0	Front	0.223	0.194	0.147	0.559	0.114	0.563	0.016	**0.564**	**0.531**	**0.798**	**0.353**	**0.802**
	Back	0.336	0.229	0.165	0.330	0.135	0.376	0.023	**0.730**	**0.700**	**0.689**	**0.494**	**0.735**
	Left side	0.450	0.044	0.256	0.065	0.551	0.584	0.001	**0.750**	**1.045**	**0.516**	**1.002**	**1.035**
	Right side	0.162	0.094	0.024	0.375	0.055	0.388	0.001	**0.280**	**0.311**	**0.538**	**0.218**	**0.551**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.122							**0.122**	**0.122**	**0.122**	**0.122**	**0.122**
LTE Band 13_Ant 1	Front	0.212	0.194	0.147	0.559	0.114	0.563	0.016	**0.553**	**0.520**	**0.787**	**0.342**	**0.791**
	Back	0.243	0.229	0.165	0.330	0.135	0.376	0.023	**0.637**	**0.607**	**0.596**	**0.401**	**0.642**
	Left side	0.227	0.044	0.256	0.065	0.551	0.584	0.001	**0.527**	**0.822**	**0.293**	**0.779**	**0.812**
	Right side	0.151	0.094	0.024	0.375	0.055	0.388	0.001	**0.269**	**0.300**	**0.527**	**0.207**	**0.540**
	Top side	0.114	0.277	0.019	0.266	0.118	0.321	0.073	**0.410**	**0.509**	**0.453**	**0.305**	**0.508**
	Bottom side								**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
LTE Band 14_Ant 0	Front	0.275	0.194	0.147	0.559	0.114	0.563	0.016	**0.616**	**0.583**	**0.850**	**0.405**	**0.854**
	Back	0.333	0.229	0.165	0.330	0.135	0.376	0.023	**0.727**	**0.697**	**0.686**	**0.491**	**0.732**
	Left side	0.439	0.044	0.256	0.065	0.551	0.584	0.001	**0.739**	**1.034**	**0.505**	**0.991**	**1.024**
	Right side	0.184	0.094	0.024	0.375	0.055	0.388	0.001	**0.302**	**0.333**	**0.560**	**0.240**	**0.573**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.131							**0.131**	**0.131**	**0.131**	**0.131**	**0.131**
LTE Band 14_Ant 1	Front	0.230	0.194	0.147	0.559	0.114	0.563	0.016	**0.571**	**0.538**	**0.805**	**0.360**	**0.809**
	Back	0.270	0.229	0.165	0.330	0.135	0.376	0.023	**0.664**	**0.634**	**0.623**	**0.428**	**0.669**
	Left side	0.225	0.044	0.256	0.065	0.551	0.584	0.001	**0.525**	**0.820**	**0.291**	**0.777**	**0.810**
	Right side	0.131	0.094	0.024	0.375	0.055	0.388	0.001	**0.249**	**0.280**	**0.507**	**0.187**	**0.520**
	Top side	0.194	0.277	0.019	0.266	0.118	0.321	0.073	**0.490**	**0.589**	**0.533**	**0.385**	**0.588**
	Bottom side								**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
LTE Band 25_Ant 2	Front	0.761	0.194	0.147	0.559	0.114	0.563	0.016	**1.102**	**1.069**	**1.336**	**0.891**	**1.340**
	Back	0.836	0.229	0.165	0.330	0.135	0.376	0.023	**1.230**	**1.200**	**1.189**	**0.994**	**1.235**
	Left side	0.098	0.044	0.256	0.065	0.551	0.584	0.001	**0.398**	**0.693**	**0.164**	**0.650**	**0.683**
	Right side	0.611	0.094	0.024	0.375	0.055	0.388	0.001	**0.729**	**0.760**	**0.987**	**0.667**	**1.000**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.870							**0.870**	**0.870**	**0.870**	**0.870**	**0.870**
LTE Band 25_Ant 0	Front	0.463	0.194	0.147	0.559	0.114	0.563	0.016	**0.804**	**0.771**	**1.038**	**0.593**	**1.042**
	Back	0.490	0.229	0.165	0.330	0.135	0.376	0.023	**0.884**	**0.854**	**0.843**	**0.648**	**0.889**
	Left side	0.620	0.044	0.256	0.065	0.551	0.584	0.001	**0.920**	**1.215**	**0.686**	**1.172**	**1.205**
	Right side	0.082	0.094	0.024	0.375	0.055	0.388	0.001	**0.200**	**0.231**	**0.458**	**0.138**	**0.471**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.840							**0.840**	**0.840**	**0.840**	**0.840**	**0.840**
LTE Band 26_Ant 0	Front	0.178	0.194	0.147	0.559	0.114	0.563	0.016	**0.519**	**0.486**	**0.753**	**0.308**	**0.757**
	Back	0.320	0.229	0.165	0.330	0.135	0.376	0.023	**0.714**	**0.684**	**0.673**	**0.478**	**0.719**
	Left side	0.479	0.044	0.256	0.065	0.551	0.584	0.001	**0.779**	**1.074**	**0.545**	**1.031**	**1.064**
	Right side	0.292	0.094	0.024	0.375	0.055	0.388	0.001	**0.410**	**0.441**	**0.668**	**0.348**	**0.681**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.382							**0.382**	**0.382**	**0.382**	**0.382**	**0.382**
LTE Band 26_Ant 1	Front	0.253	0.194	0.147	0.559	0.114	0.563	0.016	**0.594**	**0.561**	**0.828**	**0.383**	**0.832**
	Back	0.281	0.229	0.165	0.330	0.135	0.376	0.023	**0.675**	**0.645**	**0.634**	**0.439**	**0.680**
	Left side	0.248	0.044	0.256	0.065	0.551	0.584	0.001	**0.548**	**0.843**	**0.314**	**0.800**	**0.833**
	Right side	0.157	0.094	0.024	0.375	0.055	0.388	0.001	**0.275**	**0.306**	**0.533**	**0.213**	**0.546**
	Top side	0.131	0.277	0.019	0.266	0.118	0.321	0.073	**0.427**	**0.526**	**0.470**	**0.322**	**0.525**
	Bottom side								**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
LTE Band 30_Ant 2	Front	0.484	0.194	0.147	0.559	0.114	0.563	0.016	**0.825**	**0.792**	**1.059**	**0.614**	**1.063**
	Back	0.662	0.229	0.165	0.330	0.135	0.376	0.023	**1.056**	**1.026**	**1.015**	**0.820**	**1.061**
	Left side	0.022	0.044	0.256	0.065	0.551	0.584	0.001	**0.322**	**0.617**	**0.088**	**0.574**	**0.607**
	Right side	0.987	0.094	0.024	0.375	0.055	0.388	0.001	**1.105**	**1.136**	**1.363**	**1.043**	**1.376**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**

	Bottom side	0.252							0.252	0.252	0.252	0.252	0.252
LTE Band 30_Ant 0	Front	0.426	0.194	0.147	0.559	0.114	0.563	0.016	0.767	0.734	1.001	0.556	1.005
	Back	0.730	0.229	0.165	0.330	0.135	0.376	0.023	1.124	1.094	1.083	0.888	1.129
	Left side	0.847	0.044	0.256	0.065	0.551	0.584	0.001	1.147	1.442	0.913	1.399	1.432
	Right side	0.028	0.094	0.024	0.375	0.055	0.388	0.001	0.146	0.177	0.404	0.084	0.417
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	0.296	0.395	0.339	0.191	0.394
	Bottom side	0.351							0.351	0.351	0.351	0.351	0.351
LTE Band 41_Ant 2	Front	0.352	0.194	0.147	0.559	0.114	0.563	0.016	0.693	0.660	0.927	0.482	0.931
	Back	0.364	0.229	0.165	0.330	0.135	0.376	0.023	0.758	0.728	0.717	0.522	0.763
	Left side	0.143	0.044	0.256	0.065	0.551	0.584	0.001	0.443	0.738	0.209	0.695	0.728
	Right side	0.863	0.094	0.024	0.375	0.055	0.388	0.001	0.981	1.012	1.239	0.919	1.252
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	0.296	0.395	0.339	0.191	0.394
	Bottom side	0.098							0.098	0.098	0.098	0.098	0.098
LTE Band 41_Ant 0	Front	0.327	0.194	0.147	0.559	0.114	0.563	0.016	0.668	0.635	0.902	0.457	0.906
	Back	0.349	0.229	0.165	0.330	0.135	0.376	0.023	0.743	0.713	0.702	0.507	0.748
	Left side	0.353	0.044	0.256	0.065	0.551	0.584	0.001	0.653	0.948	0.419	0.905	0.938
	Right side	0.116	0.094	0.024	0.375	0.055	0.388	0.001	0.234	0.265	0.492	0.172	0.505
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	0.296	0.395	0.339	0.191	0.394
	Bottom side	0.276							0.276	0.276	0.276	0.276	0.276
LTE Band 48_Ant 7	Front	0.460	0.194	0.147	0.559	0.114	0.563	0.016	0.801	0.768	1.035	0.590	1.039
	Back	0.541	0.229	0.165	0.330	0.135	0.376	0.023	0.935	0.905	0.894	0.699	0.940
	Left side	0.971	0.044	0.256	0.065	0.551	0.584	0.001	1.271	1.566	1.037	1.523	1.556
	Right side	0.044	0.094	0.024	0.375	0.055	0.388	0.001	0.162	0.193	0.420	0.100	0.433
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	0.296	0.395	0.339	0.191	0.394
	Bottom side	0.164							0.164	0.164	0.164	0.164	0.164
LTE Band 48_Ant 2	Front	0.133	0.194	0.147	0.559	0.114	0.563	0.016	0.474	0.441	0.708	0.263	0.712
	Back	0.254	0.229	0.165	0.330	0.135	0.376	0.023	0.648	0.618	0.607	0.412	0.653
	Left side	0.102	0.044	0.256	0.065	0.551	0.584	0.001	0.402	0.697	0.168	0.654	0.687
	Right side	0.372	0.094	0.024	0.375	0.055	0.388	0.001	0.490	0.521	0.748	0.428	0.761
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	0.296	0.395	0.339	0.191	0.394
	Bottom side	0.080							0.080	0.080	0.080	0.080	0.080
LTE Band 66_Ant 2	Front	0.771	0.194	0.147	0.559	0.114	0.563	0.016	1.112	1.079	1.346	0.901	1.350
	Back	0.785	0.229	0.165	0.330	0.135	0.376	0.023	1.179	1.149	1.138	0.943	1.184
	Left side	0.117	0.044	0.256	0.065	0.551	0.584	0.001	0.417	0.712	0.183	0.669	0.702
	Right side	0.443	0.094	0.024	0.375	0.055	0.388	0.001	0.561	0.592	0.819	0.499	0.832
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	0.296	0.395	0.339	0.191	0.394
	Bottom side	0.928							0.928	0.928	0.928	0.928	0.928
LTE Band 66_Ant 0	Front	0.561	0.194	0.147	0.559	0.114	0.563	0.016	0.902	0.869	1.136	0.691	1.140
	Back	0.793	0.229	0.165	0.330	0.135	0.376	0.023	1.187	1.157	1.146	0.951	1.192
	Left side	0.424	0.044	0.256	0.065	0.551	0.584	0.001	0.724	1.019	0.490	0.976	1.009
	Right side	0.043	0.094	0.024	0.375	0.055	0.388	0.001	0.161	0.192	0.419	0.099	0.432
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	0.296	0.395	0.339	0.191	0.394
	Bottom side	0.841							0.841	0.841	0.841	0.841	0.841
LTE Band 71_Ant 0	Front	0.159	0.194	0.147	0.559	0.114	0.563	0.016	0.500	0.467	0.734	0.289	0.738
	Back	0.239	0.229	0.165	0.330	0.135	0.376	0.023	0.633	0.603	0.592	0.397	0.638
	Left side	0.232	0.044	0.256	0.065	0.551	0.584	0.001	0.532	0.827	0.298	0.784	0.817
	Right side	0.105	0.094	0.024	0.375	0.055	0.388	0.001	0.223	0.254	0.481	0.161	0.494
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	0.296	0.395	0.339	0.191	0.394
	Bottom side	0.096							0.096	0.096	0.096	0.096	0.096
LTE Band 71_Ant 1	Front	0.106	0.194	0.147	0.559	0.114	0.563	0.016	0.447	0.414	0.681	0.236	0.685
	Back	0.176	0.229	0.165	0.330	0.135	0.376	0.023	0.570	0.540	0.529	0.334	0.575
	Left side	0.232	0.044	0.256	0.065	0.551	0.584	0.001	0.532	0.827	0.298	0.784	0.817
	Right side	0.038	0.094	0.024	0.375	0.055	0.388	0.001	0.156	0.187	0.414	0.094	0.427
	Top side	0.104	0.277	0.019	0.266	0.118	0.321	0.073	0.400	0.499	0.443	0.295	0.498
	Bottom side								0.000	0.000	0.000	0.000	0.000

WWAN Band	Exposure Position	1	2	3	4	5	6	7	1+2+3 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)	1+4+7 Summed 1g SAR (W/kg)	1+5+7 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3	5GHz WLAN Ant 4	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4					
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)					
FR1 n5_Ant 0	Front	0.081	0.194	0.147	0.559	0.114	0.563	0.016	**0.422**	**0.389**	**0.656**	**0.211**	**0.660**
	Back	0.109	0.229	0.165	0.330	0.135	0.376	0.023	**0.503**	**0.473**	**0.462**	**0.267**	**0.508**
	Left side	0.131	0.044	0.256	0.065	0.551	0.584	0.001	**0.431**	**0.726**	**0.197**	**0.683**	**0.716**
	Right side	0.019	0.094	0.024	0.375	0.055	0.388	0.001	**0.137**	**0.168**	**0.395**	**0.075**	**0.408**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.027							**0.027**	**0.027**	**0.027**	**0.027**	**0.027**
FR1 n5_Ant 1	Front	0.198	0.194	0.147	0.559	0.114	0.563	0.016	**0.539**	**0.506**	**0.773**	**0.328**	**0.777**
	Back	0.237	0.229	0.165	0.330	0.135	0.376	0.023	**0.631**	**0.601**	**0.590**	**0.395**	**0.636**
	Left side	0.179	0.044	0.256	0.065	0.551	0.584	0.001	**0.479**	**0.774**	**0.245**	**0.731**	**0.764**
	Right side	0.067	0.094	0.024	0.375	0.055	0.388	0.001	**0.185**	**0.216**	**0.443**	**0.123**	**0.456**
	Top side	0.003	0.277	0.019	0.266	0.118	0.321	0.073	**0.299**	**0.398**	**0.342**	**0.194**	**0.397**
	Bottom side								**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
FR1 n7_Ant 2	Front	0.370	0.194	0.147	0.559	0.114	0.563	0.016	**0.711**	**0.678**	**0.945**	**0.500**	**0.949**
	Back	0.519	0.229	0.165	0.330	0.135	0.376	0.023	**0.913**	**0.883**	**0.872**	**0.677**	**0.918**
	Left side	0.015	0.044	0.256	0.065	0.551	0.584	0.001	**0.315**	**0.610**	**0.081**	**0.567**	**0.600**
	Right side	0.956	0.094	0.024	0.375	0.055	0.388	0.001	**1.074**	**1.105**	**1.332**	**1.012**	**1.345**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.117							**0.117**	**0.117**	**0.117**	**0.117**	**0.117**
FR1 n7_Ant 0	Front	0.709	0.194	0.147	0.559	0.114	0.563	0.016	**1.050**	**1.017**	**1.284**	**0.839**	**1.288**
	Back	0.893	0.229	0.165	0.330	0.135	0.376	0.023	**1.287**	**1.257**	**1.246**	**1.051**	**1.292**
	Left side	0.612	0.044	0.256	0.065	0.551	0.584	0.001	**0.912**	**1.207**	**0.678**	**1.164**	**1.197**
	Right side	0.072	0.094	0.024	0.375	0.055	0.388	0.001	**0.190**	**0.221**	**0.448**	**0.128**	**0.461**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.723							**0.723**	**0.723**	**0.723**	**0.723**	**0.723**
FR1 n12_Ant 0	Front	0.006	0.194	0.147	0.559	0.114	0.563	0.016	**0.347**	**0.314**	**0.581**	**0.136**	**0.585**
	Back	0.007	0.229	0.165	0.330	0.135	0.376	0.023	**0.401**	**0.371**	**0.360**	**0.165**	**0.406**
	Left side	0.014	0.044	0.256	0.065	0.551	0.584	0.001	**0.314**	**0.609**	**0.080**	**0.566**	**0.599**
	Right side	0.004	0.094	0.024	0.375	0.055	0.388	0.001	**0.122**	**0.153**	**0.380**	**0.060**	**0.393**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.010							**0.010**	**0.010**	**0.010**	**0.010**	**0.010**
FR1 n12_Ant 1	Front	0.217	0.194	0.147	0.559	0.114	0.563	0.016	**0.558**	**0.525**	**0.792**	**0.347**	**0.796**
	Back	0.218	0.229	0.165	0.330	0.135	0.376	0.023	**0.612**	**0.582**	**0.571**	**0.376**	**0.617**
	Left side	0.228	0.044	0.256	0.065	0.551	0.584	0.001	**0.528**	**0.823**	**0.294**	**0.780**	**0.813**
	Right side	0.109	0.094	0.024	0.375	0.055	0.388	0.001	**0.227**	**0.258**	**0.485**	**0.165**	**0.498**
	Top side	0.086	0.277	0.019	0.266	0.118	0.321	0.073	**0.382**	**0.481**	**0.425**	**0.277**	**0.480**
	Bottom side								**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
FR1 n25_Ant 2	Front	0.921	0.194	0.147	0.559	0.114	0.563	0.016	**1.262**	**1.229**	**1.496**	**1.051**	**1.500**
	Back	0.933	0.229	0.165	0.330	0.135	0.376	0.023	**1.327**	**1.297**	**1.286**	**1.091**	**1.332**
	Left side	0.109	0.044	0.256	0.065	0.551	0.584	0.001	**0.409**	**0.704**	**0.175**	**0.661**	**0.694**
	Right side	0.675	0.094	0.024	0.375	0.055	0.388	0.001	**0.793**	**0.824**	**1.051**	**0.731**	**1.064**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.765							**0.765**	**0.765**	**0.765**	**0.765**	**0.765**
FR1 n25_Ant 0	Front	0.118	0.194	0.147	0.559	0.114	0.563	0.016	**0.459**	**0.426**	**0.693**	**0.248**	**0.697**
	Back	0.154	0.229	0.165	0.330	0.135	0.376	0.023	**0.548**	**0.518**	**0.507**	**0.312**	**0.553**
	Left side	0.169	0.044	0.256	0.065	0.551	0.584	0.001	**0.469**	**0.764**	**0.235**	**0.721**	**0.754**
	Right side	0.087	0.094	0.024	0.375	0.055	0.388	0.001	**0.205**	**0.236**	**0.463**	**0.143**	**0.476**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.144							**0.144**	**0.144**	**0.144**	**0.144**	**0.144**
FR1 n41_Ant 2	Front	0.444	0.194	0.147	0.559	0.114	0.563	0.016	**0.785**	**0.752**	**1.019**	**0.574**	**1.023**
	Back	0.517	0.229	0.165	0.330	0.135	0.376	0.023	**0.911**	**0.881**	**0.870**	**0.675**	**0.916**

	Left side	0.002	0.044	0.256	0.065	0.551	0.584	0.001	**0.302**	**0.597**	**0.068**	**0.554**	**0.587**
	Right side	0.871	0.094	0.024	0.375	0.055	0.388	0.001	**0.989**	**1.020**	**1.247**	**0.927**	**1.260**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.132							**0.132**	**0.132**	**0.132**	**0.132**	**0.132**
FR1 n41_Ant 5	Front	0.265	0.194	0.147	0.559	0.114	0.563	0.016	**0.606**	**0.573**	**0.840**	**0.395**	**0.844**
	Back	0.428	0.229	0.165	0.330	0.135	0.376	0.023	**0.822**	**0.792**	**0.781**	**0.586**	**0.827**
	Left side	0.030	0.044	0.256	0.065	0.551	0.584	0.001	**0.330**	**0.625**	**0.096**	**0.582**	**0.615**
	Right side	0.615	0.094	0.024	0.375	0.055	0.388	0.001	**0.733**	**0.764**	**0.991**	**0.671**	**1.004**
	Top side	0.567	0.277	0.019	0.266	0.118	0.321	0.073	**0.863**	**0.962**	**0.906**	**0.758**	**0.961**
	Bottom side								**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
FR1 n41_Ant 0	Front	0.138	0.194	0.147	0.559	0.114	0.563	0.016	**0.479**	**0.446**	**0.713**	**0.268**	**0.717**
	Back	0.357	0.229	0.165	0.330	0.135	0.376	0.023	**0.751**	**0.721**	**0.710**	**0.515**	**0.756**
	Left side	0.127	0.044	0.256	0.065	0.551	0.584	0.001	**0.427**	**0.722**	**0.193**	**0.679**	**0.712**
	Right side	0.035	0.094	0.024	0.375	0.055	0.388	0.001	**0.153**	**0.184**	**0.411**	**0.091**	**0.424**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.130							**0.130**	**0.130**	**0.130**	**0.130**	**0.130**
FR1 n66_Ant 2	Front	0.588	0.194	0.147	0.559	0.114	0.563	0.016	**0.929**	**0.896**	**1.163**	**0.718**	**1.167**
	Back	0.587	0.229	0.165	0.330	0.135	0.376	0.023	**0.981**	**0.951**	**0.940**	**0.745**	**0.986**
	Left side	0.091	0.044	0.256	0.065	0.551	0.584	0.001	**0.391**	**0.686**	**0.157**	**0.643**	**0.676**
	Right side	0.576	0.094	0.024	0.375	0.055	0.388	0.001	**0.694**	**0.725**	**0.952**	**0.632**	**0.965**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.620							**0.620**	**0.620**	**0.620**	**0.620**	**0.620**
FR1 n66_Ant 0	Front	0.105	0.194	0.147	0.559	0.114	0.563	0.016	**0.446**	**0.413**	**0.680**	**0.235**	**0.684**
	Back	0.116	0.229	0.165	0.330	0.135	0.376	0.023	**0.510**	**0.480**	**0.469**	**0.274**	**0.515**
	Left side	0.114	0.044	0.256	0.065	0.551	0.584	0.001	**0.414**	**0.709**	**0.180**	**0.666**	**0.699**
	Right side	0.018	0.094	0.024	0.375	0.055	0.388	0.001	**0.136**	**0.167**	**0.394**	**0.074**	**0.407**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.109							**0.109**	**0.109**	**0.109**	**0.109**	**0.109**
FR1 n71_Ant 0	Front	0.049	0.194	0.147	0.559	0.114	0.563	0.016	**0.390**	**0.357**	**0.624**	**0.179**	**0.628**
	Back	0.055	0.229	0.165	0.330	0.135	0.376	0.023	**0.449**	**0.419**	**0.408**	**0.213**	**0.454**
	Left side	0.075	0.044	0.256	0.065	0.551	0.584	0.001	**0.375**	**0.670**	**0.141**	**0.627**	**0.660**
	Right side	0.045	0.094	0.024	0.375	0.055	0.388	0.001	**0.163**	**0.194**	**0.421**	**0.101**	**0.434**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.044							**0.044**	**0.044**	**0.044**	**0.044**	**0.044**
FR1 n71_Ant 1	Front	0.119	0.194	0.147	0.559	0.114	0.563	0.016	**0.460**	**0.427**	**0.694**	**0.249**	**0.698**
	Back	0.126	0.229	0.165	0.330	0.135	0.376	0.023	**0.520**	**0.490**	**0.479**	**0.284**	**0.525**
	Left side	0.193	0.044	0.256	0.065	0.551	0.584	0.001	**0.493**	**0.788**	**0.259**	**0.745**	**0.778**
	Right side	0.052	0.094	0.024	0.375	0.055	0.388	0.001	**0.170**	**0.201**	**0.428**	**0.108**	**0.441**
	Top side		0.277	0.019	0.266	0.118	0.321	0.073	**0.296**	**0.395**	**0.339**	**0.191**	**0.394**
	Bottom side	0.062							**0.062**	**0.062**	**0.062**	**0.062**	**0.062**

<Simultaneous Transmission is active WLAN OFF>

WWAN Band	Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
		WWAN	Bluetooth Ant 4	
		1g SAR (W/kg)	1g SAR (W/kg)	
GSM850_Ant 0	Front	0.396	0.016	**0.412**
	Back	0.293	0.023	**0.316**
	Left side	0.535	0.001	**0.536**
	Right side	0.441	0.001	**0.442**
	Top side		0.073	**0.073**
	Bottom side	0.452		**0.452**
GSM1900_Ant 2	Front	0.894	0.016	**0.910**
	Back	0.781	0.023	**0.804**
	Left side	0.790	0.001	**0.791**
	Right side	0.258	0.001	**0.259**
	Top side		0.073	**0.073**
	Bottom side	0.956		**0.956**
WCDMA II_Ant 2	Front	0.695	0.016	**0.711**
	Back	0.286	0.023	**0.309**
	Left side	0.649	0.001	**0.650**
	Right side	0.137	0.001	**0.138**
	Top side		0.073	**0.073**
	Bottom side	0.887		**0.887**
WCDMA II_Ant 0	Front	0.409	0.016	**0.425**
	Back	0.585	0.023	**0.608**
	Left side	0.567	0.001	**0.568**
	Right side	0.124	0.001	**0.125**
	Top side		0.073	**0.073**
	Bottom side	0.823		**0.823**
WCDMA IV_Ant 2	Front	0.759	0.016	**0.775**
	Back	0.729	0.023	**0.752**
	Left side	0.414	0.001	**0.415**
	Right side	0.197	0.001	**0.198**
	Top side		0.073	**0.073**
	Bottom side	0.933		**0.933**
WCDMA IV_Ant 0	Front	0.453	0.016	**0.469**
	Back	0.786	0.023	**0.809**
	Left side	0.362	0.001	**0.363**
	Right side	0.113	0.001	**0.114**
	Top side		0.073	**0.073**
	Bottom side	0.891		**0.891**
WCDMA V_Ant 0	Front	0.393	0.016	**0.409**
	Back	0.303	0.023	**0.326**
	Left side	0.562	0.001	**0.563**
	Right side	0.339	0.001	**0.340**
	Top side		0.073	**0.073**
	Bottom side	0.347		**0.347**
WCDMA V_Ant 1	Front	0.452	0.016	**0.468**
	Back	0.271	0.023	**0.294**
	Left side	0.421	0.001	**0.422**
	Right side	0.397	0.001	**0.398**
	Top side	0.100	0.073	**0.173**
	Bottom side			**0.000**
CDMA BC0_Ant 0	Front	0.218	0.016	**0.234**
	Back	0.278	0.023	**0.301**
	Left side	0.555	0.001	**0.556**

	Right side	0.348	0.001	**0.349**
	Top side		0.073	**0.073**
	Bottom side	0.310		**0.310**
CDMA BC0_Ant 1	Front	0.165	0.016	**0.181**
	Back	0.319	0.023	**0.342**
	Left side	0.203	0.001	**0.204**
	Right side	0.119	0.001	**0.120**
	Top side	0.091	0.073	**0.164**
	Bottom side			**0.000**
CDMA BC1_Ant 2	Front	0.781	0.016	**0.797**
	Back	0.914	0.023	**0.937**
	Left side	0.040	0.001	**0.041**
	Right side	0.609	0.001	**0.610**
	Top side		0.073	**0.073**
	Bottom side	0.561		**0.561**
CDMA BC1_Ant 0	Front	0.409	0.016	**0.425**
	Back	0.491	0.023	**0.514**
	Left side	0.790	0.001	**0.791**
	Right side	0.049	0.001	**0.050**
	Top side		0.073	**0.073**
	Bottom side	0.491		**0.491**
CDMA BC10_Ant 0	Front	0.266	0.016	**0.282**
	Back	0.278	0.023	**0.301**
	Left side	0.487	0.001	**0.488**
	Right side	0.309	0.001	**0.310**
	Top side		0.073	**0.073**
	Bottom side	0.273		**0.273**
CDMA BC10_Ant 1	Front	0.163	0.016	**0.179**
	Back	0.306	0.023	**0.329**
	Left side	0.211	0.001	**0.212**
	Right side	0.129	0.001	**0.130**
	Top side	0.107	0.073	**0.180**
	Bottom side			**0.000**
LTE Band 7_Ant 2	Front	0.469	0.016	**0.485**
	Back	0.151	0.023	**0.174**
	Left side	0.010	0.001	**0.011**
	Right side	0.943	0.001	**0.944**
	Top side		0.073	**0.073**
	Bottom side	0.144		**0.144**
LTE Band 7_Ant 0	Front	0.734	0.016	**0.750**
	Back	0.965	0.023	**0.988**
	Left side	0.597	0.001	**0.598**
	Right side	0.087	0.001	**0.088**
	Top side		0.073	**0.073**
	Bottom side	0.715		**0.715**
LTE Band 12_Ant 0	Front	0.179	0.016	**0.195**
	Back	0.298	0.023	**0.321**
	Left side	0.305	0.001	**0.306**
	Right side	0.116	0.001	**0.117**
	Top side		0.073	**0.073**
	Bottom side	0.089		**0.089**
LTE Band 12_Ant 1	Front	0.198	0.016	**0.214**
	Back	0.224	0.023	**0.247**
	Left side	0.235	0.001	**0.236**
	Right side	0.156	0.001	**0.157**
	Top side	0.150	0.073	**0.223**

	Bottom side			**0.000**
LTE Band 13_Ant 0	Front	0.223	0.016	**0.239**
	Back	0.336	0.023	**0.359**
	Left side	0.450	0.001	**0.451**
	Right side	0.162	0.001	**0.163**
	Top side		0.073	**0.073**
	Bottom side	0.122		**0.122**
LTE Band 13_Ant 1	Front	0.212	0.016	**0.228**
	Back	0.243	0.023	**0.266**
	Left side	0.227	0.001	**0.228**
	Right side	0.151	0.001	**0.152**
	Top side	0.114	0.073	**0.187**
	Bottom side			**0.000**
LTE Band 14_Ant 0	Front	0.275	0.016	**0.291**
	Back	0.333	0.023	**0.356**
	Left side	0.439	0.001	**0.440**
	Right side	0.184	0.001	**0.185**
	Top side		0.073	**0.073**
	Bottom side	0.131		**0.131**
LTE Band 14_Ant 1	Front	0.230	0.016	**0.246**
	Back	0.270	0.023	**0.293**
	Left side	0.225	0.001	**0.226**
	Right side	0.131	0.001	**0.132**
	Top side	0.194	0.073	**0.267**
	Bottom side			**0.000**
LTE Band 25_Ant 2	Front	0.761	0.016	**0.777**
	Back	0.836	0.023	**0.859**
	Left side	0.098	0.001	**0.099**
	Right side	0.611	0.001	**0.612**
	Top side		0.073	**0.073**
	Bottom side	0.870		**0.870**
LTE Band 25_Ant 0	Front	0.463	0.016	**0.479**
	Back	0.490	0.023	**0.513**
	Left side	0.620	0.001	**0.621**
	Right side	0.082	0.001	**0.083**
	Top side		0.073	**0.073**
	Bottom side	0.840		**0.840**
LTE Band 26_Ant 0	Front	0.178	0.016	**0.194**
	Back	0.320	0.023	**0.343**
	Left side	0.479	0.001	**0.480**
	Right side	0.292	0.001	**0.293**
	Top side		0.073	**0.073**
	Bottom side	0.382		**0.382**
LTE Band 26_Ant 1	Front	0.253	0.016	**0.269**
	Back	0.281	0.023	**0.304**
	Left side	0.248	0.001	**0.249**
	Right side	0.157	0.001	**0.158**
	Top side	0.131	0.073	**0.204**
	Bottom side			**0.000**
LTE Band 30_Ant 2	Front	0.484	0.016	**0.500**
	Back	0.662	0.023	**0.685**
	Left side	0.022	0.001	**0.023**
	Right side	0.987	0.001	**0.988**
	Top side		0.073	**0.073**
	Bottom side	0.252		**0.252**
LTE Band 30_Ant 0	Front	0.426	0.016	**0.442**

	Back	0.730	0.023	**0.753**
	Left side	0.847	0.001	**0.848**
	Right side	0.028	0.001	**0.029**
	Top side		0.073	**0.073**
	Bottom side	0.351		**0.351**
LTE Band 41_Ant 2	Front	0.352	0.016	**0.368**
	Back	0.364	0.023	**0.387**
	Left side	0.143	0.001	**0.144**
	Right side	0.912	0.001	**0.913**
	Top side		0.073	**0.073**
	Bottom side	0.098		**0.098**
LTE Band 41_Ant 0	Front	0.327	0.016	**0.343**
	Back	0.349	0.023	**0.372**
	Left side	0.353	0.001	**0.354**
	Right side	0.116	0.001	**0.117**
	Top side		0.073	**0.073**
	Bottom side	0.276		**0.276**
LTE Band 48_Ant 7	Front	0.460	0.016	**0.476**
	Back	0.541	0.023	**0.564**
	Left side	0.971	0.001	**0.972**
	Right side	0.044	0.001	**0.045**
	Top side		0.073	**0.073**
	Bottom side	0.164		**0.164**
LTE Band 48_Ant 2	Front	0.133	0.016	**0.149**
	Back	0.254	0.023	**0.277**
	Left side	0.102	0.001	**0.103**
	Right side	0.372	0.001	**0.373**
	Top side		0.073	**0.073**
	Bottom side	0.080		**0.080**
LTE Band 66_Ant 2	Front	0.771	0.016	**0.787**
	Back	0.785	0.023	**0.808**
	Left side	0.117	0.001	**0.118**
	Right side	0.443	0.001	**0.444**
	Top side		0.073	**0.073**
	Bottom side	0.928		**0.928**
LTE Band 66_Ant 0	Front	0.561	0.016	**0.577**
	Back	0.793	0.023	**0.816**
	Left side	0.424	0.001	**0.425**
	Right side	0.043	0.001	**0.044**
	Top side		0.073	**0.073**
	Bottom side	0.841		**0.841**
LTE Band 71_Ant 0	Front	0.159	0.016	**0.175**
	Back	0.239	0.023	**0.262**
	Left side	0.232	0.001	**0.233**
	Right side	0.105	0.001	**0.106**
	Top side		0.073	**0.073**
	Bottom side	0.096		**0.096**
LTE Band 71_Ant 1	Front	0.106	0.016	**0.122**
	Back	0.176	0.023	**0.199**
	Left side	0.232	0.001	**0.233**
	Right side	0.038	0.001	**0.039**
	Top side	0.104	0.073	**0.177**
	Bottom side			**0.000**

WWAN Band	Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
		WWAN	Bluetooth Ant 4	
		1g SAR (W/kg)	1g SAR (W/kg)	
FR1 n5_Ant 0	Front	0.081	0.016	**0.097**
	Back	0.109	0.023	**0.132**
	Left side	0.131	0.001	**0.132**
	Right side	0.019	0.001	**0.020**
	Top side		0.073	**0.073**
	Bottom side	0.027		**0.027**
FR1 n5_Ant 1	Front	0.198	0.016	**0.214**
	Back	0.237	0.023	**0.260**
	Left side	0.179	0.001	**0.180**
	Right side	0.067	0.001	**0.068**
	Top side	0.003	0.073	**0.076**
	Bottom side			**0.000**
FR1 n7_Ant 2	Front	0.370	0.016	**0.386**
	Back	0.519	0.023	**0.542**
	Left side	0.015	0.001	**0.016**
	Right side	0.956	0.001	**0.957**
	Top side		0.073	**0.073**
	Bottom side	0.117		**0.117**
FR1 n7_Ant 0	Front	0.709	0.016	**0.725**
	Back	0.893	0.023	**0.916**
	Left side	0.612	0.001	**0.613**
	Right side	0.072	0.001	**0.073**
	Top side		0.073	**0.073**
	Bottom side	0.723		**0.723**
FR1 n12_Ant 0	Front	0.006	0.016	**0.022**
	Back	0.007	0.023	**0.030**
	Left side	0.014	0.001	**0.015**
	Right side	0.004	0.001	**0.005**
	Top side		0.073	**0.073**
	Bottom side	0.010		**0.010**
FR1 n12_Ant 1	Front	0.217	0.016	**0.233**
	Back	0.218	0.023	**0.241**
	Left side	0.228	0.001	**0.229**
	Right side	0.109	0.001	**0.110**
	Top side	0.086	0.073	**0.159**
	Bottom side			**0.000**
FR1 n25_Ant 2	Front	0.921	0.016	**0.937**
	Back	0.933	0.023	**0.956**
	Left side	0.109	0.001	**0.110**
	Right side	0.675	0.001	**0.676**
	Top side		0.073	**0.073**
	Bottom side	0.765		**0.765**
FR1 n25_Ant 0	Front	0.118	0.016	**0.134**
	Back	0.154	0.023	**0.177**
	Left side	0.169	0.001	**0.170**
	Right side	0.087	0.001	**0.088**
	Top side		0.073	**0.073**
	Bottom side	0.144		**0.144**
FR1 n41_Ant 2	Front	0.444	0.016	**0.460**
	Back	0.517	0.023	**0.540**
	Left side	0.002	0.001	**0.003**

	Right side	0.871	0.001	**0.872**
	Top side		0.073	**0.073**
	Bottom side	0.132		**0.132**
FR1 n41_Ant 5	Front	0.265	0.016	**0.281**
	Back	0.428	0.023	**0.451**
	Left side	0.030	0.001	**0.031**
	Right side	0.615	0.001	**0.616**
	Top side	0.567	0.073	**0.640**
	Bottom side			**0.000**
FR1 n41_Ant 0	Front	0.138	0.016	**0.154**
	Back	0.357	0.023	**0.380**
	Left side	0.127	0.001	**0.128**
	Right side	0.035	0.001	**0.036**
	Top side		0.073	**0.073**
	Bottom side	0.130		**0.130**
FR1 n66_Ant 2	Front	0.588	0.016	**0.604**
	Back	0.587	0.023	**0.610**
	Left side	0.091	0.001	**0.092**
	Right side	0.576	0.001	**0.577**
	Top side		0.073	**0.073**
	Bottom side	0.620		**0.620**
FR1 n66_Ant 0	Front	0.105	0.016	**0.121**
	Back	0.116	0.023	**0.139**
	Left side	0.114	0.001	**0.115**
	Right side	0.018	0.001	**0.019**
	Top side		0.073	**0.073**
	Bottom side	0.109		**0.109**
FR1 n71_Ant 0	Front	0.049	0.016	**0.065**
	Back	0.055	0.023	**0.078**
	Left side	0.075	0.001	**0.076**
	Right side	0.045	0.001	**0.046**
	Top side		0.073	**0.073**
	Bottom side	0.044		**0.044**
FR1 n71_Ant 1	Front	0.119	0.016	**0.135**
	Back	0.126	0.023	**0.149**
	Left side	0.193	0.001	**0.194**
	Right side	0.052	0.001	**0.053**
	Top side		0.073	**0.073**
	Bottom side	0.062		**0.062**

16.4 Body-Worn Accessory Exposure Conditions

<Standalone WWAN OFF>

Exposure Position	1 2.4GHz WLAN Ant 4 1g SAR (W/kg)	2 2.4GHz WLAN Ant 3 1g SAR (W/kg)	3 5GHz WLAN Ant 4 1g SAR (W/kg)	4 5GHz WLAN Ant 3 1g SAR (W/kg)	6 Bluetooth Ant 4 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	3+4+6 Summed 1g SAR (W/kg)
Front	0.194	0.147	0.711	0.232	0.016	**0.341**	**0.426**	**0.959**
Back	0.229	0.165	0.377	0.292	0.023	**0.394**	**0.521**	**0.692**

<Simultaneous Transmission is active WWAN ON>

WWAN Band	Exposure Position	1 WWAN 1g SAR (W/kg)	2 2.4GHz WLAN Ant 4 1g SAR (W/kg)	3 2.4GHz WLAN Ant 3 1g SAR (W/kg)	4 5GHz WLAN Ant 4 1g SAR (W/kg)	5 5GHz WLAN Ant 3 1g SAR (W/kg)	6 5GHz WLAN Ant 4+3 1g SAR (W/kg)	7 Bluetooth Ant 4 1g SAR (W/kg)	1+2+3 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)	1+4+7 Summed 1g SAR (W/kg)	1+5+7 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)
GSM850_Ant 0	Front	0.253	0.194	0.147	0.579	0.232	0.579	0.016	**0.594**	**0.679**	**0.848**	**0.501**	**0.848**
	Back	0.293	0.229	0.165	0.377	0.292	0.428	0.023	**0.687**	**0.814**	**0.693**	**0.608**	**0.744**
GSM1900_Ant 2	Front	0.894	0.194	0.147	0.579	0.232	0.579	0.016	**1.235**	**1.320**	**1.489**	**1.142**	**1.489**
	Back	0.781	0.229	0.165	0.377	0.292	0.428	0.023	**1.175**	**1.302**	**1.181**	**1.096**	**1.232**
WCDMA II_Ant 2	Front	0.625	0.194	0.147	0.579	0.232	0.579	0.016	**0.966**	**1.051**	**1.220**	**0.873**	**1.220**
	Back	0.947	0.229	0.165	0.377	0.292	0.428	0.023	**1.341**	**1.468**	**1.347**	**1.262**	**1.398**
WCDMA II_Ant 0	Front	0.409	0.194	0.147	0.579	0.232	0.579	0.016	**0.750**	**0.835**	**1.004**	**0.657**	**1.004**
	Back	0.585	0.229	0.165	0.377	0.292	0.428	0.023	**0.979**	**1.106**	**0.985**	**0.900**	**1.036**
WCDMA IV_Ant 2	Front	0.678	0.194	0.147	0.579	0.232	0.579	0.016	**1.019**	**1.104**	**1.273**	**0.926**	**1.273**
	Back	0.722	0.229	0.165	0.377	0.292	0.428	0.023	**1.116**	**1.243**	**1.122**	**1.037**	**1.173**
WCDMA IV_Ant 0	Front	0.518	0.194	0.147	0.579	0.232	0.579	0.016	**0.859**	**0.944**	**1.113**	**0.766**	**1.113**
	Back	0.853	0.229	0.165	0.377	0.292	0.428	0.023	**1.247**	**1.374**	**1.253**	**1.168**	**1.304**
WCDMA V_Ant 0	Front	0.183	0.194	0.147	0.579	0.232	0.579	0.016	**0.524**	**0.609**	**0.778**	**0.431**	**0.778**
	Back	0.303	0.229	0.165	0.377	0.292	0.428	0.023	**0.697**	**0.824**	**0.703**	**0.618**	**0.754**
WCDMA V_Ant 1	Front	0.135	0.194	0.147	0.579	0.232	0.579	0.016	**0.476**	**0.561**	**0.730**	**0.383**	**0.730**
	Back	0.271	0.229	0.165	0.377	0.292	0.428	0.023	**0.665**	**0.792**	**0.671**	**0.586**	**0.722**
CDMA BC0_Ant 0	Front	0.271	0.194	0.147	0.579	0.232	0.579	0.016	**0.612**	**0.697**	**0.866**	**0.519**	**0.866**
	Back	0.312	0.229	0.165	0.377	0.292	0.428	0.023	**0.706**	**0.833**	**0.712**	**0.627**	**0.763**
CDMA BC0_Ant 1	Front	0.233	0.194	0.147	0.579	0.232	0.579	0.016	**0.574**	**0.659**	**0.828**	**0.481**	**0.828**
	Back	0.299	0.229	0.165	0.377	0.292	0.428	0.023	**0.693**	**0.820**	**0.699**	**0.614**	**0.750**
CDMA BC1_Ant 2	Front	0.783	0.194	0.147	0.579	0.232	0.579	0.016	**1.124**	**1.209**	**1.378**	**1.031**	**1.378**
	Back	0.911	0.229	0.165	0.377	0.292	0.428	0.023	**1.305**	**1.432**	**1.311**	**1.226**	**1.362**
CDMA BC1_Ant 0	Front	0.337	0.194	0.147	0.579	0.232	0.579	0.016	**0.678**	**0.763**	**0.932**	**0.585**	**0.932**
	Back	0.586	0.229	0.165	0.377	0.292	0.428	0.023	**0.980**	**1.107**	**0.986**	**0.901**	**1.037**
CDMA BC10_Ant 0	Front	0.228	0.194	0.147	0.579	0.232	0.579	0.016	**0.569**	**0.654**	**0.823**	**0.476**	**0.823**
	Back	0.283	0.229	0.165	0.377	0.292	0.428	0.023	**0.677**	**0.804**	**0.683**	**0.598**	**0.734**
CDMA BC10_Ant 1	Front	0.268	0.194	0.147	0.579	0.232	0.579	0.016	**0.609**	**0.694**	**0.863**	**0.516**	**0.863**
	Back	0.300	0.229	0.165	0.377	0.292	0.428	0.023	**0.694**	**0.821**	**0.700**	**0.615**	**0.751**
LTE Band 7_Ant 2	Front	0.773	0.194	0.147	0.579	0.232	0.579	0.016	**1.114**	**1.199**	**1.368**	**1.021**	**1.368**
	Back	0.977	0.229	0.165	0.377	0.292	0.428	0.023	**1.371**	**1.498**	**1.377**	**1.292**	**1.428**
LTE Band 7_Ant 0	Front	0.675	0.194	0.147	0.579	0.232	0.579	0.016	**1.016**	**1.101**	**1.270**	**0.923**	**1.270**
	Back	0.953	0.229	0.165	0.377	0.292	0.428	0.023	**1.347**	**1.474**	**1.353**	**1.268**	**1.404**
LTE Band 12_Ant 0	Front	0.179	0.194	0.147	0.579	0.232	0.579	0.016	**0.520**	**0.605**	**0.774**	**0.427**	**0.774**
	Back	0.298	0.229	0.165	0.377	0.292	0.428	0.023	**0.692**	**0.819**	**0.698**	**0.613**	**0.749**
LTE Band 12_Ant 1	Front	0.198	0.194	0.147	0.579	0.232	0.579	0.016	**0.539**	**0.624**	**0.793**	**0.446**	**0.793**
	Back	0.224	0.229	0.165	0.377	0.292	0.428	0.023	**0.618**	**0.745**	**0.624**	**0.539**	**0.675**
LTE Band 13_Ant 0	Front	0.227	0.194	0.147	0.579	0.232	0.579	0.016	**0.568**	**0.653**	**0.822**	**0.475**	**0.822**
	Back	0.342	0.229	0.165	0.377	0.292	0.428	0.023	**0.736**	**0.863**	**0.742**	**0.657**	**0.793**
LTE Band 13_Ant 1	Front	0.212	0.194	0.147	0.579	0.232	0.579	0.016	**0.553**	**0.638**	**0.807**	**0.460**	**0.807**
	Back	0.243	0.229	0.165	0.377	0.292	0.428	0.023	**0.637**	**0.764**	**0.643**	**0.558**	**0.694**
LTE Band 14_Ant 0	Front	0.275	0.194	0.147	0.579	0.232	0.579	0.016	**0.616**	**0.701**	**0.870**	**0.523**	**0.870**

	Back	0.333	0.229	0.165	0.377	0.292	0.428	0.023	**0.727**	**0.854**	**0.733**	**0.648**	**0.784**
LTE Band 14_Ant 1	Front	0.230	0.194	0.147	0.579	0.232	0.579	0.016	**0.571**	**0.656**	**0.825**	**0.478**	**0.825**
	Back	0.270	0.229	0.165	0.377	0.292	0.428	0.023	**0.664**	**0.791**	**0.670**	**0.585**	**0.721**
LTE Band 25_Ant 2	Front	0.730	0.194	0.147	0.579	0.232	0.579	0.016	**1.071**	**1.156**	**1.325**	**0.978**	**1.325**
	Back	0.870	0.229	0.165	0.377	0.292	0.428	0.023	**1.264**	**1.391**	**1.270**	**1.185**	**1.321**
LTE Band 25_Ant 0	Front	0.417	0.194	0.147	0.579	0.232	0.579	0.016	**0.758**	**0.843**	**1.012**	**0.665**	**1.012**
	Back	0.509	0.229	0.165	0.377	0.292	0.428	0.023	**0.903**	**1.030**	**0.909**	**0.824**	**0.960**
LTE Band 26_Ant 0	Front	0.178	0.194	0.147	0.579	0.232	0.579	0.016	**0.519**	**0.604**	**0.773**	**0.426**	**0.773**
	Back	0.320	0.229	0.165	0.377	0.292	0.428	0.023	**0.714**	**0.841**	**0.720**	**0.635**	**0.771**
LTE Band 26_Ant 1	Front	0.253	0.194	0.147	0.579	0.232	0.579	0.016	**0.594**	**0.679**	**0.848**	**0.501**	**0.848**
	Back	0.271	0.229	0.165	0.377	0.292	0.428	0.023	**0.665**	**0.792**	**0.671**	**0.586**	**0.722**
LTE Band 30_Ant 2	Front	0.489	0.194	0.147	0.579	0.232	0.579	0.016	**0.830**	**0.915**	**1.084**	**0.737**	**1.084**
	Back	0.983	0.229	0.165	0.377	0.292	0.428	0.023	**1.377**	**1.504**	**1.383**	**1.298**	**1.434**
LTE Band 30_Ant 0	Front	0.425	0.194	0.147	0.579	0.232	0.579	0.016	**0.766**	**0.851**	**1.020**	**0.673**	**1.020**
	Back	0.590	0.229	0.165	0.377	0.292	0.428	0.023	**0.984**	**1.111**	**0.990**	**0.905**	**1.041**
LTE Band 41_Ant 2	Front	0.525	0.194	0.147	0.579	0.232	0.579	0.016	**0.866**	**0.951**	**1.120**	**0.773**	**1.120**
	Back	0.934	0.229	0.165	0.377	0.292	0.428	0.023	**1.328**	**1.455**	**1.334**	**1.249**	**1.385**
LTE Band 41_Ant 0	Front	0.378	0.194	0.147	0.579	0.232	0.579	0.016	**0.719**	**0.804**	**0.973**	**0.626**	**0.973**
	Back	0.418	0.229	0.165	0.377	0.292	0.428	0.023	**0.812**	**0.939**	**0.818**	**0.733**	**0.869**
LTE Band 48_Ant 7	Front	0.595	0.194	0.147	0.579	0.232	0.579	0.016	**0.936**	**1.021**	**1.190**	**0.843**	**1.190**
	Back	0.890	0.229	0.165	0.377	0.292	0.428	0.023	**1.284**	**1.411**	**1.290**	**1.205**	**1.341**
LTE Band 48_Ant 2	Front	0.152	0.194	0.147	0.579	0.232	0.579	0.016	**0.493**	**0.578**	**0.747**	**0.400**	**0.747**
	Back	0.333	0.229	0.165	0.377	0.292	0.428	0.023	**0.727**	**0.854**	**0.733**	**0.648**	**0.784**
LTE Band 66_Ant 2	Front	0.771	0.194	0.147	0.579	0.232	0.579	0.016	**1.112**	**1.197**	**1.366**	**1.019**	**1.366**
	Back	0.785	0.229	0.165	0.377	0.292	0.428	0.023	**1.179**	**1.306**	**1.185**	**1.100**	**1.236**
LTE Band 66_Ant 0	Front	0.658	0.194	0.147	0.579	0.232	0.579	0.016	**0.999**	**1.084**	**1.253**	**0.906**	**1.253**
	Back	0.865	0.229	0.165	0.377	0.292	0.428	0.023	**1.259**	**1.386**	**1.265**	**1.180**	**1.316**
LTE Band 71_Ant 0	Front	0.159	0.194	0.147	0.579	0.232	0.579	0.016	**0.500**	**0.585**	**0.754**	**0.407**	**0.754**
	Back	0.239	0.229	0.165	0.377	0.292	0.428	0.023	**0.633**	**0.760**	**0.639**	**0.554**	**0.690**
LTE Band 71_Ant 1	Front	0.106	0.194	0.147	0.579	0.232	0.579	0.016	**0.447**	**0.532**	**0.701**	**0.354**	**0.701**
	Back	0.176	0.229	0.165	0.377	0.292	0.428	0.023	**0.570**	**0.697**	**0.576**	**0.491**	**0.627**

WWAN Band	Exposure Position	1	2	3	4	5	6	7	1+2+3 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)	1+4+7 Summed 1g SAR (W/kg)	1+5+7 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3	5GHz WLAN Ant 4	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4					
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)					
FR1 n5_Ant 0	Front	0.081	0.194	0.147	0.579	0.232	0.579	0.016	**0.422**	**0.507**	**0.676**	**0.329**	**0.676**
	Back	0.109	0.229	0.165	0.377	0.292	0.428	0.023	**0.503**	**0.630**	**0.509**	**0.424**	**0.560**
FR1 n5_Ant 1	Front	0.198	0.194	0.147	0.579	0.232	0.579	0.016	**0.539**	**0.624**	**0.793**	**0.446**	**0.793**
	Back	0.237	0.229	0.165	0.377	0.292	0.428	0.023	**0.631**	**0.758**	**0.637**	**0.552**	**0.688**
FR1 n7_Ant 2	Front	0.733	0.194	0.147	0.579	0.232	0.579	0.016	**1.074**	**1.159**	**1.328**	**0.981**	**1.328**
	Back	0.929	0.229	0.165	0.377	0.292	0.428	0.023	**1.323**	**1.450**	**1.329**	**1.244**	**1.380**
FR1 n7_Ant 0	Front	0.709	0.194	0.147	0.579	0.232	0.579	0.016	**1.050**	**1.135**	**1.304**	**0.957**	**1.304**
	Back	0.893	0.229	0.165	0.377	0.292	0.428	0.023	**1.287**	**1.414**	**1.293**	**1.208**	**1.344**
FR1 n12_Ant 0	Front	0.006	0.194	0.147	0.579	0.232	0.579	0.016	**0.347**	**0.432**	**0.601**	**0.254**	**0.601**
	Back	0.007	0.229	0.165	0.377	0.292	0.428	0.023	**0.401**	**0.528**	**0.407**	**0.322**	**0.458**
FR1 n12_Ant 1	Front	0.217	0.194	0.147	0.579	0.232	0.579	0.016	**0.558**	**0.643**	**0.812**	**0.465**	**0.812**
	Back	0.218	0.229	0.165	0.377	0.292	0.428	0.023	**0.612**	**0.739**	**0.618**	**0.533**	**0.669**
FR1 n25_Ant 2	Front	0.921	0.194	0.147	0.579	0.232	0.579	0.016	**1.262**	**1.347**	**1.516**	**1.169**	**1.516**
	Back	0.933	0.229	0.165	0.377	0.292	0.428	0.023	**1.327**	**1.454**	**1.333**	**1.248**	**1.384**
FR1 n25_Ant 0	Front	0.118	0.194	0.147	0.579	0.232	0.579	0.016	**0.459**	**0.544**	**0.713**	**0.366**	**0.713**
	Back	0.154	0.229	0.165	0.377	0.292	0.428	0.023	**0.548**	**0.675**	**0.554**	**0.469**	**0.605**
FR1 n41_Ant 2	Front	0.444	0.194	0.147	0.579	0.232	0.579	0.016	**0.785**	**0.870**	**1.039**	**0.692**	**1.039**
	Back	0.517	0.229	0.165	0.377	0.292	0.428	0.023	**0.911**	**1.038**	**0.917**	**0.832**	**0.968**

FR1 n41_Ant 5	Front	0.265	0.194	0.147	0.579	0.232	0.579	0.016	**0.606**	**0.691**	**0.860**	**0.513**	**0.860**
	Back	0.428	0.229	0.165	0.377	0.292	0.428	0.023	**0.822**	**0.949**	**0.828**	**0.743**	**0.879**
FR1 n41_Ant 0	Front	0.138	0.194	0.147	0.579	0.232	0.579	0.016	**0.479**	**0.564**	**0.733**	**0.386**	**0.733**
	Back	0.357	0.229	0.165	0.377	0.292	0.428	0.023	**0.751**	**0.878**	**0.757**	**0.672**	**0.808**
FR1 n66_Ant 2	Front	0.588	0.194	0.147	0.579	0.232	0.579	0.016	**0.929**	**1.014**	**1.183**	**0.836**	**1.183**
	Back	0.587	0.229	0.165	0.377	0.292	0.428	0.023	**0.981**	**1.108**	**0.987**	**0.902**	**1.038**
FR1 n66_Ant 0	Front	0.105	0.194	0.147	0.579	0.232	0.579	0.016	**0.446**	**0.531**	**0.700**	**0.353**	**0.700**
	Back	0.116	0.229	0.165	0.377	0.292	0.428	0.023	**0.510**	**0.637**	**0.516**	**0.431**	**0.567**
FR1 n71_Ant 0	Front	0.049	0.194	0.147	0.579	0.232	0.579	0.016	**0.390**	**0.475**	**0.644**	**0.297**	**0.644**
	Back	0.055	0.229	0.165	0.377	0.292	0.428	0.023	**0.449**	**0.576**	**0.455**	**0.370**	**0.506**
FR1 n71_Ant 1	Front	0.119	0.194	0.147	0.579	0.232	0.579	0.016	**0.460**	**0.545**	**0.714**	**0.367**	**0.714**
	Back	0.126	0.229	0.165	0.377	0.292	0.428	0.023	**0.520**	**0.647**	**0.526**	**0.441**	**0.577**

<Simultaneous Transmission is active WLAN OFF>

WWAN Band	Exposure Position	1 WWAN 1g SAR (W/kg)	2 Bluetooth Ant 4 1g SAR (W/kg)	**1+2 Summed 1g SAR (W/kg)**
GSM850_Ant 0	Front	0.253	0.016	**0.269**
	Back	0.293	0.023	**0.316**
GSM1900_Ant 2	Front	0.894	0.016	**0.910**
	Back	0.781	0.023	**0.804**
WCDMA II_Ant 2	Front	0.625	0.016	**0.641**
	Back	0.947	0.023	**0.970**
WCDMA II_Ant 0	Front	0.409	0.016	**0.425**
	Back	0.585	0.023	**0.608**
WCDMA IV_Ant 2	Front	0.678	0.016	**0.694**
	Back	0.722	0.023	**0.745**
WCDMA IV_Ant 0	Front	0.518	0.016	**0.534**
	Back	0.853	0.023	**0.876**
WCDMA V_Ant 0	Front	0.183	0.016	**0.199**
	Back	0.303	0.023	**0.326**
WCDMA V_Ant 1	Front	0.135	0.016	**0.151**
	Back	0.271	0.023	**0.294**
CDMA BC0_Ant 0	Front	0.271	0.016	**0.287**
	Back	0.312	0.023	**0.335**
CDMA BC0_Ant 1	Front	0.233	0.016	**0.249**
	Back	0.299	0.023	**0.322**
CDMA BC1_Ant 2	Front	0.783	0.016	**0.799**
	Back	0.911	0.023	**0.934**
CDMA BC1_Ant 0	Front	0.337	0.016	**0.353**
	Back	0.586	0.023	**0.609**
CDMA BC10_Ant 0	Front	0.228	0.016	**0.244**
	Back	0.283	0.023	**0.306**
CDMA BC10_Ant 1	Front	0.268	0.016	**0.284**
	Back	0.300	0.023	**0.323**
LTE Band 7_Ant 2	Front	0.773	0.016	**0.789**
	Back	0.977	0.023	**1.000**
LTE Band 7_Ant 0	Front	0.675	0.016	**0.691**
	Back	0.953	0.023	**0.976**
LTE Band 12_Ant 0	Front	0.179	0.016	**0.195**
	Back	0.298	0.023	**0.321**
LTE Band 12_Ant 1	Front	0.198	0.016	**0.214**
	Back	0.224	0.023	**0.247**
LTE Band 13_Ant 0	Front	0.227	0.016	**0.243**
	Back	0.342	0.023	**0.365**

LTE Band 13_Ant 1	Front	0.212	0.016	**0.228**
	Back	0.243	0.023	**0.266**
LTE Band 14_Ant 0	Front	0.275	0.016	**0.291**
	Back	0.333	0.023	**0.356**
LTE Band 14_Ant 1	Front	0.230	0.016	**0.246**
	Back	0.270	0.023	**0.293**
LTE Band 25_Ant 2	Front	0.730	0.016	**0.746**
	Back	0.870	0.023	**0.893**
LTE Band 25_Ant 0	Front	0.417	0.016	**0.433**
	Back	0.509	0.023	**0.532**
LTE Band 26_Ant 0	Front	0.178	0.016	**0.194**
	Back	0.320	0.023	**0.343**
LTE Band 26_Ant 1	Front	0.253	0.016	**0.269**
	Back	0.271	0.023	**0.294**
LTE Band 30_Ant 2	Front	0.489	0.016	**0.505**
	Back	0.983	0.023	**1.006**
LTE Band 30_Ant 0	Front	0.425	0.016	**0.441**
	Back	0.590	0.023	**0.613**
LTE Band 41_Ant 2	Front	0.525	0.016	**0.541**
	Back	0.934	0.023	**0.957**
LTE Band 41_Ant 0	Front	0.378	0.016	**0.394**
	Back	0.418	0.023	**0.441**
LTE Band 48_Ant 7	Front	0.595	0.016	**0.611**
	Back	0.890	0.023	**0.913**
LTE Band 48_Ant 2	Front	0.152	0.016	**0.168**
	Back	0.333	0.023	**0.356**
LTE Band 66_Ant 2	Front	0.771	0.016	**0.787**
	Back	0.785	0.023	**0.808**
LTE Band 66_Ant 0	Front	0.658	0.016	**0.674**
	Back	0.865	0.023	**0.888**
LTE Band 71_Ant 0	Front	0.159	0.016	**0.175**
	Back	0.239	0.023	**0.262**
LTE Band 71_Ant 1	Front	0.106	0.016	**0.122**
	Back	0.176	0.023	**0.199**

WWAN Band	Exposure Position	1	2	**1+2 Summed 1g SAR (W/kg)**
		WWAN	Bluetooth Ant 4	
		1g SAR (W/kg)	1g SAR (W/kg)	
FR1 n5_Ant 0	Front	0.081	0.016	**0.097**
	Back	0.109	0.023	**0.132**
FR1 n5_Ant 1	Front	0.198	0.016	**0.214**
	Back	0.237	0.023	**0.260**
FR1 n7_Ant 2	Front	0.733	0.016	**0.749**
	Back	0.929	0.023	**0.952**
FR1 n7_Ant 0	Front	0.709	0.016	**0.725**
	Back	0.893	0.023	**0.916**
FR1 n12_Ant 0	Front	0.006	0.016	**0.022**
	Back	0.007	0.023	**0.030**
FR1 n12_Ant 1	Front	0.217	0.016	**0.233**
	Back	0.218	0.023	**0.241**
FR1 n25_Ant 2	Front	0.921	0.016	**0.937**
	Back	0.933	0.023	**0.956**
FR1 n25_Ant 0	Front	0.118	0.016	**0.134**
	Back	0.154	0.023	**0.177**

FR1 n41_Ant 2	Front	0.444	0.016	**0.460**
	Back	0.517	0.023	**0.540**
FR1 n41_Ant 5	Front	0.265	0.016	**0.281**
	Back	0.428	0.023	**0.451**
FR1 n41_Ant 0	Front	0.138	0.016	**0.154**
	Back	0.357	0.023	**0.380**
FR1 n66_Ant 2	Front	0.588	0.016	**0.604**
	Back	0.587	0.023	**0.610**
FR1 n66_Ant 0	Front	0.105	0.016	**0.121**
	Back	0.116	0.023	**0.139**
FR1 n71_Ant 0	Front	0.049	0.016	**0.065**
	Back	0.055	0.023	**0.078**
FR1 n71_Ant 1	Front	0.119	0.016	**0.135**
	Back	0.126	0.023	**0.149**

17. Supplemental Antenna tuner tests results

General Note:

1. This device implements antenna tuning techniques in the several frequency band and list as below. SAR test proposal was measured according to the normally required SAR configurations with the tuner active and worst tune state (auto tune) was used for SAR testing and this design will provide the highest power at different user scenarios and would not influence to the antenna characteristics other than impedance matching.
2. The following test procedure was followed to demonstrate that the SAR results in this report represent the appropriate SAR test conditions. For bands with dynamic tuning implemented, SAR will be measured according to the required FCC SAR test procedures with the dynamic tuner active to allow the device to automatically tune to the antenna state for the respective RF exposure test configurations. Additional single point SAR time-sweep measurements will be evaluated for other tuner states to determine that the other tuner configurations would result in equivalent or lower SAR values.
3. To evaluate all of the tuner states, the 144 tuner states are divided evenly among band, mode and exposure combinations so that at least one single point SAR measurement is measured in each configuration. Single point time-sweep measurements will be performed at the peak SAR location determined by the zoom scan of the configuration with the highest reported SAR for each combination. The tuner state will be established remotely so that the device is not moved for the entire series of single point SAR for the tuner states in each combination. The SAR probe will remain stationary at the same position throughout the entire series of single point measurements for each combination.
4. Since the supported frequency span for LTE 2/4/5/17/38 and n2 falls completely within the supported frequency span for LTE 12/25/26/41/66 and n25, and both bands have the same target power and both LTE bands share the same transmission path, therefore standalone SAR was only assessed for LTE 12/25/26/41/66 and n25. The single point SAR time-sweep measurements were treated independently for each supported ACL frequency band. For the LTE 2/4/5/17/38 and n2 single point SAR measurement selected the highest measured SAR configuration and exposure condition of LTE 12/25/26/41/66 and n25.
5. The tuner state was established remotely through Wi-Fi so that the device is not moved for the entire series of single point SAR for the tuner states in each combination (band, mode, exposure conditions).

Antenna Tuner support list	
Config*	Support transmit antenna and band
Config 0	ANT 0: GSM850, UMTS B5, CDMA BC0/BC10, LTE B5/B12/B13/B14/B17/B26/B71, NR n5/n12/n71 ANT 2: GSM1900, UMTS B2/B4, CDMA BC1, LTE B2/B4/B7/B25/B30/B66/B38/B41, NR n2/n7/n25/n41/n66
Config 1	ANT 0: UMTS B2/B4, CDMA BC1, LTE B2/B4/B7/B25/B30/B66/B38/B41, NR n2/n7/n25/n41/n66

*Config 0 and 1 means output ports of power measurement for different antennas and bands.

17.1 Supplemental Head SAR results

<Ant 0>

Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 7)	0	24	48	72	96	120
GSM850_Ant 0	GPRS (4 Tx slots)	836.4	189	N/A	N/A	Left Cheek	0 mm	0.27	0.299	0.268	0.23	0.116	0.163	0.058	0.23
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 67)	1	25	49	73	97	121
WCDMA B2_Ant 0	RMC12.2K	1852.4	9262	N/A	N/A	Left Cheek	0 mm	0.42	0.514	0.417	0.217	0.464	0.036	0.036	0.141
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 70)	2	26	50	74	98	122
WCDMA B4_Ant 0	RMC12.2K	1732.6	1413	N/A	N/A	Left Cheek	0 mm	0.398	0.458	0.313	0.142	0.313	0.285	0.399	0.256
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 11)	3	27	51	75	99	123
WCDMA B5_Ant 0	RMC12.2K	826.4	4132	N/A	N/A	Left Cheek	0 mm	0.291	0.328	0.202	0.259	0.164	0.069	0.155	0.288
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 11)	4	28	52	76	100	124
CDMA BC0_Ant 0	1xRTT RC3 SO55	836.52	384	N/A	N/A	Left Cheek	0 mm	0.251	0.277	0.046	0.275	0.046	0.189	0.142	0.18
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 67)	5	29	53	77	101	125
CDMA BC1_Ant 0	1xRTT RC3 SO55	1880	600	N/A	N/A	Left Cheek	0 mm	0.421	0.543	0.455	0.17	0.16	0.274	0.389	0.341
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 11)	6	30	54	78	102	126
CDMA BC10_Ant 0	1xRTT RC3 SO55	820.5	580	N/A	N/A	Left Cheek	0 mm	0.47	0.543	0.541	0.474	0.417	0.122	0.246	0.427
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 0)	7	31	55	79	103	127
LTE B7_Ant 0	QPSK	2535	21100	1	99	Left Cheek	0 mm	0.628	0.762	0.589	0.579	0.703	0.655	0.17	0.341
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 5)	8	32	56	80	104	128
LTE B12_Ant 0	QPSK	707.5	23095	1	49	Left Cheek	0 mm	0.207	0.227	0.196	0.168	0.149	0.206	0.111	0.025
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 7)	9	33	57	81	105	129
LTE B13_Ant 0	QPSK	782	23230	1	0	Left Cheek	0 mm	0.208	0.23	0.218	0.066	0.028	0.076	0.142	0.066
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 8)	10	34	58	82	106	130
LTE B14_Ant 0	QPSK	793	23330	1	0	Left Cheek	0 mm	0.21	0.232	0.228	0.123	0.009	0.19	0.066	0.095
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 31)	11	35	59	83	107	131
LTE B25_Ant 0	QPSK	1860	26140	1	0	Left Cheek	0 mm	0.521	0.627	0.596	0.187	0.377	0.606	0.244	0.215
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 84)	12	36	60	84	108	132
LTE B26_Ant 0	QPSK	831.5	26865	1	0	Left Cheek	0 mm	0.27	0.301	0.28	0.109	0.08	0.3	0.194	0.194
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 79)	13	37	61	85	109	133
LTE B30_Ant 0	QPSK	2310	27710	1	25	Left Cheek	0 mm	0.5	0.713	0.482	0.387	0.711	0.14	0.454	0.368
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 0)	14	38	62	86	110	134
LTE B41_HPUE_Ant 0	QPSK	2636.5	41055	1	49	Left Cheek	0 mm	0.466	0.575	0.535	0.554	0.516	0.24	0.335	0.078
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 70)	15	39	63	87	111	135

LTE B66_Ant 0	QPSK	1770	132572	1	0	Left Cheek	0 mm	0.547	0.621	0.44	0.135	0.44	0.412	0.316	0.545
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 7)	16	40	64	88	112	136
LTE B71_Ant 0	QPSK	683	133322	1	0	Left Cheek	0 mm	0.163	0.187	0.118	0.09	0.118	0.023	0.052	0.185
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 7)	17	41	65	89	113	137
FR1 n5_Ant 0	BPSK	836.5	167300	1	1	Left Cheek	0 mm	0.173	0.207	0.148	0.167	0.1	0.062	0.148	0.119
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 0)	18	42	66	90	114	138
FR1 n7_Ant 0	BPSK	2560	51200	1	1	Left Cheek	0 mm	0.253	0.367	0.213	0.27	0.346	0.051	0.079	0.298
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 7)	19	43	67	91	115	139
FR1 n12_Ant 0	BPSK	707.5	141500	1	1	Left Cheek	0 mm	0.098	0.112	0.034	0.072	0.024	0.11	0.024	0.081
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 99)	20	44	68	92	116	140
FR1 25_Ant 0	BPSK	1882.5	376500	1	1	Left Cheek	0 mm	0.57	0.745	0.733	0.219	0.305	0.153	0.467	0.105
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 0)	21	45	69	93	117	141
FR1 n41_Ant 0	BPSK	2592.99	518598	1	1	Left Cheek	0 mm	0.173	0.252	0.098	0.212	0.04	0.098	0.221	0.088
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 70)	22	46	70	94	118	142
FR1 n66_Ant 0	BPSK	1745	349000	1	1	Left Cheek	0 mm	0.176	0.229	0.037	0.16	0.208	0.103	0.227	0.198
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 12)	23	47	71	95	119	143
FR1 n71_Ant 0	BPSK	680.5	136100	1	1	Left Cheek	0 mm	0.046	0.0531	0.032	0.013	0.042	0.013	0.032	0.042

<Ant 2>

Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 0)	0	14	28	42	56	70	84	98	112	126	140
GSM1900_Ant 2	GPRS (4 Tx slots)	1880	661	N/A	N/A	Right Cheek	0 mm	0.291	0.337	0.337	0.164	0.297	0.24	0.23	0.173	0.202	0.306	0.173	0.259	0.23
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 139)	1	15	29	43	57	71	85	99	113	127	141
WCDMA B2_Ant 2	RMC12.2K	1852.4	9262	N/A	N/A	Right Cheek	0 mm	0.432	0.503	0.396	0.272	0.234	0.444	0.472	0.358	0.12	0.206	0.501	0.301	0.053
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 70)	2	16	30	44	58	72	86	100	114	128	142
WCDMA B4_Ant 2	RMC12.2K	1732.6	1413	N/A	N/A	Right Cheek	0 mm	0.281	0.321	0.262	0.281	0.281	0.176	0.148	0.157	0.138	0.176	0.09	0.109	0.033
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 0)	3	17	31	45	59	73	87	101	115	129	143
CDMA BC1_Ant 2	1xRTT RC3 SO55	1880	600	N/A	N/A	Right Cheek	0 mm	0.421	0.494	0.33	0.492	0.406	0.13	0.13	0.282	0.244	0.378	0.359	0.492	0.263
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 12)	4	18	32	46	60	74	88	102	116	130	0
LTE B7_Ant 2	QPSK	2510	20850	1	99	Right Cheek	0 mm	0.644	0.809	0.102	0.35	0.55	0.607	0.255	0.778	0.255	0.55	0.712	0.521	0.407
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 0)	5	19	33	47	61	75	89	103	117	131	1
LTE B25_Ant 2	QPSK	1880	26340	1	0	Right Cheek	0 mm	0.425	0.498	0.277	0.172	0.306	0.201	0.182	0.286	0.248	0.306	0.448	0.325	0.401
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 51)	6	20	34	48	62	76	90	104	118	132	2
LTE B30_Ant 2	QPSK	2310	27710	1	0	Right Cheek	0 mm	0.5	0.588	0.567	0.491	0.557	0.3	0.576	0.272	0.138	0.424	0.243	0.424	0.234
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 12)	7	21	35	49	63	77	91	105	119	133	3
LTE B41_HPUE_Ant 2	QPSK	2506	39750	1	49	Right Cheek	0 mm	0.394	0.478	0.4	0.066	0.286	0.143	0.324	0.381	0.133	0.105	0.409	0.124	0.076
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 134)	8	22	36	50	64	78	92	106	120	134	4
LTE B48_Ant 2	QPSK	3641	56150	1	0	Right Cheek	0 mm	0.24	0.422	0.41	0.172	0.353	0.049	0.239	0.296	0.049	0.334	0.172	0.422	0.258
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 2)	9	23	37	51	65	79	93	107	121	135	5
LTE B66_Ant 2	QPSK	1770	132572	1	0	Right Cheek	0 mm	0.461	0.529	0.289	0.203	0.441	0.289	0.279	0.356	0.46	0.156	0.489	0.27	0.337
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 1)	10	24	38	52	66	80	94	108	122	136	6
FR1 n7_Ant 2	BPSK	2510	502000	1	1	Right Cheek	0 mm	0.454	0.624	0.479	0.155	0.593	0.298	0.051	0.136	0.155	0.232	0.041	0.584	0.536
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 0)	11	25	39	53	67	81	95	109	123	137	7
FR1 25_Ant 2	BPSK	1882.5	376500	1	1	Left Cheek	0 mm	0.368	0.481	0.45	0.108	0.089	0.222	0.289	0.174	0.127	0.136	0.069	0.431	0.422
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 0)	12	26	40	54	68	82	96	110	124	138	8
FR1 n41_Ant 2	BPSK	2592.99	518598	1	1	Left Cheek	0 mm	0.192	0.276	0.179	0.112	0.15	0.055	0.055	0.16	0.112	0.16	0.064	0.026	0.103
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 3)	13	27	41	55	69	83	97	111	125	139	9
FR1 n66_Ant 2	BPSK	1745	349000	1	1	Left Cheek	0 mm	0.361	0.458	0.342	0.199	0.266	0.17	0.085	0.113	0.161	0.027	0.113	0.151	0.237

17.2 Supplemental Body SAR results

<Ant 0>

Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 7)	0	24	48	72	96	120
GSM850_Ant 0	GPRS (4 Tx slots)	836.4	189	N/A	N/A	Left Side	10 mm	0.4	0.505	0.332	0.446	0.027	0.141	0.493	0.284
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 67)	1	25	49	73	97	121
WCDMA B2_Ant 0	RMC12.2K	1852.4	9262	N/A	N/A	Bottom Side	10 mm	0.799	1.07	0.697	0.468	0.354	0.297	0.43	0.792
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 70)	2	26	50	74	98	122
WCDMA B4_Ant 0	RMC12.2K	1732.6	1413	N/A	N/A	Bottom Side	10 mm	0.765	0.894	0.235	0.882	0.187	0.416	0.349	0.844
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 11)	3	27	51	75	99	123
WCDMA B5_Ant 0	RMC12.2K	826.4	4132	N/A	N/A	Left Side	10 mm	0.534	0.712	0.253	0.71	0.51	0.215	0.139	0.51
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 11)	4	28	52	76	100	124
CDMA BC0_Ant 0	RTAP 153.6Kbps	836.52	384	N/A	N/A	Left Side	10 mm	0.523	0.704	0.616	0.492	0.207	0.702	0.169	0.635
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 67)	5	29	53	77	101	125
CDMA BC1_Ant 0	RTAP 153.6Kbps	1908.75	1175	N/A	N/A	Left Side	10 mm	0.795	1.13	0.747	0.28	0.538	0.357	0.414	1.052
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 11)	6	30	54	78	102	126
CDMA BC10_Ant 0	RTAP 153.6Kbps	820.5	580	N/A	N/A	Left Side	10 mm	0.46	0.623	0.439	0.353	0.21	0.401	0.401	0.353
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 0)	7	31	55	79	103	127
LTE B7_Ant 0	QPSK	2535	21100	1	99	Back	10 mm	0.795	1.38	1.207	0.797	1.13	1.149	0.33	0.607
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 5)	8	32	56	80	104	128
LTE B12_Ant 0	QPSK	707.5	23095	1	49	Left Side	10 mm	0.264	0.3	0.146	0.269	0.098	0.069	0.269	0.127
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 7)	9	33	57	81	105	129
LTE B13_Ant 0	QPSK	782	23230	1	0	Left Side	10 mm	0.403	0.456	0.302	0.416	0.044	0.073	0.14	0.13
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 85)	10	34	58	82	106	130
LTE B14_Ant 0	QPSK	793	23330	1	0	Left Side	10 mm	0.387	0.447	0.359	0.264	0.207	0.074	0.245	0.026
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 31)	11	35	59	83	107	131
LTE B25_Ant 0	QPSK	1860	26140	1	0	Bottom Side	10 mm	0.811	1.03	0.523	0.809	0.142	0.771	0.942	0.866
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 11)	12	36	60	84	108	132
LTE B26_Ant 0	QPSK	831.5	26865	1	0	Left Side	10 mm	0.409	0.515	0.313	0.446	0.342	0.332	0.132	0.161
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 79)	13	37	61	85	109	133
LTE B30_Ant 0	QPSK	2310	27710	1	49	Left Side	10 mm	0.753	0.926	0.343	0.286	0.895	0.857	0.276	0.781
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 0)	14	38	62	86	110	134
LTE B41_HPUE_Ant 0	QPSK	2636.5	41055	1	99	Left Side	10 mm	0.373	0.529	0.337	0.27	0.156	0.479	0.117	0.508
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 70)	15	39	63	87	111	135

LTE B66_Ant 0	QPSK	1745	132322	1	0	Bottom Side	10 mm	0.748	0.979	0.758	0.396	0.491	0.339	0.358	0.282
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 7)	16	40	64	88	112	136
LTE B71_Ant 0	QPSK	683	133322	1	0	Back	10 mm	0.205	0.222	0.134	0.049	0.058	0.077	0.163	0.172
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 7)	17	41	65	89	113	137
FR1 n5_Ant 0	BPSK	836.5	167300	1	1	Left Side	10 mm	0.125	0.166	0.126	0.164	0.126	0.097	0.031	0.04
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 0)	18	42	66	90	114	138
FR1 n7_Ant 0	BPSK	2535	507000	1	1	Back	10 mm	0.716	0.994	0.935	0.411	0.83	0.954	0.078	0.373
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 7)	19	43	67	91	115	139
FR1 n12_Ant 0	BPSK	707.5	141500	1	1	Left Side	10 mm	0.013	0.0156	0.004	0.004	0.014	0.004	0.014	0.014
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 31)	20	44	68	92	116	140
FR1 25_Ant 0	BPSK	1860	376000	1	1	Left Side	10 mm	0.166	0.242	0.03	0.154	0.164	0.069	0.011	0.202
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 0)	21	45	69	93	117	141
FR1 n41_Ant 0	BPSK	2592.99	518598	1	1	Back	10 mm	0.253	0.311	0.119	0.299	0.233	0.119	0.252	0.09
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 70)	22	46	70	94	118	142
FR1 n66_Ant 0	BPSK	1745	349000	1	1	Back	10 mm	0.112	0.159	0.138	0.157	0.081	0.062	0.157	0.09
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)						
									Auto-Tune (State 12)	23	47	71	95	119	143
FR1 n71_Ant 0	BPSK	680.5	136100	50	1	Left Side	10 mm	0.069	0.092	0.033	0.014	0.033	0.052	0.061	0.014

<Ant 2>

Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 0)	0	14	28	42	56	70	84	98	112	126	140
GSM1900_Ant 2	GPRS (4 Tx slots)	1880	661	N/A	N/A	Bottom Side	10 mm	0.749	0.917	0.801	0.086	0.639	0.858	0.553	0.686	0.582	0.648	0.21	0.877	0.258
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 139)	1	15	29	43	57	71	85	99	113	127	141
WCDMA B2_Ant 2	RMC12.2K	1880	9400	N/A	N/A	Bottom Side	10 mm	0.812	0.962	0.741	0.731	0.141	0.284	0.931	0.77	0.141	0.836	0.846	0.15	0.798
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 70)	2	16	30	44	58	72	86	100	114	128	142
WCDMA B4_Ant 2	RMC12.2K	1752.6	1513	N/A	N/A	Bottom Side	10 mm	0.731	0.814	0.622	0.764	0.774	0.574	0.145	0.136	0.06	0.707	0.364	0.764	0.479
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 0)	3	17	31	45	59	73	87	101	115	129	143
CDMA BC1_Ant 2	RTAP 153.6Kbps	1880	600	N/A	N/A	Back	10 mm	0.778	1.31	0.053	0.081	0.1	0.11	0.091	0.053	0.072	0.1	0.091	0.062	0.072
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 12)	4	18	32	46	60	74	88	102	116	130	0
LTE B7_Ant 2	QPSK	2560	21350	1	0	Right Side	10 mm	0.798	1.01	0.779	0.694	0.56	0.522	0.056	0.96	0.208	0.589	0.96	0.637	0.97
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 0)	5	19	33	47	61	75	89	103	117	131	1
LTE B25_Ant 2	QPSK	1880	26340	1	0	Bottom Side	10 mm	0.768	0.674	0.158	0.453	0.52	0.205	0.262	0.272	0.101	0.348	0.177	0.091	0.11
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 51)	6	20	34	48	62	76	90	104	118	132	2
LTE B30_Ant 2	QPSK	2310	27710	50	0	Right Side	10 mm	0.791	1.04	0.305	0.381	0.79	0.933	0.962	0.819	0.581	0.667	0.705	0.667	0.733
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 12)	7	21	35	49	63	77	91	105	119	133	3
LTE B41_HPUE_Ant 2	QPSK	2506	39750	1	0	Right Side	10 mm	0.752	0.831	0.524	0.458	0.448	0.581	0.2	0.448	0.162	0.381	0.496	0.619	0.515
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 134)	8	22	36	50	64	78	92	106	120	134	4
LTE B48_Ant 2	QPSK	3641	56150	1	0	Right Side	10 mm	0.359	0.727	0.706	0.182	0.125	0.42	0.554	0.725	0.373	0.554	0.315	0.727	0.658
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 2)	9	23	37	51	65	79	93	107	121	135	5
LTE B66_Ant 2	QPSK	1770	132572	1	0	Bottom Side	10 mm	0.727	0.948	0.641	0.936	0.575	0.441	0.365	0.27	0.27	0.727	0.717	0.432	0.879
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 1)	10	24	38	52	66	80	94	108	122	136	6
FR1 n7_Ant 2	BPSK	2560	51200	1	1	Right Side	10 mm	0.688	1.14	0.909	0.49	1.062	0.386	0.852	0.29	0.767	0.824	0.814	1.109	0.919
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 0)	11	25	39	53	67	81	95	109	123	137	7
FR1 25_Ant 2	BPSK	1860	37200	1	1	Back	10 mm	0.721	0.953	0.103	0.189	0.865	0.418	0.646	0.732	0.065	0.646	0.799	0.57	0.332
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 0)	12	26	40	54	68	82	96	110	124	138	8
FR1 n41_Ant 2	BPSK	2592.99	518598	1	1	Right Side	10 mm	0.576	0.764	0.076	0.505	0.286	0.343	0.191	0.486	0.248	0.486	0.572	0.429	0.533
Mode	Service/ Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)											
									Auto-Tune (State 3)	13	27	41	55	69	83	97	111	125	139	9
FR1 n66_Ant 2	BPSK	1745	349000	1	1	Bottom Side	10 mm	0.616	0.855	0.748	0.786	0.777	0.367	0.853	0.396	0.129	0.167	0.482	0.291	0.643

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18. Uncertainty Assessment

Per KDB 865664 D01 SAR measurement 100MHz to 6GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg and the measured 10-g SAR within a frequency band is < 3.75 W/kg. The expanded SAR measurement uncertainty must be ≤ 30%, for a confidence interval of k = 2. If these conditions are met, extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. For this device, the highest measured 1-g SAR is less 1.5W/kg and highest measured 10-g SAR is less 3.75W/kg. Therefore, the measurement uncertainty table is not required in this report.

19. References

[1] FCC 47 CFR Part 2 “Frequency Allocations and Radio Treaty Matters; General Rules and Regulations”

[2] ANSI/IEEE Std. C95.1-1992, “IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz”, September 1992

[3] IEEE Std. 1528-2013, “IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques”, Sep 2013

[4] SPEAG DASY System Handbook

[5] FCC KDB 248227 D01 v02r02, “SAR Guidance for IEEE 802.11 (WiFi) Transmitters”, Oct 2015.

[6] FCC KDB 447498 D01 v06, “Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies”, Oct 2015

[7] FCC KDB 648474 D04 v01r03, “SAR Evaluation Considerations for Wireless Handsets”, Oct 2015.

[8] FCC KDB 941225 D01 v03r01, “3G SAR MEAUREMENT PROCEDURES”, Oct 2015

[9] FCC KDB 941225 D05 v02r05, “SAR Evaluation Considerations for LTE Devices”, Dec 2015

[10] FCC KDB 941225 D05A v01r02, “Rel. 10 LTE SAR Test Guidance and KDB Inquiries”, Oct 2015

[11] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.

[12] FCC KDB 941225 D07 v01r02, " SAR Evaluation Procedures for UMPC Mini-Tablet Devices", Oct 2015.

[13] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.

[14] FCC KDB 865664 D02 v01r02, “RF Exposure Compliance Reporting and Documentation Considerations” Oct 2015.