



FCC SAR TEST REPORT

FCC ID : A4RG6QU3
Equipment : Phone
Model Name : G6QU3
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 Jun. 01, 2020 and testing was started from Jun. 19, 2020 and completed on Aug. 04, 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.

Approved by: Cona Huang / Deputy Manager

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History of this test report

Report No.	Version	Description	Issued Date
FA050515A	01	Initial issue of report	Aug. 05, 2020



1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for Google LLC, Phone, G6QU3, 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)	Product Specific (Separation 0mm)	
		1g SAR (W/kg)			10g SAR (W/kg)	
Licensed	GSM850	1.18	0.60	0.60		1.59
	GSM1900	0.50	1.07	0.89		
	WCDMA II	0.95	1.20	1.00		
	WCDMA IV	0.80	1.15	1.00		
	WCDMA V	1.15	0.62	0.62		
	CDMA BC0	1.07	0.74	0.74		
	CDMA BC1	1.00	1.14	0.94		
	CDMA BC10	1.20	0.76	0.78		
	LTE Band 7	0.41	1.20	1.00		
	LTE Band 12/17	1.08	0.66	0.66		
	LTE Band 13	1.09	0.69	0.69		
	LTE Band 14	1.11	0.82	0.82		
	LTE Band 25/2	0.96	1.14	0.95		
	LTE Band 26/5	1.12	0.71	0.71		
	LTE Band 30	0.25	1.19	0.99		
	LTE Band 41/38	0.44	1.19	0.99		
	LTE Band 48	0.28	1.20	1.00		
	LTE Band 66/4	0.67	1.16	0.94		
	LTE Band 71	1.09	0.63	0.63		
	FR1 n5	1.19	0.38	0.38		
FR1 n12	0.27	0.53	0.53			
FR1 n25/2	0.90	1.20	1.00			
FR1 n66	0.63	1.20	1.00			
FR1 n71	0.34	0.54	0.54			
DTS	2.4GHz WLAN	0.55	0.59	0.59		1.59
NII	5GHz WLAN	0.58	0.58	0.45	1.43	1.59
DSS	Bluetooth	0.24	0.39	0.39		1.56
Date of Testing:		2020/6/19 ~ 2020/8/4				

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 (1g SAR 1.6 W/kg for partial-body, 10g SAR 4.0W/kg for extremity) 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: **Ching Chen**



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	G6QU3
FCC ID	A4RG6QU3
Wireless Technology and Frequency Range	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz WCDMA Band IV: 1712.4 MHz ~ 1752.6 MHz WCDMA Band V: 826.4 MHz ~ 846.6 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: 1850.7 MHz ~ 1909.3 MHz LTE Band 4: 1710.7 MHz ~ 1754.3 MHz LTE Band 5: 824.7 MHz ~ 848.3 MHz LTE Band 7: 2502.5 MHz ~ 2567.5 MHz LTE Band 12: 699.7 MHz ~ 715.3 MHz LTE Band 13: 779.5 MHz ~ 784.5 MHz LTE Band 14: 790.5 MHz ~ 795.5 MHz LTE Band 17: 706.5 MHz ~ 713.5 MHz LTE Band 25: 1850.7 MHz ~ 1914.3 MHz LTE Band 26: 821.5 MHz ~ 841.5 MHz LTE Band 30: 2307.5 MHz ~ 2312.5 MHz LTE Band 38: 2572.5 MHz ~ 2617.5 MHz LTE Band 41: 2498.5 MHz ~ 2687.5 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710.7 MHz ~ 1779.3 MHz LTE Band 71: 665.5 MHz ~ 695.5 MHz 5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n12 : 699 MHz ~ 716 MHz 5G NR n25 : 1850 MHz ~ 1915 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 ~ 2462 MHz WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz WLAN 5.5GHz Band: 5500 MHz ~ 5720 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC: 13.56 MHz
Mode	GSM/GPRS/EDGE AMR / RMC 12.2Kbps HSDPA HSUPA DC-HSDPA CDMA2000 : 1xRTT/1xEv-Do(Rev.0)/1xEv-Do(Rev.A) LTE: QPSK, 16QAM, 64QAM 5G NR: DFT-s-OFDM/CP-OFDM, Pi/ BPSK/QPSK/16QAM/64QAM/256QAM WLAN: 802.11a/b/g/n/ac HT20 / HT40 / VHT20 / VHT40 / VHT80 Bluetooth BR/EDR/LE NFC: ASK
GSM / (E)GPRS Dual 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:	<ol style="list-style-type: none"> 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. The device implements the power management and sensor detection for SAR compliance at different exposure conditions (head, body-worn, hotspot/extremity) 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. 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, extremity) 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 use for SAR testing, the other DSI may same powr levels but DSI 0 is covered for all modes under the mobile RF exposure evaluation, please refer to Sporton's test report FA050515C

Table with 2 columns: Config* and Support transmit antenna and band. It lists configurations for Config 0 and Config 1, detailing supported antennas and bands like GSM850, UMTS B5, CDMA BC0/BC10, etc.

*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	33.5	33.5	33.5	33.5	33.5	33.5
GSM2Tx	850	ANT0	32.5	32.5	32.5	32.5	32.5	32.5
GSM3Tx	850	ANT0	30.5	30.5	30.5	30.5	30.5	30.5
GSM4Tx	850	ANT0	29.5	29.5	29.5	29.5	29.5	29.5
EGPRS1Tx	850	ANT0	27.5	27.5	27.5	27.5	27.5	27.5
EGPRS2Tx	850	ANT0	27.0	27.0	27.0	27.0	27.0	27.0
EGPRS3Tx	850	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
EGPRS4Tx	850	ANT0	23.0	23.0	23.0	23.0	23.0	23.0
GSM1Tx	1900	ANT2	30.5	30.5	30.5	30.5	30.5	30.5
GSM2Tx	1900	ANT2	29.7	29.7	29.7	29.7	29.7	29.7
GSM3Tx	1900	ANT2	28.0	28.0	28.0	28.0	28.0	28.0
GSM4Tx	1900	ANT2	27.0	27.0	27.0	27.0	27.0	27.0
EGPRS1Tx	1900	ANT2	26.5	26.5	26.5	26.5	26.5	26.5
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	25.7	25.7	25.5	24.7	25.7	24.7
WCDMA HSDPA/HSUPA	B2	ANT2	24.7	24.7	24.5	23.7	24.7	23.7
WCDMA AMR/RMC	B4	ANT2	25.7	25.7	25.7	25.2	25.7	25.2
WCDMA HSDPA/HSUPA	B4	ANT2	24.7	24.7	24.7	24.2	24.7	24.2
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	25.5	25.5	25.5	25.5	25.5	25.5
CDMA	BC1	ANT2	25.5	25.5	24.7	23.9	25.5	23.9
CDMA	BC10	ANT0	25.5	25.5	25.5	25.5	25.5	25.5
LTE	B2	ANT2	25.7	25.7	25.0	24.2	25.7	24.2
LTE	B4	ANT2	25.7	25.7	24.9	24.1	25.7	24.1
LTE	B5	ANT0	25.7	25.7	25.7	25.7	25.7	25.7
LTE	B7	ANT2	25.7	25.7	25.7	24.9	25.7	24.9
LTE	B12	ANT0	25.7	25.7	25.7	25.7	25.7	25.7
LTE	B13	ANT0	25.2	25.2	25.2	25.2	25.2	25.2
LTE	B14	ANT0	25.7	25.7	25.7	25.7	25.7	25.7
LTE	B17	ANT0	25.7	25.7	25.7	25.7	25.7	25.7
LTE	B25	ANT2	25.7	25.7	25.0	24.2	25.7	24.2
LTE	B26	ANT0	25.7	25.7	25.7	25.7	25.7	25.7
LTE	B30	ANT2	23.7	23.7	23.7	23.7	23.7	23.7
LTE	B38	ANT2	25.7	25.7	25.7	25.1	25.7	25.1
LTE	B41	ANT2	25.7	25.7	25.7	25.1	25.7	25.1
LTE	B41_HPUE	ANT2	27.5	27.5	27.5	26.9	27.5	26.9
LTE	B48	ANT7	25.2	25.2	24.6	23.8	25.2	23.8
LTE	B66	ANT2	25.7	25.7	24.9	24.1	25.7	24.1
LTE	B71	ANT0	25.7	25.7	25.7	25.7	25.7	25.7
5G FR1	n2	ANT2	25.7	25.7	24.5	23.7	25.7	23.7
5G FR1	n5	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
5G FR1	n12	ANT0	24.7	24.7	24.7	24.7	24.7	24.7
5G FR1	n25	ANT2	25.7	25.7	24.5	23.7	25.7	23.7
5G FR1	n66	ANT2	25.7	25.7	25.7	25.3	25.7	25.3
5G FR1	n71	ANT0	25.7	25.7	25.7	25.7	25.7	25.7



Config1			Secondary Transmitter 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	ANT1	33.5	33.3	33.5	33.5	32.5	33.5
GSM2Tx	850	ANT1	32.5	30.3	32.5	32.5	29.5	32.5
GSM3Tx	850	ANT1	30.5	28.5	30.5	30.5	27.7	30.5
GSM4Tx	850	ANT1	29.5	27.3	29.5	29.5	26.5	29.5
EGPRS1Tx	850	ANT1	27.5	27.5	27.5	27.5	27.5	27.5
EGPRS2Tx	850	ANT1	27.0	27.0	27.0	27.0	27.0	27.0
EGPRS3Tx	850	ANT1	25.0	25.0	25.0	25.0	25.0	25.0
EGPRS4Tx	850	ANT1	23.0	23.0	23.0	23.0	23.0	23.0
GSM1Tx	1900	ANT0	30.0	30.0	29.3	28.5	30.0	28.5
GSM2Tx	1900	ANT0	29.2	29.2	26.3	25.5	29.2	25.5
GSM3Tx	1900	ANT0	27.5	27.5	24.5	23.7	27.5	23.7
GSM4Tx	1900	ANT0	26.5	26.5	23.3	22.5	26.5	22.5
EGPRS1Tx	1900	ANT0	26.0	26.0	26.0	26.0	26.0	26.0
EGPRS2Tx	1900	ANT0	25.5	25.5	25.5	25.5	25.5	25.5
EGPRS3Tx	1900	ANT0	24.5	24.5	24.5	23.7	24.5	23.7
EGPRS4Tx	1900	ANT0	23.5	23.5	22.5	22.5	23.5	22.5
WCDMA AMR/RMC	B2	ANT0	25.7	25.7	21.0	20.2	25.7	20.2
WCDMA HSDPA/HSUPA	B2	ANT0	24.7	24.7	20.0	19.2	24.7	19.2
WCDMA AMR/RMC	B4	ANT0	25.7	25.7	21.4	20.6	25.7	20.6
WCDMA HSDPA/HSUPA	B4	ANT0	24.7	24.7	20.4	19.6	24.7	19.6
WCDMA AMR/RMC	B5	ANT1	25.0	24.4	25.0	25.0	23.6	25.0
WCDMA HSDPA/HSUPA	B5	ANT1	24.0	23.4	24.0	24.0	22.6	24.0
CDMA	BC0	ANT1	25.5	23.2	25.5	25.5	22.4	25.5
CDMA	BC1	ANT0	25.5	25.5	21.0	20.2	25.5	20.2
CDMA	BC10	ANT1	25.5	25.4	25.5	25.5	24.6	25.5
LTE	B2	ANT0	25.7	25.7	20.2	19.4	25.7	19.4
LTE	B4	ANT0	25.7	25.7	20.8	20.0	25.7	20.0
LTE	B5	ANT1	25.7	25.0	25.7	25.7	24.2	25.7
LTE	B7	ANT0	25.7	25.7	22.8	22.0	25.7	22.0
LTE	B12	ANT1	25.7	25.4	25.7	25.7	24.6	25.7
LTE	B13	ANT1	25.2	25.2	25.2	25.2	24.4	25.2
LTE	B14	ANT1	25.7	25.4	25.7	25.7	24.6	25.7
LTE	B17	ANT1	25.7	25.4	25.7	25.7	24.6	25.7
LTE	B25	ANT0	25.7	25.7	20.2	19.4	25.7	19.4
LTE	B26	ANT1	25.7	25.0	25.7	25.7	24.2	25.7
LTE	B30	ANT0	23.7	23.7	22.3	21.5	23.7	21.5
LTE	B38	ANT0	25.7	25.7	23.2	22.4	25.7	22.4
LTE	B41	ANT0	25.7	25.7	23.2	22.4	25.7	22.4
LTE	B41HPUE	ANT0	27.5	27.5	25.0	24.2	27.5	24.2
LTE	B48	ANT2	22.3	22.3	22.3	21.7	22.3	21.7
LTE	B66	ANT0	25.7	25.7	20.8	20.0	25.7	20.0
LTE	B71	ANT1	25.7	25.2	25.7	25.7	24.4	25.7
5G FR1	n2	ANT0	25.7	25.7	19.2	18.4	25.7	18.4
5G FR1	n5	ANT1	25.0	24.0	25.0	25.0	23.2	25.0
5G FR1	n12	ANT1	24.7	24.7	24.7	24.7	24.7	24.7
5G FR1	n25	ANT0	25.7	25.7	19.2	18.4	25.7	18.4
5G FR1	n66	ANT0	25.7	25.7	20.9	20.1	25.7	20.1
5G FR1	n71	ANT1	25.7	25.7	25.7	25.7	25.7	25.7



<WLAN Maximum Power>

General Note:

1. The device implements the power management for WLAN SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity). 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 or extremity 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		
2.4GHz WLAN	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
	802.11b 1Mbps		1	2412	19.50	19.50	19.50	19.50
6			2437	19.50	19.50	19.50	19.50	22.5
11			2462	19.50	19.50	19.50	19.50	22.5
802.11g 6Mbps		1	2412	16.00	16.00	16.00	16.00	19.0
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	16.50	16.50	16.50	16.50	19.5
802.11n-HT20 MCS0		1	2412	15.00	15.00	15.00	15.00	18.0
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	15.50	15.50	15.50	15.50	18.5
802.11ac-VHT20 MCS0		1	2412	14.50	14.50	14.50	14.50	17.5
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	15.50	15.50	15.50	15.50	18.5

<5GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
5.2GHz WLAN	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
	802.11a 6Mbps		36	5180	17.50	17.50	17.50	17.50
40			5200	18.00	18.00	18.00	18.00	21.0
44			5220	18.00	18.00	18.00	18.00	21.0
48			5240	17.50	17.50	17.50	17.50	20.5
802.11n-HT20 MCS0		36	5180	17.50	17.50	17.50	17.50	20.5
		40	5200	18.00	18.00	18.00	18.00	21.0
		44	5220	18.00	18.00	18.00	18.00	21.0
802.11n-HT40 MCS0		48	5240	17.50	17.50	17.50	17.50	20.5
		38	5190	16.00	16.00	16.00	16.00	19.0
		46	5230	17.50	17.50	17.50	17.50	20.5
802.11ac-VHT20 MCS0		36	5180	17.50	17.50	17.50	17.50	20.5
		40	5200	18.00	18.00	18.00	18.00	21.0
		44	5220	18.00	18.00	18.00	18.00	21.0
802.11ac-VHT40 MCS0		48	5240	17.50	17.50	17.50	17.50	20.5
		38	5190	16.00	16.00	16.00	16.00	19.0
		46	5230	17.50	17.50	17.50	17.50	20.5
802.11ac-VHT80 MCS0		42	5210	15.00	15.00	15.00	15.00	18.0



	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	18.00	18.00	18.00	18.00	21.0
		56	5280	17.50	17.50	17.50	17.50	20.5
		60	5300	17.50	17.50	17.50	17.50	20.5
		64	5320	17.50	17.50	17.50	17.50	20.5
	802.11n-HT20 MCS0	52	5260	18.00	18.00	18.00	18.00	21.0
		56	5280	17.50	17.50	17.50	17.50	20.5
		60	5300	17.50	17.50	17.50	17.50	20.5
		64	5320	17.00	17.00	17.00	17.00	20.0
	802.11n-HT40 MCS0	54	5270	17.50	17.50	17.50	17.50	20.5
		62	5310	16.50	16.50	16.50	16.50	19.5
	802.11ac-VHT20 MCS0	52	5260	18.00	18.00	18.00	18.00	21.0
		56	5280	17.50	17.50	17.50	17.50	20.5
		60	5300	17.50	17.50	17.50	17.50	20.5
		64	5320	17.00	17.00	17.00	17.00	20.0
	802.11ac-VHT40 MCS0	54	5270	17.50	17.50	17.50	17.50	20.5
		62	5310	16.50	16.50	16.50	16.50	19.5
802.11ac-VHT80 MCS0	58	5290	16.00	16.00	16.00	16.00	19.0	

	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	18.50	18.50	18.50	18.50	21.5
		116	5580	18.50	18.50	18.50	18.50	21.5
		124	5620	18.50	18.50	18.50	18.50	21.5
		132	5660	18.50	18.50	18.50	18.50	21.5
		144	5720	18.50	18.50	18.50	18.50	21.5
	802.11n-HT20 MCS0	100	5500	18.50	18.50	18.50	18.50	21.5
		116	5580	18.50	18.50	18.50	18.50	21.5
		124	5620	18.50	18.50	18.50	18.50	21.5
		132	5660	18.50	18.50	18.50	18.50	21.5
		144	5720	18.50	18.50	18.50	18.50	21.5
	802.11n-HT40 MCS0	102	5510	17.00	17.00	17.00	17.00	20.0
		110	5550	17.50	17.50	17.50	17.50	20.5
		126	5630	17.50	17.50	17.50	17.50	20.5
		134	5670	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT20 MCS0	100	5500	18.50	18.50	18.50	18.50	21.5
		116	5580	18.50	18.50	18.50	18.50	21.5
		124	5620	18.50	18.50	18.50	18.50	21.5
		132	5660	18.50	18.50	18.50	18.50	21.5
	802.11ac-VHT40 MCS0	102	5510	17.00	17.00	17.00	17.00	20.0
		110	5550	17.50	17.50	17.50	17.50	20.5
		126	5630	17.50	17.50	17.50	17.50	20.5
		134	5670	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT80 MCS0	106	5530	16.00	16.00	16.00	16.00	19.0
		122	5610	17.50	17.50	17.50	17.50	20.5
		138	5690	17.50	17.50	17.50	17.50	20.5
		142	5710	17.50	17.50	17.50	17.50	20.5



5.8GHz 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
802.11a 6Mbps		149	5745	18.50	18.50	18.50	18.50	21.5
		157	5785	18.50	18.50	18.50	18.50	21.5
		165	5825	17.00	17.00	17.00	17.00	20.0
802.11n-HT20 MCS0		149	5745	18.50	18.50	18.50	18.50	21.5
		157	5785	18.50	18.50	18.50	18.50	21.5
		165	5825	18.50	18.50	18.50	18.50	21.5
802.11n-HT40 MCS0		151	5755	17.50	17.50	17.50	17.50	20.5
		159	5795	17.50	17.50	17.50	17.50	20.5
802.11ac-VHT20 MCS0		149	5745	18.50	18.50	18.50	18.50	21.5
		157	5785	18.50	18.50	18.50	18.50	21.5
		165	5825	18.50	18.50	18.50	18.50	21.5
802.11ac-VHT40 MCS0		151	5755	17.50	17.50	17.50	17.50	20.5
		159	5795	17.50	17.50	17.50	17.50	20.5
802.11ac-VHT80 MCS0		155	5775	17.50	17.50	17.50	17.50	20.5

<Power Table 1>

<2.4GHz WLAN>

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
802.11b 1Mbps		1	2412	19.50	19.50	19.50	19.50	22.5
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	19.50	19.50	19.50	19.50	22.5
802.11g 6Mbps		1	2412	16.00	16.00	16.00	16.00	19.0
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	16.50	16.50	16.50	16.50	19.5
802.11n-HT20 MCS0		1	2412	15.00	15.00	15.00	15.00	18.0
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	15.50	15.50	15.50	15.50	18.5
802.11ac-VHT20 MCS0		1	2412	14.50	14.50	14.50	14.50	17.5
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	15.50	15.50	15.50	15.50	18.5



<5GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO			
5.2GHz WLAN	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	
	802.11a 6Mbps		36	5180	17.50	17.50	17.50	17.50	20.5
			40	5200	18.00	18.00	18.00	18.00	21.0
			44	5220	18.00	18.00	18.00	18.00	21.0
			48	5240	17.50	17.50	17.50	17.50	20.5
	802.11n-HT20 MCS0		36	5180	17.50	17.50	17.50	17.50	20.5
			40	5200	18.00	18.00	18.00	18.00	21.0
			44	5220	18.00	18.00	18.00	18.00	21.0
			48	5240	17.50	17.50	17.50	17.50	20.5
	802.11n-HT40 MCS0		38	5190	16.00	16.00	16.00	16.00	19.0
			46	5230	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT20 MCS0		36	5180	17.50	17.50	17.50	17.50	20.5
			40	5200	18.00	18.00	18.00	18.00	21.0
			44	5220	18.00	18.00	18.00	18.00	21.0
48			5240	17.50	17.50	17.50	17.50	20.5	
802.11ac-VHT40 MCS0		38	5190	16.00	16.00	16.00	16.00	19.0	
		46	5230	17.50	17.50	17.50	17.50	20.5	
802.11ac-VHT80 MCS0		42	5210	15.00	15.00	15.00	15.00	18.0	

Transmit Antenna				SISO	SISO	MIMO			
5.3GHz WLAN	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	
	802.11a 6Mbps		52	5260	18.00	18.00	18.00	18.00	21.0
			56	5280	17.50	17.50	17.50	17.50	20.5
			60	5300	17.50	17.50	17.50	17.50	20.5
			64	5320	17.50	17.50	17.50	17.50	20.5
	802.11n-HT20 MCS0		52	5260	18.00	18.00	18.00	18.00	21.0
			56	5280	17.50	17.50	17.50	17.50	20.5
			60	5300	17.50	17.50	17.50	17.50	20.5
			64	5320	17.00	17.00	17.00	17.00	20.0
	802.11n-HT40 MCS0		54	5270	17.50	17.50	17.50	17.50	20.5
			62	5310	16.50	16.50	16.50	16.50	19.5
	802.11ac-VHT20 MCS0		52	5260	18.00	18.00	18.00	18.00	21.0
			56	5280	17.50	17.50	17.50	17.50	20.5
			60	5300	17.50	17.50	17.50	17.50	20.5
			64	5320	17.00	17.00	17.00	17.00	20.0
	802.11ac-VHT40 MCS0		54	5270	17.50	17.50	17.50	17.50	20.5
			62	5310	16.50	16.50	16.50	16.50	19.5
	802.11ac-VHT80 MCS0		58	5290	16.00	16.00	16.00	16.00	19.0



	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	18.50	18.50	18.50	18.50	21.5
		116	5580	18.50	18.50	18.50	18.50	21.5
		124	5620	18.50	18.50	18.50	18.50	21.5
		132	5660	18.50	18.50	18.50	18.50	21.5
		144	5720	18.50	18.50	18.50	18.50	21.5
	802.11n-HT20 MCS0	100	5500	18.50	18.50	18.50	18.50	21.5
		116	5580	18.50	18.50	18.50	18.50	21.5
		124	5620	18.50	18.50	18.50	18.50	21.5
		132	5660	18.50	18.50	18.50	18.50	21.5
		144	5720	18.50	18.50	18.50	18.50	21.5
	802.11n-HT40 MCS0	102	5510	17.00	17.00	17.00	17.00	20.0
		110	5550	17.50	17.50	17.50	17.50	20.5
		126	5630	17.50	17.50	17.50	17.50	20.5
		134	5670	17.50	17.50	17.50	17.50	20.5
		142	5710	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT20 MCS0	100	5500	18.50	18.50	18.50	18.50	21.5
		116	5580	18.50	18.50	18.50	18.50	21.5
		124	5620	18.50	18.50	18.50	18.50	21.5
		132	5660	18.50	18.50	18.50	18.50	21.5
		144	5720	18.50	18.50	18.50	18.50	21.5
	802.11ac-VHT40 MCS0	102	5510	17.00	17.00	17.00	17.00	20.0
		110	5550	17.50	17.50	17.50	17.50	20.5
		126	5630	17.50	17.50	17.50	17.50	20.5
		134	5670	17.50	17.50	17.50	17.50	20.5
		142	5710	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT80 MCS0	106	5530	16.00	16.00	16.00	16.00	19.0
		122	5610	17.50	17.50	17.50	17.50	20.5
		138	5690	17.50	17.50	17.50	17.50	20.5

	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	18.50	18.50	18.50	18.50	21.5
		157	5785	18.50	18.50	18.50	18.50	21.5
		165	5825	17.00	17.00	17.00	17.00	20.0
	802.11n-HT20 MCS0	149	5745	18.50	18.50	18.50	18.50	21.5
		157	5785	18.50	18.50	18.50	18.50	21.5
		165	5825	18.50	18.50	18.50	18.50	21.5
	802.11n-HT40 MCS0	151	5755	17.50	17.50	17.50	17.50	20.5
		159	5795	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT20 MCS0	149	5745	18.50	18.50	18.50	18.50	21.5
		157	5785	18.50	18.50	18.50	18.50	21.5
		165	5825	18.50	18.50	18.50	18.50	21.5
	802.11ac-VHT40 MCS0	151	5755	17.50	17.50	17.50	17.50	20.5
		159	5795	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT80 MCS0	155	5775	17.50	17.50	17.50	17.50	20.5



<Power Tabele 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	13.00	16.50	13.00	16.50	18.1
		6	2437	13.00	16.50	13.00	16.50	18.1
		11	2462	13.00	16.50	13.00	16.50	18.1
	802.11g 6Mbps	1	2412	13.00	16.00	13.00	16.00	17.8
		6	2437	13.00	16.50	13.00	16.50	18.1
		11	2462	13.00	16.50	13.00	16.50	18.1
	802.11n-HT20 MCS0	1	2412	13.00	15.00	13.00	15.00	17.1
		6	2437	13.00	16.50	13.00	16.50	18.1
		11	2462	13.00	15.50	13.00	15.50	17.4
	802.11ac-VHT20 MCS0	1	2412	13.00	14.50	13.00	14.50	16.8
		6	2437	13.00	16.50	13.00	16.50	18.1
		11	2462	13.00	15.50	13.00	15.50	17.4

<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	15.00	17.50	15.00	17.50	19.4
		40	5200	15.00	18.00	15.00	18.00	19.8
		44	5220	15.00	18.00	15.00	18.00	19.8
		48	5240	15.00	17.50	15.00	17.50	19.4
	802.11n-HT20 MCS0	36	5180	15.00	17.50	15.00	17.50	19.4
		40	5200	15.00	18.00	15.00	18.00	19.8
		44	5220	15.00	18.00	15.00	18.00	19.8
		48	5240	15.00	17.50	15.00	17.50	19.4
	802.11n-HT40 MCS0	38	5190	15.00	16.00	15.00	16.00	18.5
		46	5230	15.00	17.50	15.00	17.50	19.4
	802.11ac-VHT20 MCS0	36	5180	15.00	17.50	15.00	17.50	19.4
		40	5200	15.00	18.00	15.00	18.00	19.8
		44	5220	15.00	18.00	15.00	18.00	19.8
		48	5240	15.00	17.50	15.00	17.50	19.4
	802.11ac-VHT40 MCS0	38	5190	15.00	16.00	15.00	16.00	18.5
		46	5230	15.00	17.50	15.00	17.50	19.4
	802.11ac-VHT80 MCS0	42	5210	15.00	15.00	15.00	15.00	18.0



5.3GHz 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
802.11a 6Mbps		52	5260	15.00	18.00	15.00	18.00	19.8
		56	5280	15.00	17.50	15.00	17.50	19.4
		60	5300	15.00	17.50	15.00	17.50	19.4
		64	5320	15.00	17.50	15.00	17.50	19.4
802.11n-HT20 MCS0		52	5260	15.00	18.00	15.00	18.00	19.8
		56	5280	15.00	17.50	15.00	17.50	19.4
		60	5300	15.00	17.50	15.00	17.50	19.4
		64	5320	15.00	17.00	15.00	17.00	19.1
802.11n-HT40 MCS0		54	5270	15.00	17.50	15.00	17.50	19.4
		62	5310	15.00	16.50	15.00	16.50	18.8
802.11ac-VHT20 MCS0		52	5260	15.00	18.00	15.00	18.00	19.8
		56	5280	15.00	17.50	15.00	17.50	19.4
		60	5300	15.00	17.50	15.00	17.50	19.4
		64	5320	15.00	17.00	15.00	17.00	19.1
802.11ac-VHT40 MCS0		54	5270	15.00	17.50	15.00	17.50	19.4
		62	5310	15.00	16.50	15.00	16.50	18.8
802.11ac-VHT80 MCS0		58	5290	15.00	16.00	15.00	16.00	18.5

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
802.11a 6Mbps		100	5500	12.50	18.50	12.50	18.50	19.5
		116	5580	12.50	18.50	12.50	18.50	19.5
		124	5620	12.50	18.50	12.50	18.50	19.5
		132	5660	12.50	18.50	12.50	18.50	19.5
		144	5720	12.50	18.50	12.50	18.50	19.5
802.11n-HT20 MCS0		100	5500	12.50	18.50	12.50	18.50	19.5
		116	5580	12.50	18.50	12.50	18.50	19.5
		124	5620	12.50	18.50	12.50	18.50	19.5
		132	5660	12.50	18.50	12.50	18.50	19.5
		144	5720	12.50	18.50	12.50	18.50	19.5
802.11n-HT40 MCS0		102	5510	12.50	17.00	12.50	17.00	18.3
		110	5550	12.50	17.50	12.50	17.50	18.7
		126	5630	12.50	17.50	12.50	17.50	18.7
		134	5670	12.50	17.50	12.50	17.50	18.7
		142	5710	12.50	17.50	12.50	17.50	18.7
802.11ac-VHT20 MCS0		100	5500	12.50	18.50	12.50	18.50	19.5
		116	5580	12.50	18.50	12.50	18.50	19.5
		124	5620	12.50	18.50	12.50	18.50	19.5
		132	5660	12.50	18.50	12.50	18.50	19.5
		144	5720	12.50	18.50	12.50	18.50	19.5
802.11ac-VHT40 MCS0		102	5510	12.50	17.00	12.50	17.00	18.3
		110	5550	12.50	17.50	12.50	17.50	18.7
		126	5630	12.50	17.50	12.50	17.50	18.7
		134	5670	12.50	17.50	12.50	17.50	18.7
		142	5710	12.50	17.50	12.50	17.50	18.7
802.11ac-VHT80 MCS0		106	5530	12.50	16.00	12.50	16.00	17.6
		122	5610	12.50	17.50	12.50	17.50	18.7
		138	5690	12.50	17.50	12.50	17.50	18.7



Transmit Antenna				SISO	SISO	MIMO		
5.8GHz WLAN	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
	802.11a 6Mbps	149	5745	13.50	18.50	13.50	18.50	19.7
		157	5785	13.50	18.50	13.50	18.50	19.7
		165	5825	13.50	17.00	13.50	17.00	18.6
	802.11n-HT20 MCS0	149	5745	13.50	18.50	13.50	18.50	19.7
		157	5785	13.50	18.50	13.50	18.50	19.7
		165	5825	13.50	18.50	13.50	18.50	19.7
	802.11n-HT40 MCS0	151	5755	13.50	17.50	13.50	17.50	19.0
		159	5795	13.50	17.50	13.50	17.50	19.0
	802.11ac-VHT20 MCS0	149	5745	13.50	18.50	13.50	18.50	19.7
157		5785	13.50	18.50	13.50	18.50	19.7	
165		5825	13.50	18.50	13.50	18.50	19.7	
802.11ac-VHT40 MCS0	151	5755	13.50	17.50	13.50	17.50	19.0	
	159	5795	13.50	17.50	13.50	17.50	19.0	
802.11ac-VHT80 MCS0	155	5775	13.50	17.50	13.50	17.50	19.0	

<Power Table 3>

<2.4GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
2.4GHz WLAN	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
	802.11b 1Mbps	1	2412	16.00	19.50	19.50	19.50	22.5
		6	2437	16.00	19.50	19.50	19.50	22.5
		11	2462	16.00	19.50	19.50	19.50	22.5
	802.11g 6Mbps	1	2412	16.00	16.00	16.00	16.00	19.0
		6	2437	16.00	19.50	19.50	19.50	22.5
		11	2462	16.50	16.50	16.50	16.50	19.5
	802.11n-HT20 MCS0	1	2412	15.00	15.00	15.00	15.00	18.0
		6	2437	16.00	19.50	19.50	19.50	22.5
		11	2462	15.50	15.50	15.50	15.50	18.5
	802.11ac-VHT20 MCS0	1	2412	14.50	14.50	14.50	14.50	17.5
		6	2437	16.00	19.50	19.50	19.50	22.5
		11	2462	15.50	15.50	15.50	15.50	18.5



<5GHz WLAN>

5.2GHz 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
802.11a 6Mbps		36	5180	17.50	15.50	17.50	15.50	19.6
		40	5200	17.50	15.50	17.50	15.50	19.6
		44	5220	17.50	15.50	17.50	15.50	19.6
		48	5240	17.50	15.50	17.50	15.50	19.6
802.11n-HT20 MCS0		36	5180	17.50	15.50	17.50	15.50	19.6
		40	5200	17.50	15.50	17.50	15.50	19.6
		44	5220	17.50	15.50	17.50	15.50	19.6
		48	5240	17.50	15.50	17.50	15.50	19.6
802.11n-HT40 MCS0		38	5190	16.00	15.50	16.00	15.50	18.8
		46	5230	17.50	15.50	17.50	15.50	19.6
802.11ac-VHT20 MCS0		36	5180	17.50	15.50	17.50	15.50	19.6
		40	5200	17.50	15.50	17.50	15.50	19.6
		44	5220	17.50	15.50	17.50	15.50	19.6
		48	5240	17.50	15.50	17.50	15.50	19.6
802.11ac-VHT40 MCS0		38	5190	16.00	15.50	16.00	15.50	18.8
		46	5230	17.50	15.50	17.50	15.50	19.6
802.11ac-VHT80 MCS0		42	5210	15.00	15.00	15.00	15.00	18.0

5.3GHz 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
802.11a 6Mbps		52	5260	17.50	15.50	17.50	15.50	19.6
		56	5280	17.50	15.50	17.50	15.50	19.6
		60	5300	17.50	15.50	17.50	15.50	19.6
		64	5320	17.50	15.50	17.50	15.50	19.6
802.11n-HT20 MCS0		52	5260	17.50	15.50	17.50	15.50	19.6
		56	5280	17.50	15.50	17.50	15.50	19.6
		60	5300	17.50	15.50	17.50	15.50	19.6
		64	5320	17.00	15.50	17.00	15.50	19.3
802.11n-HT40 MCS0		54	5270	17.50	15.50	17.50	15.50	19.6
		62	5310	16.50	15.50	16.50	15.50	19.0
802.11ac-VHT20 MCS0		52	5260	17.50	15.50	17.50	15.50	19.6
		56	5280	17.50	15.50	17.50	15.50	19.6
		60	5300	17.50	15.50	17.50	15.50	19.6
		64	5320	17.00	15.50	17.00	15.50	19.3
802.11ac-VHT40 MCS0		54	5270	17.50	15.50	17.50	15.50	19.6
		62	5310	16.50	15.50	16.50	15.50	19.0
802.11ac-VHT80 MCS0		58	5290	16.00	15.50	16.00	15.50	18.8



	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	16.00	18.50	16.00	18.50	20.4
		116	5580	16.00	18.50	16.00	18.50	20.4
		124	5620	16.00	18.50	16.00	18.50	20.4
		132	5660	16.00	18.50	16.00	18.50	20.4
		144	5720	16.00	18.50	16.00	18.50	20.4
	802.11n-HT20 MCS0	100	5500	16.00	18.50	16.00	18.50	20.4
		116	5580	16.00	18.50	16.00	18.50	20.4
		124	5620	16.00	18.50	16.00	18.50	20.4
		132	5660	16.00	18.50	16.00	18.50	20.4
		144	5720	16.00	18.50	16.00	18.50	20.4
	802.11n-HT40 MCS0	102	5510	16.00	17.00	16.00	17.00	19.5
		110	5550	16.00	17.50	16.00	17.50	19.8
		126	5630	16.00	17.50	16.00	17.50	19.8
		134	5670	16.00	17.50	16.00	17.50	19.8
		142	5710	16.00	17.50	16.00	17.50	19.8
	802.11ac-VHT20 MCS0	100	5500	16.00	18.50	16.00	18.50	20.4
		116	5580	16.00	18.50	16.00	18.50	20.4
		124	5620	16.00	18.50	16.00	18.50	20.4
		132	5660	16.00	18.50	16.00	18.50	20.4
		144	5720	16.00	18.50	16.00	18.50	20.4
	802.11ac-VHT40 MCS0	102	5510	16.00	17.00	16.00	17.00	19.5
		110	5550	16.00	17.50	16.00	17.50	19.8
		126	5630	16.00	17.50	16.00	17.50	19.8
		134	5670	16.00	17.50	16.00	17.50	19.8
142		5710	16.00	17.50	16.00	17.50	19.8	
802.11ac-VHT80 MCS0	106	5530	16.00	16.00	16.00	16.00	19.0	
	122	5610	16.00	17.50	16.00	17.50	19.8	
	138	5690	16.00	17.50	16.00	17.50	19.8	

	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	16.50	18.50	16.50	18.50	20.6
		157	5785	16.50	18.50	16.50	18.50	20.6
		165	5825	16.50	17.00	16.50	17.00	19.8
	802.11n-HT20 MCS0	149	5745	16.50	18.50	16.50	18.50	20.6
		157	5785	16.50	18.50	16.50	18.50	20.6
		165	5825	16.50	18.50	16.50	18.50	20.6
	802.11n-HT40 MCS0	151	5755	16.50	17.50	16.50	17.50	20.0
		159	5795	16.50	17.50	16.50	17.50	20.0
	802.11ac-VHT20 MCS0	149	5745	16.50	18.50	16.50	18.50	20.6
		157	5785	16.50	18.50	16.50	18.50	20.6
		165	5825	16.50	18.50	16.50	18.50	20.6
	802.11ac-VHT40 MCS0	151	5755	16.50	17.50	16.50	17.50	20.0
		159	5795	16.50	17.50	16.50	17.50	20.0
	802.11ac-VHT80 MCS0	155	5775	16.50	17.50	16.50	17.50	20.0



<Bluetooth Maximum Power>

General Note:

- 1. The device implements the power management for Bluetooth SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity). 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 or extremity 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	18	18	18	11.5	11.5

<Power Table1>

Mode	Average power (dBm)				
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	18	18	18	11.5	11.5

<Power Table 2>

Mode	Average power (dBm)				
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	11.5	11.5	11.5	11.5	11.5

<Power Table 3>

Mode	Average power (dBm)				
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	17	17	17	11.5	11.5



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

LTE information																																																															
FCC ID	A4RG6QU3																																																														
Equipment Name	Phone																																																														
Operating Frequency Range of each LTE transmission band	LTE Band 2: 1850.7 MHz ~ 1909.3 MHz LTE Band 4: 1710.7 MHz ~ 1754.3 MHz LTE Band 5: 824.7 MHz ~ 848.3 MHz LTE Band 7: 2502.5 MHz ~ 2567.5 MHz LTE Band 12: 699.7 MHz ~ 715.3 MHz LTE Band 13: 779.5 MHz ~ 784.5 MHz LTE Band 14: 790.5 MHz ~ 795.5 MHz LTE Band 17: 706.5 MHz ~ 713.5 MHz LTE Band 25: 1850.7 MHz ~ 1914.3 MHz LTE Band 26: 821.5 MHz ~ 841.5 MHz LTE Band 30: 2307.5 MHz ~ 2312.5 MHz LTE Band 38: 2572.5 MHz ~ 2617.5 MHz LTE Band 41: 2498.5 MHz ~ 2687.5 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710.7 MHz ~ 1779.3 MHz LTE Band 71: 665.5 MHz ~ 695.5 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.	Rel'15, 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	<p>Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3</p> <table border="1"> <thead> <tr> <th rowspan="2">Modulation</th> <th colspan="6">Channel bandwidth / Transmission bandwidth (N_{RB})</th> <th rowspan="2">MPR (dB)</th> </tr> <tr> <th>1.4 MHz</th> <th>3.0 MHz</th> <th>5 MHz</th> <th>10 MHz</th> <th>15 MHz</th> <th>20 MHz</th> </tr> </thead> <tbody> <tr> <td>QPSK</td> <td>> 5</td> <td>> 4</td> <td>> 8</td> <td>> 12</td> <td>> 16</td> <td>> 18</td> <td>≤ 1</td> </tr> <tr> <td>16 QAM</td> <td>≤ 5</td> <td>≤ 4</td> <td>≤ 8</td> <td>≤ 12</td> <td>≤ 16</td> <td>≤ 18</td> <td>≤ 1</td> </tr> <tr> <td>16 QAM</td> <td>> 5</td> <td>> 4</td> <td>> 8</td> <td>> 12</td> <td>> 16</td> <td>> 18</td> <td>≤ 2</td> </tr> <tr> <td>64 QAM</td> <td>≤ 5</td> <td>≤ 4</td> <td>≤ 8</td> <td>≤ 12</td> <td>≤ 16</td> <td>≤ 18</td> <td>≤ 2</td> </tr> <tr> <td>64 QAM</td> <td>> 5</td> <td>> 4</td> <td>> 8</td> <td>> 12</td> <td>> 16</td> <td>> 18</td> <td>≤ 3</td> </tr> <tr> <td>256 QAM</td> <td colspan="6">≥ 1</td> <td>≤ 5</td> </tr> </tbody> </table>	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
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																																																								
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	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.																																																														



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		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	20407	824.7	20415	825.5	20425	826.5	20450	829	20450	829	20450	829				
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5				
H	20643	848.3	20635	847.5	20625	846.5	20600	844	20600	844	20600	844				
LTE Band 7																
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 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	20775	2502.5	20800	2505	20825	2507.5	20850	2510	20850	2510	20850	2510				
M	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535				
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560	21350	2560	21350	2560				
LTE Band 12																
	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	23017	699.7	23025	700.5	23035	701.5	23060	704	23060	704	23060	704				
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5				
H	23173	715.3	23165	714.5	23155	713.5	23130	711	23130	711	23130	711				
LTE Band 13																
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz				Bandwidth 20 MHz			
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)	
L	23205		779.5		23230		782		23255		784.5		23280		787	
M	23230		782		23255		784.5		23280		787		23305		789.5	
H	23255		784.5		23280		787		23305		789.5		23330		792	
LTE Band 14																
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz				Bandwidth 20 MHz			
	Channel #		Channel #		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)	
L	23305		790.5		23330		793		23355		795.5		23380		798	
M	23330		793		23355		795.5		23380		798		23405		800.5	
H	23355		795.5		23380		798		23405		800.5		23430		803	
LTE Band 17																
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz				Bandwidth 20 MHz			
	Channel #		Freq.(MHz)		Channel #		Freq. (MHz)		Channel #		Freq. (MHz)		Channel #		Freq. (MHz)	
L	23755		706.5		23780		709		23805		711.5		23830		714	
M	23790		710		23815		713		23840		716		23865		719	
H	23825		713.5		23850		716.5		23875		719.5		23900		722	
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		Bandwidth 20 MHz					
	Ch. #	Freq. (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	26790	824				
M	26865	831.5	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	26940	839				



LTE Band 30												
Bandwidth 5 MHz						Bandwidth 10 MHz						
	Channel #		Freq.(MHz)			Channel #		Freq.(MHz)				
L	27685		2307.5		27710	2310		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)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580	37850	2580	37850	2580
M	38000	2595	38000	2595	38000	2595	38000	2595	38000	2595	38000	2595
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610	38150	2610	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)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	39675	2498.5	39700	2501	39725	2503.5	39750	2506	39750	2506	39750	2506
L	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5	40185	2549.5	40185	2549.5
M	40620	2593	40620	2593	40620	2593	40620	2593	40620	2593	40620	2593
H	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5	41055	2636.5	41055	2636.5
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680	41490	2680	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)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	133147	665.5	133172	668	133197	670.5	133222	673	133222	673	133222	673
M	133297	680.5	133297	680.5	133297	680.5	133297	680.5	133297	680.5	133297	680.5
H	133447	695.5	133422	693	133397	690.5	133372	688	133372	688	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)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	55265	3552.5	55290	3555	55315	3557.5	55340	3560	55340	3560	55340	3560
L	55810	3607	55815	3607.5	55820	3608	55830	3609	55830	3609	55830	3609
M	56170	3643	56165	3642.5	56160	3642	56150	3641	56150	3641	56150	3641
H	56715	3697.5	56690	3695	56665	3692.5	56640	3690	56640	3690	56640	3690



5G NR Information								
FCC ID	A4RG6QU3							
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 n12 : 699 MHz ~ 716 MHz 5G NR n25 : 1850 MHz ~ 1915 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 n12: 5MHz, 10MHz, 15MHz 5G NR n25: 5MHz, 10MHz, 15MHz, 20MHz 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 n12	LTE B2/66							
LTE Anchor Bands for n25	LTE B12							
LTE Anchor Bands for n66	LTE B5/12/13/14/48							
LTE Anchor Bands for n71	LTE B2/66							
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 12								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	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 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_target.
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)>

Config0							
Band	Antenna	DSI_2	DSI_4	DSI_6	DSI_7	DSI_8	Pmax*
		Head Standalone	Body Standalone	Hotspot Simultaneous Transmit	Head Simultaneous Transmit	Body Simultaneous Transmit	
GSM850(GPRS 4 Tx slots)**	0	30.1	29.2	28.4	29.3	28.4	25.5
GSM1900(GPRS 4 Tx slots)**	2	27.4	25.1	24.3	26.6	24.3	23.0
WCDMA B2	2	26.2	24.5	23.7	25.4	23.7	24.7
WCDMA B4	2	28.4	25.0	24.2	27.6	24.2	24.7
WCDMA B5	0	28.5	26.8	26.0	27.7	26.0	24.0
CDMA BC0	0	28.2	26.1	25.3	27.4	25.3	24.5
CDMA BC1	2	25.5	23.7	22.9	24.7	22.9	24.5
CDMA BC10	0	29.2	26.9	26.1	28.4	26.1	24.5
LTE B7	2	32.8	24.7	23.9	32.0	23.9	24.7
LTE B12/17	0	29.5	27.1	26.3	28.7	26.3	24.7
LTE B13	0	28.7	26.3	25.5	27.9	25.5	24.2
LTE B14	0	28.5	26.2	25.4	27.7	25.4	24.7
LTE B25/2	2	26.2	24.0	23.2	25.4	23.2	24.7
LTE B26/5	0	28.8	27.0	26.2	28.0	26.2	24.7
LTE B30	2	30.8	25.0	24.2	30.0	24.2	22.7
LTE B41/38**	2	32.5	22.9	22.1	31.7	22.1	22.7
LTE B41 HPUE**	2	32.5	22.9	22.1	31.7	22.1	22.9
LTE B48**	7	29.8	21.6	20.8	29.0	20.8	22.2
LTE B66/4	2	28.2	23.9	23.1	27.4	23.1	24.7
LTE B71	0	29.6	27.3	26.5	28.8	26.5	24.7
FR1 n2/25	2	26.0	23.5	22.7	25.2	22.7	24.7
FR1 n5	0	32.0	29.0	28.2	31.2	28.2	24.0
FR1 n12	0	38.2	35.6	34.8	37.4	34.8	23.7
FR1 n66	2	27.4	25.1	24.3	26.5	24.3	24.7
FR1 n71	0	30.4	28.2	27.4	29.6	27.4	24.7

Config1							
Band	Antenna	DSI_2	DSI_4	DSI_6	DSI_7	DSI_8	Pmax*
		Head Standalone	Body Standalone	Hotspot Simultaneous Transmit	Head Simultaneous Transmit	Body Simultaneous Transmit	
GSM850(GPRS 4 Tx slots)**	1	23.3	30.3	29.5	22.5	29.5	25.50
GSM1900(GPRS 4 Tx slots)**	0	30.7	19.3	18.5	29.9	18.5	22.50
WCDMA B2	0	33.1	20.0	19.2	32.3	19.2	24.70
WCDMA B4	0	34.1	20.4	19.6	33.3	19.6	24.70
WCDMA B5	1	23.4	25.5	24.7	22.6	24.7	24.00
CDMA BC0	1	22.2	25.5	24.7	21.4	24.7	24.50
CDMA BC1	0	29.5	20.0	19.2	28.7	19.2	24.50
CDMA BC10	1	24.4	26.6	25.8	23.6	25.8	24.50
LTE B7	0	29.5	21.8	21.0	28.7	21.0	24.70
LTE B12/17	1	24.4	27.5	26.7	23.6	26.7	24.70
LTE B13	1	24.2	27.6	26.8	23.4	26.8	24.20
LTE B14	1	24.4	27.8	27.0	23.6	27.0	24.70
LTE B25/2	0	35.6	19.2	18.4	34.8	18.4	24.70
LTE B26/5	1	24.0	26.1	25.3	23.2	25.3	24.70
LTE B30	0	28.4	21.3	20.5	27.6	20.5	22.70
LTE B41/38**	0	26.3	20.2	19.4	25.5	19.4	22.70
LTE B41 HPUE**	0	26.3	20.2	19.4	25.5	19.4	22.90
LTE B48**	2	28.4	19.5	18.7	27.6	18.7	19.30
LTE B66/4	0	29.3	19.8	19.0	28.5	19.0	24.70
LTE B71	1	24.2	27.8	27.0	23.4	27.0	24.70
FR1 n2/25	0	33.4	18.2	17.4	32.6	17.4	24.70
FR1 n5	1	23.0	25.8	25.0	22.2	25.0	24.00
FR1 n12	1	29.6	32.5	31.7	28.8	31.7	23.70
FR1 n66	0	29.1	19.9	19.1	28.3	19.1	24.70
FR1 n71	1	27.1	28.7	27.9	26.3	27.9	24.70

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

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

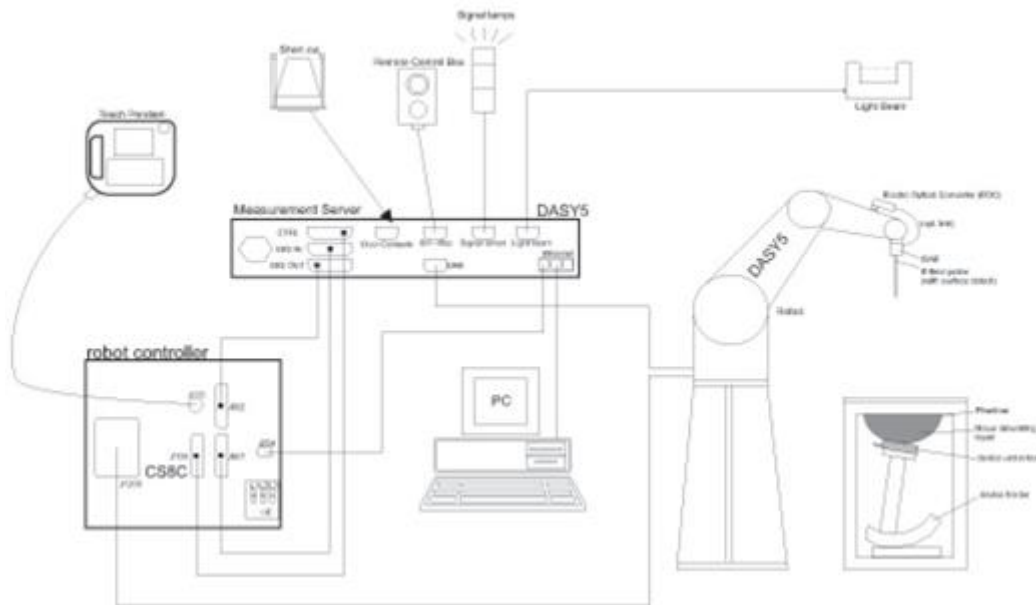
SAR is expressed in units of Watts per kilogram (W/kg)

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

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, Wehnuia 3rd, Rd., Guishan Dist., Taoyuan City, CHINESE TAIPEI	
	SAR01-HY	SAR03-HY	SAR08-HY	SAR09-HY
Test Site No.	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 μ W/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 μ W/g – >100 mW/g Linearity: ± 0.2 dB (noise: typically <1 μ W/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

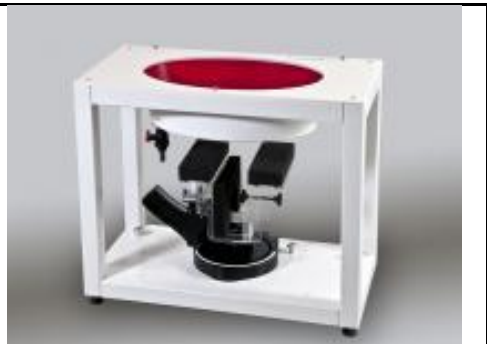
7.4 Phantom

<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 from 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 dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan), if only one zoom scan follows the area scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of zoom scans has to be increased accordingly.

Area scan parameters extracted from FCC KDB 865664 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	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: $\Delta x_{Area}, \Delta y_{Area}$	≤ 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: $\Delta x_{Zoom}, \Delta y_{Zoom}$		≤ 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 1 st 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 <i>reported</i> SAR from the <i>area scan based 1-g SAR estimation</i> 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	5d041	Sep. 11, 2018	Sep. 09, 2020
SPEAG	2300MHz System Validation Kit ⁽²⁾	D2300V2	1006	Jan. 28, 2019	Jan. 26, 2021
SPEAG	2450MHz System Validation Kit ⁽²⁾	D2450V2	736	Aug. 31, 2018	Aug. 29, 2020
SPEAG	2600MHz System Validation Kit ⁽²⁾	D2600V2	1078	Mar. 06, 2019	Mar. 04, 2021
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	DAE4	376	Dec. 06, 2019	Dec. 05, 2020
SPEAG	Data Acquisition Electronics	DAE3	577	Sep. 17, 2019	Sep. 16, 2020
SPEAG	Data Acquisition Electronics	DAE4	699	Feb. 26, 2020	Feb. 25, 2021
SPEAG	Data Acquisition Electronics	DAE4	916	Dec. 17, 2019	Dec. 16, 2020
SPEAG	Data Acquisition Electronics	DAE4	1399	Feb. 18, 2020	Feb. 17, 2021
SPEAG	Dosimetric E-Field Probe	ES3DV3	3184	Sep. 25, 2019	Sep. 24, 2020
SPEAG	Dosimetric E-Field Probe	ES3DV3	3270	Sep. 25, 2019	Sep. 24, 2020
SPEAG	Dosimetric E-Field Probe	EX3DV4	3642	Apr. 29, 2020	Apr. 28, 2021
SPEAG	Dosimetric E-Field Probe	EX3DV4	3728	Feb. 04, 2020	Feb. 03, 2021
SPEAG	Dosimetric E-Field Probe	EX3DV4	3925	Sep. 20, 2019	Sep. 19, 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.

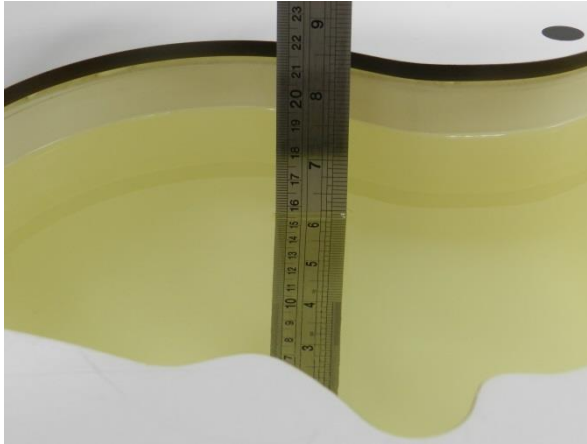


Fig 10.1Photo of Liquid Height for Head SAR

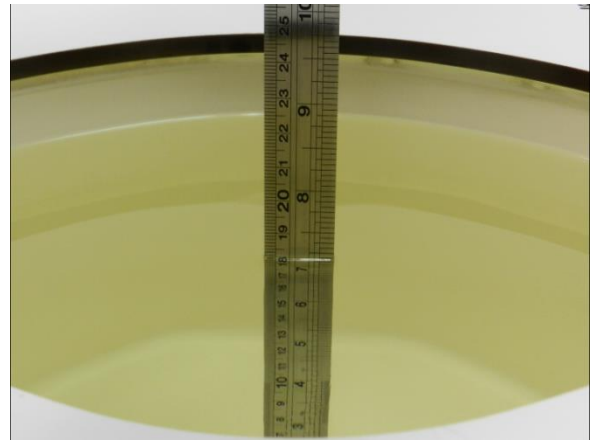


Fig 10.2 Photo of Liquid Height for Body SAR



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.

Table with 9 columns: Frequency (MHz), Water (%), Sugar (%), Cellulose (%), Salt (%), Preventol (%), DGBE (%), Conductivity (σ), Permittivity (εr). Rows include frequencies 750, 835, 900, 1800, 1900, 2000, 2450, and 2600.

Simulating Liquid for 5GHz, Manufactured by SPEAG

Table with 2 columns: Ingredients, (% by weight). Rows include Water (64-78%), Mineral oil (11-18%), Emulsifiers (9-15%), and Additives and Salt (2-3%).



<Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ε _r)	Conductivity Target (σ)	Permittivity Target (ε _r)	Delta (σ) (%)	Delta (ε _r) (%)	Limit (%)	Date
750	22.6	0.913	41.797	0.89	41.90	2.58	-0.25	±5	2020/6/29
750	22.2	0.915	41.998	0.89	41.90	2.81	0.23	±5	2020/6/30
750	22.2	0.905	40.878	0.89	41.90	1.69	-2.44	±5	2020/7/1
750	22.6	0.893	42.767	0.89	41.90	0.34	2.07	±5	2020/7/4
750	22.2	0.894	41.411	0.89	41.90	0.45	-1.17	±5	2020/7/17
750	22.3	0.862	41.816	0.89	41.90	-3.15	-0.20	±5	2020/7/18
750	22.2	0.879	40.503	0.89	41.90	-1.24	-3.33	±5	2020/7/29
835	22.6	0.876	42.492	0.90	41.50	-2.67	2.39	±5	2020/6/19
835	22.5	0.912	42.614	0.90	41.50	1.33	2.68	±5	2020/6/24
835	22.5	0.890	41.021	0.90	41.50	-1.11	-1.15	±5	2020/7/7
835	22.5	0.899	42.474	0.90	41.50	-0.11	2.35	±5	2020/7/10
835	22.6	0.934	42.511	0.90	41.50	3.78	2.44	±5	2020/7/17
835	22.5	0.879	40.816	0.90	41.50	-2.33	-1.65	±5	2020/7/21
835	22.6	0.926	42.441	0.90	41.50	2.89	2.27	±5	2020/7/28
1750	22.5	1.374	41.722	1.37	40.10	0.29	4.04	±5	2020/6/24
1750	22.2	1.392	41.746	1.37	40.10	1.61	4.10	±5	2020/7/6
1750	22.7	1.387	40.296	1.37	40.10	1.24	0.49	±5	2020/7/16
1750	22.4	1.354	41.376	1.37	40.10	-1.17	3.18	±5	2020/7/18
1750	22.4	1.367	39.428	1.37	40.10	-0.22	-1.68	±5	2020/7/20
1900	22.2	1.430	40.283	1.40	40.00	2.14	0.71	±5	2020/6/22
1900	22.6	1.453	40.652	1.40	40.00	3.79	1.63	±5	2020/7/4
1900	22.5	1.456	40.204	1.40	40.00	4.00	0.51	±5	2020/7/7
1900	22.7	1.419	40.474	1.40	40.00	1.36	1.18	±5	2020/7/16
1900	22.4	1.414	40.408	1.40	40.00	1.00	1.02	±5	2020/7/18
1900	22.4	1.408	40.069	1.40	40.00	0.57	0.17	±5	2020/7/19
2300	22.6	1.698	39.260	1.67	39.50	1.68	-0.61	±5	2020/6/19
2300	22.5	1.689	39.686	1.67	39.50	1.14	0.47	±5	2020/7/7
2450	22.5	1.792	38.550	1.80	39.20	-0.44	-1.66	±5	2020/7/10
2450	22.3	1.826	40.306	1.80	39.20	1.44	2.82	±5	2020/7/15
2450	22.3	1.866	39.584	1.80	39.20	3.67	0.98	±5	2020/7/18
2450	22.2	1.761	39.012	1.80	39.20	-2.17	-0.48	±5	2020/8/4
2600	22.6	2.020	37.994	1.96	39.00	3.06	-2.58	±5	2020/6/19
2600	22.8	2.010	37.814	1.96	39.00	2.55	-3.04	±5	2020/6/20
2600	22.5	1.989	39.623	1.96	39.00	1.48	1.60	±5	2020/7/8
2600	22.3	2.029	39.119	1.96	39.00	3.52	0.31	±5	2020/7/22
2600	22.6	2.031	39.132	1.96	39.00	3.62	0.34	±5	2020/7/25
3500	22.3	3.041	38.575	2.91	37.90	4.50	1.78	±5	2020/7/22
3500	22.2	3.033	38.472	2.91	37.90	4.23	1.51	±5	2020/7/26
3500	22.2	2.908	37.880	2.91	37.90	-0.07	-0.05	±5	2020/7/27
3700	22.3	3.258	38.373	3.12	37.70	4.42	1.79	±5	2020/7/22
3700	22.2	3.249	38.270	3.12	37.70	4.13	1.51	±5	2020/7/26
3700	22.2	3.116	37.678	3.12	37.70	-0.13	-0.06	±5	2020/7/27
5250	22.5	4.588	37.497	4.71	35.95	-2.59	4.30	±5	2020/7/11
5250	22.3	4.775	36.903	4.71	35.95	1.38	2.65	±5	2020/7/15
5250	22.4	4.508	35.612	4.71	35.95	-4.29	-0.94	±5	2020/7/16
5250	22.5	4.634	36.648	4.71	35.95	-1.61	1.94	±5	2020/7/29
5250	22.5	4.734	36.623	4.71	35.95	0.51	1.87	±5	2020/7/31
5250	22.4	4.716	36.688	4.71	35.95	0.13	2.05	±5	2020/8/1
5600	22.5	4.949	37.088	5.07	35.50	-2.39	4.47	±5	2020/7/11
5600	22.3	5.119	36.434	5.07	35.50	0.97	2.63	±5	2020/7/15
5600	22.4	4.848	35.122	5.07	35.50	-4.38	-1.06	±5	2020/7/16
5600	22.6	5.019	36.838	5.07	35.50	-1.01	3.77	±5	2020/7/17
5600	22.3	5.217	36.628	5.07	35.50	2.90	3.18	±5	2020/7/27
5600	22.5	4.994	36.072	5.07	35.50	-1.50	1.61	±5	2020/7/29
5600	22.5	5.107	36.113	5.07	35.50	0.73	1.73	±5	2020/7/31
5600	22.4	5.082	36.206	5.07	35.50	0.24	1.99	±5	2020/8/1
5600	22.5	5.181	36.452	5.07	35.50	2.19	2.68	±5	2020/8/4
5750	22.5	5.114	36.921	5.22	35.35	-2.03	4.44	±5	2020/7/11
5750	22.3	5.285	36.197	5.22	35.35	1.25	2.40	±5	2020/7/15
5750	22.6	5.177	36.661	5.22	35.35	-0.82	3.71	±5	2020/7/17
5750	22.5	5.146	35.936	5.22	35.35	-1.42	1.66	±5	2020/7/29
5750	22.5	5.273	35.929	5.22	35.35	1.02	1.64	±5	2020/7/31
5750	22.4	5.236	35.931	5.22	35.35	0.31	1.64	±5	2020/8/1
5750	22.5	5.349	36.268	5.22	35.35	2.47	2.60	±5	2020/8/4



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 (%)
2020/6/29	750	250	D750V3-1107	ES3DV3 - SN3270	DAE4 Sn1399	2.12	8.32	8.48	1.92
2020/6/30	750	250	D750V3-1107	ES3DV3 - SN3270	DAE4 Sn1399	2.14	8.32	8.56	2.88
2020/7/1	750	250	D750V3-1107	EX3DV4 - SN3728	DAE4 Sn699	2.12	8.32	8.48	1.92
2020/7/4	750	250	D750V3-1107	EX3DV4 - SN3728	DAE4 Sn699	2.13	8.32	8.52	2.40
2020/7/17	750	250	D750V3-1107	ES3DV3 - SN3270	DAE4 Sn1399	2.08	8.32	8.32	0.00
2020/7/18	750	250	D750V3-1107	EX3DV4 - SN3728	DAE4 Sn699	2.06	8.32	8.24	-0.96
2020/7/29	750	250	D750V3-1107	D750V3-1107	DAE3 Sn577	2.09	8.32	8.36	0.48
2020/6/19	835	250	D835V2-4d167	EX3DV4 - SN3728	DAE4 Sn699	2.30	9.55	9.2	-3.66
2020/6/24	835	250	D835V2-4d167	ES3DV3 - SN3270	DAE4 Sn1399	2.50	9.55	10	4.71
2020/7/7	835	250	D835V2-4d167	EX3DV4 - SN3728	DAE4 Sn699	2.34	9.55	9.36	-1.99
2020/7/10	835	250	D835V2-4d167	EX3DV4 - SN3728	DAE4 Sn699	2.36	9.55	9.44	-1.15
2020/7/17	835	250	D835V2-4d167	ES3DV3 - SN3184	DAE4 Sn916	2.29	9.55	9.16	-4.08
2020/7/21	835	250	D835V2-4d167	EX3DV4 - SN3728	DAE4 Sn699	2.31	9.55	9.24	-3.25
2020/7/28	835	250	D835V2-4d167	EX3DV4 - SN7590	DAE3 Sn577	2.50	9.55	10	4.71
2020/6/24	1750	250	D1750V2-1112	ES3DV3 - SN3270	DAE4 Sn1399	8.96	36.70	35.84	-2.34
2020/7/6	1750	250	D1750V2-1112	EX3DV4 - SN3728	DAE4 Sn699	8.83	36.70	35.32	-3.76
2020/7/16	1750	250	D1750V2-1112	ES3DV3 - SN3184	DAE4 Sn916	8.92	36.70	35.68	-2.78
2020/7/18	1750	250	D1750V2-1112	ES3DV3 - SN3270	DAE4 Sn1399	9.28	36.70	37.12	1.14
2020/7/20	1750	250	D1750V2-1112	EX3DV4 - SN3728	DAE4 Sn699	9.46	36.70	37.84	3.11
2020/6/22	1900	250	D1900V2-5d041	ES3DV3 - SN3270	DAE4 Sn1399	10.30	40.20	41.2	2.49
2020/7/4	1900	250	D1900V2-5d041	EX3DV4 - SN3728	DAE4 Sn699	10.20	40.20	40.8	1.49
2020/7/7	1900	250	D1900V2-5d041	EX3DV4 - SN3728	DAE4 Sn699	10.50	40.20	42	4.48
2020/7/16	1900	250	D1900V2-5d041	ES3DV3 - SN3184	DAE4 Sn916	9.62	40.20	38.48	-4.28
2020/7/18	1900	250	D1900V2-5d041	ES3DV3 - SN3270	DAE4 Sn1399	10.20	40.20	40.8	1.49
2020/7/19	1900	250	D1900V2-5d041	EX3DV4 - SN3728	DAE4 Sn699	10.30	40.20	41.2	2.49
2020/6/19	2300	250	D2300V2-1006	EX3DV4 - SN3925	DAE4 Sn376	12.80	48.70	51.2	5.13
2020/7/7	2300	250	D2300V2-1006	EX3DV4 - SN3728	DAE4 Sn699	12.60	48.70	50.4	3.49
2020/7/10	2450	250	D2450V2-736	EX3DV4 - SN3728	DAE4 Sn699	12.60	52.70	50.4	-4.36
2020/7/15	2450	250	D2450V2-736	EX3DV4 - SN3728	DAE4 Sn699	12.20	52.70	48.8	-7.40
2020/7/18	2450	250	D2450V2-736	EX3DV4 - SN3728	DAE4 Sn699	13.10	52.70	52.4	-0.57
2020/8/4	2450	250	D2450V2-736	ES3DV3 - SN3270	DAE4 Sn1399	13.60	52.70	54.4	3.23
2020/6/19	2600	250	D2600V2-1078	EX3DV4 - SN3642	DAE4 Sn376	14.40	57.60	57.6	0.00
2020/6/20	2600	250	D2600V2-1078	EX3DV4 - SN3925	DAE4 Sn376	15.00	57.60	60	4.17
2020/7/8	2600	250	D2600V2-1078	EX3DV4 - SN3728	DAE4 Sn699	14.80	57.60	59.2	2.78
2020/7/22	2600	250	D2600V2-1078	EX3DV4 - SN3728	DAE4 Sn699	15.50	57.60	62	7.64
2020/7/25	2600	250	D2600V2-1078	EX3DV4 - SN3728	DAE4 Sn699	15.10	57.60	60.4	4.86
2020/7/22	3500	100	D3500V2-1014	EX3DV4 - SN3642	DAE4 Sn376	6.68	67.90	66.8	-1.62
2020/7/26	3500	100	D3500V2-1014	EX3DV4 - SN3642	DAE4 Sn376	6.66	67.90	66.6	-1.91
2020/7/27	3500	100	D3500V2-1014	EX3DV4 - SN3642	DAE4 Sn376	6.63	67.90	66.3	-2.36
2020/7/22	3700	100	D3700V2-1006	EX3DV4 - SN3642	DAE4 Sn376	6.63	67.30	66.3	-1.49
2020/7/26	3700	100	D3700V2-1006	EX3DV4 - SN3642	DAE4 Sn376	6.61	67.30	66.1	-1.78
2020/7/27	3700	100	D3700V2-1006	EX3DV4 - SN3642	DAE4 Sn376	6.34	67.30	63.4	-5.79
2020/7/11	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3728	DAE4 Sn699	7.70	80.70	77	-4.58
2020/7/15	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3728	DAE4 Sn699	7.64	80.70	76.4	-5.33
2020/7/16	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3728	DAE4 Sn699	7.53	80.70	75.3	-6.69
2020/7/29	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3642	DAE4 Sn376	8.72	80.70	87.2	8.05
2020/7/31	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3642	DAE4 Sn376	8.60	80.70	86	6.57
2020/8/1	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3642	DAE4 Sn376	8.51	80.70	85.1	5.45
2020/7/11	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3728	DAE4 Sn699	8.39	83.30	83.9	0.72
2020/7/15	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3728	DAE4 Sn699	7.94	83.30	79.4	-4.68
2020/7/16	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3728	DAE4 Sn699	8.17	83.30	81.7	-1.92
2020/7/17	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3728	DAE4 Sn699	8.45	83.30	84.5	1.44
2020/7/27	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3728	DAE4 Sn699	8.10	83.30	81	-2.76
2020/7/29	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3642	DAE4 Sn376	8.81	83.30	88.1	5.76
2020/7/31	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3642	DAE4 Sn376	8.66	83.30	86.6	3.96
2020/8/1	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3642	DAE4 Sn376	8.62	83.30	86.2	3.48
2020/8/4	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3642	DAE4 Sn376	8.48	83.30	84.8	1.80
2020/7/11	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3728	DAE4 Sn699	7.72	80.40	77.2	-3.98
2020/7/15	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3728	DAE4 Sn699	7.44	80.40	74.4	-7.46
2020/7/17	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3728	DAE4 Sn699	7.47	80.40	74.7	-7.09
2020/7/29	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3642	DAE4 Sn376	7.64	80.40	76.4	-4.98
2020/7/31	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3642	DAE4 Sn376	7.83	80.40	78.3	-2.61
2020/8/1	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3642	DAE4 Sn376	7.78	80.40	77.8	-3.23
2020/8/4	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3642	DAE4 Sn376	8.42	80.40	84.2	4.73

Date	Frequency (MHz) ²	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 10g SAR (W/kg) ²	Targeted 10g SAR (W/kg) ³	Normalized 10g SAR (W/kg) ⁴	Deviation (%) ²
2020/7/11	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3728	DAE4 Sn699	2.18	23.20	21.8	-6.03
2020/7/15	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3728	DAE4 Sn699	2.18	23.20	21.8	-6.03
2020/7/16	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3728	DAE4 Sn699	2.12	23.20	21.2	-8.62
2020/7/29	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3642	DAE4 Sn376	2.36	23.20	23.6	1.72
2020/7/31	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3642	DAE4 Sn376	2.36	23.20	23.6	1.72
2020/8/1	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3642	DAE4 Sn376	2.34	23.20	23.4	0.86
2020/7/11	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3728	DAE4 Sn699	2.37	23.80	23.7	-0.42
2020/7/15	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3728	DAE4 Sn699	2.19	23.80	21.9	-7.98
2020/7/16	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3728	DAE4 Sn699	2.35	23.80	23.5	-1.26
2020/7/17	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3728	DAE4 Sn699	2.43	23.80	24.3	2.10
2020/7/27	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3728	DAE4 Sn699	2.23	23.80	22.3	-6.30
2020/7/29	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3642	DAE4 Sn376	2.45	23.80	24.5	2.94
2020/7/31	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3642	DAE4 Sn376	2.36	23.80	23.6	-0.84
2020/8/1	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3642	DAE4 Sn376	2.35	23.80	23.5	-1.26
2020/7/11	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3728	DAE4 Sn699	2.18	22.90	21.8	-4.80
2020/7/15	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3728	DAE4 Sn699	2.12	22.90	21.2	-7.42
2020/7/17	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3728	DAE4 Sn699	2.15	22.90	21.5	-6.11
2020/7/29	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3642	DAE4 Sn376	2.11	22.90	21.1	-7.86
2020/7/31	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3642	DAE4 Sn376	2.16	22.90	21.6	-5.68
2020/8/1	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3642	DAE4 Sn376	2.14	22.90	21.4	-6.55

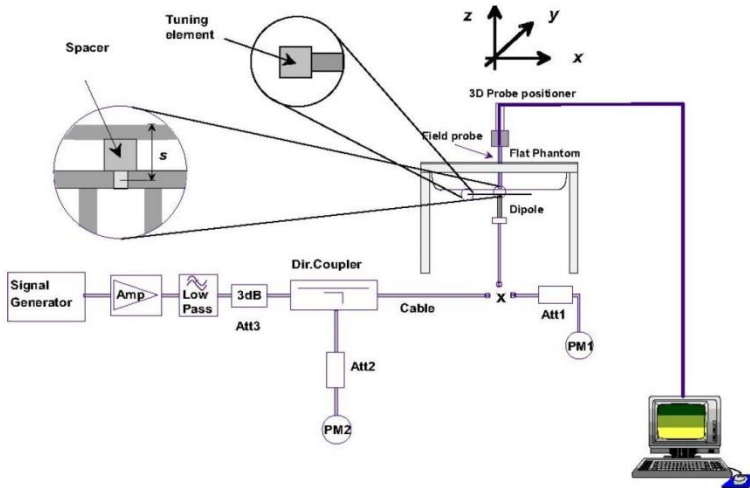


Fig 8.3.1 System Performance Check Setup



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.

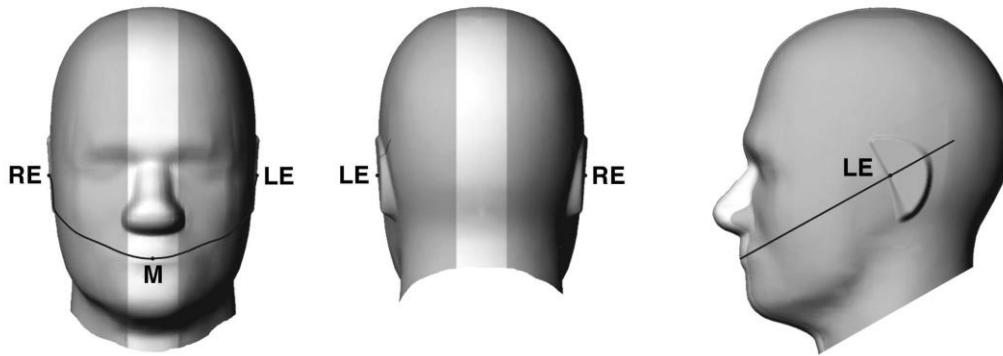


Fig 9.1.1 Front, back, and side views of SAM twin phantom

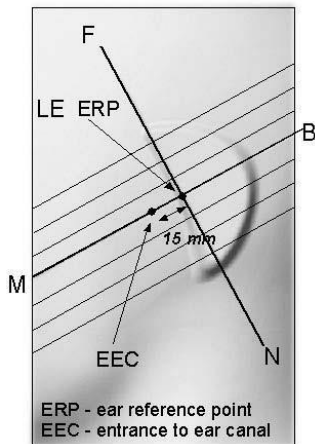


Fig 9.1.2 Close-up side view of phantom showing the ear region.

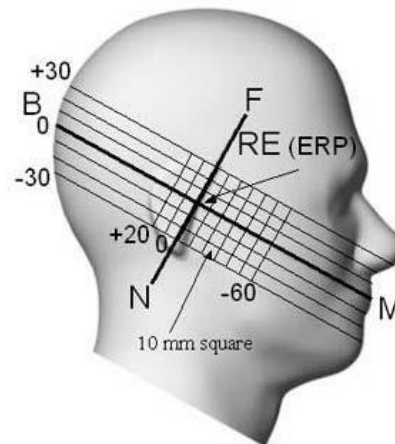


Fig 9.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

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 w_t 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 w_b 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.

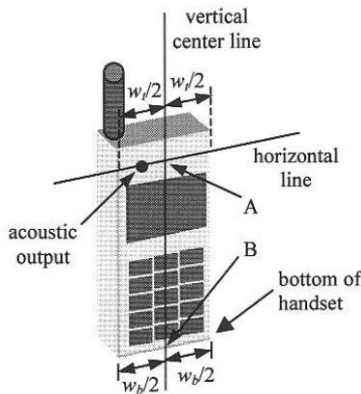


Fig 9.2.1 Handset vertical and horizontal reference lines—“fixed case”

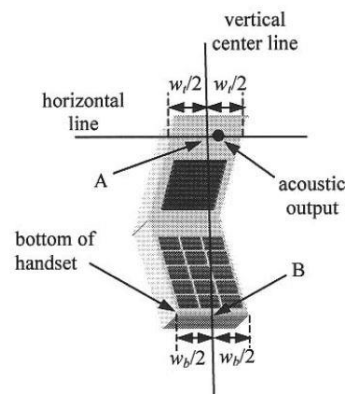


Fig 9.2.2 Handset vertical and horizontal reference lines—“clam-shell case”

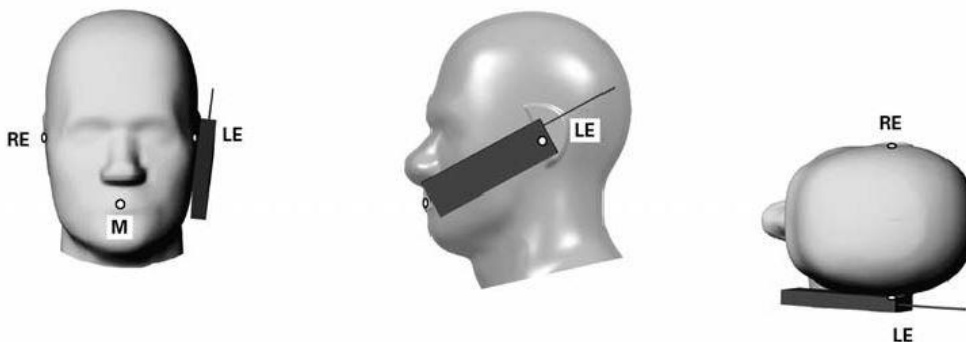


Fig 9.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

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

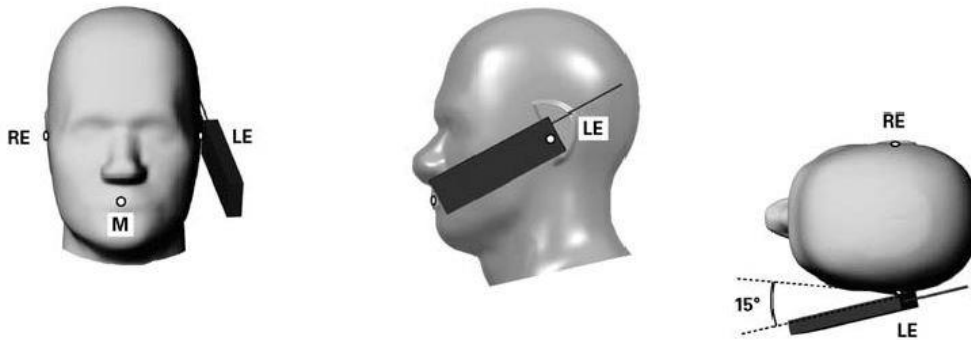


Fig 9.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

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 headset attached to the handset.

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

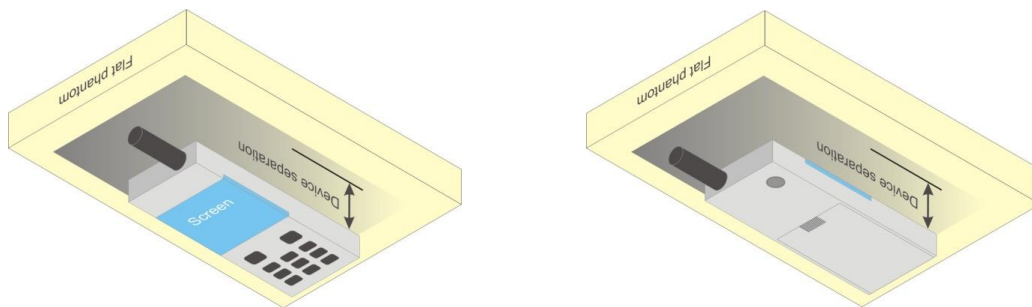


Fig 9.4 Body Worn Position

11.5 Product Specific Exposure

For smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear, According to KDB648474 D04v01r03, the following phablet procedures should be applied to evaluate SAR compliance for each applicable wireless modes and frequency band. Devices marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance

1. The normally required head and body-worn accessory SAR test procedures for handsets, including hotspot mode, must be applied.
2. The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions.6 The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.



11.6 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 \geq 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 from 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 $\leq \frac{1}{4}$ 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 $\leq \frac{1}{4}$ 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 $\frac{1}{4}$ 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_d/β_c	β_{HS} (Note 1, 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: $\Delta_{ACK}, \Delta_{NACK}$ and $\Delta_{CQI} = 30/15$ with $\beta_{HS} = 30/15 * \beta_c$.

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 $\Delta_{NACK} = 30/15$ with $\beta_{HS} = 30/15 * \beta_c$, and $\Delta_{CQI} = 24/15$ with $\beta_{HS} = 24/15 * \beta_c$.

Note 3: CM = 1 for $\beta_c/\beta_d = 12/15, \beta_{HS}/\beta_c = 24/15$. For all other combinations of DPDCCH, 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 $\beta_c = 11/15$ and $\beta_d = 15/15$.

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-TFCl
 - viii. Confirm that E-TFCl is equal to the target E-TFCl of 75 for sub-test 1, and other subtest's E-TFCl
- 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-TFCl
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/25	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	$\beta_{ed1}: 47/15$ $\beta_{ed2}: 47/15$	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15	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 $\Delta_{CQI} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$. For sub-test 5, Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 5/15$ with $\beta_{hs} = 5/15 * \beta_c$.

Note 2: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. 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 $\beta_c = 10/15$ and $\beta_d = 15/15$.

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: $\beta_c/\beta_d=2/15$
 - b). Subtest 2: $\beta_c/\beta_d=12/15$
 - c). Subtest 3: $\beta_c/\beta_d=15/8$
 - d). Subtest 4: $\beta_c/\beta_d=15/4$
 - 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	Processes	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.		

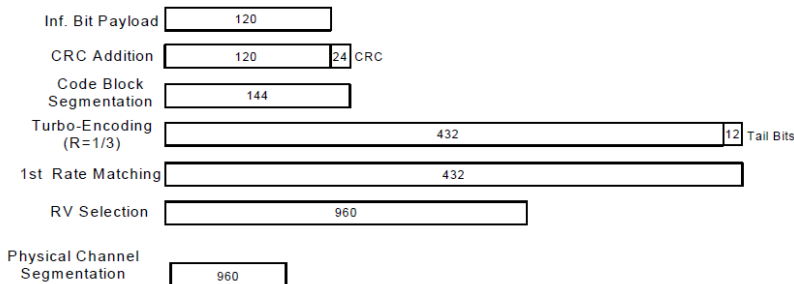
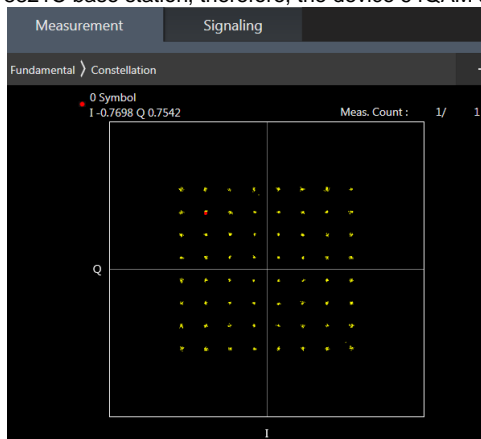


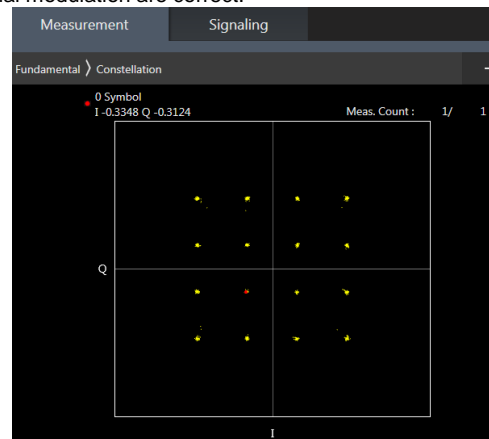
Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK) Setup Configuration

<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 $\frac{1}{2}$ 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 $\frac{1}{2}$ 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 \leq 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.

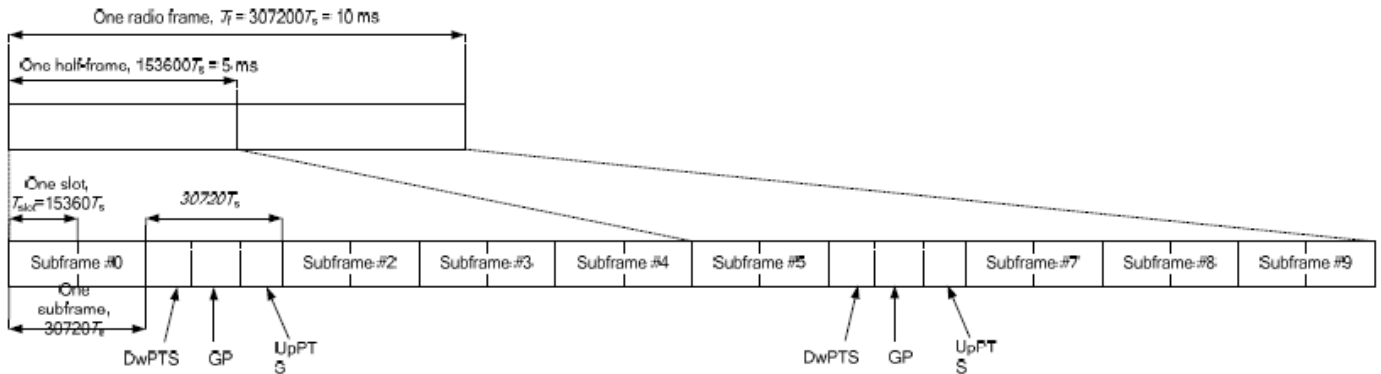


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

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 · Ts	2192 · Ts	2560 · Ts	7680 · Ts	2192 · Ts	2560 · Ts
1	19760 · Ts			20480 · Ts		
2	21952 · Ts			23040 · Ts		
3	24144 · Ts			25600 · Ts		
4	26336 · Ts	4384 · Ts	5120 · Ts	7680 · Ts	4384 · Ts	5120 · Ts
5	6592 · Ts			20480 · Ts		
6	19760 · Ts			23040 · Ts		
7	21952 · Ts			12800 · Ts		
8	24144 · Ts			-		
9	13168 · Ts	-	-	-	-	-

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 subframes, 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, n66 and n71 is limited to EN-DC operations only (NSA), with LTE Bands 2/5/7/12/13/14/30/48/66 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 for FDD / 30KHz for TDD, 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/16QAM/64QMA/256QAM with larger bandwidth, for smaller bandwidth output power will 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	
CP-OFDM	256 QAM		≤ 4.5	
		QPSK	≤ 3	
	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>

1. 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.
2. 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).
3. 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.
4. 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	Restriction	Covered by Measurement Superset	Number	Combination	Restriction	Covered by Measurement Superset	Number	Combination	Restriction	Covered by Measurement Superset
1	CA_2A-12A		3CC-1	1	CA_2A-12A-12A		4CC-1	1	CA_2A-12A-66A-66A		4CC-2
2	CA_2A-13A		3CC-5	2	CA_2A-12A-30A		4CC-9	2	CA_2A-12A-66C		
3	CA_2A-14A		3CC-8	3	CA_2A-12A-66A		4CC-1	3	CA_2A-13A-46C	B46 SCC Only	
4	CA_2A-17A			4	CA_2A-12B		4CC-11	4	CA_2A-13A-48C		
5	CA_2A-29A	B29 SCC Only	3CC-11	5	CA_2A-13A-46A	B46 SCC Only	4CC-3	5	CA_2A-13A-66A-66A		4CC-12
6	CA_2A-2A		3CC-12	6	CA_2A-13A-48A		4CC-4	6	CA_2A-13A-66B		4CC-12
7	CA_2A-30A		3CC-10	7	CA_2A-13A-66A		4CC-5	7	CA_2A-13A-66C		4CC-12
8	CA_2A-46A	B46 SCC Only	3CC-5	8	CA_2A-14A-30A			8	CA_2A-14A-66A-66A		4CC-13
9	CA_2A-48A		3CC-24	9	CA_2A-14A-66A		4CC-8	9	CA_2A-2A-12A-30A		
10	CA_2A-4A		3CC-17	10	CA_2A-29A-30A	B29 SCC Only	4CC-14	10	CA_2A-2A-12A-66A		4CC-2
11	CA_2A-5A		3CC-38	11	CA_2A-29A-66A	B29 SCC Only		11	CA_2A-2A-12B		4CC-2
12	CA_2A-66A		3CC-11	12	CA_2A-2A-12A		4CC-9	12	CA_2A-2A-13A-66A		
13	CA_2A-71A		3CC-45	13	CA_2A-2A-13A		4CC-12	13	CA_2A-2A-14A-66A		
14	CA_2A-7A		3CC-19	14	CA_2A-2A-14A		4CC-13	14	CA_2A-2A-29A-30A	B29 SCC Only	
15	CA_2C		3CC-15	15	CA_2A-2A-30A		4CC-9	15	CA_2A-2A-30A-66A		4CC-28
16	CA_4A-12A		3CC-30	16	CA_2A-2A-46A	B46 SCC Only	4CC-3	16	CA_2A-2A-46C	B46 SCC Only	4CC-126
17	CA_4A-13A		3CC-31	17	CA_2A-2A-4A		4CC-17	17	CA_2A-2A-4A-12A		4CC-35
18	CA_4A-17A			18	CA_2A-2A-5A		4CC-20	18	CA_2A-2A-4A-4A		4CC-35
19	CA_4A-29A	B29 SCC Only	3CC-32	19	CA_2A-2A-7A		4CC-23	19	CA_2A-2A-4A-5A		4CC-37
20	CA_4A-30A		3CC-33	20	CA_2A-2A-66A		4CC-21	20	CA_2A-2A-5A-30A		4CC-46
21	CA_4A-46A	B46 SCC Only	3CC-57	21	CA_2A-2A-71A		4CC-25	21	CA_2A-2A-5A-66A		4CC-43
22	CA_4A-48A		3CC-59	22	CA_2A-30A-66A		4CC-15	22	CA_2A-2A-5B		4CC-43
23	CA_4A-4A		3CC-60	23	CA_2A-46A-46A	B46 SCC Only	4CC-29	23	CA_2A-2A-7A-66A		4CC-120
24	CA_4A-5A		3CC-35	24	CA_2A-46A-48A	B46 SCC Only	4CC-49	24	CA_2A-2A-66A-66A		4CC-120
25	CA_4A-71A		3CC-36	25	CA_2A-46A-66A	B46 SCC Only	4CC-30	25	CA_2A-2A-66A-71A		4CC-50
26	CA_4A-7A		3CC-37	26	CA_2A-46C	B46 SCC Only	4CC-29	26	CA_2A-2A-66B		4CC-50
27	CA_5A-5A		3CC-43	27	CA_2A-48A-48A		4CC-32	27	CA_2A-2A-66C		4CC-50
28	CA_5A-25A			28	CA_2A-48A-66A		4CC-33	28	CA_2A-30A-66A-66A		
29	CA_5A-30A		3CC-39	29	CA_2A-48C		4CC-34	29	CA_2A-46A-46C	B46 SCC Only	4CC-126
30	CA_5A-38A			30	CA_2A-4A-12A		4CC-35	30	CA_2A-46C-66A	B46 SCC Only	
31	CA_5A-46A	B46 SCC Only	3CC-40	31	CA_2A-4A-13A			31	CA_2A-46D	B46 SCC Only	4CC-30
32	CA_5A-48A		3CC-41	32	CA_2A-4A-29A	B29 SCC Only		32	CA_2A-48A-48C		4CC-126
33	CA_5A-66A		3CC-42	33	CA_2A-4A-30A			33	CA_2A-48C-66A		
34	CA_5A-7A		3CC-38	34	CA_2A-4A-4A		4CC-18	34	CA_2A-48D		4CC-4
35	CA_5B		3CC-43	35	CA_2A-4A-5A		4CC-19	35	CA_2A-4A-12B		
36	CA_7A-12A		3CC-48	36	CA_2A-4A-71A		4CC-118	36	CA_2A-4A-4A-12A		4CC-35
37	CA_7A-46A	B46 SCC Only	3CC-86	37	CA_2A-4A-7A		4CC-39	37	CA_2A-4A-4A-5A		
38	CA_7A-66A		3CC-49	38	CA_2A-5A-7A			38	CA_2A-4A-5B		4CC-37
39	CA_7A-7A		3CC-50	39	CA_2A-5A-30A		4CC-20	39	CA_2A-4A-7A-7A		4CC-39
40	CA_7C		3CC-51	40	CA_2A-5A-46A	B46 SCC Only	4CC-41	40	CA_2A-4A-7C		
41	CA_12A-12A		3CC-53	41	CA_2A-5A-48A		4CC-42	41	CA_2A-5A-46C	B46 SCC Only	
42	CA_12A-25A			42	CA_2A-5A-66A		4CC-43	42	CA_2A-5A-48C		
43	CA_12A-30A		3CC-90	43	CA_2A-5B		4CC-38	43	CA_2A-5A-66A-66A		



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44	CA_12A-46A	B46 SCC Only	3CC-91	44	CA_2A-66A-66A		4CC-48	44	CA_2A-5A-66B		4CC-43
45	CA_12A-66A		3CC-92	45	CA_2A-66A-71A		4CC-25	45	CA_2A-5A-66C		4CC-43
46	CA_12B		3CC-89	46	CA_2A-66B		4CC-6	46	CA_2A-5B-30A		
47	CA_13A-46A	B46 SCC Only	3CC-95	47	CA_2A-66C		4CC-7	47	CA_2A-5B-66A		4CC-43
48	CA_13A-48A		3CC-96	48	CA_2A-7A-12A			48	CA_2A-66A-66A-66A		4CC-43
49	CA_13A-66A		3CC-99	49	CA_2A-7A-66A		4CC-23	49	CA_2A-46A-48C	B46 SCC Only	4CC-126
50	CA_14A-30A		3CC-102	50	CA_2A-7A-7A		4CC-23	50	CA_2A-66A-66A-71A		
51	CA_14A-66A		3CC-103	51	CA_2A-7C		4CC-23	51	CA_2A-66C-71A		4CC-50
52	CA_25A-25A		3CC-104	52	CA_2C-66A		4CC-23	52	CA_2A-7A-12B		
53	CA_25A-26A		3CC-105	53	CA_4A-12A-12A		4CC-17	53	CA_2A-7A-66A-66A		4CC-120
54	CA_25A-41A		3CC-106	54	CA_4A-12A-30A		4CC-58	54	CA_2C-66A-66A		4CC-120
55	CA_29A-30A	B29 SCC Only	3CC-108	55	CA_4A-12B		4CC-35	55	CA_4A-46A-46C	B46 SCC Only	4CC-56
56	CA_29A-66A	B29 SCC Only	3CC-108	56	CA_4A-29A-30A	B29 SCC Only		56	CA_4A-46D	B46 SCC Only	
57	CA_30A-66A		3CC-108	57	CA_4A-46A-46A	B46 SCC Only	4CC-56	57	CA_4A-48D		
58	CA_41A-41A		3CC-111	58	CA_4A-46C	B46 SCC Only	4CC-56	58	CA_4A-4A-12A-30A		
59	CA_41C		3CC-111	59	CA_4A-48C		4CC-57	59	CA_4A-4A-12B		4CC-59
60	CA_46A-66A	B46 SCC Only	3CC-114	60	CA_4A-4A-12A		4CC-59	60	CA_4A-4A-5B		4CC-59
61	CA_46A-71A	B46 SCC Only	3CC-116	61	CA_4A-4A-13A			61	CA_5A-30A-66A-66A		
62	CA_48A-48A		3CC-118	62	CA_4A-4A-5A		4CC-19	62	CA_5A-46C-66A	B46 SCC Only	
63	CA_48A-66A		3CC-117	63	CA_4A-4A-71A		4CC-118	63	CA_5A-46D	B46 SCC Only	4CC-62
64	CA_48C		3CC-119	64	CA_4A-4A-7A		4CC-39	64	CA_5A-48A-48C		4CC-65
65	CA_66A-66A		3CC-120	65	CA_4A-5A-30A			65	CA_5A-48C-66A		
66	CA_66A-71A		3CC-129	66	CA_4A-5B		4CC-19	66	CA_5A-48D		4CC-65
67	CA_66B		3CC-127	67	CA_4A-7A-12A			67	CA_5A-5A-66A-66A		4CC-65
68	CA_66C		3CC-128	68	CA_4A-7A-7A		4CC-39	68	CA_5A-5A-66B		4CC-65
69	CA_7A-13A		3CC-130	69	CA_4A-7C		4CC-39	69	CA_5A-5A-66C		4CC-65
70	CA_7A-26A		3CC-134	70	CA_5A-5A-66A		4CC-43	70	CA_5B-30A-66A		4CC-61
71	CA_7A-29A	B29 SCC Only	3CC-131	71	CA_5A-30A-66A		4CC-61	71	CA_5B-66A-66A		4CC-65
				72	CA_5A-46A-66A	B46 SCC Only	4CC-62	72	CA_5B-46C	B46 SCC Only	4CC-62
				73	CA_5A-46C	B46 SCC Only	4CC-62	73	CA_5B-66B		4CC-65
				74	CA_5A-48A-48A		4CC-64	74	CA_5B-66C		4CC-65
				75	CA_5A-48A-66A		4CC-65	75	CA_7A-12B-66A		
				76	CA_5A-48C		4CC-64	76	CA_7A-46D	B46 SCC Only	4CC-122
				77	CA_5A-66A-66A		4CC-61	77	CA_7A-7A-46C	B46 SCC Only	4CC-122
				78	CA_5A-66B		4CC-68	78	CA_7C-66A-66A		4CC-23
				79	CA_5A-66C		4CC-69	79	CA_7C-46C	B46 SCC Only	4CC-122
				80	CA_5A-7A-7A		4CC-123	80	CA_12A-30A-66A-66A		
				81	CA_5A-7C		4CC-123	81	CA_12A-46D	B46 SCC Only	
				82	CA_5B-46A	B46 SCC Only	4CC-72	82	CA_12B-66A-66A		4CC-75
				83	CA_5B-66A		4CC-71	83	CA_13A-46C-66A	B46 SCC Only	
				84	CA_7A-12A-66A		4CC-75	84	CA_13A-46D	B46 SCC Only	4CC-83
				85	CA_7A-12B		4CC-75	85	CA_13A-66A-66C		4CC-83
				86	CA_7A-46C	B46 SCC Only	4CC-79	86	CA_13A-48A-66B		4CC-87
				87	CA_7A-66A-66A		4CC-78	87	CA_13A-48A-66C		
				88	CA_7A-7A-46A	B46 SCC Only	4CC-79	88	CA_13A-48A-48C		4CC-87
				89	CA_12B-66A		4CC-80	89	CA_13A-48C-66A		4CC-87
				90	CA_12A-30A-66A		4CC-80	90	CA_13A-48D		4CC-87
				91	CA_12A-46C	B46 SCC Only	4CC-81	91	CA_13A-66A-66A-66A		4CC-87
				92	CA_12A-66A-66A		4CC-80	92	CA_13A-66A-66B		4CC-87
				93	CA_12A-66C		4CC-80	93	CA_13A-66D		4CC-87
				94	CA_13A-46A-66A	B46 SCC Only	4CC-83	94	CA_14A-30A-66A-66A		
				95	CA_13A-46C	B46 SCC Only	4CC-83	95	CA_25A-25A-41C		
				96	CA_13A-48A-48A		4CC-88	96	CA_25A-41D		4CC-95
				97	CA_13A-48A-66A		4CC-87	97	CA_29A-30A-66A-66A	B29 SCC Only	
				98	CA_13A-48C		4CC-87	98	CA_41A-41A-41C		4CC-95
				99	CA_13A-66A-66A		4CC-87	99	CA_41A-41D		4CC-95



				100	CA_13A-66B		4CC-87	100	CA_41C-41C		4CC-95
				101	CA_13A-66C		4CC-87	101	CA_41E		4CC-95
				102	CA_14A-30A-66A		4CC-94	102	CA_46A-46C-66A	B46 SCC Only	4CC-83
				103	CA_14A-66A-66A		4CC-94	103	CA_46A-66A-66A-66A	B46 SCC Only	4CC-83
				104	CA_25A-25A-25A		4CC-95	104	CA_46C-66A-66A	B46 SCC Only	4CC-83
				105	CA_25A-25A-26A			105	CA_46D-66A	B46 SCC Only	4CC-83
				106	CA_25A-25A-41A		4CC-95	106	CA_48A-48A-66A-66A		4CC-125
				107	CA_25A-41C		4CC-95	107	CA_48A-66A-66A-66A		4CC-125
				108	CA_29A-30A-66A	B29 SCC Only	4CC-97	108	CA_48C-66B		4CC-125
				109	CA_29A-66A-66A	B29 SCC Only	4CC-97	109	CA_48C-66C		4CC-125
				110	CA_30A-66A-66A		4CC-97	110	CA_48A-48A-66B		4CC-125
				111	CA_41A-41C		4CC-95	111	CA_48A-48A-66C		4CC-125
				112	CA_41D		4CC-95	112	CA_48A-48C-66A		4CC-125
				113	CA_46A-46A-66A	B46 SCC Only	4CC-104	113	CA_48A-48D		4CC-125
				114	CA_46A-66A-66A	B46 SCC Only	4CC-104	114	CA_48C-48C		4CC-125
				115	CA_46C-66A	B46 SCC Only	4CC-104	115	CA_48C-66A-66A		4CC-125
				116	CA_46C-71A	B46 SCC Only		116	CA_48D-66A		4CC-125
				117	CA_46A-66C	B46 SCC Only	4CC-33	117	CA_48E		4CC-125
				118	CA_48A-48A-66A		4CC-33	118	CA_2A-2A-4A-71A		
				119	CA_48A-48C		4CC-32	119	CA_2A-7A-7A-29A	B29 SCC Only	
				120	CA_48A-66A-66A		4CC-111	120	CA_2A-7A-7A-66A		
				121	CA_48A-66B		4CC-111	121	CA_2A-7A-7A-13A		
				122	CA_48A-66C		4CC-111	122	CA_2A-7A-46C	B46 SCC Only	
				123	CA_48C-66A		4CC-116	123	CA_5A-7A-66A-66A		
				124	CA_48D		4CC-116	124	CA_7A-7A-66A-66A		4CC-123
				125	CA_66A-66A-66A		4CC-115	125	CA_46C-48A-66A	B46 SCC Only	
				126	CA_66A-66A-71A		4CC-25	126	CA_2A-46C-48A	B46 SCC Only	
				127	CA_66A-66B		4CC-92	127	CA_46A-48C-66A	B46 SCC Only	4CC-125
				128	CA_66A-66C		4CC-92				
				129	CA_66C-71A		4CC-25				
				130	CA_2A-7A-13A		4CC-121				
				131	CA_2A-7A-29A	B29 SCC Only	4CC-119				
				132	CA_2A-7A-46A	B46 SCC Only	4CC-122				
				133	CA_5A-7A-66A		4CC-123				
				134	CA_7A-7A-26A						
				135	CA_7A-7A-66A		4CC-124				
				136	CA_7C-66A		4CC-124				
				137	CA_7C-13A		4CC-121				
				138	CA_46A-48A-66A	B46 SCC Only	4CC-127				

<Power verification for DL Carrier Aggregation>

General Note:

1. 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.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.

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

<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	CA_2A-17A	2	5	1907.5	19175	QPSK	1	24	17	10	740	5790	24.89	24.95
	CA_4A-17A	4	5	1752.5	20375	QPSK	1	12	17	10	740	5790	24.45	24.48
	CA_5A-25A	5	10	829	20450	QPSK	1	0	25	20	1960	8340	24.74	24.76
	CA_5A-38A	5	10	829	20450	QPSK	1	0	38	20	2595	38000	24.75	24.76
	CA_12A-25A	12	10	704	23060	QPSK	1	49	25	20	1960	8340	24.68	24.76

<Three Carrier power verification>

Configure	CA Configuration (BCS)	PCC							SCC1				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	CA_2A-14A-30A	2	20	1900	19100	QPSK	1	0	14	10	763	5330	30	10	2355	9820	24.93	24.96
	CA_2A-29A-66A	2	20	1900	19100	QPSK	1	0	29	10	722.5	9715	66	20	2155	66886	24.96	24.96
	CA_2A-4A-13A	2	20	1900	19100	QPSK	1	0	4	20	2132.5	2175	13	10	751	5230	24.92	24.96
	CA_2A-4A-29A	2	20	1900	19100	QPSK	1	0	4	20	2132.5	2175	13	10	751	5230	24.93	24.96
	CA_2A-4A-30A	2	20	1900	19100	QPSK	1	0	4	20	2132.5	2175	30	10	2355	9820	24.96	24.96
	CA_2A-5A-7A	2	20	1900	19100	QPSK	1	0	5	10	881.5	2525	7	20	2655	3100	24.92	24.96
	CA_2A-7A-12A	2	20	1900	19100	QPSK	1	0	7	20	2655	3100	12	10	737.5	5095	24.94	24.96
	CA_4A-29A-30A	4	20	1732.5	20175	QPSK	1	0	29	10	722.5	9715	30	10	2355	9820	24.42	24.50
	CA_4A-4A-13A	4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	13	10	751	5230	24.47	24.50
	CA_4A-5A-30A	4	20	1732.5	20175	QPSK	1	0	5	10	881.5	2525	30	10	2355	9820	24.46	24.50
	CA_4A-7A-12A	4	20	1732.5	20175	QPSK	1	0	7	20	2655	3100	12	10	737.5	5095	24.49	24.50
	CA_25A-25A-26A	25	20	1905	26590	QPSK	1	0	25	5	1932.5	8065	26	15	876.5	8865	24.82	24.91
	CA_46C-71A	71	20	673	133222	QPSK	1	0	46	20	5537.5	50665	46	20	5557.3	50863	24.68	24.77
	CA_7A-7A-26A	7	20	2510	20850	QPSK	1	99	7	5	2687.5	3425	26	15	876.5	8865	24.74	24.84



<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	CA_2A-12A-66C	2	20	1900	19100	QPSK	1	0	12	10	737.5	5095	66	20	2155	66886	66	20	2174.8	67084	24.89	24.96
	CA_2A-13A-46C	2	20	1900	19100	QPSK	1	0	13	10	751	5230	46	20	5537.5	50665	46	20	5557.3	50863	24.86	24.96
	CA_2A-13A-48C	2	20	1900	19100	QPSK	1	0	13	10	751	5230	48	20	3660	56340	48	20	3679.8	56538	24.93	24.96
	CA_2A-2A-12A-30A	2	20	1900	19100	QPSK	1	0	2	5	1932.5	625	12	10	737.5	5095	30	10	2355	9820	24.93	24.96
	CA_2A-2A-13A-66A	2	20	1900	19100	QPSK	1	0	2	5	1932.5	625	13	10	751	5230	66	20	2155	66886	24.87	24.96
	CA_2A-2A-14A-66A	2	20	1900	19100	QPSK	1	0	2	5	1932.5	625	14	10	763	5330	66	20	2155	66886	24.87	24.96
	CA_2A-2A-29A-30A	2	20	1900	19100	QPSK	1	0	2	5	1932.5	625	29	10	722.5	9715	30	10	2355	9820	24.86	24.96
	CA_2A-30A-66A-66A	2	20	1900	19100	QPSK	1	0	30	10	2355	9820	66	20	2155	66886	66	5	2197.5	67311	24.91	24.96
	CA_2A-46C-66A	2	20	1900	19100	QPSK	1	0	46	20	5537.5	50665	46	20	5557.3	50863	66	20	2155	66886	24.88	24.96
	CA_2A-48C-66A	2	20	1900	19100	QPSK	1	0	48	20	3660	56340	48	20	3679.8	56538	66	20	2155	66886	24.89	24.96
	CA_2A-4A-12B	2	20	1900	19100	QPSK	1	0	4	20	2132.5	2175	12	10	740	5120	12	5	732.8	5048	24.95	24.96
	CA_2A-4A-4A-5A	2	20	1900	19100	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	5	10	881.5	2525	24.92	24.96
	CA_2A-4A-7C	2	20	1900	19100	QPSK	1	0	4	20	2132.5	2175	7	20	2655	3100	7	20	2674.8	3298	24.86	24.96
	CA_2A-5A-46C	2	20	1900	19100	QPSK	1	0	5	10	881.5	2525	46	20	5537.5	50665	46	20	5557.3	50863	24.91	24.96
	CA_2A-5A-48C	2	20	1900	19100	QPSK	1	0	5	10	881.5	2525	48	20	3660	56340	48	20	3679.8	56538	24.94	24.96
	CA_2A-5A-66A-66A	2	20	1900	19100	QPSK	1	0	5	10	881.5	2525	66	20	2155	66886	66	5	2197.5	67311	24.93	24.96
	CA_2A-5B-30A	2	20	1900	19100	QPSK	1	0	5	10	876.6	2476	5	10	886.5	2575	30	10	2355	9820	24.89	24.96
	CA_2A-66A-66A-71A	2	20	1900	19100	QPSK	1	0	66	20	2155	66886	66	5	2197.5	67311	71	20	634.5	68761	24.91	24.96
	CA_2A-7A-12B	2	20	1900	19100	QPSK	1	0	7	20	2655	3100	12	10	740	5120	12	5	732.8	5048	24.87	24.96
	CA_4A-46D	4	20	1732.5	20175	QPSK	1	0	46	20	5537.5	50665	46	20	5557.3	50863	46	20	5577.1	51061	24.46	24.50
	CA_4A-48D	4	20	1732.5	20175	QPSK	1	0	48	20	3625	55990	48	20	3644.8	56188	48	20	3664.6	56386	24.40	24.50
	CA_4A-4A-12A-30A	4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	12	10	737.5	5095	30	10	2355	9820	24.42	24.50
	CA_5A-30A-66A-66A	5	10	829	20450	QPSK	1	0	30	10	2355	9820	66	20	2155	66886	66	5	2197.5	67311	24.71	24.76
	CA_5A-46C-66A	5	10	829	20450	QPSK	1	0	46	20	5537.5	50665	46	20	5557.3	50863	66	20	2155	66886	24.66	24.76
	CA_5A-48C-66A	5	10	829	20450	QPSK	1	0	48	20	3625	55990	48	20	3644.8	56188	66	20	2155	66886	24.70	24.76
	CA_7A-12B-66A	7	20	2510	20850	QPSK	1	99	12	10	740	5120	12	5	732.8	5048	66	20	2155	66886	24.82	24.84
	CA_12A-30A-66A-66A	12	10	704	23060	QPSK	1	49	30	10	2355	9820	66	20	2155	66886	66	5	2197.5	67311	24.76	24.76
	CA_12A-46D	12	10	704	23060	QPSK	1	49	46	20	5537.5	50665	46	20	5557.3	50863	46	20	5577.1	51061	24.67	24.76
	CA_13A-46C-66A	13	10	793	23230	QPSK	1	49	46	20	5537.5	50665	46	20	5557.3	50863	66	20	2155	66886	24.25	24.35
	CA_13A-48A-66C	13	10	782	23230	QPSK	1	49	48	20	3625	55990	66	20	2155	66886	66	20	2174.8	67084	24.35	24.35
	CA_14A-30A-66A-66A	14	10	793	23330	QPSK	1	0	30	10	2355	9820	66	20	2155	66886	66	5	2197.5	67311	24.70	24.75
	CA_25A-25A-41C	25	20	1905	26590	QPSK	1	0	25	5	1932.5	8065	41	20	2593	40620	41	20	2612.8	40818	24.89	24.91
	CA_29A-30A-66A-66A	30	10	2310	27710	QPSK	1	0	29	10	722.5	9715	66	20	2155	66886	66	5	2197.5	67311	22.93	23.02
	CA_2A-2A-4A-71A	2	20	1900	19100	QPSK	1	0	2	5	1932.5	625	4	20	2132.5	2175	71	20	634.5	68761	24.96	24.96
CA_2A-7A-7A-29A	2	20	1900	19100	QPSK	1	0	7	20	2655	3100	7	5	2687.5	3425	66	20	2155	66886	24.86	24.96	
CA_2A-7A-7A-66A	2	20	1900	19100	QPSK	1	0	7	20	2655	3100	7	5	2687.5	3425	66	20	2155	66886	24.95	24.96	
CA_2A-7A-7A-13A	2	20	1900	19100	QPSK	1	0	7	20	2655	3100	7	5	2687.5	3425	13	10	751	5230	24.93	24.96	
CA_2A-7A-46C	2	20	1900	19100	QPSK	1	0	7	20	2655	3100	46	20	5537.5	50665	46	20	5557.3	50863	24.93	24.96	
CA_5A-7A-66A-66A	5	10	829	20450	QPSK	1	0	7	20	2655	3100	66	20	2155	66886	66	5	2197.5	67311	24.66	24.76	
CA_46C-48A-66A	48	20	3609	55830	QPSK	1	0	46	20	5537.5	50665	46	20	5557.3	50863	66	20	2155	66886	24.24	24.24	
CA_2A-46C-48A	2	20	1900	19100	QPSK	1	0	46	20	5537.5	50665	46	20	5557.3	50863	48	20	3625	55990	24.96	24.96	



<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
1	5B
2	7C
3	41C
4	48C
5	66B
6	66C

Config 0

<ANT 0>

CA_5B_DSI 2/4/6/7/8										
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	2	0	24.72	25.7
20575	20476	QPSK	1	0	1	49	2	0	24.79	25.7
20600	20501	QPSK	1	0	1	49	2	0	24.82	25.7

<ANT 2>

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	2	0	25.15	25.7
21100	20902	QPSK	1	0	1	99	2	0	25.04	25.7
21350	21152	QPSK	1	0	1	99	2	0	25.25	25.7

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	2	0	24.07	25.7
21100	20902	QPSK	1	0	1	99	2	0	24.30	25.7
21350	21152	QPSK	1	0	1	99	2	0	24.41	25.7



CA_7C_DSI 6/8										
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	2	0	24.07	24.9
21100	20902	QPSK	1	0	1	99	2	0	24.30	24.9
21350	21152	QPSK	1	0	1	99	2	0	24.41	24.9

CA_66B_DSI 2/7										
Combination 15MHz+5MHz (75RB+25RB)										
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				
132047	132140	QPSK	1	74	1	0	2	0	25.36	25.7
132322	132229	QPSK	1	0	1	24	2	0	24.7	25.7
132597	132504	QPSK	1	0	1	24	2	0	25.23	25.7

CA_66B_DSI 4										
Combination 15MHz+5MHz (75RB+25RB)										
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				
132047	132140	QPSK	1	74	1	0	2	0	23.61	24.9
132322	132229	QPSK	1	0	1	24	2	0	23.53	24.9
132597	132504	QPSK	1	0	1	24	2	0	23.46	24.9

CA_66B_DSI 6/8										
Combination 15MHz+5MHz (75RB+25RB)										
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				
132047	132140	QPSK	1	74	1	0	2	0	22.82	24.1
132322	132229	QPSK	1	0	1	24	2	0	22.70	24.1
132597	132504	QPSK	1	0	1	24	2	0	22.68	24.1

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	2	0	25.66	25.7
132322	132124	QPSK	1	0	1	99	2	0	25.35	25.7
132572	132374	QPSK	1	0	1	99	2	0	25.34	25.7

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	2	0	23.84	24.9
132322	132124	QPSK	1	0	1	99	2	0	23.77	24.9
132572	132374	QPSK	1	0	1	99	2	0	23.78	24.9



CA_66C_DSI 6 / 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	2	0	23.02	24.1
132322	132124	QPSK	1	0	1	99	2	0	22.98	24.1
132572	132374	QPSK	1	0	1	99	2	0	22.88	24.1

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	2	0	25.64	25.7
40185	39987	QPSK	1	0	1	99	2	0	25.58	25.7
40620	40422	QPSK	1	0	1	99	2	0	25.65	25.7
41055	40857	QPSK	1	0	1	99	2	0	25.60	25.7
41490	41292	QPSK	1	0	1	99	2	0	25.69	25.7

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	2	0	24.31	25.7
40185	39987	QPSK	1	0	1	99	2	0	24.49	25.7
40620	40422	QPSK	1	0	1	99	2	0	24.71	25.7
41055	40857	QPSK	1	0	1	99	2	0	24.62	25.7
41490	41292	QPSK	1	0	1	99	2	0	24.71	25.7

CA_41C_DSI 6 / 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	2	0	24.31	25.1
40185	39987	QPSK	1	0	1	99	2	0	24.49	25.1
40620	40422	QPSK	1	0	1	99	2	0	24.71	25.1
41055	40857	QPSK	1	0	1	99	2	0	24.62	25.1
41490	41292	QPSK	1	0	1	99	2	0	24.71	25.1

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CA_48C_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				
55340	55538	QPSK	1	99	1	0	2	0	5.86	7
55830	55632	QPSK	1	0	1	99	2	0	14.54	15.5
56150	55952	QPSK	1	0	1	99	2	0	14.28	15.5
56640	56442	QPSK	1	0	1	99	2	0	5.74	7



CA_48C_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				
55340	55538	QPSK	1	99	1	0	2	0	5.85	7
55830	55632	QPSK	1	0	1	99	2	0	14.52	15.5
56150	55952	QPSK	1	0	1	99	2	0	14.39	15.5
56640	56442	QPSK	1	0	1	99	2	0	5.68	7

CA_48C_DSI 6 / 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	2	0	5.85	7
55830	55632	QPSK	1	0	1	99	2	0	14.51	15.5
56150	55952	QPSK	1	0	1	99	2	0	14.36	15.5
56640	56442	QPSK	1	0	1	99	2	0	5.71	7

Config 1

<ANT 1>

CA_5B_DSI 4 / 6 / 8										
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	2	0	25.34	25.70
20575	20476	QPSK	1	0	1	49	2	0	25.26	25.70
20600	20501	QPSK	1	0	1	49	2	0	25.40	25.70

CA_5B_DSI 2										
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	2	0	23.17	25.00
20575	20476	QPSK	1	0	1	49	2	0	23.22	25.00
20600	20501	QPSK	1	0	1	49	2	0	23.21	25.00

CA_5B_DSI 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	2	0	23.17	24.20
20575	20476	QPSK	1	0	1	49	2	0	23.22	24.20
20600	20501	QPSK	1	0	1	49	2	0	23.21	24.20



<ANT 0>

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	2	0	24.57	25.70
21100	20902	QPSK	1	0	1	99	2	0	24.62	25.70
21350	21152	QPSK	1	0	1	99	2	0	24.67	25.70

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	2	0	20.80	22.80
21100	20902	QPSK	1	0	1	99	2	0	20.93	22.80
21350	21152	QPSK	1	0	1	99	2	0	21.06	22.80

CA_7C_DSI 6 / 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	2	0	20.80	22.00
21100	20902	QPSK	1	0	1	99	2	0	20.93	22.00
21350	21152	QPSK	1	0	1	99	2	0	21.06	22.00

CA_66B_DSI 2 / 7										
Combination 15MHz+5MHz (75RB+25RB)										
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				
132047	132140	QPSK	1	74	1	0	2	0	25.20	25.70
132322	132229	QPSK	1	0	1	24	2	0	24.66	25.70
132597	132504	QPSK	1	0	1	24	2	0	25.11	25.70

CA_66B_DSI 4										
Combination 15MHz+5MHz (75RB+25RB)										
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				
132047	132140	QPSK	1	74	1	0	2	0	19.50	20.80
132322	132229	QPSK	1	0	1	24	2	0	19.46	20.80
132597	132504	QPSK	1	0	1	24	2	0	19.23	20.80

CA_66B_DSI 6 / 8										
Combination 15MHz+5MHz (75RB+25RB)										
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				
132047	132140	QPSK	1	74	1	0	2	0	18.59	20.00
132322	132229	QPSK	1	0	1	24	2	0	18.59	20.00
132597	132504	QPSK	1	0	1	24	2	0	18.47	20.00



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	2	0	25.68	25.70
132322	132124	QPSK	1	0	1	99	2	0	25.50	25.70
132572	132374	QPSK	1	0	1	99	2	0	25.24	25.70

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	2	0	19.46	20.80
132322	132124	QPSK	1	0	1	99	2	0	19.27	20.80
132572	132374	QPSK	1	0	1	99	2	0	19.69	20.80

CA_66C_DSI 6 / 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	2	0	18.66	20.00
132322	132124	QPSK	1	0	1	99	2	0	18.60	20.00
132572	132374	QPSK	1	0	1	99	2	0	18.58	20.00

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	2	0	24.77	25.70
40185	39987	QPSK	1	0	1	99	2	0	24.94	25.70
40620	40422	QPSK	1	0	1	99	2	0	24.93	25.70
41055	40857	QPSK	1	0	1	99	2	0	24.92	25.70
41490	41292	QPSK	1	0	1	99	2	0	25.03	25.70

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	2	0	21.99	23.20
40185	39987	QPSK	1	0	1	99	2	0	22.16	23.20
40620	40422	QPSK	1	0	1	99	2	0	22.11	23.20
41055	40857	QPSK	1	0	1	99	2	0	22.09	23.20
41490	41292	QPSK	1	0	1	99	2	0	21.97	23.20

CA_41C_DSI 6 / 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	2	0	21.11	22.40
40185	39987	QPSK	1	0	1	99	2	0	21.30	22.40
40620	40422	QPSK	1	0	1	99	2	0	21.26	22.40
41055	40857	QPSK	1	0	1	99	2	0	21.18	22.40
41490	41292	QPSK	1	0	1	99	2	0	21.19	22.40



<ANT 2>

CA_48C_DSI 2 / 4 / 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				
55340	55538	QPSK	1	99	1	0	2	0	4.43	5.50
55830	55632	QPSK	1	0	1	99	2	0	13.08	14.00
56150	55952	QPSK	1	0	1	99	2	0	12.97	14.00
56640	56442	QPSK	1	0	1	99	2	0	4.01	5.50

CA_48C_DSI 6 / 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	2	0	4.46	5.50
55830	55632	QPSK	1	0	1	99	2	0	12.97	14.00
56150	55952	QPSK	1	0	1	99	2	0	12.87	14.00
56640	56442	QPSK	1	0	1	99	2	0	4.02	5.50

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
2.4GHz WLAN Ant 4+3	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm
5GHz WLAN Ant 3	≤ 25mm	≤ 25mm	>25mm	>25mm	>25mm	≤ 25mm
5GHz WLAN/BT Ant 4	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	>25mm
5GHz WLAN Ant 4+3	≤ 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	No	Yes	Yes	Yes
WWAN Ant 7	Yes	Yes	No	Yes	Yes	Yes
2.4GHz WLAN Ant 3	Yes	Yes	No	No	No	Yes
2.4GHz WLAN/BT Ant 4	Yes	Yes	Yes	No	Yes	No
2.4GHz WLAN Ant 4+3	Yes	Yes	Yes	No	Yes	Yes
5GHz WLAN Ant 3	Yes	Yes	No	No	No	Yes
5GHz WLAN Ant 4	Yes	Yes	Yes	No	Yes	No
5GHz WLAN Ant 4+3	Yes	Yes	Yes	No	Yes	Yes

General Note:

- 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
- 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.
 - f. For NR TDD SAR = Measured SAR(W/kg)*Tune-up Scaling Factor*transmission cycle factor
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 ≥ 0.8 W/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.
5. Per KDB648474 D04v01r03, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, when hotspot mode applies, 10-g product specific SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold. For this device only 5.3GHz / 5.5GHz WLAN product specific SAR is necessary, due to an overall diagonal dimension is > 16 cm

GSM Note:

3. 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.
4. 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 $\leq \frac{1}{4}$ 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 $\leq \frac{1}{4}$ 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 $\frac{1}{4}$ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.

**CDMA Note:**

1. Per KDB 941225 D01v03r01, SAR for next to the ear head exposure is measured in RC3 with the handset configured to transmit at full rate in SO55.
2. Per KDB 941225 D01v03r01, in Hotspot mode EUT is treated as data device and SAR is tested with Ev-Do Rev 0 (RTAP 153.6kbps) as the primary mode.
3. Per KDB 941225 D01v03r01, for Body-worn accessory SAR is measured in RC3 with the handset configured in TDSO/SO32 to transmit at full rate on FCH only with all other code channels disabled. The body-worn accessory procedures in KDB Publication 447498 are applied. The 3G SAR test reduction procedure is applied to the multiple code channel configuration (FCH+SCH), with FCH only as the primary mode.

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 $\frac{1}{2}$ 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 $\frac{1}{2}$ 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 \leq 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 active. The SCC was configured 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 according to 3GPP MPR will not $\frac{1}{2}$ 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 $\frac{1}{2}$ 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 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.
6. 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	128	824.2	Config 0	28.49	29.50	1.262	-0.02	0.203	0.256
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Tilted	0mm	DSI 2/7	128	824.2	Config 0	28.49	29.50	1.262	-0.05	0.107	0.135
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	DSI 2/7	128	824.2	Config 0	28.49	29.50	1.262	-0.05	0.166	0.209
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Tilted	0mm	DSI 2/7	128	824.2	Config 0	28.49	29.50	1.262	0.02	0.108	0.136
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 7	189	836.4	Config 1	25.90	26.50	1.148	-0.1	0.653	0.750
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	DSI 7	189	836.4	Config 1	25.90	26.50	1.148	-0.14	0.469	0.538
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	DSI 7	189	836.4	Config 1	25.90	26.50	1.148	-0.14	0.403	0.463
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	DSI 7	189	836.4	Config 1	25.90	26.50	1.148	0.06	0.339	0.389
	GSM850_Ant 1-	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 2	189	836.4	Config 1	25.90	27.30	1.380	-0.1	0.653	0.901
	GSM850_Ant 1-	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 2	128	824.2	Config 1	25.85	27.30	1.396	-0.16	0.495	0.691
01	GSM850_Ant 1-	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 2	251	848.8	Config 1	25.60	27.30	1.479	-0.17	0.798	1.180
	GSM850_Ant 1-	GPRS (4 Tx slots)	Right Tilted	0mm	DSI 2	189	836.4	Config 1	25.90	27.30	1.380	-0.14	0.469	0.647
	GSM850_Ant 1-	GPRS (4 Tx slots)	Left Cheek	0mm	DSI 2	189	836.4	Config 1	25.90	27.30	1.380	-0.14	0.403	0.556
	GSM850_Ant 1-	GPRS (4 Tx slots)	Left Tilted	0mm	DSI 2	189	836.4	Config 1	25.90	27.30	1.380	0.06	0.339	0.468
02	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 2/7	661	1880	Config 0	26.75	27.00	1.059	-0.03	0.470	0.498
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Tilted	0mm	DSI 2/7	661	1880	Config 0	26.75	27.00	1.059	0.06	0.215	0.228
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Cheek	0mm	DSI 2/7	661	1880	Config 0	26.75	27.00	1.059	0.01	0.245	0.260
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Tilted	0mm	DSI 2/7	661	1880	Config 0	26.75	27.00	1.059	-0.13	0.193	0.204
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 2/7	661	1880	Config 1	26.20	26.50	1.072	0.11	0.087	0.093
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Tilted	0mm	DSI 2/7	661	1880	Config 1	26.20	26.50	1.072	0.04	0.030	0.032
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	DSI 2/7	661	1880	Config 1	26.20	26.50	1.072	-0.15	0.072	0.077
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Tilted	0mm	DSI 2/7	661	1880	Config 1	26.20	26.50	1.072	0.15	0.029	0.031



<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	9538	1907.6	Config 0	25.08	25.70	1.153	0.06	0.821	0.947
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	9262	1852.4	Config 0	24.76	25.70	1.242	0.1	0.607	0.754
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	9400	1880	Config 0	24.95	25.70	1.189	0.13	0.619	0.736
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	9538	1907.6	Config 0	25.01	25.70	1.172	-0.03	0.364	0.427
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	9538	1907.6	Config 0	25.01	25.70	1.172	-0.18	0.419	0.491
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	9538	1907.6	Config 0	25.01	25.70	1.172	0.03	0.366	0.429
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	9538	1907.6	Config 1	25.02	25.70	1.169	0.08	0.158	0.185
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	9538	1907.6	Config 1	25.02	25.70	1.169	0.15	0.066	0.077
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	9538	1907.6	Config 1	25.02	25.70	1.169	0.03	0.236	0.276
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	9538	1907.6	Config 1	25.02	25.70	1.169	0.06	0.081	0.095
04	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	1513	1752.6	Config 0	24.96	25.70	1.186	0.14	0.672	0.797
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	1513	1752.6	Config 0	24.96	25.70	1.186	0.01	0.272	0.323
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	1513	1752.6	Config 0	24.96	25.70	1.186	-0.03	0.365	0.433
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	1513	1752.6	Config 0	24.96	25.70	1.186	0.01	0.279	0.331
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	1513	1752.6	Config 1	24.67	25.70	1.268	0.06	0.053	0.067
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	1513	1752.6	Config 1	24.67	25.70	1.268	0.11	0.034	0.043
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	1513	1752.6	Config 1	24.67	25.70	1.268	0.12	0.329	0.417
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	1513	1752.6	Config 1	24.67	25.70	1.268	0.19	0.020	0.026
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	4182	836.4	Config 0	24.37	25.00	1.156	-0.09	0.341	0.394
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	4182	836.4	Config 0	24.37	25.00	1.156	-0.02	0.168	0.194
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	4182	836.4	Config 0	24.37	25.00	1.156	-0.06	0.305	0.353
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	4182	836.4	Config 0	24.37	25.00	1.156	-0.04	0.167	0.193
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	DSI 7	4182	836.4	Config 1	23.06	23.60	1.132	-0.13	0.760	0.861
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	DSI 7	4132	826.4	Config 1	23.05	23.60	1.135	-0.07	0.666	0.756
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	DSI 7	4233	846.6	Config 1	23.04	23.60	1.138	-0.07	0.841	0.957
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	DSI 7	4182	836.4	Config 1	23.06	23.60	1.132	-0.05	0.527	0.597
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	DSI 7	4182	836.4	Config 1	23.06	23.60	1.132	-0.18	0.394	0.446
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	DSI 7	4182	836.4	Config 1	23.06	23.60	1.132	-0.07	0.351	0.397
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	DSI 2	4182	836.4	Config 1	23.06	24.40	1.361	-0.13	0.760	1.035
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	DSI 2	4132	826.4	Config 1	23.05	24.40	1.365	-0.07	0.666	0.909
05	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	DSI 2	4233	846.6	Config 1	23.04	24.40	1.368	-0.07	0.841	1.150
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	DSI 2	4182	836.4	Config 1	23.06	24.40	1.361	-0.05	0.527	0.717
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	DSI 2	4182	836.4	Config 1	23.06	24.40	1.361	-0.18	0.394	0.536
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	DSI 2	4182	836.4	Config 1	23.06	24.40	1.361	-0.07	0.351	0.478



<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 SO55	Right Cheek	0mm	DSI 2/7	384	836.52	Config 0	24.48	25.50	1.265	-0.09	0.380	0.481
	CDMA BC0_Ant 0	1xRTT RC3 SO55	Right Tilted	0mm	DSI 2/7	384	836.52	Config 0	24.48	25.50	1.265	-0.06	0.188	0.238
	CDMA BC0_Ant 0	1xRTT RC3 SO55	Left Cheek	0mm	DSI 2/7	384	836.52	Config 0	24.48	25.50	1.265	-0.13	0.359	0.454
	CDMA BC0_Ant 0	1xRTT RC3 SO55	Left Tilted	0mm	DSI 2/7	384	836.52	Config 0	24.48	25.50	1.265	-0.01	0.187	0.237
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Right Cheek	0mm	DSI 7	777	848.31	Config 1	21.30	22.40	1.288	-0.01	0.691	0.890
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Right Cheek	0mm	DSI 7	1013	824.7	Config 1	21.22	22.40	1.312	-0.08	0.503	0.660
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Right Cheek	0mm	DSI 7	384	836.52	Config 1	21.25	22.40	1.303	-0.01	0.589	0.768
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Right Tilted	0mm	DSI 7	777	848.31	Config 1	21.30	22.40	1.288	-0.1	0.463	0.596
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Left Cheek	0mm	DSI 7	777	848.31	Config 1	21.30	22.40	1.288	-0.11	0.359	0.462
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Left Tilted	0mm	DSI 7	777	848.31	Config 1	21.30	22.40	1.288	-0.01	0.297	0.383
06	CDMA BC0_Ant 1	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2	777	848.31	Config 1	21.30	23.20	1.549	-0.01	0.691	1.070
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2	1013	824.7	Config 1	21.22	23.20	1.578	-0.08	0.503	0.794
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2	384	836.52	Config 1	21.25	23.20	1.567	-0.01	0.589	0.923
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Right Tilted	0mm	DSI 2	777	848.31	Config 1	21.30	23.20	1.549	-0.1	0.463	0.717
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Left Cheek	0mm	DSI 2	777	848.31	Config 1	21.30	23.20	1.549	-0.11	0.359	0.556
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Left Tilted	0mm	DSI 2	777	848.31	Config 1	21.30	23.20	1.549	-0.01	0.297	0.460
07	CDMA BC1_Ant 2	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2/7	1175	1908.75	Config 0	24.90	25.50	1.148	0.1	0.869	0.998
	CDMA BC1_Ant 2	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2/7	25	1851.25	Config 0	24.66	25.50	1.213	-0.09	0.810	0.983
	CDMA BC1_Ant 2	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2/7	600	1880	Config 0	24.76	25.50	1.186	0.05	0.709	0.841
	CDMA BC1_Ant 2	1xRTT RC3 SO55	Right Tilted	0mm	DSI 2/7	1175	1908.75	Config 0	24.90	25.50	1.148	-0.04	0.389	0.447
	CDMA BC1_Ant 2	1xRTT RC3 SO55	Left Cheek	0mm	DSI 2/7	1175	1908.75	Config 0	24.90	25.50	1.148	-0.19	0.471	0.541
	CDMA BC1_Ant 2	1xRTT RC3 SO55	Left Tilted	0mm	DSI 2/7	1175	1908.75	Config 0	24.90	25.50	1.148	-0.01	0.382	0.439
	CDMA BC1_Ant 0	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2/7	1175	1908.75	Config 1	24.70	25.50	1.202	0.13	0.168	0.202
	CDMA BC1_Ant 0	1xRTT RC3 SO55	Right Tilted	0mm	DSI 2/7	1175	1908.75	Config 1	24.70	25.50	1.202	0.06	0.096	0.115
	CDMA BC1_Ant 0	1xRTT RC3 SO55	Left Cheek	0mm	DSI 2/7	1175	1908.75	Config 1	24.70	25.50	1.202	-0.03	0.290	0.349
	CDMA BC1_Ant 0	1xRTT RC3 SO55	Left Tilted	0mm	DSI 2/7	1175	1908.75	Config 1	24.70	25.50	1.202	0.11	0.092	0.111
	CDMA BC10_Ant 0	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2/7	580	820.5	Config 0	24.49	25.50	1.262	-0.13	0.333	0.420
	CDMA BC10_Ant 0	1xRTT RC3 SO55	Right Tilted	0mm	DSI 2/7	580	820.5	Config 0	24.49	25.50	1.262	-0.05	0.162	0.204
	CDMA BC10_Ant 0	1xRTT RC3 SO55	Left Cheek	0mm	DSI 2/7	580	820.5	Config 0	24.49	25.50	1.262	-0.18	0.323	0.408
	CDMA BC10_Ant 0	1xRTT RC3 SO55	Left Tilted	0mm	DSI 2/7	580	820.5	Config 0	24.49	25.50	1.262	-0.07	0.157	0.198
	CDMA BC10_Ant 1	1xRTT RC3 SO55	Right Cheek	0mm	DSI 7	580	820.5	Config 1	23.75	24.60	1.216	-0.1	0.819	0.996
	CDMA BC10_Ant 1	1xRTT RC3 SO55	Right Tilted	0mm	DSI 7	580	820.5	Config 1	23.75	24.60	1.216	-0.08	0.691	0.840
	CDMA BC10_Ant 1	1xRTT RC3 SO55	Left Cheek	0mm	DSI 7	580	820.5	Config 1	23.75	24.60	1.216	-0.02	0.434	0.528
	CDMA BC10_Ant 1	1xRTT RC3 SO55	Left Tilted	0mm	DSI 7	580	820.5	Config 1	23.75	24.60	1.216	-0.04	0.362	0.440
08	CDMA BC10_Ant 1	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2	580	820.5	Config 1	23.75	25.40	1.462	-0.1	0.819	1.198
	CDMA BC10_Ant 1	1xRTT RC3 SO55	Right Tilted	0mm	DSI 2	580	820.5	Config 1	23.75	25.40	1.462	-0.08	0.691	1.010
	CDMA BC10_Ant 1	1xRTT RC3 SO55	Left Cheek	0mm	DSI 2	580	820.5	Config 1	23.75	25.40	1.462	-0.02	0.434	0.635
	CDMA BC10_Ant 1	1xRTT RC3 SO55	Left Tilted	0mm	DSI 2	580	820.5	Config 1	23.75	25.40	1.462	-0.04	0.372	0.544



<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	99	Right Cheek	0mm	DSI 2/7	20850	2510	Config 0	24.84	25.70	1.219	0.02	0.276	0.336
	LTE Band 7_Ant 2	20M	QPSK	50	50	Right Cheek	0mm	DSI 2/7	20850	2510	Config 0	23.94	24.70	1.191	-0.11	0.226	0.269
	LTE Band 7_Ant 2	20M	QPSK	1	99	Right Tilted	0mm	DSI 2/7	20850	2510	Config 0	24.84	25.70	1.219	-0.08	0.102	0.124
	LTE Band 7_Ant 2	20M	QPSK	50	50	Right Tilted	0mm	DSI 2/7	20850	2510	Config 0	23.94	24.70	1.191	-0.08	0.088	0.105
	LTE Band 7_Ant 2	20M	QPSK	1	99	Left Cheek	0mm	DSI 2/7	20850	2510	Config 0	24.84	25.70	1.219	-0.13	0.196	0.239
	LTE Band 7_Ant 2	20M	QPSK	50	50	Left Cheek	0mm	DSI 2/7	20850	2510	Config 0	23.94	24.70	1.191	-0.07	0.158	0.188
	LTE Band 7_Ant 2	20M	QPSK	1	99	Left Tilted	0mm	DSI 2/7	20850	2510	Config 0	24.84	25.70	1.219	0.13	0.172	0.210
	LTE Band 7_Ant 2	20M	QPSK	50	50	Left Tilted	0mm	DSI 2/7	20850	2510	Config 0	23.94	24.70	1.191	-0.18	0.141	0.168
	LTE Band 7C_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	21350+21152	2560	Config 0	25.25	25.70	1.109	-0.09	0.180	0.200
	LTE Band 7_Ant 0	20M	QPSK	1	99	Right Cheek	0mm	DSI 2/7	20850	2510	Config 1	24.25	25.70	1.396	-0.18	0.247	0.345
	LTE Band 7_Ant 0	20M	QPSK	50	50	Right Cheek	0mm	DSI 2/7	20850	2510	Config 1	23.33	24.70	1.371	-0.13	0.186	0.255
	LTE Band 7_Ant 0	20M	QPSK	1	99	Right Tilted	0mm	DSI 2/7	20850	2510	Config 1	24.25	25.70	1.396	0.17	0.025	0.035
	LTE Band 7_Ant 0	20M	QPSK	50	50	Right Tilted	0mm	DSI 2/7	20850	2510	Config 1	23.33	24.70	1.371	0.19	0.021	0.029
09	LTE Band 7_Ant 0	20M	QPSK	1	99	Left Cheek	0mm	DSI 2/7	20850	2510	Config 1	24.25	25.70	1.396	-0.1	0.296	0.413
	LTE Band 7_Ant 0	20M	QPSK	50	50	Left Cheek	0mm	DSI 2/7	20850	2510	Config 1	23.33	24.70	1.371	-0.09	0.229	0.314
	LTE Band 7_Ant 0	20M	QPSK	1	99	Left Tilted	0mm	DSI 2/7	20850	2510	Config 1	24.25	25.70	1.396	0.12	0.125	0.175
	LTE Band 7_Ant 0	20M	QPSK	50	50	Left Tilted	0mm	DSI 2/7	20850	2510	Config 1	23.33	24.70	1.371	-0.16	0.041	0.056
	LTE Band 7C_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	21350+21152	2560	Config 1	24.67	25.70	1.268	-0.02	0.312	0.396
	LTE Band 12_Ant 0	10M	QPSK	1	49	Right Cheek	0mm	DSI 2/7	23095	707.5	Config 0	24.71	25.70	1.256	-0.02	0.252	0.317
	LTE Band 12_Ant 0	10M	QPSK	25	25	Right Cheek	0mm	DSI 2/7	23095	707.5	Config 0	23.85	24.70	1.216	-0.05	0.193	0.235
	LTE Band 12_Ant 0	10M	QPSK	1	49	Right Tilted	0mm	DSI 2/7	23095	707.5	Config 0	24.71	25.70	1.256	0.06	0.132	0.166
	LTE Band 12_Ant 0	10M	QPSK	25	25	Right Tilted	0mm	DSI 2/7	23095	707.5	Config 0	23.85	24.70	1.216	0.01	0.104	0.126
	LTE Band 12_Ant 0	10M	QPSK	1	49	Left Cheek	0mm	DSI 2/7	23095	707.5	Config 0	24.71	25.70	1.256	-0.06	0.273	0.343
	LTE Band 12_Ant 0	10M	QPSK	25	25	Left Cheek	0mm	DSI 2/7	23095	707.5	Config 0	23.85	24.70	1.216	-0.04	0.217	0.264
	LTE Band 12_Ant 0	10M	QPSK	1	49	Left Tilted	0mm	DSI 2/7	23095	707.5	Config 0	24.71	25.70	1.256	-0.01	0.148	0.186
	LTE Band 12_Ant 0	10M	QPSK	25	25	Left Tilted	0mm	DSI 2/7	23095	707.5	Config 0	23.85	24.70	1.216	-0.04	0.115	0.140
	LTE Band 12_Ant 1	10M	QPSK	1	49	Right Cheek	0mm	DSI 7	23095	707.5	Config 1	23.58	24.60	1.265	-0.05	0.711	0.899
	LTE Band 12_Ant 1	10M	QPSK	25	25	Right Cheek	0mm	DSI 7	23095	707.5	Config 1	23.66	24.10	1.107	-0.07	0.693	0.767
	LTE Band 12_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	DSI 7	23095	707.5	Config 1	23.59	24.10	1.125	-0.09	0.712	0.801
	LTE Band 12_Ant 1	10M	QPSK	1	49	Right Tilted	0mm	DSI 7	23095	707.5	Config 1	23.58	24.60	1.265	-0.1	0.457	0.578
	LTE Band 12_Ant 1	10M	QPSK	25	25	Right Tilted	0mm	DSI 7	23095	707.5	Config 1	23.66	24.10	1.107	-0.06	0.470	0.520
	LTE Band 12_Ant 1	10M	QPSK	1	49	Left Cheek	0mm	DSI 7	23095	707.5	Config 1	23.58	24.60	1.265	0.04	0.359	0.454
	LTE Band 12_Ant 1	10M	QPSK	25	25	Left Cheek	0mm	DSI 7	23095	707.5	Config 1	23.66	24.10	1.107	-0.06	0.365	0.404
	LTE Band 12_Ant 1	10M	QPSK	1	49	Left Tilted	0mm	DSI 7	23095	707.5	Config 1	23.58	24.60	1.265	-0.02	0.267	0.338
	LTE Band 12_Ant 1	10M	QPSK	25	25	Left Tilted	0mm	DSI 7	23095	707.5	Config 1	23.66	24.10	1.107	-0.03	0.275	0.304
10	LTE Band 12_Ant 1	10M	QPSK	1	49	Right Cheek	0mm	DSI 2	23095	707.5	Config 1	23.58	25.40	1.521	-0.05	0.711	1.081
	LTE Band 12_Ant 1	10M	QPSK	25	25	Right Cheek	0mm	DSI 2	23095	707.5	Config 1	23.66	24.40	1.186	-0.07	0.693	0.822
	LTE Band 12_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	DSI 2	23095	707.5	Config 1	23.59	24.40	1.205	-0.09	0.712	0.858
	LTE Band 12_Ant 1	10M	QPSK	1	49	Right Tilted	0mm	DSI 2	23095	707.5	Config 1	23.58	25.40	1.521	-0.1	0.457	0.695
	LTE Band 12_Ant 1	10M	QPSK	25	25	Right Tilted	0mm	DSI 2	23095	707.5	Config 1	23.66	24.40	1.186	-0.06	0.470	0.557
	LTE Band 12_Ant 1	10M	QPSK	1	49	Left Cheek	0mm	DSI 2	23095	707.5	Config 1	23.58	25.40	1.521	0.04	0.359	0.546
	LTE Band 12_Ant 1	10M	QPSK	25	25	Left Cheek	0mm	DSI 2	23095	707.5	Config 1	23.66	24.40	1.186	-0.06	0.365	0.433
	LTE Band 12_Ant 1	10M	QPSK	1	49	Left Tilted	0mm	DSI 2	23095	707.5	Config 1	23.58	25.40	1.521	-0.02	0.267	0.406
	LTE Band 12_Ant 1	10M	QPSK	25	25	Left Tilted	0mm	DSI 2	23095	707.5	Config 1	23.66	24.40	1.186	-0.03	0.275	0.326



FCC SAR TEST REPORT

Report No. : FA050515A

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	49	Right Cheek	0mm	DSI 2/7	23230	782	Config 0	24.35	25.20	1.216	-0.09	0.280	0.341
	LTE Band 13_Ant 0	10M	QPSK	25	25	Right Cheek	0mm	DSI 2/7	23230	782	Config 0	23.34	24.20	1.219	0	0.194	0.236
	LTE Band 13_Ant 0	10M	QPSK	1	49	Right Tilted	0mm	DSI 2/7	23230	782	Config 0	24.35	25.20	1.216	-0.05	0.134	0.163
	LTE Band 13_Ant 0	10M	QPSK	25	25	Right Tilted	0mm	DSI 2/7	23230	782	Config 0	23.34	24.20	1.219	-0.01	0.112	0.137
	LTE Band 13_Ant 0	10M	QPSK	1	49	Left Cheek	0mm	DSI 2/7	23230	782	Config 0	24.35	25.20	1.216	0.01	0.264	0.321
	LTE Band 13_Ant 0	10M	QPSK	25	25	Left Cheek	0mm	DSI 2/7	23230	782	Config 0	23.34	24.20	1.219	-0.06	0.222	0.271
	LTE Band 13_Ant 0	10M	QPSK	1	49	Left Tilted	0mm	DSI 2/7	23230	782	Config 0	24.35	25.20	1.216	-0.04	0.163	0.198
	LTE Band 13_Ant 0	10M	QPSK	25	25	Left Tilted	0mm	DSI 2/7	23230	782	Config 0	23.34	24.20	1.219	-0.11	0.136	0.166
	LTE Band 13_Ant 1	10M	QPSK	1	49	Right Cheek	0mm	DSI 7	23230	782	Config 1	23.30	24.40	1.288	-0.08	0.703	0.906
	LTE Band 13_Ant 1	10M	QPSK	25	12	Right Cheek	0mm	DSI 7	23230	782	Config 1	23.20	24.20	1.259	-0.1	0.683	0.860
	LTE Band 13_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	DSI 7	23230	782	Config 1	23.52	24.20	1.169	-0.1	0.681	0.796
	LTE Band 13_Ant 1	10M	QPSK	1	49	Right Tilted	0mm	DSI 7	23230	782	Config 1	23.30	24.40	1.288	-0.1	0.468	0.603
	LTE Band 13_Ant 1	10M	QPSK	25	12	Right Tilted	0mm	DSI 7	23230	782	Config 1	23.20	24.20	1.259	-0.03	0.484	0.609
	LTE Band 13_Ant 1	10M	QPSK	1	49	Left Cheek	0mm	DSI 7	23230	782	Config 1	23.30	24.40	1.288	-0.07	0.391	0.504
	LTE Band 13_Ant 1	10M	QPSK	25	12	Left Cheek	0mm	DSI 7	23230	782	Config 1	23.20	24.20	1.259	-0.04	0.407	0.512
	LTE Band 13_Ant 1	10M	QPSK	1	49	Left Tilted	0mm	DSI 7	23230	782	Config 1	23.30	24.40	1.288	-0.07	0.309	0.398
	LTE Band 13_Ant 1	10M	QPSK	25	12	Left Tilted	0mm	DSI 7	23230	782	Config 1	23.20	24.20	1.259	-0.07	0.320	0.403
11	LTE Band 13_Ant 1	10M	QPSK	1	49	Right Cheek	0mm	DSI 2	23230	782	Config 1	23.30	25.20	1.549	-0.08	0.703	1.089
	LTE Band 13_Ant 1	10M	QPSK	25	12	Right Cheek	0mm	DSI 2	23230	782	Config 1	23.20	24.20	1.259	-0.1	0.683	0.860
	LTE Band 13_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	DSI 2	23230	782	Config 1	23.52	24.20	1.169	-0.1	0.681	0.796
	LTE Band 13_Ant 1	10M	QPSK	1	49	Right Tilted	0mm	DSI 2	23230	782	Config 1	23.30	25.20	1.549	-0.1	0.468	0.725
	LTE Band 13_Ant 1	10M	QPSK	25	12	Right Tilted	0mm	DSI 2	23230	782	Config 1	23.20	24.20	1.259	-0.03	0.484	0.609
	LTE Band 13_Ant 1	10M	QPSK	1	49	Left Cheek	0mm	DSI 2	23230	782	Config 1	23.30	25.20	1.549	-0.07	0.391	0.606
	LTE Band 13_Ant 1	10M	QPSK	25	12	Left Cheek	0mm	DSI 2	23230	782	Config 1	23.20	24.20	1.259	-0.04	0.407	0.512
	LTE Band 13_Ant 1	10M	QPSK	1	49	Left Tilted	0mm	DSI 2	23230	782	Config 1	23.30	25.20	1.549	-0.07	0.309	0.479
	LTE Band 13_Ant 1	10M	QPSK	25	12	Left Tilted	0mm	DSI 2	23230	782	Config 1	23.20	24.20	1.259	-0.07	0.320	0.403
	LTE Band 14_Ant 0	10M	QPSK	1	49	Right Cheek	0mm	DSI 2/7	23330	793	Config 0	24.67	25.70	1.268	-0.14	0.334	0.423
	LTE Band 14_Ant 0	10M	QPSK	25	25	Right Cheek	0mm	DSI 2/7	23330	793	Config 0	23.73	24.70	1.250	-0.06	0.271	0.339
	LTE Band 14_Ant 0	10M	QPSK	1	49	Right Tilted	0mm	DSI 2/7	23330	793	Config 0	24.67	25.70	1.268	0	0.201	0.255
	LTE Band 14_Ant 0	10M	QPSK	25	25	Right Tilted	0mm	DSI 2/7	23330	793	Config 0	23.73	24.70	1.250	-0.02	0.165	0.206
	LTE Band 14_Ant 0	10M	QPSK	1	49	Left Cheek	0mm	DSI 2/7	23330	793	Config 0	24.67	25.70	1.268	-0.06	0.323	0.409
	LTE Band 14_Ant 0	10M	QPSK	25	25	Left Cheek	0mm	DSI 2/7	23330	793	Config 0	23.73	24.70	1.250	-0.1	0.266	0.333
	LTE Band 14_Ant 0	10M	QPSK	1	49	Left Tilted	0mm	DSI 2/7	23330	793	Config 0	24.67	25.70	1.268	-0.02	0.209	0.265
	LTE Band 14_Ant 0	10M	QPSK	25	25	Left Tilted	0mm	DSI 2/7	23330	793	Config 0	23.73	24.70	1.250	-0.04	0.170	0.213
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	DSI 7	23330	793	Config 1	23.64	24.60	1.247	-0.14	0.742	0.926
	LTE Band 14_Ant 1	10M	QPSK	25	25	Right Cheek	0mm	DSI 7	23330	793	Config 1	23.73	24.60	1.222	-0.19	0.666	0.814
	LTE Band 14_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	DSI 7	23330	793	Config 1	23.68	24.60	1.236	-0.1	0.668	0.826
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	DSI 7	23330	793	Config 1	23.64	24.60	1.247	-0.05	0.480	0.599
	LTE Band 14_Ant 1	10M	QPSK	25	25	Right Tilted	0mm	DSI 7	23330	793	Config 1	23.73	24.60	1.222	-0.09	0.469	0.573
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	DSI 7	23330	793	Config 1	23.64	24.60	1.247	0.01	0.409	0.510
	LTE Band 14_Ant 1	10M	QPSK	25	25	Left Cheek	0mm	DSI 7	23330	793	Config 1	23.73	24.60	1.222	0.03	0.398	0.486
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	DSI 7	23330	793	Config 1	23.64	24.60	1.247	-0.06	0.328	0.409
	LTE Band 14_Ant 1	10M	QPSK	25	25	Left Tilted	0mm	DSI 7	23330	793	Config 1	23.73	24.60	1.222	-0.02	0.321	0.392
12	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	DSI 2	23330	793	Config 1	23.64	25.40	1.500	-0.14	0.742	1.113
	LTE Band 14_Ant 1	10M	QPSK	25	25	Right Cheek	0mm	DSI 2	23330	793	Config 1	23.73	24.70	1.250	-0.19	0.666	0.833
	LTE Band 14_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	DSI 2	23330	793	Config 1	23.68	24.70	1.265	-0.1	0.668	0.845
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	DSI 2	23330	793	Config 1	23.64	25.40	1.500	-0.05	0.480	0.720
	LTE Band 14_Ant 1	10M	QPSK	25	25	Right Tilted	0mm	DSI 2	23330	793	Config 1	23.73	24.70	1.250	-0.09	0.469	0.586
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	DSI 2	23330	793	Config 1	23.64	25.40	1.500	0.01	0.409	0.613
	LTE Band 14_Ant 1	10M	QPSK	25	25	Left Cheek	0mm	DSI 2	23330	793	Config 1	23.73	24.70	1.250	0.03	0.398	0.498
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	DSI 2	23330	793	Config 1	23.64	25.40	1.500	-0.06	0.328	0.492
	LTE Band 14_Ant 1	10M	QPSK	25	25	Left Tilted	0mm	DSI 2	23330	793	Config 1	23.73	24.70	1.250	-0.02	0.321	0.401



FCC SAR TEST REPORT

Report No. : FA050515A

Table with columns: 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). Rows include various LTE Band configurations (e.g., LTE Band 25_Ant 2, LTE Band 26_Ant 0, LTE Band 26_Ant 1) with associated test parameters and SAR values.



FCC SAR TEST REPORT

Report No. : FA050515A

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	23.02	23.70	1.169	-0.11	0.132	0.154
	LTE Band 30_Ant 2	10M	QPSK	25	25	Right Cheek	0mm	DSI 2/7	27710	2310	Config 0	22.11	22.70	1.146	-0.1	0.111	0.127
	LTE Band 30_Ant 2	10M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	27710	2310	Config 0	23.02	23.70	1.169	-0.18	0.051	0.060
	LTE Band 30_Ant 2	10M	QPSK	25	25	Right Tilted	0mm	DSI 2/7	27710	2310	Config 0	22.11	22.70	1.146	-0.13	0.043	0.049
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	27710	2310	Config 0	23.02	23.70	1.169	-0.12	0.071	0.083
	LTE Band 30_Ant 2	10M	QPSK	25	25	Left Cheek	0mm	DSI 2/7	27710	2310	Config 0	22.11	22.70	1.146	-0.17	0.060	0.069
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	27710	2310	Config 0	23.02	23.70	1.169	-0.13	0.099	0.116
	LTE Band 30_Ant 2	10M	QPSK	25	25	Left Tilted	0mm	DSI 2/7	27710	2310	Config 0	22.11	22.70	1.146	-0.09	0.082	0.094
	LTE Band 30_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	27710	2310	Config 1	22.92	23.70	1.197	-0.12	0.077	0.092
	LTE Band 30_Ant 0	10M	QPSK	25	25	Right Cheek	0mm	DSI 2/7	27710	2310	Config 1	21.97	22.70	1.183	-0.19	0.063	0.075
	LTE Band 30_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	27710	2310	Config 1	22.92	23.70	1.197	-0.06	0.030	0.036
	LTE Band 30_Ant 0	10M	QPSK	25	25	Right Tilted	0mm	DSI 2/7	27710	2310	Config 1	21.97	22.70	1.183	-0.04	0.028	0.033
15	LTE Band 30_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	27710	2310	Config 1	22.92	23.70	1.197	-0.09	0.211	0.253
	LTE Band 30_Ant 0	10M	QPSK	25	25	Left Cheek	0mm	DSI 2/7	27710	2310	Config 1	21.97	22.70	1.183	-0.09	0.177	0.209
	LTE Band 30_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	27710	2310	Config 1	22.92	23.70	1.197	0.08	0.041	0.049
	LTE Band 30_Ant 0	10M	QPSK	25	25	Left Tilted	0mm	DSI 2/7	27710	2310	Config 1	21.97	22.70	1.183	-0.01	0.034	0.040

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)
16	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	132572	1770	Config 0	24.57	25.70	1.297	-0.04	0.516	0.669
	LTE Band 66_Ant 2	20M	QPSK	50	50	Right Cheek	0mm	DSI 2/7	132572	1770	Config 0	23.50	24.70	1.318	0.12	0.404	0.533
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	132572	1770	Config 0	24.57	25.70	1.297	0.07	0.328	0.425
	LTE Band 66_Ant 2	20M	QPSK	50	50	Right Tilted	0mm	DSI 2/7	132572	1770	Config 0	23.50	24.70	1.318	0.03	0.266	0.351
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	132572	1770	Config 0	24.57	25.70	1.297	-0.01	0.395	0.512
	LTE Band 66_Ant 2	20M	QPSK	50	50	Left Cheek	0mm	DSI 2/7	132572	1770	Config 0	23.50	24.70	1.318	0.09	0.293	0.386
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	132572	1770	Config 0	24.57	25.70	1.297	0.04	0.333	0.432
	LTE Band 66_Ant 2	20M	QPSK	50	50	Left Tilted	0mm	DSI 2/7	132572	1770	Config 0	23.50	24.70	1.318	0.03	0.267	0.352
	LTE Band 66C_Ant 2	20M	QPSK	1	99	Right Cheek	0mm	DSI 2/7	132072+132270	1720	Config 0	25.66	25.70	1.009	0.01	0.404	0.408
	LTE Band 66B_Ant 2	15M	QPSK	1	74	Right Cheek	0mm	DSI 2/7	132047+132140	1717.5	Config 0	25.36	25.70	1.081	0.06	0.536	0.580
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	132572	1770	Config 1	24.79	25.70	1.233	-0.17	0.188	0.232
	LTE Band 66_Ant 0	20M	QPSK	50	50	Right Cheek	0mm	DSI 2/7	132572	1770	Config 1	23.72	24.70	1.253	0.06	0.160	0.201
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	132572	1770	Config 1	24.79	25.70	1.233	0.05	0.188	0.232
	LTE Band 66_Ant 0	20M	QPSK	50	50	Right Tilted	0mm	DSI 2/7	132572	1770	Config 1	23.72	24.70	1.253	0.02	0.154	0.193
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	132572	1770	Config 1	24.79	25.70	1.233	-0.01	0.376	0.464
	LTE Band 66_Ant 0	20M	QPSK	50	50	Left Cheek	0mm	DSI 2/7	132572	1770	Config 1	23.72	24.70	1.253	0.03	0.306	0.383
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	132572	1770	Config 1	24.79	25.70	1.233	0.01	0.170	0.210
	LTE Band 66_Ant 0	20M	QPSK	50	50	Left Tilted	0mm	DSI 2/7	132572	1770	Config 1	23.72	24.70	1.253	-0.01	0.149	0.187
	LTE Band 66C_Ant 0	20M	QPSK	1	99	Left Cheek	0mm	DSI 2/7	132072+132270	1720	Config 1	25.68	25.70	1.005	-0.05	0.096	0.096
	LTE Band 66B_Ant 0	15M	QPSK	1	74	Left Cheek	0mm	DSI 2/7	132047+132140	1717.5	Config 1	25.20	25.70	1.122	-0.02	0.091	0.102



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	Right Cheek	0mm	DSI 2/7	133322	683	Config 0	24.67	25.70	1.268	-0.14	0.278	0.352
	LTE Band 71_Ant 0	20M	QPSK	50	50	Right Cheek	0mm	DSI 2/7	133322	683	Config 0	23.78	24.70	1.236	-0.05	0.223	0.276
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	133322	683	Config 0	24.67	25.70	1.268	0.03	0.127	0.161
	LTE Band 71_Ant 0	20M	QPSK	50	50	Right Tilted	0mm	DSI 2/7	133322	683	Config 0	23.78	24.70	1.236	0.04	0.104	0.129
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	133322	683	Config 0	24.67	25.70	1.268	-0.06	0.297	0.376
	LTE Band 71_Ant 0	20M	QPSK	50	50	Left Cheek	0mm	DSI 2/7	133322	683	Config 0	23.78	24.70	1.236	-0.02	0.228	0.282
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	133322	683	Config 0	24.67	25.70	1.268	0.04	0.120	0.152
	LTE Band 71_Ant 0	20M	QPSK	50	50	Left Tilted	0mm	DSI 2/7	133322	683	Config 0	23.78	24.70	1.236	0.02	0.103	0.127
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	DSI 7	133322	683	Config 1	23.41	24.40	1.256	-0.05	0.724	0.909
	LTE Band 71_Ant 1	20M	QPSK	50	50	Right Cheek	0mm	DSI 7	133322	683	Config 1	23.49	24.20	1.178	-0.01	0.612	0.721
	LTE Band 71_Ant 1	20M	QPSK	100	0	Right Cheek	0mm	DSI 7	133322	683	Config 1	23.45	24.20	1.189	-0.06	0.630	0.749
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	DSI 7	133322	683	Config 1	23.41	24.40	1.256	-0.04	0.514	0.646
	LTE Band 71_Ant 1	20M	QPSK	50	50	Right Tilted	0mm	DSI 7	133322	683	Config 1	23.49	24.20	1.178	-0.06	0.494	0.582
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	DSI 7	133322	683	Config 1	23.41	24.40	1.256	-0.09	0.317	0.398
	LTE Band 71_Ant 1	20M	QPSK	50	50	Left Cheek	0mm	DSI 7	133322	683	Config 1	23.49	24.20	1.178	-0.07	0.320	0.377
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	DSI 7	133322	683	Config 1	23.41	24.40	1.256	-0.05	0.251	0.315
	LTE Band 71_Ant 1	20M	QPSK	50	50	Left Tilted	0mm	DSI 7	133322	683	Config 1	23.49	24.20	1.178	-0.02	0.253	0.298
17	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	DSI 2	133322	683	Config 1	23.41	25.20	1.510	-0.05	0.724	1.093
	LTE Band 71_Ant 1	20M	QPSK	50	50	Right Cheek	0mm	DSI 2	133322	683	Config 1	23.49	24.20	1.178	-0.01	0.612	0.721
	LTE Band 71_Ant 1	20M	QPSK	100	0	Right Cheek	0mm	DSI 2	133322	683	Config 1	23.45	24.20	1.189	-0.06	0.630	0.749
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	DSI 2	133322	683	Config 1	23.41	25.20	1.510	-0.04	0.514	0.776
	LTE Band 71_Ant 1	20M	QPSK	50	50	Right Tilted	0mm	DSI 2	133322	683	Config 1	23.49	24.20	1.178	-0.06	0.494	0.582
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	DSI 2	133322	683	Config 1	23.41	25.20	1.510	-0.09	0.317	0.479
	LTE Band 71_Ant 1	20M	QPSK	50	50	Left Cheek	0mm	DSI 2	133322	683	Config 1	23.49	24.20	1.178	-0.07	0.320	0.377
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	DSI 2	133322	683	Config 1	23.41	25.20	1.510	-0.05	0.251	0.379
	LTE Band 71_Ant 1	20M	QPSK	50	50	Left Tilted	0mm	DSI 2	133322	683	Config 1	23.49	24.20	1.178	-0.02	0.253	0.298



<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	41055	2636.5	Config 0	24.57	25.70	1.297	62.9	1.006	-0.15	0.076	0.099
	LTE Band 41_Ant 2	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	41055	2636.5	Config 0	23.57	24.70	1.297	62.9	1.006	-0.11	0.061	0.080
	LTE Band 41_Ant 2	20M	QPSK	1	49	Right Tilted	0mm	DSI 2/7	41055	2636.5	Config 0	24.57	25.70	1.297	62.9	1.006	-0.15	0.028	0.037
	LTE Band 41_Ant 2	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	41055	2636.5	Config 0	23.57	24.70	1.297	62.9	1.006	0.15	0.020	0.026
	LTE Band 41_Ant 2	20M	QPSK	1	49	Left Cheek	0mm	DSI 2/7	41055	2636.5	Config 0	24.57	25.70	1.297	62.9	1.006	-0.14	0.058	0.076
	LTE Band 41_Ant 2	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	41055	2636.5	Config 0	23.57	24.70	1.297	62.9	1.006	-0.13	0.045	0.059
	LTE Band 41_Ant 2	20M	QPSK	1	49	Left Tilted	0mm	DSI 2/7	41055	2636.5	Config 0	24.57	25.70	1.297	62.9	1.006	-0.19	0.065	0.085
	LTE Band 41_Ant 2	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	41055	2636.5	Config 0	23.57	24.70	1.297	62.9	1.006	-0.08	0.051	0.067
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	49	Right Cheek	0mm	DSI 2/7	41055	2636.5	Config 0	26.39	27.50	1.291	42.9	1.009	0.15	0.074	0.096
	LTE Band 41C_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	41490+41292	2680	Config 0	25.69	25.70	1.002	62.9	1.006	-0.02	0.087	0.088
	LTE Band 41_Ant 0	20M	QPSK	1	49	Right Cheek	0mm	DSI 2/7	41055	2636.5	Config 1	24.08	25.70	1.452	62.9	1.006	-0.11	0.239	0.349
	LTE Band 41_Ant 0	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	41055	2636.5	Config 1	23.06	24.70	1.459	62.9	1.006	-0.19	0.186	0.273
	LTE Band 41_Ant 0	20M	QPSK	1	49	Right Tilted	0mm	DSI 2/7	41055	2636.5	Config 1	24.08	25.70	1.452	62.9	1.006	-0.07	0.075	0.110
	LTE Band 41_Ant 0	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	41055	2636.5	Config 1	23.06	24.70	1.459	62.9	1.006	-0.13	0.059	0.087
18	LTE Band 41_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	DSI 2/7	41055	2636.5	Config 1	24.08	25.70	1.452	62.9	1.006	-0.05	0.303	0.443
	LTE Band 41_Ant 0	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	41055	2636.5	Config 1	23.06	24.70	1.459	62.9	1.006	-0.01	0.241	0.354
	LTE Band 41_Ant 0	20M	QPSK	1	49	Left Tilted	0mm	DSI 2/7	41055	2636.5	Config 1	24.08	25.70	1.452	62.9	1.006	-0.15	0.159	0.232
	LTE Band 41_Ant 0	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	41055	2636.5	Config 1	23.06	24.70	1.459	62.9	1.006	-0.17	0.125	0.183
	LTE Band 41_HPUE_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	DSI 2/7	41055	2636.5	Config 1	26.04	27.50	1.400	42.9	1.009	-0.01	0.301	0.425
	LTE Band 41C_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	41490+41292	2680	Config 1	25.03	25.70	1.167	62.9	1.006	-0.04	0.295	0.346
	LTE Band 48_Ant 7	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	55830	3609	Config 0	24.24	25.20	1.247	62.9	1.006	-0.05	0.090	0.113
	LTE Band 48_Ant 7	20M	QPSK	50	0	Right Cheek	0mm	DSI 2/7	55830	3609	Config 0	23.27	24.20	1.239	62.9	1.006	0.04	0.068	0.085
	LTE Band 48_Ant 7	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	55830	3609	Config 0	24.24	25.20	1.247	62.9	1.006	0.03	0.108	0.136
	LTE Band 48_Ant 7	20M	QPSK	50	0	Right Tilted	0mm	DSI 2/7	55830	3609	Config 0	23.27	24.20	1.239	62.9	1.006	0.09	0.081	0.101
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	55830	3609	Config 0	24.24	25.20	1.247	62.9	1.006	0.07	0.217	0.272
	LTE Band 48_Ant 7	20M	QPSK	50	0	Left Cheek	0mm	DSI 2/7	55830	3609	Config 0	23.27	24.20	1.239	62.9	1.006	0.14	0.174	0.217
19	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	55830	3609	Config 0	24.24	25.20	1.247	62.9	1.006	0	0.224	0.281
	LTE Band 48_Ant 7	20M	QPSK	50	0	Left Tilted	0mm	DSI 2/7	55830	3609	Config 0	23.27	24.20	1.239	62.9	1.006	0.08	0.122	0.152
	LTE Band 48C_Ant 7	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	55830+55632	3609	Config 0	14.54	15.50	1.247	62.9	1.006	0.03	0.031	0.039
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	55340	3560	Config 1	21.79	22.30	1.125	62.9	1.006	-0.05	0.176	0.199
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	DSI 2/7	55340	3560	Config 1	20.81	21.30	1.119	62.9	1.006	0.08	0.140	0.158
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	55340	3560	Config 1	21.79	22.30	1.125	62.9	1.006	-0.02	0.043	0.049
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	DSI 2/7	55340	3560	Config 1	20.81	21.30	1.119	62.9	1.006	0.15	0.031	0.035
	LTE Band 48_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	55340	3560	Config 1	21.79	22.30	1.125	62.9	1.006	0.16	0.082	0.093
	LTE Band 48_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	DSI 2/7	55340	3560	Config 1	20.81	21.30	1.119	62.9	1.006	0.12	0.062	0.070
	LTE Band 48_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	55340	3560	Config 1	21.79	22.30	1.125	62.9	1.006	-0.16	0.101	0.114
	LTE Band 48_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	DSI 2/7	55340	3560	Config 1	20.81	21.30	1.119	62.9	1.006	-0.14	0.079	0.089
	LTE Band 48C_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	55830+55632	3609	Config 1	13.08	14.00	1.236	62.9	1.006	-0.02	0.006	0.007



<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	167300	836.5	Config 0	23.72	25.00	1.343	0.02	0.161	0.216
	FR1 n5_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	DSI 2/7	167300	836.5	Config 0	23.70	25.00	1.349	-0.03	0.173	0.233
	FR1 n5_Ant 0	20M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	167300	836.5	Config 0	23.72	25.00	1.343	0.03	0.097	0.130
	FR1 n5_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	DSI 2/7	167300	836.5	Config 0	23.70	25.00	1.349	0.05	0.096	0.130
	FR1 n5_Ant 0	20M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	167300	836.5	Config 0	23.72	25.00	1.343	-0.06	0.175	0.235
	FR1 n5_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	DSI 2/7	167300	836.5	Config 0	23.70	25.00	1.349	-0.04	0.185	0.250
	FR1 n5_Ant 0	20M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	167300	836.5	Config 0	23.72	25.00	1.343	0.1	0.106	0.142
	FR1 n5_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	DSI 2/7	167300	836.5	Config 0	23.70	25.00	1.349	0.04	0.107	0.144
	FR1 n5_Ant 1	20M	BPSK	1	53	Right Cheek	0mm	DSI 7	167300	836.5	Config 1	22.78	23.20	1.102	-0.14	0.897	0.988
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	DSI 7	167300	836.5	Config 1	22.60	23.20	1.148	-0.07	0.668	0.767
	FR1 n5_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	DSI 7	167300	836.5	Config 1	22.55	23.20	1.161	-0.06	0.730	0.848
	FR1 n5_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	DSI 7	167300	836.5	Config 1	22.78	23.20	1.102	-0.06	0.631	0.695
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	DSI 7	167300	836.5	Config 1	22.60	23.20	1.148	-0.04	0.545	0.626
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Cheek	0mm	DSI 7	167300	836.5	Config 1	22.78	23.20	1.102	-0.1	0.470	0.518
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	DSI 7	167300	836.5	Config 1	22.60	23.20	1.148	-0.08	0.410	0.471
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Tilted	0mm	DSI 7	167300	836.5	Config 1	22.78	23.20	1.102	-0.05	0.328	0.361
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	DSI 7	167300	836.5	Config 1	22.60	23.20	1.148	-0.06	0.324	0.372
20	FR1 n5_Ant 1	20M	BPSK	1	53	Right Cheek	0mm	DSI 2	167300	836.5	Config 1	22.78	24.00	1.324	-0.14	0.897	1.188
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	DSI 2	167300	836.5	Config 1	22.60	24.00	1.380	-0.07	0.668	0.922
	FR1 n5_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	DSI 2	167300	836.5	Config 1	22.55	24.00	1.396	-0.06	0.730	1.019
	FR1 n5_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	DSI 2	167300	836.5	Config 1	22.78	24.00	1.324	-0.06	0.631	0.836
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	DSI 2	167300	836.5	Config 1	22.60	24.00	1.380	-0.04	0.545	0.752
	FR1 n5_Ant 1	20M	BPSK	100	0	Right Tilted	0mm	DSI 2	167300	836.5	Config 1	22.55	24.00	1.396	0	0.549	0.767
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Cheek	0mm	DSI 2	167300	836.5	Config 1	22.78	24.00	1.324	-0.1	0.470	0.622
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	DSI 2	167300	836.5	Config 1	22.60	24.00	1.380	-0.08	0.410	0.566
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Tilted	0mm	DSI 2	167300	836.5	Config 1	22.78	24.00	1.324	-0.05	0.328	0.434
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	DSI 2	167300	836.5	Config 1	22.60	24.00	1.380	-0.06	0.324	0.447
	FR1 n12_Ant 0	15M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	141500	707.5	Config 0	23.76	24.70	1.242	0.03	0.176	0.219
	FR1 n12_Ant 0	15M	BPSK	36	22	Right Cheek	0mm	DSI 2/7	141500	707.5	Config 0	23.62	24.70	1.282	-0.02	0.174	0.223
	FR1 n12_Ant 0	15M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	141500	707.5	Config 0	23.76	24.70	1.242	0.05	0.118	0.147
	FR1 n12_Ant 0	15M	BPSK	36	22	Right Tilted	0mm	DSI 2/7	141500	707.5	Config 0	23.62	24.70	1.282	-0.04	0.114	0.146
21	FR1 n12_Ant 0	15M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	141500	707.5	Config 0	23.76	24.70	1.242	0.03	0.214	0.266
	FR1 n12_Ant 0	15M	BPSK	36	22	Left Cheek	0mm	DSI 2/7	141500	707.5	Config 0	23.62	24.70	1.282	0	0.206	0.264
	FR1 n12_Ant 0	15M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	141500	707.5	Config 0	23.76	24.70	1.242	0.04	0.134	0.166
	FR1 n12_Ant 0	15M	BPSK	36	22	Left Tilted	0mm	DSI 2/7	141500	707.5	Config 0	23.62	24.70	1.282	-0.05	0.131	0.168
	FR1 n12_Ant 1	15M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	141500	707.5	Config 1	23.32	24.70	1.374	0.02	0.067	0.092
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Cheek	0mm	DSI 2/7	141500	707.5	Config 1	23.26	24.70	1.393	-0.03	0.074	0.103
	FR1 n12_Ant 1	15M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	141500	707.5	Config 1	23.32	24.70	1.374	0.05	0.069	0.095
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Tilted	0mm	DSI 2/7	141500	707.5	Config 1	23.26	24.70	1.393	-0.04	0.076	0.106
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	141500	707.5	Config 1	23.32	24.70	1.374	-0.08	0.033	0.045
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Cheek	0mm	DSI 2/7	141500	707.5	Config 1	23.26	24.70	1.393	0.06	0.036	0.050
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	141500	707.5	Config 1	23.32	24.70	1.374	0.01	0.036	0.049
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Tilted	0mm	DSI 2/7	141500	707.5	Config 1	23.26	24.70	1.393	0.07	0.042	0.059



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)
22	FR1 n25_Ant 2	20M	BPSK	1	53	Right Cheek	0mm	DSI 2/7	376000	1880	Config 0	24.67	25.70	1.268	-0.02	0.706	0.895
	FR1 n25_Ant 2	20M	BPSK	1	53	Right Cheek	0mm	DSI 2/7	372000	1860	Config 0	24.63	25.70	1.279	0.19	0.635	0.812
	FR1 n25_Ant 2	20M	BPSK	1	53	Right Cheek	0mm	DSI 2/7	381000	1905	Config 0	24.62	25.70	1.282	0.07	0.651	0.835
	FR1 n25_Ant 2	20M	BPSK	50	28	Right Cheek	0mm	DSI 2/7	376000	1880	Config 0	24.77	25.70	1.239	0.02	0.721	0.893
	FR1 n25_Ant 2	20M	BPSK	50	28	Right Cheek	0mm	DSI 2/7	372000	1860	Config 0	24.64	25.70	1.276	-0.01	0.642	0.819
	FR1 n25_Ant 2	20M	BPSK	50	28	Right Cheek	0mm	DSI 2/7	381000	1905	Config 0	24.41	25.70	1.346	0	0.650	0.875
	FR1 n25_Ant 2	20M	BPSK	100	0	Right Cheek	0mm	DSI 2/7	376000	1880	Config 0	24.21	25.20	1.256	0.03	0.622	0.781
	FR1 n25_Ant 2	20M	BPSK	1	53	Right Tilted	0mm	DSI 2/7	376000	1880	Config 0	24.67	25.70	1.268	0.05	0.463	0.587
	FR1 n25_Ant 2	20M	BPSK	50	28	Right Tilted	0mm	DSI 2/7	376000	1880	Config 0	24.77	25.70	1.239	-0.04	0.467	0.579
	FR1 n25_Ant 2	20M	BPSK	1	53	Left Cheek	0mm	DSI 2/7	376000	1880	Config 0	24.67	25.70	1.268	0.02	0.444	0.563
	FR1 n25_Ant 2	20M	BPSK	50	28	Left Cheek	0mm	DSI 2/7	376000	1880	Config 0	24.77	25.70	1.239	0.01	0.443	0.549
	FR1 n25_Ant 2	20M	BPSK	1	53	Left Tilted	0mm	DSI 2/7	376000	1880	Config 0	24.67	25.70	1.268	0.06	0.351	0.445
	FR1 n25_Ant 2	20M	BPSK	50	28	Left Tilted	0mm	DSI 2/7	376000	1880	Config 0	24.77	25.70	1.239	0.08	0.350	0.434
	FR1 n25_Ant 0	20M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	372000	1860	Config 1	24.51	25.70	1.315	-0.01	0.046	0.061
	FR1 n25_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	DSI 2/7	372000	1860	Config 1	24.48	25.70	1.324	0	0.043	0.057
	FR1 n25_Ant 0	20M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	372000	1860	Config 1	24.51	25.70	1.315	0.02	0.001	0.001
	FR1 n25_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	DSI 2/7	372000	1860	Config 1	24.48	25.70	1.324	-0.05	0.001	0.001
	FR1 n25_Ant 0	20M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	372000	1860	Config 1	24.51	25.70	1.315	0.03	0.109	0.143
	FR1 n25_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	DSI 2/7	372000	1860	Config 1	24.48	25.70	1.324	0.1	0.105	0.139
	FR1 n25_Ant 0	20M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	372000	1860	Config 1	24.51	25.70	1.315	0.06	0.001	0.001
	FR1 n25_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	DSI 2/7	372000	1860	Config 1	24.48	25.70	1.324	-0.03	0.001	0.001
23	FR1 n66_Ant 2	20M	BPSK	1	104	Right Cheek	0mm	DSI 2/7	344000	1720	Config 0	24.45	25.70	1.334	-0.02	0.471	0.628
	FR1 n66_Ant 2	20M	BPSK	50	28	Right Cheek	0mm	DSI 2/7	344000	1720	Config 0	24.45	25.70	1.334	0.03	0.465	0.620
	FR1 n66_Ant 2	20M	BPSK	1	104	Right Tilted	0mm	DSI 2/7	344000	1720	Config 0	24.45	25.70	1.334	0	0.296	0.395
	FR1 n66_Ant 2	20M	BPSK	50	28	Right Tilted	0mm	DSI 2/7	344000	1720	Config 0	24.45	25.70	1.334	0.01	0.297	0.396
	FR1 n66_Ant 2	20M	BPSK	1	104	Left Cheek	0mm	DSI 2/7	344000	1720	Config 0	24.45	25.70	1.334	-0.02	0.420	0.560
	FR1 n66_Ant 2	20M	BPSK	50	28	Left Cheek	0mm	DSI 2/7	344000	1720	Config 0	24.45	25.70	1.334	-0.05	0.422	0.563
	FR1 n66_Ant 2	20M	BPSK	1	104	Left Tilted	0mm	DSI 2/7	344000	1720	Config 0	24.45	25.70	1.334	0.06	0.319	0.425
	FR1 n66_Ant 2	20M	BPSK	50	28	Left Tilted	0mm	DSI 2/7	344000	1720	Config 0	24.45	25.70	1.334	0.03	0.317	0.423
	FR1 n66_Ant 0	20M	BPSK	1	104	Right Cheek	0mm	DSI 2/7	344000	1720	Config 1	24.53	25.70	1.309	0.02	0.270	0.353
	FR1 n66_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	DSI 2/7	344000	1720	Config 1	24.43	25.70	1.340	0.05	0.259	0.347
	FR1 n66_Ant 0	20M	BPSK	1	104	Right Tilted	0mm	DSI 2/7	344000	1720	Config 1	24.53	25.70	1.309	0	0.185	0.242
	FR1 n66_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	DSI 2/7	344000	1720	Config 1	24.43	25.70	1.340	0.1	0.169	0.226
	FR1 n66_Ant 0	20M	BPSK	1	104	Left Cheek	0mm	DSI 2/7	344000	1720	Config 1	24.53	25.70	1.309	-0.02	0.272	0.356
	FR1 n66_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	DSI 2/7	344000	1720	Config 1	24.43	25.70	1.340	0.11	0.242	0.324
	FR1 n66_Ant 0	20M	BPSK	1	104	Left Tilted	0mm	DSI 2/7	344000	1720	Config 1	24.53	25.70	1.309	-0.05	0.220	0.288
	FR1 n66_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	DSI 2/7	344000	1720	Config 1	24.43	25.70	1.340	0.03	0.197	0.264
	FR1 n71_Ant 0	20M	BPSK	1	53	Right Cheek	0mm	DSI 2/7	136100	680.5	Config 0	24.84	25.70	1.219	0.02	0.245	0.299
	FR1 n71_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	DSI 2/7	136100	680.5	Config 0	24.95	25.70	1.189	0.01	0.259	0.308
	FR1 n71_Ant 0	20M	BPSK	1	53	Right Tilted	0mm	DSI 2/7	136100	680.5	Config 0	24.84	25.70	1.219	-0.05	0.143	0.174
	FR1 n71_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	DSI 2/7	136100	680.5	Config 0	24.95	25.70	1.189	0.06	0.147	0.175
	FR1 n71_Ant 0	20M	BPSK	1	53	Left Cheek	0mm	DSI 2/7	136100	680.5	Config 0	24.84	25.70	1.219	-0.03	0.278	0.339
24	FR1 n71_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	DSI 2/7	136100	680.5	Config 0	24.95	25.70	1.189	-0.07	0.286	0.340
	FR1 n71_Ant 0	20M	BPSK	1	53	Left Tilted	0mm	DSI 2/7	136100	680.5	Config 0	24.84	25.70	1.219	0	0.182	0.222
	FR1 n71_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	DSI 2/7	136100	680.5	Config 0	24.95	25.70	1.189	0.12	0.186	0.221
	FR1 n71_Ant 1	20M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	136100	680.5	Config 1	24.51	25.70	1.315	0.1	0.219	0.288
	FR1 n71_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	DSI 2/7	136100	680.5	Config 1	24.63	25.70	1.279	0.02	0.253	0.324
	FR1 n71_Ant 1	20M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	136100	680.5	Config 1	24.51	25.70	1.315	-0.05	0.229	0.301
	FR1 n71_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	DSI 2/7	136100	680.5	Config 1	24.63	25.70	1.279	-0.06	0.256	0.328
	FR1 n71_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	136100	680.5	Config 1	24.51	25.70	1.315	0.03	0.108	0.142
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	DSI 2/7	136100	680.5	Config 1	24.63	25.70	1.279	0.06	0.129	0.165
	FR1 n71_Ant 1	20M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	136100	680.5	Config 1	24.51	25.70	1.315	-0.02	0.137	0.180
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	DSI 2/7	136100	680.5	Config 1	24.63	25.70	1.279	0.01	0.150	0.192



<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)
25	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4	2	11	2462	12.90	13.00	1.023	100	1.000	-0.06	0.100	0.102
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4	2	11	2462	12.90	13.00	1.023	100	1.000	-0.04	0.091	0.093
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	2	11	2462	12.90	13.00	1.023	100	1.000	0.16	0.540	0.553
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4	2	11	2462	12.90	13.00	1.023	100	1.000	-0.19	0.383	0.392
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	2	1	2412	16.00	16.50	1.122	100	1.000	-0.07	0.222	0.249
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 3	2	1	2412	16.00	16.50	1.122	100	1.000	-0.04	0.059	0.066
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	2	1	2412	16.00	16.50	1.122	100	1.000	-0.04	0.456	0.512
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3	2	1	2412	16.00	16.50	1.122	100	1.000	-0.15	0.043	0.048
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3	2	1	2412	12.60	13.00	1.096	100	1.000	0.1	0.070	0.077
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3	2	1	2412	16.10	16.50	1.096	100	1.000	0.1	0.240	0.263
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4+3	2	1	2412	12.60	13.00	1.096	100	1.000	0	0.049	0.054
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4+3	2	1	2412	16.10	16.50	1.096	100	1.000	0	0.066	0.072
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3	2	1	2412	12.60	13.00	1.096	100	1.000	-0.02	0.269	0.295
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3	2	1	2412	16.10	16.50	1.096	100	1.000	-0.02	0.471	0.516
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3	2	1	2412	12.60	13.00	1.096	100	1.000	0	0.197	0.216
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3	2	1	2412	16.10	16.50	1.096	100	1.000	0	0.055	0.060
26	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	2	58	5290	14.60	15.00	1.096	92.68	1.079	-0.1	0.283	0.335
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	2	58	5290	14.60	15.00	1.096	92.68	1.079	0.13	0.365	0.432
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	58	5290	14.60	15.00	1.096	92.68	1.079	0.13	0.347	0.411
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	2	58	5290	14.60	15.00	1.096	92.68	1.079	0.08	0.484	0.573
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 3	2	52	5260	17.20	18.00	1.202	97.83	1.022	-0.19	0.170	0.209
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 3	2	52	5260	17.20	18.00	1.202	97.83	1.022	0.17	0.106	0.130
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 3	2	52	5260	17.20	18.00	1.202	97.83	1.022	-0.18	0.183	0.225
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 3	2	52	5260	17.20	18.00	1.202	97.83	1.022	-0.14	0.047	0.058
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3	2	52	5260	14.60	15.00	1.096	98.08	1.020	-0.16	0.302	0.338
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3	2	52	5260	17.90	18.00	1.023	98.08	1.020	-0.16	0.174	0.182
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 4+3	2	52	5260	14.60	15.00	1.096	98.08	1.020	-0.17	0.385	0.431
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 4+3	2	52	5260	17.90	18.00	1.023	98.08	1.020	-0.17	0.385	0.402
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3	2	52	5260	14.60	15.00	1.096	98.08	1.020	-0.19	0.366	0.409
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3	2	52	5260	17.90	18.00	1.023	98.08	1.020	-0.19	0.366	0.382
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 4+3	2	52	5260	14.60	15.00	1.096	98.08	1.020	-0.11	0.517	0.578
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 4+3	2	52	5260	17.90	18.00	1.023	98.08	1.020	-0.11	0.086	0.090



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)
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	2	122	5610	12.50	12.50	1.000	92.68	1.079	-0.12	0.255	0.275
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	2	122	5610	12.50	12.50	1.000	92.68	1.079	0.11	0.321	0.346
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	122	5610	12.50	12.50	1.000	92.68	1.079	0.17	0.297	0.320
27	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	2	122	5610	12.50	12.50	1.000	92.68	1.079	-0.04	0.497	0.536
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 3	2	144	5720	17.80	18.50	1.175	97.83	1.022	-0.14	0.071	0.085
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 3	2	144	5720	17.80	18.50	1.175	97.83	1.022	-0.12	0.033	0.040
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 3	2	144	5720	17.80	18.50	1.175	97.83	1.022	0.13	0.072	0.086
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 3	2	144	5720	17.80	18.50	1.175	97.83	1.022	0.19	0.029	0.035
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3	2	144	5720	12.50	12.50	1.000	98.08	1.020	-0.14	0.234	0.239
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3	2	144	5720	18.50	18.50	1.000	98.08	1.020	-0.14	0.090	0.092
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 4+3	2	144	5720	12.50	12.50	1.000	98.08	1.020	-0.14	0.174	0.178
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 4+3	2	144	5720	18.50	18.50	1.000	98.08	1.020	-0.14	0.073	0.074
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3	2	144	5720	12.50	12.50	1.000	98.08	1.020	0	0.242	0.247
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3	2	144	5720	18.50	18.50	1.000	98.08	1.020	0	0.080	0.082
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 4+3	2	144	5720	12.50	12.50	1.000	98.08	1.020	-0.11	0.382	0.390
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 4+3	2	144	5720	18.50	18.50	1.000	98.08	1.020	-0.11	0.048	0.049
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	2	155	5775	13.40	13.50	1.023	92.68	1.079	-0.15	0.271	0.299
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	2	155	5775	13.40	13.50	1.023	92.68	1.079	-0.14	0.316	0.349
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	155	5775	13.40	13.50	1.023	92.68	1.079	0.17	0.264	0.291
28	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	2	155	5775	13.40	13.50	1.023	92.68	1.079	0.11	0.502	0.554
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 3	2	149	5745	18.20	18.50	1.072	97.83	1.022	0.11	0.157	0.172
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 3	2	149	5745	18.20	18.50	1.072	97.83	1.022	-0.06	0.146	0.160
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 3	2	149	5745	18.20	18.50	1.072	97.83	1.022	0.18	0.139	0.152
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 3	2	149	5745	18.20	18.50	1.072	97.83	1.022	0.11	0.076	0.083
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3	2	157	5785	13.30	13.50	1.047	98.08	1.020	-0.17	0.298	0.319
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3	2	157	5785	18.30	18.50	1.047	98.08	1.020	-0.17	0.073	0.078
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 4+3	2	157	5785	13.30	13.50	1.047	98.08	1.020	-0.16	0.357	0.381
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 4+3	2	157	5785	18.30	18.50	1.047	98.08	1.020	-0.16	0.110	0.118
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3	2	157	5785	13.30	13.50	1.047	98.08	1.020	-0.11	0.349	0.373
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3	2	157	5785	18.30	18.50	1.047	98.08	1.020	-0.11	0.116	0.124
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 4+3	2	157	5785	13.30	13.50	1.047	98.08	1.020	-0.1	0.437	0.467
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 4+3	2	157	5785	18.30	18.50	1.047	98.08	1.020	-0.1	0.063	0.067

<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	10.61	11.50	1.227	77.13	1.080	-0.13	0.021	0.028
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 4	2	39	2441	10.61	11.50	1.227	77.13	1.080	0	0.046	0.061
29	Bluetooth	1Mbps	Left Cheek	0mm	Ant 4	2	39	2441	10.61	11.50	1.227	77.13	1.080	-0.13	0.184	0.244
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 4	2	39	2441	10.61	11.50	1.227	77.13	1.080	-0.09	0.115	0.152



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)
30	GSM850_Ant 0	GPRS (4 Tx slots)	Front	10mm	DSI 6	128	824.2	Config 0	28.49	29.50	1.262	-0.04	0.225	0.284
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 6	128	824.2	Config 0	28.49	29.50	1.262	0.07	0.478	0.603
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	DSI 6	128	824.2	Config 0	28.49	29.50	1.262	-0.02	0.389	0.491
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Side	10mm	DSI 6	128	824.2	Config 0	28.49	29.50	1.262	-0.11	0.357	0.450
	GSM850_Ant 0	GPRS (4 Tx slots)	Bottom Side	10mm	DSI 6	128	824.2	Config 0	28.49	29.50	1.262	-0.03	0.112	0.141
	GSM850_Ant 1	GPRS (4 Tx slots)	Front	10mm	DSI 6	128	824.2	Config 1	28.60	29.50	1.230	-0.14	0.175	0.215
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	DSI 6	128	824.2	Config 1	28.60	29.50	1.230	0.05	0.325	0.400
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Side	10mm	DSI 6	128	824.2	Config 1	28.60	29.50	1.230	-0.16	0.068	0.084
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Side	10mm	DSI 6	128	824.2	Config 1	28.60	29.50	1.230	-0.06	0.070	0.086
	GSM850_Ant 1	GPRS (4 Tx slots)	Top Side	10mm	DSI 6	128	824.2	Config 1	28.60	29.50	1.230	-0.06	0.156	0.192
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	DSI 6	661	1880	Config 0	26.75	27.00	1.059	-0.14	0.521	0.552
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	DSI 6	661	1880	Config 0	26.75	27.00	1.059	-0.11	0.427	0.452
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Side	10mm	DSI 6	661	1880	Config 0	26.75	27.00	1.059	-0.19	0.308	0.326
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Side	10mm	DSI 6	661	1880	Config 0	26.75	27.00	1.059	-0.15	0.413	0.437
	GSM1900_Ant 2	GPRS (4 Tx slots)	Bottom Side	10mm	DSI 6	661	1880	Config 0	26.75	27.00	1.059	-0.08	0.217	0.230
31	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	DSI 6	661	1880	Config 1	22.09	22.50	1.099	-0.08	0.439	0.482
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 6	661	1880	Config 1	22.09	22.50	1.099	-0.03	0.808	0.888
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 6	512	1850.2	Config 1	21.74	22.50	1.191	-0.1	0.635	0.756
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 6	810	1909.8	Config 1	21.72	22.50	1.197	-0.02	0.680	0.814
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	DSI 6	661	1880	Config 1	22.09	22.50	1.099	0	0.177	0.195
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Side	10mm	DSI 6	661	1880	Config 1	22.09	22.50	1.099	-0.16	0.029	0.032
GSM1900_Ant 0	GPRS (4 Tx slots)	Bottom Side	10mm	DSI 6	661	1880	Config 1	22.09	22.50	1.099	-0.16	0.500	0.550	



<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	9538	1907.6	Config 0	24.22	24.70	1.117	-0.18	0.880	0.983
32	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 6	9262	1852.4	Config 0	24.02	24.70	1.169	-0.11	0.851	0.995
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 6	9400	1880	Config 0	24.21	24.70	1.119	-0.05	0.888	0.994
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 6	9538	1907.6	Config 0	24.22	24.70	1.117	0	0.756	0.844
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 6	9262	1852.4	Config 0	24.02	24.70	1.169	-0.08	0.742	0.868
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 6	9400	1880	Config 0	24.21	24.70	1.119	0.04	0.720	0.806
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Side	10mm	DSI 6	9538	1907.6	Config 0	24.22	24.70	1.117	0.1	0.325	0.363
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Side	10mm	DSI 6	9538	1907.6	Config 0	24.22	24.70	1.117	-0.05	0.541	0.604
	WCDMA II_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	9538	1907.6	Config 0	24.22	24.70	1.117	-0.13	0.335	0.374
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 6	9538	1907.6	Config 1	19.78	20.20	1.102	-0.04	0.358	0.394
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	9538	1907.6	Config 1	19.78	20.20	1.102	-0.13	0.888	0.978
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	9262	1852.4	Config 1	19.76	20.20	1.107	-0.13	0.844	0.934
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	9400	1880	Config 1	19.78	20.20	1.102	-0.11	0.858	0.945
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Side	10mm	DSI 6	9538	1907.6	Config 1	19.78	20.20	1.102	-0.07	0.126	0.139
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Side	10mm	DSI 6	9538	1907.6	Config 1	19.78	20.20	1.102	-0.02	0.040	0.044
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	9538	1907.6	Config 1	19.78	20.20	1.102	0.07	0.748	0.824
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	9262	1852.4	Config 1	19.76	20.20	1.107	0.09	0.760	0.841
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	9400	1880	Config 1	19.78	20.20	1.102	0.04	0.771	0.849
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 6	1513	1752.6	Config 0	24.45	25.20	1.189	-0.06	0.798	0.948
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 6	1312	1712.4	Config 0	24.39	25.20	1.205	-0.09	0.821	0.989
33	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 6	1413	1732.6	Config 0	24.44	25.20	1.191	-0.09	0.838	0.998
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 6	1513	1752.6	Config 0	24.45	25.20	1.189	-0.11	0.764	0.908
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 6	1312	1712.4	Config 0	24.39	25.20	1.205	-0.05	0.797	0.960
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 6	1413	1732.6	Config 0	24.44	25.20	1.191	-0.14	0.815	0.971
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Side	10mm	DSI 6	1513	1752.6	Config 0	24.45	25.20	1.189	-0.04	0.274	0.326
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Side	10mm	DSI 6	1513	1752.6	Config 0	24.45	25.20	1.189	-0.05	0.537	0.638
	WCDMA IV_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	1513	1752.6	Config 0	24.45	25.20	1.189	-0.01	0.460	0.547
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 6	1513	1752.6	Config 1	19.85	20.60	1.189	-0.16	0.332	0.395
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	1513	1752.6	Config 1	19.85	20.60	1.189	-0.01	0.784	0.932
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	1312	1712.4	Config 1	19.82	20.60	1.197	-0.02	0.796	0.953
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	1413	1732.6	Config 1	19.84	20.60	1.191	-0.11	0.776	0.924
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Side	10mm	DSI 6	1513	1752.6	Config 1	19.85	20.60	1.189	0.04	0.284	0.338
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Side	10mm	DSI 6	1513	1752.6	Config 1	19.85	20.60	1.189	-0.02	0.018	0.021
	WCDMA IV_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	1513	1752.6	Config 1	19.85	20.60	1.189	-0.09	0.614	0.730
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 6	4182	836.4	Config 0	24.37	25.00	1.156	-0.09	0.302	0.349
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	4182	836.4	Config 0	24.37	25.00	1.156	-0.09	0.470	0.543
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Side	10mm	DSI 6	4182	836.4	Config 0	24.37	25.00	1.156	-0.14	0.260	0.301
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Side	10mm	DSI 6	4182	836.4	Config 0	24.37	25.00	1.156	-0.05	0.252	0.291
	WCDMA V_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	4182	836.4	Config 0	24.37	25.00	1.156	0.01	0.126	0.146
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	10mm	DSI 6	4182	836.4	Config 1	24.36	25.00	1.159	0	0.304	0.352
34	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	DSI 6	4182	836.4	Config 1	24.36	25.00	1.159	-0.13	0.537	0.622
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 6	4182	836.4	Config 1	24.36	25.00	1.159	-0.17	0.125	0.145
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Side	10mm	DSI 6	4182	836.4	Config 1	24.36	25.00	1.159	-0.02	0.150	0.174
	WCDMA V_Ant 1	RMC 12.2Kbps	Top Side	10mm	DSI 6	4182	836.4	Config 1	24.36	25.00	1.159	-0.04	0.244	0.283



<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	24.50	25.50	1.259	-0.13	0.394	0.496
35	CDMA BC0_Ant 0	RTAP 153.6Kbps	Back	10mm	DSI 6	384	836.52	Config 0	24.50	25.50	1.259	-0.07	0.584	0.735
	CDMA BC0_Ant 0	RTAP 153.6Kbps	Left Side	10mm	DSI 6	384	836.52	Config 0	24.50	25.50	1.259	-0.15	0.425	0.535
	CDMA BC0_Ant 0	RTAP 153.6Kbps	Right Side	10mm	DSI 6	384	836.52	Config 0	24.50	25.50	1.259	-0.06	0.379	0.477
	CDMA BC0_Ant 0	RTAP 153.6Kbps	Bottom Side	10mm	DSI 6	384	836.52	Config 0	24.50	25.50	1.259	-0.05	0.112	0.141
	CDMA BC0_Ant 1	RTAP 153.6Kbps	Front	10mm	DSI 6	384	836.52	Config 1	24.45	25.50	1.274	-0.04	0.331	0.422
	CDMA BC0_Ant 1	RTAP 153.6Kbps	Back	10mm	DSI 6	384	836.52	Config 1	24.45	25.50	1.274	-0.06	0.564	0.718
	CDMA BC0_Ant 1	RTAP 153.6Kbps	Left Side	10mm	DSI 6	384	836.52	Config 1	24.45	25.50	1.274	-0.17	0.115	0.146
	CDMA BC0_Ant 1	RTAP 153.6Kbps	Right Side	10mm	DSI 6	384	836.52	Config 1	24.45	25.50	1.274	-0.12	0.172	0.219
	CDMA BC0_Ant 1	RTAP 153.6Kbps	Top Side	10mm	DSI 6	384	836.52	Config 1	24.45	25.50	1.274	-0.01	0.288	0.367
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Front	10mm	DSI 6	1175	1908.75	Config 0	23.03	23.90	1.222	-0.06	0.764	0.933
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Front	10mm	DSI 6	25	1851.25	Config 0	22.88	23.90	1.265	-0.09	0.707	0.894
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Front	10mm	DSI 6	600	1880	Config 0	22.97	23.90	1.239	-0.11	0.743	0.920
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Back	10mm	DSI 6	1175	1908.75	Config 0	23.03	23.90	1.222	-0.05	0.678	0.828
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Back	10mm	DSI 6	25	1851.25	Config 0	22.88	23.90	1.265	-0.13	0.611	0.773
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Back	10mm	DSI 6	600	1880	Config 0	22.97	23.90	1.239	-0.12	0.643	0.797
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Left Side	10mm	DSI 6	1175	1908.75	Config 0	23.03	23.90	1.222	0.04	0.451	0.551
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Right Side	10mm	DSI 6	1175	1908.75	Config 0	23.03	23.90	1.222	-0.12	0.549	0.671
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Bottom Side	10mm	DSI 6	1175	1908.75	Config 0	23.03	23.90	1.222	-0.11	0.312	0.381
	CDMA BC1_Ant 0	RTAP 153.6Kbps	Front	10mm	DSI 6	600	1880	Config 1	19.30	20.20	1.230	-0.09	0.359	0.442
36	CDMA BC1_Ant 0	RTAP 153.6Kbps	Back	10mm	DSI 6	600	1880	Config 1	19.30	20.20	1.230	-0.19	0.762	0.937
	CDMA BC1_Ant 0	RTAP 153.6Kbps	Back	10mm	DSI 6	25	1851.25	Config 1	19.19	20.20	1.262	-0.13	0.729	0.920
	CDMA BC1_Ant 0	RTAP 153.6Kbps	Back	10mm	DSI 6	1175	1908.75	Config 1	19.26	20.20	1.242	-0.09	0.752	0.934
	CDMA BC1_Ant 0	RTAP 153.6Kbps	Left Side	10mm	DSI 6	600	1880	Config 1	19.30	20.20	1.230	-0.16	0.134	0.165
	CDMA BC1_Ant 0	RTAP 153.6Kbps	Right Side	10mm	DSI 6	600	1880	Config 1	19.30	20.20	1.230	-0.14	0.048	0.059
	CDMA BC1_Ant 0	RTAP 153.6Kbps	Bottom Side	10mm	DSI 6	600	1880	Config 1	19.30	20.20	1.230	-0.12	0.729	0.897
	CDMA BC1_Ant 0	RTAP 153.6Kbps	Bottom Side	10mm	DSI 6	25	1851.25	Config 1	19.19	20.20	1.262	0.01	0.735	0.927
	CDMA BC1_Ant 0	RTAP 153.6Kbps	Bottom Side	10mm	DSI 6	1175	1908.75	Config 1	19.26	20.20	1.242	-0.04	0.746	0.926
	CDMA BC10_Ant 0	RTAP 153.6Kbps	Front	10mm	DSI 6	580	820.5	Config 0	24.43	25.50	1.279	-0.02	0.400	0.512
37	CDMA BC10_Ant 0	RTAP 153.6Kbps	Back	10mm	DSI 6	580	820.5	Config 0	24.43	25.50	1.279	-0.08	0.606	0.775
	CDMA BC10_Ant 0	RTAP 153.6Kbps	Left Side	10mm	DSI 6	580	820.5	Config 0	24.43	25.50	1.279	-0.09	0.434	0.555
	CDMA BC10_Ant 0	RTAP 153.6Kbps	Right Side	10mm	DSI 6	580	820.5	Config 0	24.43	25.50	1.279	-0.07	0.387	0.495
	CDMA BC10_Ant 0	RTAP 153.6Kbps	Bottom Side	10mm	DSI 6	580	820.5	Config 0	24.43	25.50	1.279	-0.03	0.103	0.132
	CDMA BC10_Ant 1	RTAP 153.6Kbps	Front	10mm	DSI 6	580	820.5	Config 1	24.46	25.50	1.271	-0.04	0.250	0.318
	CDMA BC10_Ant 1	RTAP 153.6Kbps	Back	10mm	DSI 6	580	820.5	Config 1	24.46	25.50	1.271	-0.08	0.450	0.572
	CDMA BC10_Ant 1	RTAP 153.6Kbps	Left Side	10mm	DSI 6	580	820.5	Config 1	24.46	25.50	1.271	-0.06	0.137	0.174
	CDMA BC10_Ant 1	RTAP 153.6Kbps	Right Side	10mm	DSI 6	580	820.5	Config 1	24.46	25.50	1.271	-0.07	0.149	0.189
	CDMA BC10_Ant 1	RTAP 153.6Kbps	Top Side	10mm	DSI 6	580	820.5	Config 1	24.46	25.50	1.271	-0.04	0.219	0.278



<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	99	Front	10mm	DSI 6	21100	2535	Config 0	24.08	24.90	1.208	-0.16	0.711	0.859
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 6	20850	2510	Config 0	23.99	24.90	1.233	-0.03	0.640	0.789
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 6	21350	2560	Config 0	24.04	24.90	1.219	-0.18	0.696	0.848
	LTE Band 7_Ant 2	20M	QPSK	50	50	Front	10mm	DSI 6	21100	2535	Config 0	24.03	24.40	1.089	-0.04	0.715	0.779
	LTE Band 7_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 6	21100	2535	Config 0	23.91	24.40	1.119	-0.08	0.681	0.762
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 6	21100	2535	Config 0	24.08	24.90	1.208	0.04	0.726	0.877
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 6	20850	2510	Config 0	23.99	24.90	1.233	0.01	0.656	0.809
38	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 6	21350	2560	Config 0	24.04	24.90	1.219	0.13	0.818	0.997
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 6	21100	2535	Config 0	24.03	24.40	1.089	0.02	0.627	0.683
	LTE Band 7_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 6	21100	2535	Config 0	23.91	24.40	1.119	-0.06	0.614	0.687
	LTE Band 7_Ant 2	20M	QPSK	1	99	Left Side	10mm	DSI 6	21100	2535	Config 0	24.08	24.90	1.208	-0.11	0.150	0.181
	LTE Band 7_Ant 2	20M	QPSK	50	50	Left Side	10mm	DSI 6	21100	2535	Config 0	24.03	24.40	1.089	-0.14	0.161	0.175
	LTE Band 7_Ant 2	20M	QPSK	1	99	Right Side	10mm	DSI 6	21100	2535	Config 0	24.08	24.90	1.208	-0.01	0.592	0.715
	LTE Band 7_Ant 2	20M	QPSK	50	50	Right Side	10mm	DSI 6	21100	2535	Config 0	24.03	24.40	1.089	-0.17	0.557	0.607
	LTE Band 7_Ant 2	20M	QPSK	1	99	Bottom Side	10mm	DSI 6	21100	2535	Config 0	24.08	24.90	1.208	0.02	0.621	0.750
	LTE Band 7_Ant 2	20M	QPSK	50	50	Bottom Side	10mm	DSI 6	21100	2535	Config 0	24.03	24.40	1.089	0.04	0.622	0.677
	LTE Band 7C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	21350+21152	2560	Config 0	24.41	24.90	1.119	0.01	0.812	0.909
	LTE Band 7_Ant 0	20M	QPSK	1	99	Front	10mm	DSI 6	21100	2535	Config 1	20.92	22.00	1.282	-0.06	0.254	0.326
	LTE Band 7_Ant 0	20M	QPSK	50	50	Front	10mm	DSI 6	21100	2535	Config 1	21.03	22.00	1.250	-0.09	0.265	0.331
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 6	21100	2535	Config 1	20.92	22.00	1.282	-0.19	0.679	0.871
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 6	20850	2510	Config 1	20.83	22.00	1.309	-0.17	0.578	0.757
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 6	21350	2560	Config 1	20.89	22.00	1.291	-0.18	0.727	0.939
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 6	21100	2535	Config 1	21.03	22.00	1.250	-0.14	0.691	0.864
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 6	20850	2510	Config 1	20.95	22.00	1.274	-0.11	0.581	0.740
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 6	21350	2560	Config 1	21.02	22.00	1.253	-0.13	0.750	0.940
	LTE Band 7_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 6	21100	2535	Config 1	20.94	22.00	1.276	-0.16	0.660	0.842
	LTE Band 7_Ant 0	20M	QPSK	1	99	Left Side	10mm	DSI 6	21100	2535	Config 1	20.92	22.00	1.282	0.03	0.184	0.236
	LTE Band 7_Ant 0	20M	QPSK	50	50	Left Side	10mm	DSI 6	21100	2535	Config 1	21.03	22.00	1.250	-0.07	0.188	0.235
	LTE Band 7_Ant 0	20M	QPSK	1	99	Right Side	10mm	DSI 6	21100	2535	Config 1	20.92	22.00	1.282	-0.1	0.055	0.071
	LTE Band 7_Ant 0	20M	QPSK	50	50	Right Side	10mm	DSI 6	21100	2535	Config 1	21.03	22.00	1.250	-0.1	0.055	0.069
	LTE Band 7_Ant 0	20M	QPSK	1	99	Bottom Side	10mm	DSI 6	21100	2535	Config 1	20.92	22.00	1.282	-0.19	0.720	0.923
	LTE Band 7_Ant 0	20M	QPSK	1	99	Bottom Side	10mm	DSI 6	20850	2510	Config 1	20.83	22.00	1.309	-0.18	0.675	0.884
	LTE Band 7_Ant 0	20M	QPSK	1	99	Bottom Side	10mm	DSI 6	21350	2560	Config 1	20.89	22.00	1.291	-0.19	0.718	0.927
	LTE Band 7_Ant 0	20M	QPSK	50	50	Bottom Side	10mm	DSI 6	21100	2535	Config 1	21.03	22.00	1.250	-0.16	0.725	0.906
	LTE Band 7_Ant 0	20M	QPSK	50	50	Bottom Side	10mm	DSI 6	20850	2510	Config 1	20.95	22.00	1.274	-0.15	0.667	0.849
	LTE Band 7_Ant 0	20M	QPSK	50	50	Bottom Side	10mm	DSI 6	21350	2560	Config 1	21.02	22.00	1.253	-0.13	0.739	0.926
	LTE Band 7_Ant 0	20M	QPSK	100	0	Bottom Side	10mm	DSI 6	21100	2535	Config 1	20.94	22.00	1.276	-0.17	0.713	0.910
	LTE Band 7C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	21350+21152	2560	Config 1	21.06	22.00	1.242	-0.05	0.596	0.740



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 12_Ant 0	10M	QPSK	1	49	Front	10mm	DSI 6	23095	707.5	Config 0	24.71	25.70	1.256	-0.11	0.336	0.422
	LTE Band 12_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 6	23095	707.5	Config 0	23.85	24.70	1.216	-0.06	0.253	0.308
39	LTE Band 12_Ant 0	10M	QPSK	1	49	Back	10mm	DSI 6	23095	707.5	Config 0	24.71	25.70	1.256	-0.01	0.524	0.658
	LTE Band 12_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 6	23095	707.5	Config 0	23.85	24.70	1.216	-0.13	0.445	0.541
	LTE Band 12_Ant 0	10M	QPSK	1	49	Left Side	10mm	DSI 6	23095	707.5	Config 0	24.71	25.70	1.256	0.01	0.352	0.442
	LTE Band 12_Ant 0	10M	QPSK	25	25	Left Side	10mm	DSI 6	23095	707.5	Config 0	23.85	24.70	1.216	0.02	0.273	0.332
	LTE Band 12_Ant 0	10M	QPSK	1	49	Right Side	10mm	DSI 6	23095	707.5	Config 0	24.71	25.70	1.256	-0.16	0.275	0.345
	LTE Band 12_Ant 0	10M	QPSK	25	25	Right Side	10mm	DSI 6	23095	707.5	Config 0	23.85	24.70	1.216	-0.11	0.213	0.259
	LTE Band 12_Ant 0	10M	QPSK	1	49	Bottom Side	10mm	DSI 6	23095	707.5	Config 0	24.71	25.70	1.256	-0.08	0.056	0.070
	LTE Band 12_Ant 0	10M	QPSK	25	25	Bottom Side	10mm	DSI 6	23095	707.5	Config 0	23.85	24.70	1.216	-0.05	0.051	0.062
	LTE Band 12_Ant 1	10M	QPSK	1	49	Front	10mm	DSI 6	23095	707.5	Config 1	24.62	25.70	1.282	-0.06	0.286	0.367
	LTE Band 12_Ant 1	10M	QPSK	25	25	Front	10mm	DSI 6	23095	707.5	Config 1	23.75	24.70	1.245	-0.04	0.234	0.291
	LTE Band 12_Ant 1	10M	QPSK	1	49	Back	10mm	DSI 6	23095	707.5	Config 1	24.62	25.70	1.282	-0.11	0.481	0.617
	LTE Band 12_Ant 1	10M	QPSK	25	25	Back	10mm	DSI 6	23095	707.5	Config 1	23.75	24.70	1.245	-0.04	0.394	0.490
	LTE Band 12_Ant 1	10M	QPSK	1	49	Left Side	10mm	DSI 6	23095	707.5	Config 1	24.62	25.70	1.282	0.05	0.292	0.374
	LTE Band 12_Ant 1	10M	QPSK	25	25	Left Side	10mm	DSI 6	23095	707.5	Config 1	23.75	24.70	1.245	0.06	0.252	0.314
	LTE Band 12_Ant 1	10M	QPSK	1	49	Right Side	10mm	DSI 6	23095	707.5	Config 1	24.62	25.70	1.282	-0.13	0.202	0.259
	LTE Band 12_Ant 1	10M	QPSK	25	25	Right Side	10mm	DSI 6	23095	707.5	Config 1	23.75	24.70	1.245	-0.07	0.168	0.209
	LTE Band 12_Ant 1	10M	QPSK	1	49	Top Side	10mm	DSI 6	23095	707.5	Config 1	24.62	25.70	1.282	-0.13	0.175	0.224
	LTE Band 12_Ant 1	10M	QPSK	25	25	Top Side	10mm	DSI 6	23095	707.5	Config 1	23.75	24.70	1.245	-0.12	0.140	0.174
	LTE Band 13_Ant 0	10M	QPSK	1	49	Front	10mm	DSI 6	23230	782	Config 0	24.35	25.20	1.216	0.01	0.397	0.483
	LTE Band 13_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 6	23230	782	Config 0	23.34	24.20	1.219	-0.07	0.327	0.399
40	LTE Band 13_Ant 0	10M	QPSK	1	49	Back	10mm	DSI 6	23230	782	Config 0	24.35	25.20	1.216	-0.11	0.568	0.691
	LTE Band 13_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 6	23230	782	Config 0	23.34	24.20	1.219	-0.11	0.510	0.622
	LTE Band 13_Ant 0	10M	QPSK	1	49	Left Side	10mm	DSI 6	23230	782	Config 0	24.35	25.20	1.216	-0.11	0.395	0.480
	LTE Band 13_Ant 0	10M	QPSK	25	25	Left Side	10mm	DSI 6	23230	782	Config 0	23.34	24.20	1.219	-0.12	0.329	0.401
	LTE Band 13_Ant 0	10M	QPSK	1	49	Right Side	10mm	DSI 6	23230	782	Config 0	24.35	25.20	1.216	-0.05	0.385	0.468
	LTE Band 13_Ant 0	10M	QPSK	25	25	Right Side	10mm	DSI 6	23230	782	Config 0	23.34	24.20	1.219	0	0.310	0.378
	LTE Band 13_Ant 0	10M	QPSK	1	49	Bottom Side	10mm	DSI 6	23230	782	Config 0	24.35	25.20	1.216	-0.08	0.081	0.099
	LTE Band 13_Ant 0	10M	QPSK	25	25	Bottom Side	10mm	DSI 6	23230	782	Config 0	23.34	24.20	1.219	-0.09	0.065	0.079
	LTE Band 13_Ant 1	10M	QPSK	1	0	Front	10mm	DSI 6	23230	782	Config 1	24.17	25.20	1.268	-0.11	0.301	0.382
	LTE Band 13_Ant 1	10M	QPSK	25	25	Front	10mm	DSI 6	23230	782	Config 1	23.21	24.20	1.256	-0.01	0.250	0.314
	LTE Band 13_Ant 1	10M	QPSK	1	0	Back	10mm	DSI 6	23230	782	Config 1	24.17	25.20	1.268	-0.08	0.486	0.616
	LTE Band 13_Ant 1	10M	QPSK	25	25	Back	10mm	DSI 6	23230	782	Config 1	23.21	24.20	1.256	-0.04	0.400	0.502
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Side	10mm	DSI 6	23230	782	Config 1	24.17	25.20	1.268	0.04	0.286	0.363
	LTE Band 13_Ant 1	10M	QPSK	25	25	Left Side	10mm	DSI 6	23230	782	Config 1	23.21	24.20	1.256	0.01	0.190	0.239
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Side	10mm	DSI 6	23230	782	Config 1	24.17	25.20	1.268	-0.09	0.245	0.311
	LTE Band 13_Ant 1	10M	QPSK	25	25	Right Side	10mm	DSI 6	23230	782	Config 1	23.21	24.20	1.256	-0.08	0.181	0.227
	LTE Band 13_Ant 1	10M	QPSK	1	0	Top Side	10mm	DSI 6	23230	782	Config 1	24.17	25.20	1.268	-0.17	0.190	0.241
	LTE Band 13_Ant 1	10M	QPSK	25	25	Top Side	10mm	DSI 6	23230	782	Config 1	23.21	24.20	1.256	-0.11	0.157	0.197



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	49	Front	10mm	DSI 6	23330	793	Config 0	24.67	25.70	1.268	0	0.454	0.576
	LTE Band 14_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 6	23330	793	Config 0	23.73	24.70	1.250	-0.07	0.366	0.458
41	LTE Band 14_Ant 0	10M	QPSK	1	49	Back	10mm	DSI 6	23330	793	Config 0	24.67	25.70	1.268	0.01	0.649	0.823
	LTE Band 14_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 6	23330	793	Config 0	23.73	24.70	1.250	0	0.533	0.666
	LTE Band 14_Ant 0	10M	QPSK	50	0	Back	10mm	DSI 6	23330	793	Config 0	23.67	24.70	1.268	-0.13	0.518	0.657
	LTE Band 14_Ant 0	10M	QPSK	1	49	Left Side	10mm	DSI 6	23330	793	Config 0	24.67	25.70	1.268	0.13	0.458	0.581
	LTE Band 14_Ant 0	10M	QPSK	25	25	Left Side	10mm	DSI 6	23330	793	Config 0	23.73	24.70	1.250	-0.06	0.380	0.475
	LTE Band 14_Ant 0	10M	QPSK	1	49	Right Side	10mm	DSI 6	23330	793	Config 0	24.67	25.70	1.268	-0.14	0.456	0.578
	LTE Band 14_Ant 0	10M	QPSK	25	25	Right Side	10mm	DSI 6	23330	793	Config 0	23.73	24.70	1.250	-0.07	0.378	0.473
	LTE Band 14_Ant 0	10M	QPSK	1	49	Bottom Side	10mm	DSI 6	23330	793	Config 0	24.67	25.70	1.268	-0.11	0.092	0.117
	LTE Band 14_Ant 0	10M	QPSK	25	25	Bottom Side	10mm	DSI 6	23330	793	Config 0	23.73	24.70	1.250	-0.14	0.082	0.102
	LTE Band 14_Ant 1	10M	QPSK	1	0	Front	10mm	DSI 6	23330	793	Config 1	24.59	25.70	1.291	-0.08	0.338	0.436
	LTE Band 14_Ant 1	10M	QPSK	25	25	Front	10mm	DSI 6	23330	793	Config 1	23.59	24.70	1.291	-0.04	0.250	0.323
	LTE Band 14_Ant 1	10M	QPSK	1	0	Back	10mm	DSI 6	23330	793	Config 1	24.59	25.70	1.291	-0.04	0.500	0.646
	LTE Band 14_Ant 1	10M	QPSK	25	25	Back	10mm	DSI 6	23330	793	Config 1	23.59	24.70	1.291	-0.04	0.407	0.526
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Side	10mm	DSI 6	23330	793	Config 1	24.59	25.70	1.291	-0.04	0.183	0.236
	LTE Band 14_Ant 1	10M	QPSK	25	25	Left Side	10mm	DSI 6	23330	793	Config 1	23.59	24.70	1.291	-0.01	0.125	0.161
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Side	10mm	DSI 6	23330	793	Config 1	24.59	25.70	1.291	-0.04	0.173	0.223
	LTE Band 14_Ant 1	10M	QPSK	25	25	Right Side	10mm	DSI 6	23330	793	Config 1	23.59	24.70	1.291	-0.02	0.123	0.159
	LTE Band 14_Ant 1	10M	QPSK	1	0	Top Side	10mm	DSI 6	23330	793	Config 1	24.59	25.70	1.291	-0.06	0.216	0.279
	LTE Band 14_Ant 1	10M	QPSK	25	25	Top Side	10mm	DSI 6	23330	793	Config 1	23.59	24.70	1.291	0.05	0.170	0.220



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)
42	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	26340	1880	Config 0	23.12	24.20	1.282	-0.09	0.741	0.950
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	26140	1860	Config 0	23.09	24.20	1.291	-0.11	0.705	0.910
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	26590	1905	Config 0	23.05	24.20	1.303	-0.09	0.646	0.842
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 6	26340	1880	Config 0	23.28	24.00	1.180	-0.12	0.757	0.894
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 6	26140	1860	Config 0	23.02	24.00	1.253	-0.1	0.736	0.922
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 6	26590	1905	Config 0	23.12	24.00	1.225	-0.16	0.684	0.838
	LTE Band 25_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 6	26340	1880	Config 0	23.24	24.00	1.191	-0.17	0.743	0.885
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	26340	1880	Config 0	23.12	24.20	1.282	-0.17	0.617	0.791
	LTE Band 25_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	26340	1880	Config 0	23.28	24.00	1.180	-0.06	0.613	0.724
	LTE Band 25_Ant 2	20M	QPSK	1	0	Left Side	10mm	DSI 6	26340	1880	Config 0	23.12	24.20	1.282	-0.07	0.318	0.408
	LTE Band 25_Ant 2	20M	QPSK	50	24	Left Side	10mm	DSI 6	26340	1880	Config 0	23.28	24.00	1.180	-0.07	0.327	0.386
	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	26340	1880	Config 0	23.12	24.20	1.282	-0.16	0.580	0.744
	LTE Band 25_Ant 2	20M	QPSK	50	24	Right Side	10mm	DSI 6	26340	1880	Config 0	23.28	24.00	1.180	-0.19	0.599	0.707
	LTE Band 25_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	26340	1880	Config 0	23.12	24.20	1.282	-0.09	0.322	0.413
	LTE Band 25_Ant 2	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	26340	1880	Config 0	23.28	24.00	1.180	-0.15	0.309	0.365
	LTE Band 25_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 6	26340	1880	Config 1	18.31	19.40	1.285	-0.16	0.383	0.492
	LTE Band 25_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 6	26340	1880	Config 1	18.43	19.40	1.250	-0.13	0.420	0.525
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	26340	1880	Config 1	18.31	19.40	1.285	-0.16	0.717	0.922
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	26140	1860	Config 1	18.30	19.40	1.288	-0.09	0.613	0.790
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	26590	1905	Config 1	18.23	19.40	1.309	-0.15	0.725	0.949
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	26340	1880	Config 1	18.43	19.40	1.250	-0.08	0.758	0.948
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	26140	1860	Config 1	18.40	19.40	1.259	-0.13	0.654	0.823
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	26590	1905	Config 1	18.35	19.40	1.274	-0.13	0.709	0.903
	LTE Band 25_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 6	26340	1880	Config 1	18.42	19.40	1.253	-0.09	0.754	0.945
	LTE Band 25_Ant 0	20M	QPSK	1	0	Left Side	10mm	DSI 6	26340	1880	Config 1	18.31	19.40	1.285	-0.13	0.264	0.339
	LTE Band 25_Ant 0	20M	QPSK	50	24	Left Side	10mm	DSI 6	26340	1880	Config 1	18.43	19.40	1.250	-0.17	0.297	0.371
	LTE Band 25_Ant 0	20M	QPSK	1	0	Right Side	10mm	DSI 6	26340	1880	Config 1	18.31	19.40	1.285	-0.14	0.029	0.037
	LTE Band 25_Ant 0	20M	QPSK	50	24	Right Side	10mm	DSI 6	26340	1880	Config 1	18.43	19.40	1.250	0.14	0.034	0.043
	LTE Band 25_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	26340	1880	Config 1	18.31	19.40	1.285	-0.18	0.685	0.880
	LTE Band 25_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	26140	1860	Config 1	18.30	19.40	1.288	-0.03	0.512	0.660
	LTE Band 25_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	26590	1905	Config 1	18.23	19.40	1.309	0	0.696	0.911
	LTE Band 25_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	26340	1880	Config 1	18.43	19.40	1.250	-0.11	0.757	0.946
	LTE Band 25_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	26140	1860	Config 1	18.40	19.40	1.259	0.03	0.569	0.716
	LTE Band 25_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	26590	1905	Config 1	18.35	19.40	1.274	0	0.665	0.847
	LTE Band 25_Ant 0	20M	QPSK	100	0	Bottom Side	10mm	DSI 6	26340	1880	Config 1	18.42	19.40	1.253	0.03	0.684	0.857



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 26_Ant 0	15M	QPSK	1	0	Front	10mm	DSI 6	26865	831.5	Config 0	24.52	25.70	1.312	-0.02	0.265	0.348
	LTE Band 26_Ant 0	15M	QPSK	36	0	Front	10mm	DSI 6	26865	831.5	Config 0	23.65	24.70	1.274	-0.06	0.264	0.336
43	LTE Band 26_Ant 0	15M	QPSK	1	0	Back	10mm	DSI 6	26865	831.5	Config 0	24.52	25.70	1.312	-0.11	0.538	0.706
	LTE Band 26_Ant 0	15M	QPSK	36	0	Back	10mm	DSI 6	26865	831.5	Config 0	23.65	24.70	1.274	-0.05	0.454	0.578
	LTE Band 26_Ant 0	15M	QPSK	1	0	Left Side	10mm	DSI 6	26865	831.5	Config 0	24.52	25.70	1.312	0.01	0.127	0.167
	LTE Band 26_Ant 0	15M	QPSK	36	0	Left Side	10mm	DSI 6	26865	831.5	Config 0	23.65	24.70	1.274	0.09	0.102	0.130
	LTE Band 26_Ant 0	15M	QPSK	1	0	Right Side	10mm	DSI 6	26865	831.5	Config 0	24.52	25.70	1.312	-0.12	0.117	0.154
	LTE Band 26_Ant 0	15M	QPSK	36	0	Right Side	10mm	DSI 6	26865	831.5	Config 0	23.65	24.70	1.274	-0.09	0.094	0.120
	LTE Band 26_Ant 0	15M	QPSK	1	0	Bottom Side	10mm	DSI 6	26865	831.5	Config 0	24.52	25.70	1.312	-0.09	0.118	0.155
	LTE Band 26_Ant 0	15M	QPSK	36	0	Bottom Side	10mm	DSI 6	26865	831.5	Config 0	23.65	24.70	1.274	-0.03	0.092	0.117
	LTE Band 5B_Ant 0	10M	QPSK	1	0	Back	10mm	DSI 6	20600+20501	844	Config 0	24.82	25.70	1.225	-0.06	0.567	0.694
	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	10mm	DSI 6	26865	831.5	Config 1	24.40	25.70	1.349	-0.01	0.244	0.329
	LTE Band 26_Ant 1	15M	QPSK	36	0	Front	10mm	DSI 6	26865	831.5	Config 1	23.51	24.70	1.315	0.08	0.214	0.281
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	10mm	DSI 6	26865	831.5	Config 1	24.40	25.70	1.349	0.04	0.481	0.649
	LTE Band 26_Ant 1	15M	QPSK	36	0	Back	10mm	DSI 6	26865	831.5	Config 1	23.51	24.70	1.315	0.08	0.427	0.562
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Side	10mm	DSI 6	26865	831.5	Config 1	24.40	25.70	1.349	0.1	0.103	0.139
	LTE Band 26_Ant 1	15M	QPSK	36	0	Left Side	10mm	DSI 6	26865	831.5	Config 1	23.51	24.70	1.315	0	0.094	0.124
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Side	10mm	DSI 6	26865	831.5	Config 1	24.40	25.70	1.349	0.07	0.128	0.173
	LTE Band 26_Ant 1	15M	QPSK	36	0	Right Side	10mm	DSI 6	26865	831.5	Config 1	23.51	24.70	1.315	0.13	0.105	0.138
	LTE Band 26_Ant 1	15M	QPSK	1	0	Top Side	10mm	DSI 6	26865	831.5	Config 1	24.40	25.70	1.349	-0.11	0.235	0.317
	LTE Band 26_Ant 1	15M	QPSK	36	0	Top Side	10mm	DSI 6	26865	831.5	Config 1	23.51	24.70	1.315	-0.08	0.207	0.272
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Back	10mm	DSI 6	20600+20501	844	Config 1	25.40	25.70	1.072	-0.02	0.602	0.645
	LTE Band 30_Ant 2	10M	QPSK	1	0	Front	10mm	DSI 6	27710	2310	Config 0	23.02	23.70	1.169	-0.14	0.422	0.494
	LTE Band 30_Ant 2	10M	QPSK	25	25	Front	10mm	DSI 6	27710	2310	Config 0	22.11	22.70	1.146	-0.18	0.359	0.411
	LTE Band 30_Ant 2	10M	QPSK	1	0	Back	10mm	DSI 6	27710	2310	Config 0	23.02	23.70	1.169	0.11	0.364	0.426
	LTE Band 30_Ant 2	10M	QPSK	25	25	Back	10mm	DSI 6	27710	2310	Config 0	22.11	22.70	1.146	-0.07	0.311	0.356
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Side	10mm	DSI 6	27710	2310	Config 0	23.02	23.70	1.169	-0.16	0.072	0.084
	LTE Band 30_Ant 2	10M	QPSK	25	25	Left Side	10mm	DSI 6	27710	2310	Config 0	22.11	22.70	1.146	-0.17	0.057	0.065
	LTE Band 30_Ant 2	10M	QPSK	1	0	Right Side	10mm	DSI 6	27710	2310	Config 0	23.02	23.70	1.169	-0.11	0.239	0.280
	LTE Band 30_Ant 2	10M	QPSK	25	25	Right Side	10mm	DSI 6	27710	2310	Config 0	22.11	22.70	1.146	-0.13	0.206	0.236
	LTE Band 30_Ant 2	10M	QPSK	1	0	Bottom Side	10mm	DSI 6	27710	2310	Config 0	23.02	23.70	1.169	-0.12	0.338	0.395
	LTE Band 30_Ant 2	10M	QPSK	25	25	Bottom Side	10mm	DSI 6	27710	2310	Config 0	22.11	22.70	1.146	-0.15	0.280	0.321
	LTE Band 30_Ant 0	10M	QPSK	1	0	Front	10mm	DSI 6	27710	2310	Config 1	20.52	21.50	1.253	-0.08	0.382	0.479
	LTE Band 30_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 6	27710	2310	Config 1	20.70	21.50	1.202	-0.13	0.396	0.476
44	LTE Band 30_Ant 0	10M	QPSK	1	0	Back	10mm	DSI 6	27710	2310	Config 1	20.72	21.50	1.197	-0.13	0.828	0.991
	LTE Band 30_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 6	27710	2310	Config 1	20.70	21.50	1.202	-0.19	0.775	0.932
	LTE Band 30_Ant 0	10M	QPSK	50	0	Back	10mm	DSI 6	27710	2310	Config 1	20.59	21.50	1.233	-0.15	0.780	0.962
	LTE Band 30_Ant 0	10M	QPSK	1	0	Left Side	10mm	DSI 6	27710	2310	Config 1	20.72	21.50	1.197	-0.01	0.129	0.154
	LTE Band 30_Ant 0	10M	QPSK	25	25	Left Side	10mm	DSI 6	27710	2310	Config 1	20.70	21.50	1.202	0.13	0.127	0.153
	LTE Band 30_Ant 0	10M	QPSK	1	0	Right Side	10mm	DSI 6	27710	2310	Config 1	20.72	21.50	1.197	-0.16	0.064	0.077
	LTE Band 30_Ant 0	10M	QPSK	25	25	Right Side	10mm	DSI 6	27710	2310	Config 1	20.70	21.50	1.202	-0.14	0.063	0.076
	LTE Band 30_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	DSI 6	27710	2310	Config 1	20.52	21.50	1.253	-0.15	0.576	0.722
	LTE Band 30_Ant 0	10M	QPSK	25	25	Bottom Side	10mm	DSI 6	27710	2310	Config 1	20.70	21.50	1.202	-0.15	0.548	0.659



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)
45	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	132072	1720	Config 0	22.96	24.10	1.300	-0.14	0.719	0.935
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	132322	1745	Config 0	22.88	24.10	1.324	0.02	0.680	0.901
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	132572	1770	Config 0	22.80	24.10	1.349	-0.08	0.615	0.830
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 6	132072	1720	Config 0	23.08	24.10	1.265	-0.14	0.735	0.930
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 6	132322	1745	Config 0	22.93	24.10	1.309	-0.17	0.668	0.875
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 6	132572	1770	Config 0	22.85	24.10	1.334	0.01	0.617	0.823
	LTE Band 66_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 6	132072	1720	Config 0	23.06	24.10	1.271	0.06	0.718	0.912
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	132072	1720	Config 0	22.96	24.10	1.300	0.03	0.654	0.850
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	132322	1745	Config 0	22.88	24.10	1.324	-0.02	0.608	0.805
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	132572	1770	Config 0	22.80	24.10	1.349	-0.13	0.557	0.751
	LTE Band 66_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	132072	1720	Config 0	23.08	24.10	1.265	0	0.657	0.831
	LTE Band 66_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	132322	1745	Config 0	22.93	24.10	1.309	-0.09	0.600	0.786
	LTE Band 66_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	132572	1770	Config 0	22.85	24.10	1.334	-0.08	0.549	0.732
	LTE Band 66_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 6	132072	1720	Config 0	23.06	24.10	1.271	-0.15	0.593	0.753
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Side	10mm	DSI 6	132072	1720	Config 0	22.96	24.10	1.300	-0.04	0.232	0.302
	LTE Band 66_Ant 2	20M	QPSK	50	24	Left Side	10mm	DSI 6	132072	1720	Config 0	23.08	24.10	1.265	-0.12	0.247	0.312
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	132072	1720	Config 0	22.96	24.10	1.300	-0.14	0.441	0.573
	LTE Band 66_Ant 2	20M	QPSK	50	24	Right Side	10mm	DSI 6	132072	1720	Config 0	23.08	24.10	1.265	-0.19	0.463	0.586
	LTE Band 66_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	132072	1720	Config 0	22.96	24.10	1.300	0.04	0.312	0.406
	LTE Band 66_Ant 2	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	132072	1720	Config 0	23.08	24.10	1.265	0.01	0.310	0.392
	LTE Band 66C_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 6	132072+132270	1720	Config 0	23.02	24.10	1.282	-0.11	0.668	0.857
	LTE Band 66B_Ant 2	15M	QPSK	1	74	Front	10mm	DSI 6	132047+132140	1717.5	Config 0	22.82	24.10	1.343	-0.08	0.674	0.905
	LTE Band 66_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 6	132322	1745	Config 1	18.90	20.00	1.288	-0.07	0.261	0.336
	LTE Band 66_Ant 0	20M	QPSK	50	50	Front	10mm	DSI 6	132322	1745	Config 1	18.83	20.00	1.309	-0.1	0.274	0.359
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	132322	1745	Config 1	18.90	20.00	1.288	-0.17	0.621	0.800
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	132072	1720	Config 1	18.83	20.00	1.309	-0.15	0.616	0.806
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	132572	1770	Config 1	18.88	20.00	1.294	-0.14	0.615	0.796
	LTE Band 66_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 6	132322	1745	Config 1	18.83	20.00	1.309	-0.14	0.680	0.890
	LTE Band 66_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 6	132072	1720	Config 1	18.81	20.00	1.315	-0.19	0.670	0.881
	LTE Band 66_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 6	132572	1770	Config 1	18.81	20.00	1.315	-0.12	0.571	0.751
	LTE Band 66_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 6	132572	1770	Config 1	18.92	20.00	1.282	-0.11	0.589	0.755
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Side	10mm	DSI 6	132322	1745	Config 1	18.90	20.00	1.288	-0.16	0.217	0.280
	LTE Band 66_Ant 0	20M	QPSK	50	50	Left Side	10mm	DSI 6	132322	1745	Config 1	18.83	20.00	1.309	0.14	0.255	0.334
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Side	10mm	DSI 6	132322	1745	Config 1	18.90	20.00	1.288	-0.06	0.002	0.003
	LTE Band 66_Ant 0	20M	QPSK	50	50	Right Side	10mm	DSI 6	132322	1745	Config 1	18.83	20.00	1.309	-0.13	0.006	0.008
	LTE Band 66_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	132322	1745	Config 1	18.90	20.00	1.288	-0.13	0.495	0.638
	LTE Band 66_Ant 0	20M	QPSK	50	50	Bottom Side	10mm	DSI 6	132322	1745	Config 1	18.83	20.00	1.309	-0.18	0.514	0.673
	LTE Band 66C_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 6	132072+132270	1720	Config 1	18.66	20.00	1.361	-0.06	0.561	0.764
	LTE Band 66B_Ant 0	15M	QPSK	1	74	Back	10mm	DSI 6	132047+132140	1717.5	Config 1	18.59	20.00	1.384	-0.02	0.568	0.786



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	24.67	25.70	1.268	-0.1	0.297	0.376
	LTE Band 71_Ant 0	20M	QPSK	50	50	Front	10mm	DSI 6	133322	683	Config 0	23.78	24.70	1.236	-0.17	0.239	0.295
	LTE Band 71_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	133322	683	Config 0	24.67	25.70	1.268	0.01	0.445	0.564
	LTE Band 71_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 6	133322	683	Config 0	23.78	24.70	1.236	-0.07	0.391	0.483
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Side	10mm	DSI 6	133322	683	Config 0	24.67	25.70	1.268	0	0.309	0.392
	LTE Band 71_Ant 0	20M	QPSK	50	50	Left Side	10mm	DSI 6	133322	683	Config 0	23.78	24.70	1.236	-0.01	0.257	0.318
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Side	10mm	DSI 6	133322	683	Config 0	24.67	25.70	1.268	-0.01	0.290	0.368
	LTE Band 71_Ant 0	20M	QPSK	50	50	Right Side	10mm	DSI 6	133322	683	Config 0	23.78	24.70	1.236	-0.01	0.236	0.292
	LTE Band 71_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	133322	683	Config 0	24.67	25.70	1.268	-0.01	0.068	0.086
	LTE Band 71_Ant 0	20M	QPSK	50	50	Bottom Side	10mm	DSI 6	133322	683	Config 0	23.78	24.70	1.236	0	0.053	0.066
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	DSI 6	133322	683	Config 1	24.60	25.70	1.288	-0.18	0.279	0.359
	LTE Band 71_Ant 1	20M	QPSK	50	50	Front	10mm	DSI 6	133322	683	Config 1	23.69	24.70	1.262	-0.03	0.237	0.299
46	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	DSI 6	133322	683	Config 1	24.60	25.70	1.288	-0.09	0.487	0.627
	LTE Band 71_Ant 1	20M	QPSK	50	50	Back	10mm	DSI 6	133322	683	Config 1	23.69	24.70	1.262	-0.12	0.399	0.503
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 6	133322	683	Config 1	24.60	25.70	1.288	-0.14	0.364	0.469
	LTE Band 71_Ant 1	20M	QPSK	50	50	Left Side	10mm	DSI 6	133322	683	Config 1	23.69	24.70	1.262	-0.12	0.311	0.392
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Side	10mm	DSI 6	133322	683	Config 1	24.60	25.70	1.288	-0.19	0.141	0.182
	LTE Band 71_Ant 1	20M	QPSK	50	50	Right Side	10mm	DSI 6	133322	683	Config 1	23.69	24.70	1.262	-0.07	0.136	0.172
	LTE Band 71_Ant 1	20M	QPSK	1	0	Top Side	10mm	DSI 6	133322	683	Config 1	24.60	25.70	1.288	-0.15	0.151	0.195
	LTE Band 71_Ant 1	20M	QPSK	50	50	Top Side	10mm	DSI 6	133322	683	Config 1	23.69	24.70	1.262	-0.09	0.122	0.154



<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	40620	2593	Config 0	24.45	25.10	1.161	62.9	1.006	-0.13	0.444	0.519
	LTE Band 41_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 6	40620	2593	Config 0	24.16	24.70	1.132	62.9	1.006	0.11	0.406	0.463
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	40620	2593	Config 0	24.45	25.10	1.161	62.9	1.006	-0.12	0.566	0.661
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	39750	2506	Config 0	24.23	25.10	1.222	62.9	1.006	-0.17	0.431	0.530
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	40185	2549.5	Config 0	24.38	25.10	1.180	62.9	1.006	-0.12	0.498	0.591
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 6	41055	2636.5	Config 0	24.40	25.10	1.175	62.9	1.006	-0.11	0.515	0.609
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 6	41490	2680	Config 0	24.10	25.10	1.259	62.9	1.006	-0.15	0.719	0.911
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	40620	2593	Config 0	24.16	24.70	1.132	62.9	1.006	-0.1	0.537	0.612
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	39750	2506	Config 0	23.90	24.70	1.202	62.9	1.006	-0.03	0.413	0.500
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	40185	2549.5	Config 0	24.07	24.70	1.156	62.9	1.006	-0.08	0.477	0.555
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	41055	2636.5	Config 0	24.15	24.70	1.135	62.9	1.006	-0.13	0.524	0.598
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	41490	2680	Config 0	24.02	24.70	1.169	62.9	1.006	-0.1	0.671	0.789
	LTE Band 41_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 6	41055	2636.5	Config 0	24.10	24.70	1.148	62.9	1.006	-0.15	0.530	0.612
	LTE Band 41_Ant 2	20M	QPSK	1	0	Left Side	10mm	DSI 6	40620	2593	Config 0	24.45	25.10	1.161	62.9	1.006	-0.13	0.067	0.078
	LTE Band 41_Ant 2	20M	QPSK	50	24	Left Side	10mm	DSI 6	40620	2593	Config 0	24.16	24.70	1.132	62.9	1.006	-0.14	0.065	0.074
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	40620	2593	Config 0	24.45	25.10	1.161	62.9	1.006	-0.01	0.513	0.599
	LTE Band 41_Ant 2	20M	QPSK	50	24	Right Side	10mm	DSI 6	40620	2593	Config 0	24.16	24.70	1.132	62.9	1.006	0.01	0.475	0.541
	LTE Band 41_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	40620	2593	Config 0	24.45	25.10	1.161	62.9	1.006	-0.18	0.483	0.564
	LTE Band 41_Ant 2	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	40620	2593	Config 0	24.16	24.70	1.132	62.9	1.006	-0.08	0.431	0.491
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 6	41490	2680	Config 0	25.81	26.90	1.285	42.9	1.009	-0.13	0.688	0.892
	LTE Band 41C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	41490+41292	2680	Config 0	24.71	25.10	1.094	62.9	1.006	-0.08	0.693	0.763
	LTE Band 41_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 6	40620	2593	Config 1	21.07	22.40	1.358	62.9	1.006	-0.12	0.163	0.223
	LTE Band 41_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 6	40620	2593	Config 1	21.16	22.40	1.330	62.9	1.006	-0.08	0.168	0.225
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	40620	2593	Config 1	21.07	22.40	1.358	62.9	1.006	-0.12	0.539	0.737
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 6	39750	2506	Config 1	20.97	22.40	1.390	62.9	1.006	-0.16	0.389	0.544
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 6	40185	2549.5	Config 1	20.98	22.40	1.387	62.9	1.006	-0.1	0.443	0.618
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 6	41055	2636.5	Config 1	20.96	22.40	1.393	62.9	1.006	-0.16	0.674	0.945
47	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 6	41490	2680	Config 1	20.82	22.40	1.439	62.9	1.006	-0.1	0.685	0.991
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	40620	2593	Config 1	21.16	22.40	1.330	62.9	1.006	-0.12	0.535	0.716
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	39750	2506	Config 1	21.12	22.40	1.343	62.9	1.006	-0.11	0.377	0.509
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	40185	2549.5	Config 1	21.16	22.40	1.330	62.9	1.006	-0.16	0.444	0.594
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	41055	2636.5	Config 1	21.06	22.40	1.361	62.9	1.006	-0.07	0.671	0.919
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	41490	2680	Config 1	20.88	22.40	1.419	62.9	1.006	-0.03	0.689	0.984
	LTE Band 41_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 6	40185	2549.5	Config 1	21.15	22.40	1.334	62.9	1.006	-0.14	0.437	0.586
	LTE Band 41_Ant 0	20M	QPSK	1	0	Left Side	10mm	DSI 6	40620	2593	Config 1	21.07	22.40	1.358	62.9	1.006	-0.06	0.132	0.180
	LTE Band 41_Ant 0	20M	QPSK	50	24	Left Side	10mm	DSI 6	40620	2593	Config 1	21.16	22.40	1.330	62.9	1.006	-0.1	0.156	0.209
	LTE Band 41_Ant 0	20M	QPSK	1	0	Right Side	10mm	DSI 6	40620	2593	Config 1	21.07	22.40	1.358	62.9	1.006	-0.05	0.040	0.055
	LTE Band 41_Ant 0	20M	QPSK	50	24	Right Side	10mm	DSI 6	40620	2593	Config 1	21.16	22.40	1.330	62.9	1.006	-0.05	0.043	0.058
	LTE Band 41_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	40620	2593	Config 1	21.07	22.40	1.358	62.9	1.006	-0.12	0.439	0.600
	LTE Band 41_Ant 0	20M	QPSK	1	49	Bottom Side	10mm	DSI 6	39750	2506	Config 1	20.97	22.40	1.390	62.9	1.006	-0.04	0.366	0.512
	LTE Band 41_Ant 0	20M	QPSK	1	49	Bottom Side	10mm	DSI 6	40185	2549.5	Config 1	20.98	22.40	1.387	62.9	1.006	-0.09	0.400	0.558
	LTE Band 41_Ant 0	20M	QPSK	1	49	Bottom Side	10mm	DSI 6	41055	2636.5	Config 1	20.96	22.40	1.393	62.9	1.006	-0.03	0.433	0.607
	LTE Band 41_Ant 0	20M	QPSK	1	49	Bottom Side	10mm	DSI 6	41490	2680	Config 1	20.82	22.40	1.439	62.9	1.006	-0.09	0.284	0.411
	LTE Band 41_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	40620	2593	Config 1	21.16	22.40	1.330	62.9	1.006	-0.06	0.452	0.605
	LTE Band 41_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	39750	2506	Config 1	21.12	22.40	1.343	62.9	1.006	-0.1	0.393	0.531
	LTE Band 41_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	40185	2549.5	Config 1	21.16	22.40	1.330	62.9	1.006	-0.04	0.429	0.574
	LTE Band 41_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	41055	2636.5	Config 1	21.06	22.40	1.361	62.9	1.006	-0.08	0.448	0.614
	LTE Band 41_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	41490	2680	Config 1	20.88	22.40	1.419	62.9	1.006	-0.02	0.294	0.420
	LTE Band 41_Ant 0	20M	QPSK	100	0	Bottom Side	10mm	DSI 6	40185	2549.5	Config 1	21.15	22.40	1.334	62.9	1.006	-0.02	0.424	0.569
	LTE Band 41_HPUE_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 6	41490	2680	Config 1	22.39	24.20	1.517	42.9	1.009	0	0.622	0.952
	LTE Band 41C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	40185	2549.5	Config 1	21.30	22.40	1.288	62.9	1.006	-0.03	0.525	0.680



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	55340	3560	Config 0	22.80	23.80	1.259	62.9	1.006	-0.04	0.221	0.280
	LTE Band 48_Ant 7	20M	QPSK	50	0	Front	10mm	DSI 6	55340	3560	Config 0	22.80	23.30	1.122	62.9	1.006	-0.1	0.227	0.256
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 6	55340	3560	Config 0	22.80	23.80	1.259	62.9	1.006	0.04	0.544	0.689
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 6	55830	3609	Config 0	22.72	23.80	1.282	62.9	1.006	-0.1	0.584	0.753
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 6	56150	3641	Config 0	22.60	23.80	1.318	62.9	1.006	0.02	0.620	0.822
48	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 6	56640	3690	Config 0	22.45	23.80	1.365	62.9	1.006	-0.01	0.725	0.995
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 6	55340	3560	Config 0	22.80	23.30	1.122	62.9	1.006	0.02	0.554	0.625
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 6	55830	3609	Config 0	22.73	23.30	1.140	62.9	1.006	0.04	0.587	0.673
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 6	56150	3641	Config 0	22.58	23.30	1.180	62.9	1.006	-0.01	0.629	0.747
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 6	56640	3690	Config 0	22.33	23.30	1.250	62.9	1.006	0.02	0.736	0.926
	LTE Band 48_Ant 7	20M	QPSK	100	0	Back	10mm	DSI 6	55340	3560	Config 0	22.76	23.30	1.132	62.9	1.006	0.01	0.559	0.637
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Side	10mm	DSI 6	55340	3560	Config 0	22.80	23.80	1.259	62.9	1.006	0.02	0.382	0.484
	LTE Band 48_Ant 7	20M	QPSK	50	0	Left Side	10mm	DSI 6	55340	3560	Config 0	22.80	23.30	1.122	62.9	1.006	0.17	0.405	0.457
	LTE Band 48_Ant 7	20M	QPSK	1	0	Right Side	10mm	DSI 6	55340	3560	Config 0	22.80	23.80	1.259	62.9	1.006	-0.08	0.035	0.044
	LTE Band 48_Ant 7	20M	QPSK	50	0	Right Side	10mm	DSI 6	55340	3560	Config 0	22.80	23.30	1.122	62.9	1.006	-0.05	0.025	0.028
	LTE Band 48_Ant 7	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	55340	3560	Config 0	22.80	23.80	1.259	62.9	1.006	-0.03	0.122	0.155
	LTE Band 48_Ant 7	20M	QPSK	50	0	Bottom Side	10mm	DSI 6	55340	3560	Config 0	22.80	23.30	1.122	62.9	1.006	-0.03	0.126	0.142
	LTE Band 48C_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 6	55830+55632	3609	Config 0	14.51	15.50	1.256	62.9	1.006	0.06	0.089	0.112
	LTE Band 48_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	55340	3560	Config 1	20.38	21.70	1.355	62.9	1.006	-0.06	0.283	0.386
	LTE Band 48_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 6	55340	3560	Config 1	20.39	21.20	1.205	62.9	1.006	0	0.285	0.345
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	55340	3560	Config 1	20.38	21.70	1.355	62.9	1.006	-0.1	0.693	0.945
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	55830	3609	Config 1	20.29	21.70	1.384	62.9	1.006	-0.17	0.569	0.792
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	56150	3641	Config 1	20.20	21.70	1.413	62.9	1.006	-0.19	0.526	0.747
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	56640	3690	Config 1	20.20	21.70	1.413	62.9	1.006	-0.17	0.488	0.693
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 6	55340	3560	Config 1	20.39	21.20	1.205	62.9	1.006	0.05	0.691	0.838
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 6	55830	3609	Config 1	20.31	21.20	1.227	62.9	1.006	-0.15	0.574	0.709
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 6	56150	3641	Config 1	20.19	21.20	1.262	62.9	1.006	0	0.510	0.647
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 6	56640	3690	Config 1	20.17	21.20	1.268	62.9	1.006	0.02	0.456	0.582
	LTE Band 48_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 6	55340	3560	Config 1	20.32	21.20	1.225	62.9	1.006	-0.06	0.671	0.827
	LTE Band 48_Ant 2	20M	QPSK	1	0	Left Side	10mm	DSI 6	55340	3560	Config 1	20.38	21.70	1.355	62.9	1.006	0.01	0.001	0.001
	LTE Band 48_Ant 2	20M	QPSK	50	0	Left Side	10mm	DSI 6	55340	3560	Config 1	20.39	21.20	1.205	62.9	1.006	0.01	0.001	0.001
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	55340	3560	Config 1	20.38	21.70	1.355	62.9	1.006	0.13	0.648	0.883
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	55830	3609	Config 1	20.29	21.70	1.384	62.9	1.006	0.15	0.568	0.791
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	56150	3641	Config 1	20.20	21.70	1.413	62.9	1.006	0.11	0.524	0.745
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	56640	3690	Config 1	20.20	21.70	1.413	62.9	1.006	0.17	0.456	0.648
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Side	10mm	DSI 6	55340	3560	Config 1	20.39	21.20	1.205	62.9	1.006	0.18	0.656	0.795
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Side	10mm	DSI 6	55830	3609	Config 1	20.31	21.20	1.227	62.9	1.006	0.11	0.573	0.708
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Side	10mm	DSI 6	56150	3641	Config 1	20.19	21.20	1.262	62.9	1.006	0.15	0.523	0.664
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Side	10mm	DSI 6	56640	3690	Config 1	20.17	21.20	1.268	62.9	1.006	0.19	0.455	0.580
	LTE Band 48_Ant 2	20M	QPSK	100	0	Right Side	10mm	DSI 6	55340	3560	Config 1	20.32	21.20	1.225	62.9	1.006	0.18	0.637	0.785
	LTE Band 48_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	55340	3560	Config 1	20.38	21.70	1.355	62.9	1.006	0.11	0.429	0.585
	LTE Band 48_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	DSI 6	55340	3560	Config 1	20.39	21.20	1.205	62.9	1.006	0.11	0.444	0.538
	LTE Band 48C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	55830+55632	3609	Config 1	12.97	14.00	1.268	62.9	1.006	-0.04	0.090	0.115



<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	167300	836.5	Config 0	23.72	25.00	1.343	0.02	0.158	0.212
	FR1 n5_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 6	167300	836.5	Config 0	23.70	25.00	1.349	0	0.158	0.213
	FR1 n5_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 6	167300	836.5	Config 0	23.72	25.00	1.343	-0.01	0.247	0.332
	FR1 n5_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 6	167300	836.5	Config 0	23.70	25.00	1.349	-0.03	0.239	0.322
	FR1 n5_Ant 0	20M	BPSK	1	1	Left Side	10mm	DSI 6	167300	836.5	Config 0	23.72	25.00	1.343	0.05	0.159	0.213
	FR1 n5_Ant 0	20M	BPSK	50	28	Left Side	10mm	DSI 6	167300	836.5	Config 0	23.70	25.00	1.349	0.1	0.167	0.225
	FR1 n5_Ant 0	20M	BPSK	1	1	Right Side	10mm	DSI 6	167300	836.5	Config 0	23.72	25.00	1.343	0.06	0.146	0.196
	FR1 n5_Ant 0	20M	BPSK	50	28	Right Side	10mm	DSI 6	167300	836.5	Config 0	23.70	25.00	1.349	-0.05	0.144	0.194
	FR1 n5_Ant 0	20M	BPSK	1	1	Bottom Side	10mm	DSI 6	167300	836.5	Config 0	23.72	25.00	1.343	0.04	0.064	0.086
	FR1 n5_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	DSI 6	167300	836.5	Config 0	23.70	25.00	1.349	0.02	0.061	0.082
	FR1 n5_Ant 1	20M	BPSK	1	53	Front	10mm	DSI 6	167300	836.5	Config 1	23.38	25.00	1.452	0.02	0.145	0.211
	FR1 n5_Ant 1	20M	BPSK	50	28	Front	10mm	DSI 6	167300	836.5	Config 1	23.34	25.00	1.466	-0.03	0.142	0.208
49	FR1 n5_Ant 1	20M	BPSK	1	53	Back	10mm	DSI 6	167300	836.5	Config 1	23.38	25.00	1.452	0	0.262	0.380
	FR1 n5_Ant 1	20M	BPSK	50	28	Back	10mm	DSI 6	167300	836.5	Config 1	23.34	25.00	1.466	0.05	0.249	0.365
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Side	10mm	DSI 6	167300	836.5	Config 1	23.38	25.00	1.452	0.12	0.094	0.136
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Side	10mm	DSI 6	167300	836.5	Config 1	23.34	25.00	1.466	-0.04	0.092	0.135
	FR1 n5_Ant 1	20M	BPSK	1	53	Right Side	10mm	DSI 6	167300	836.5	Config 1	23.38	25.00	1.452	0.02	0.047	0.068
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Side	10mm	DSI 6	167300	836.5	Config 1	23.34	25.00	1.466	0	0.050	0.073
	FR1 n5_Ant 1	20M	BPSK	1	53	Top Side	10mm	DSI 6	167300	836.5	Config 1	23.38	25.00	1.452	0.06	0.156	0.227
	FR1 n5_Ant 1	20M	BPSK	50	28	Top Side	10mm	DSI 6	167300	836.5	Config 1	23.34	25.00	1.466	-0.09	0.151	0.221
	FR1 n12_Ant 0	15M	BPSK	1	1	Front	10mm	DSI 6	141500	707.5	Config 0	23.76	24.70	1.242	-0.1	0.256	0.318
	FR1 n12_Ant 0	15M	BPSK	36	22	Front	10mm	DSI 6	141500	707.5	Config 0	23.62	24.70	1.282	0.02	0.255	0.327
	FR1 n12_Ant 0	15M	BPSK	1	1	Back	10mm	DSI 6	141500	707.5	Config 0	23.76	24.70	1.242	0.05	0.423	0.525
50	FR1 n12_Ant 0	15M	BPSK	36	22	Back	10mm	DSI 6	141500	707.5	Config 0	23.62	24.70	1.282	-0.12	0.414	0.531
	FR1 n12_Ant 0	15M	BPSK	1	1	Left Side	10mm	DSI 6	141500	707.5	Config 0	23.76	24.70	1.242	-0.06	0.369	0.458
	FR1 n12_Ant 0	15M	BPSK	36	22	Left Side	10mm	DSI 6	141500	707.5	Config 0	23.62	24.70	1.282	0.03	0.311	0.399
	FR1 n12_Ant 0	15M	BPSK	1	1	Right Side	10mm	DSI 6	141500	707.5	Config 0	23.76	24.70	1.242	0	0.183	0.227
	FR1 n12_Ant 0	15M	BPSK	36	22	Right Side	10mm	DSI 6	141500	707.5	Config 0	23.62	24.70	1.282	0.05	0.247	0.317
	FR1 n12_Ant 0	15M	BPSK	1	1	Bottom Side	10mm	DSI 6	141500	707.5	Config 0	23.76	24.70	1.242	-0.01	0.050	0.062
	FR1 n12_Ant 0	15M	BPSK	36	22	Bottom Side	10mm	DSI 6	141500	707.5	Config 0	23.62	24.70	1.282	0.02	0.051	0.065
	FR1 n12_Ant 1	15M	BPSK	1	1	Front	10mm	DSI 6	141500	707.5	Config 1	23.32	24.70	1.374	0.1	0.001	0.001
	FR1 n12_Ant 1	15M	BPSK	36	22	Front	10mm	DSI 6	141500	707.5	Config 1	23.26	24.70	1.393	0.08	0.001	0.001
	FR1 n12_Ant 1	15M	BPSK	1	1	Back	10mm	DSI 6	141500	707.5	Config 1	23.32	24.70	1.374	-0.09	0.044	0.060
	FR1 n12_Ant 1	15M	BPSK	36	22	Back	10mm	DSI 6	141500	707.5	Config 1	23.26	24.70	1.393	-0.07	0.047	0.065
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Side	10mm	DSI 6	141500	707.5	Config 1	23.32	24.70	1.374	0.12	0.001	0.001
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Side	10mm	DSI 6	141500	707.5	Config 1	23.26	24.70	1.393	0.05	0.001	0.001
	FR1 n12_Ant 1	15M	BPSK	1	1	Right Side	10mm	DSI 6	141500	707.5	Config 1	23.32	24.70	1.374	0.07	0.001	0.001
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Side	10mm	DSI 6	141500	707.5	Config 1	23.26	24.70	1.393	0.08	0.001	0.001
	FR1 n12_Ant 1	15M	BPSK	1	1	Top Side	10mm	DSI 6	141500	707.5	Config 1	23.32	24.70	1.374	-0.07	0.001	0.001
	FR1 n12_Ant 1	15M	BPSK	36	22	Top Side	10mm	DSI 6	141500	707.5	Config 1	23.26	24.70	1.393	0.06	0.001	0.001



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)
51	FR1 n25_Ant 2	20M	BPSK	1	53	Front	10mm	DSI 6	376000	1880	Config 0	23.15	23.70	1.135	-0.01	0.878	0.997
	FR1 n25_Ant 2	20M	BPSK	1	53	Front	10mm	DSI 6	372000	1860	Config 0	23.11	23.70	1.146	0.02	0.816	0.935
	FR1 n25_Ant 2	20M	BPSK	1	53	Front	10mm	DSI 6	381000	1905	Config 0	23.12	23.70	1.143	-0.05	0.719	0.822
	FR1 n25_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 6	376000	1880	Config 0	23.13	23.70	1.140	0.06	0.862	0.983
	FR1 n25_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 6	372000	1860	Config 0	23.10	23.70	1.148	-0.08	0.844	0.969
	FR1 n25_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 6	381000	1905	Config 0	23.12	23.70	1.143	0.1	0.678	0.775
	FR1 n25_Ant 2	20M	BPSK	100	0	Front	10mm	DSI 6	376000	1880	Config 0	23.07	23.70	1.156	0.05	0.813	0.940
	FR1 n25_Ant 2	20M	BPSK	1	53	Back	10mm	DSI 6	376000	1880	Config 0	23.15	23.70	1.135	0.06	0.765	0.868
	FR1 n25_Ant 2	20M	BPSK	1	53	Back	10mm	DSI 6	372000	1860	Config 0	23.11	23.70	1.146	-0.04	0.708	0.811
	FR1 n25_Ant 2	20M	BPSK	1	53	Back	10mm	DSI 6	381000	1905	Config 0	23.12	23.70	1.143	0.02	0.680	0.777
	FR1 n25_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 6	376000	1880	Config 0	23.13	23.70	1.140	0.01	0.776	0.885
	FR1 n25_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 6	372000	1860	Config 0	23.10	23.70	1.148	0	0.732	0.840
	FR1 n25_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 6	381000	1905	Config 0	23.12	23.70	1.143	0.05	0.668	0.763
	FR1 n25_Ant 2	20M	BPSK	100	0	Back	10mm	DSI 6	376000	1880	Config 0	23.07	23.70	1.156	-0.08	0.692	0.800
	FR1 n25_Ant 2	20M	BPSK	1	53	Left Side	10mm	DSI 6	376000	1880	Config 0	23.15	23.70	1.135	0.09	0.281	0.319
	FR1 n25_Ant 2	20M	BPSK	50	28	Left Side	10mm	DSI 6	376000	1880	Config 0	23.13	23.70	1.140	-0.13	0.282	0.322
	FR1 n25_Ant 2	20M	BPSK	1	53	Right Side	10mm	DSI 6	376000	1880	Config 0	23.15	23.70	1.135	0.05	0.634	0.720
	FR1 n25_Ant 2	20M	BPSK	50	28	Right Side	10mm	DSI 6	376000	1880	Config 0	23.13	23.70	1.140	0.06	0.656	0.748
	FR1 n25_Ant 2	20M	BPSK	1	53	Bottom Side	10mm	DSI 6	376000	1880	Config 0	23.15	23.70	1.135	0.02	0.447	0.507
	FR1 n25_Ant 2	20M	BPSK	50	28	Bottom Side	10mm	DSI 6	376000	1880	Config 0	23.13	23.70	1.140	-0.07	0.453	0.517
	FR1 n25_Ant 0	20M	BPSK	1	53	Front	10mm	DSI 6	372000	1860	Config 1	17.76	18.40	1.159	0.03	0.374	0.433
	FR1 n25_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 6	372000	1860	Config 1	17.83	18.40	1.140	-0.02	0.354	0.404
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	DSI 6	372000	1860	Config 1	17.76	18.40	1.159	0	0.692	0.802
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	DSI 6	372000	1880	Config 1	17.71	18.40	1.172	-0.1	0.845	0.991
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	DSI 6	381000	1905	Config 1	17.75	18.40	1.161	0.05	0.781	0.907
	FR1 n25_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 6	372000	1860	Config 1	17.83	18.40	1.140	-0.06	0.660	0.753
	FR1 n25_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 6	376000	1880	Config 1	17.82	18.40	1.143	0.08	0.738	0.843
	FR1 n25_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 6	381000	1905	Config 1	17.81	18.40	1.146	0.1	0.745	0.853
	FR1 n25_Ant 0	20M	BPSK	100	0	Back	10mm	DSI 6	372000	1860	Config 1	17.70	18.40	1.175	0.04	0.675	0.793
	FR1 n25_Ant 0	20M	BPSK	1	53	Left Side	10mm	DSI 6	372000	1860	Config 1	17.76	18.40	1.159	0.01	0.269	0.312
	FR1 n25_Ant 0	20M	BPSK	50	28	Left Side	10mm	DSI 6	372000	1860	Config 1	17.83	18.40	1.140	-0.02	0.231	0.263
	FR1 n25_Ant 0	20M	BPSK	1	53	Right Side	10mm	DSI 6	372000	1860	Config 1	17.76	18.40	1.159	0.05	0.001	0.001
	FR1 n25_Ant 0	20M	BPSK	50	28	Right Side	10mm	DSI 6	372000	1860	Config 1	17.83	18.40	1.140	-0.09	0.001	0.001
	FR1 n25_Ant 0	20M	BPSK	1	53	Bottom Side	10mm	DSI 6	372000	1860	Config 1	17.76	18.40	1.159	0.05	0.621	0.720
	FR1 n25_Ant 0	20M	BPSK	1	53	Bottom Side	10mm	DSI 6	376000	1880	Config 1	17.71	18.40	1.172	0.03	0.708	0.830
	FR1 n25_Ant 0	20M	BPSK	1	53	Bottom Side	10mm	DSI 6	381000	1905	Config 1	17.75	18.40	1.161	-0.06	0.670	0.778
	FR1 n25_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	DSI 6	372000	1860	Config 1	17.83	18.40	1.140	0.02	0.592	0.675
	FR1 n25_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	DSI 6	376000	1880	Config 1	17.82	18.40	1.143	0.04	0.715	0.817
	FR1 n25_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	DSI 6	381000	1905	Config 1	17.81	18.40	1.146	0.01	0.730	0.836
	FR1 n25_Ant 0	20M	BPSK	100	0	Bottom Side	10mm	DSI 6	372000	1860	Config 1	17.70	18.40	1.175	0.03	0.570	0.670



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	20M	BPSK	1	104	Front	10mm	DSI 6	344000	1720	Config 0	24.75	25.30	1.135	0.02	0.850	0.965
	FR1 n66_Ant 2	20M	BPSK	1	104	Front	10mm	DSI 6	349000	1745	Config 0	24.63	25.30	1.167	0.05	0.782	0.912
	FR1 n66_Ant 2	20M	BPSK	1	104	Front	10mm	DSI 6	354000	1770	Config 0	24.63	25.30	1.167	-0.06	0.672	0.784
52	FR1 n66_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 6	344000	1720	Config 0	24.75	25.30	1.135	-0.09	0.880	0.999
	FR1 n66_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 6	349000	1745	Config 0	24.72	25.30	1.143	0.08	0.795	0.909
	FR1 n66_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 6	354000	1770	Config 0	24.63	25.30	1.167	-0.09	0.640	0.747
	FR1 n66_Ant 2	20M	BPSK	100	0	Front	10mm	DSI 6	344000	1720	Config 0	24.22	24.80	1.143	0.1	0.838	0.958
	FR1 n66_Ant 2	20M	BPSK	1	104	Back	10mm	DSI 6	344000	1720	Config 0	24.75	25.30	1.135	0.04	0.801	0.909
	FR1 n66_Ant 2	20M	BPSK	1	104	Back	10mm	DSI 6	349000	1745	Config 0	24.63	25.30	1.167	-0.08	0.707	0.825
	FR1 n66_Ant 2	20M	BPSK	1	104	Back	10mm	DSI 6	354000	1770	Config 0	24.63	25.30	1.167	0.06	0.621	0.725
	FR1 n66_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 6	344000	1720	Config 0	24.75	25.30	1.135	0.04	0.817	0.927
	FR1 n66_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 6	349000	1745	Config 0	24.72	25.30	1.143	0.01	0.795	0.909
	FR1 n66_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 6	354000	1770	Config 0	24.63	25.30	1.167	0.02	0.595	0.694
	FR1 n66_Ant 2	20M	BPSK	100	0	Back	10mm	DSI 6	344000	1720	Config 0	24.22	24.80	1.143	-0.03	0.748	0.855
	FR1 n66_Ant 2	20M	BPSK	1	104	Left Side	10mm	DSI 6	344000	1720	Config 0	24.75	25.30	1.135	0.05	0.275	0.312
	FR1 n66_Ant 2	20M	BPSK	50	28	Left Side	10mm	DSI 6	344000	1720	Config 0	24.75	25.30	1.135	-0.07	0.346	0.393
	FR1 n66_Ant 2	20M	BPSK	1	104	Right Side	10mm	DSI 6	344000	1720	Config 0	24.75	25.30	1.135	0.05	0.178	0.202
	FR1 n66_Ant 2	20M	BPSK	50	28	Right Side	10mm	DSI 6	344000	1720	Config 0	24.75	25.30	1.135	0.08	0.251	0.285
	FR1 n66_Ant 2	20M	BPSK	1	104	Bottom Side	10mm	DSI 6	344000	1720	Config 0	24.75	25.30	1.135	-0.02	0.408	0.463
	FR1 n66_Ant 2	20M	BPSK	50	28	Bottom Side	10mm	DSI 6	344000	1720	Config 0	24.75	25.30	1.135	0.06	0.447	0.507
	FR1 n66_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 6	344000	1720	Config 1	19.20	20.10	1.230	0.02	0.314	0.386
	FR1 n66_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 6	344000	1720	Config 1	19.16	20.10	1.242	-0.03	0.304	0.377
	FR1 n66_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 6	344000	1720	Config 1	19.20	20.10	1.230	0.05	0.794	0.977
	FR1 n66_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 6	349000	1745	Config 1	19.13	20.10	1.250	-0.06	0.636	0.795
	FR1 n66_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 6	354000	1770	Config 1	19.80	20.10	1.072	0	0.614	0.658
	FR1 n66_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 6	344000	1720	Config 1	19.16	20.10	1.242	-0.1	0.802	0.996
	FR1 n66_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 6	349000	1745	Config 1	19.14	20.10	1.247	0.1	0.663	0.827
	FR1 n66_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 6	354000	1770	Config 1	19.12	20.10	1.253	0.05	0.593	0.743
	FR1 n66_Ant 0	20M	BPSK	100	0	Back	10mm	DSI 6	344000	1720	Config 1	19.04	20.10	1.276	0.04	0.771	0.984
	FR1 n66_Ant 0	20M	BPSK	1	1	Left Side	10mm	DSI 6	344000	1720	Config 1	19.20	20.10	1.230	-0.02	0.045	0.055
	FR1 n66_Ant 0	20M	BPSK	50	28	Left Side	10mm	DSI 6	344000	1720	Config 1	19.16	20.10	1.242	0.04	0.072	0.089
	FR1 n66_Ant 0	20M	BPSK	1	1	Right Side	10mm	DSI 6	344000	1720	Config 1	19.20	20.10	1.230	0.03	0.042	0.052
	FR1 n66_Ant 0	20M	BPSK	50	28	Right Side	10mm	DSI 6	344000	1720	Config 1	19.16	20.10	1.242	-0.06	0.052	0.065
	FR1 n66_Ant 0	20M	BPSK	1	1	Bottom Side	10mm	DSI 6	344000	1720	Config 1	19.20	20.10	1.230	0.08	0.648	0.797
	FR1 n66_Ant 0	20M	BPSK	1	1	Bottom Side	10mm	DSI 6	349000	1745	Config 1	19.13	20.10	1.250	-0.11	0.571	0.714
	FR1 n66_Ant 0	20M	BPSK	1	1	Bottom Side	10mm	DSI 6	354000	1770	Config 1	19.80	20.10	1.072	0.09	0.508	0.544
	FR1 n66_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	DSI 6	344000	1720	Config 1	19.16	20.10	1.242	0.05	0.660	0.819
	FR1 n66_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	DSI 6	349000	1745	Config 1	19.14	20.10	1.247	0.04	0.576	0.718
	FR1 n66_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	DSI 6	354000	1770	Config 1	19.12	20.10	1.253	-0.02	0.538	0.674
	FR1 n66_Ant 0	20M	BPSK	100	0	Bottom Side	10mm	DSI 6	344000	1720	Config 1	19.04	20.10	1.276	0.07	0.635	0.811



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 n71_Ant 0	20M	BPSK	1	53	Front	10mm	DSI 6	136100	680.5	Config 0	24.84	25.70	1.219	0.02	0.250	0.305
	FR1 n71_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 6	136100	680.5	Config 0	24.95	25.70	1.189	-0.03	0.270	0.321
53	FR1 n71_Ant 0	20M	BPSK	1	53	Back	10mm	DSI 6	136100	680.5	Config 0	24.84	25.70	1.219	0.01	0.445	0.542
	FR1 n71_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 6	136100	680.5	Config 0	24.95	25.70	1.189	0.05	0.434	0.516
	FR1 n71_Ant 0	20M	BPSK	1	53	Left Side	10mm	DSI 6	136100	680.5	Config 0	24.84	25.70	1.219	-0.06	0.232	0.283
	FR1 n71_Ant 0	20M	BPSK	50	28	Left Side	10mm	DSI 6	136100	680.5	Config 0	24.95	25.70	1.189	0.04	0.220	0.261
	FR1 n71_Ant 0	20M	BPSK	1	53	Right Side	10mm	DSI 6	136100	680.5	Config 0	24.84	25.70	1.219	0	0.148	0.180
	FR1 n71_Ant 0	20M	BPSK	50	28	Right Side	10mm	DSI 6	136100	680.5	Config 0	24.95	25.70	1.189	0.05	0.133	0.158
	FR1 n71_Ant 0	20M	BPSK	1	53	Bottom Side	10mm	DSI 6	136100	680.5	Config 0	24.84	25.70	1.219	0.09	0.081	0.099
	FR1 n71_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	DSI 6	136100	680.5	Config 0	24.95	25.70	1.189	-0.05	0.079	0.094
	FR1 n71_Ant 1	20M	BPSK	1	1	Front	10mm	DSI 6	136100	680.5	Config 1	24.51	25.70	1.315	0.06	0.078	0.103
	FR1 n71_Ant 1	20M	BPSK	50	28	Front	10mm	DSI 6	136100	680.5	Config 1	24.63	25.70	1.279	-0.05	0.090	0.115
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	10mm	DSI 6	136100	680.5	Config 1	24.51	25.70	1.315	0.02	0.153	0.201
	FR1 n71_Ant 1	20M	BPSK	50	28	Back	10mm	DSI 6	136100	680.5	Config 1	24.63	25.70	1.279	-0.09	0.165	0.211
	FR1 n71_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 6	136100	680.5	Config 1	24.51	25.70	1.315	0.03	0.125	0.164
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Side	10mm	DSI 6	136100	680.5	Config 1	24.63	25.70	1.279	-0.05	0.124	0.159
	FR1 n71_Ant 1	20M	BPSK	1	1	Right Side	10mm	DSI 6	136100	680.5	Config 1	24.51	25.70	1.315	0.04	0.046	0.061
	FR1 n71_Ant 1	20M	BPSK	50	28	Right Side	10mm	DSI 6	136100	680.5	Config 1	24.63	25.70	1.279	0.06	0.060	0.077
	FR1 n71_Ant 1	20M	BPSK	1	1	Top Side	10mm	DSI 6	136100	680.5	Config 1	24.51	25.70	1.315	-0.08	0.050	0.066
	FR1 n71_Ant 1	20M	BPSK	50	28	Top Side	10mm	DSI 6	136100	680.5	Config 1	24.63	25.70	1.279	0.06	0.059	0.075



<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	15.80	16.00	1.047	100	1.000	-0.07	0.131	0.137
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4	3	1	2412	15.80	16.00	1.047	100	1.000	-0.1	0.262	0.274
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 4	3	1	2412	15.80	16.00	1.047	100	1.000	0.08	0.203	0.213
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4	3	1	2412	15.80	16.00	1.047	100	1.000	-0.05	0.107	0.112
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 3	3	1	2412	19.20	19.50	1.072	100	1.000	-0.16	0.164	0.176
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	3	1	2412	19.20	19.50	1.072	100	1.000	-0.1	0.253	0.271
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3	3	1	2412	19.20	19.50	1.072	100	1.000	-0.03	0.203	0.218
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(4)	3	1	2412	19.50	19.50	1.000	100	1.000	-0.12	0.288	0.288
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(3)	3	1	2412	19.40	19.50	1.023	100	1.000	-0.12	0.168	0.172
54	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(4)	3	1	2412	19.50	19.50	1.000	100	1.000	-0.13	0.591	0.591
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(3)	3	1	2412	19.40	19.50	1.023	100	1.000	-0.13	0.218	0.223
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 4+3(3)	3	1	2412	19.40	19.50	1.023	100	1.000	0.19	0.132	0.135
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 4+3(4)	3	1	2412	19.50	19.50	1.000	100	1.000	-0.01	0.494	0.494
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4+3(4)	3	1	2412	19.50	19.50	1.000	100	1.000	0.16	0.197	0.197
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4	3	46	5230	17.30	17.50	1.047	95.67	1.045	0.13	0.084	0.092
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4	3	46	5230	17.30	17.50	1.047	95.67	1.045	-0.15	0.248	0.271
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 4	3	46	5230	17.30	17.50	1.047	95.67	1.045	-0.11	0.299	0.327
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4	3	46	5230	17.30	17.50	1.047	95.67	1.045	0.12	0.309	0.338
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 3	3	46	5230	15.20	15.50	1.072	95.03	1.052	-0.16	0.053	0.060
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3	3	46	5230	15.20	15.50	1.072	95.03	1.052	0.03	0.281	0.317
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 3	3	46	5230	15.20	15.50	1.072	95.03	1.052	0.16	0.276	0.311
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3(4)	3	46	5230	17.40	17.50	1.023	95.66	1.045	0.12	0.070	0.075
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3(3)	3	46	5230	15.40	15.50	1.023	95.66	1.045	0.12	0.045	0.048
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(4)	3	46	5230	17.40	17.50	1.023	95.66	1.045	-0.12	0.193	0.206
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(3)	3	46	5230	15.40	15.50	1.023	95.66	1.045	-0.12	0.258	0.276
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 4+3(3)	3	46	5230	15.40	15.50	1.023	95.66	1.045	0.15	0.271	0.290
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 4+3(4)	3	46	5230	17.40	17.50	1.023	95.66	1.045	0.13	0.275	0.294
55	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4+3(4)	3	46	5230	17.40	17.50	1.023	95.66	1.045	0.1	0.362	0.387
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4	3	155	5775	16.10	16.50	1.096	92.68	1.079	0.09	0.095	0.112
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4	3	155	5775	16.10	16.50	1.096	92.68	1.079	-0.13	0.235	0.278
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 4	3	155	5775	16.10	16.50	1.096	92.68	1.079	-0.19	0.335	0.396
56	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4	3	155	5775	16.10	16.50	1.096	92.68	1.079	-0.14	0.377	0.446
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 3	3	149	5745	18.20	18.50	1.072	97.83	1.022	-0.11	0.040	0.044
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 3	3	149	5745	18.20	18.50	1.072	97.83	1.022	-0.09	0.140	0.153
	WLAN5GHz	802.11a 6Mbps	Left Side	10mm	Ant 3	3	149	5745	18.20	18.50	1.072	97.83	1.022	-0.15	0.126	0.138
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(4)	3	157	5785	16.20	16.50	1.072	98.08	1.020	0.03	0.075	0.082
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(3)	3	157	5785	18.30	18.50	1.047	98.08	1.020	0.03	0.046	0.049
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	3	157	5785	16.20	16.50	1.072	98.08	1.020	-0.17	0.245	0.268
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	3	157	5785	18.30	18.50	1.047	98.08	1.020	-0.17	0.107	0.114
	WLAN5GHz	802.11a 6Mbps	Left Side	10mm	Ant 4+3(3)	3	157	5785	18.30	18.50	1.047	98.08	1.020	0.16	0.125	0.134
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	Ant 4+3(4)	3	157	5785	16.20	16.50	1.072	98.08	1.020	-0.13	0.346	0.378
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4+3(4)	3	157	5785	16.20	16.50	1.072	98.08	1.020	-0.12	0.389	0.425

<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	3	0	2402	16.55	17.00	1.109	77.13	1.080	-0.18	0.091	0.109
	Bluetooth	1Mbps	Back	10mm	Ant 4	3	0	2402	16.55	17.00	1.109	77.13	1.080	0.1	0.205	0.246
	Bluetooth	1Mbps	Right Side	10mm	Ant 4	3	0	2402	16.55	17.00	1.109	77.13	1.080	-0.12	0.157	0.188
	Bluetooth	1Mbps	Top Side	10mm	Ant 4	3	0	2402	16.55	17.00	1.109	77.13	1.080	-0.18	0.074	0.089
	Bluetooth	1Mbps	Front	10mm	Ant 4	1	78	2480	17.89	18.00	1.026	77.13	1.080	-0.13	0.152	0.168
57	Bluetooth	1Mbps	Back	10mm	Ant 4	1	78	2480	17.89	18.00	1.026	77.13	1.080	-0.16	0.348	0.385
	Bluetooth	1Mbps	Right Side	10mm	Ant 4	1	78	2480	17.89	18.00	1.026	77.13	1.080	0.12	0.202	0.224
	Bluetooth	1Mbps	Top Side	10mm	Ant 4	1	78	2480	17.89	18.00	1.026	77.13	1.080	0.16	0.100	0.111



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	128	824.2	Config 0	28.49	29.50	1.262	-0.04	0.225	0.284
58	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 4/8	128	824.2	Config 0	28.49	29.50	1.262	0.07	0.478	0.603
	GSM850_Ant 1	GPRS (4 Tx slots)	Front	10mm	DSI 4/8	128	824.2	Config 1	28.60	29.50	1.230	-0.14	0.175	0.215
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	DSI 4/8	128	824.2	Config 1	28.60	29.50	1.230	0.05	0.325	0.400
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	DSI 4/8	661	1880	Config 0	26.75	27.00	1.059	-0.14	0.521	0.552
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	DSI 4/8	661	1880	Config 0	26.75	27.00	1.059	-0.11	0.427	0.452
	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	DSI 8	661	1880	Config 1	22.09	22.50	1.099	-0.08	0.439	0.482
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 8	661	1880	Config 1	22.09	22.50	1.099	-0.03	0.808	0.888
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 8	512	1850.2	Config 1	21.74	22.50	1.191	-0.1	0.635	0.756
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 8	810	1909.8	Config 1	21.72	22.50	1.197	-0.02	0.680	0.814
	GSM1900_Ant 0-	GPRS (4 Tx slots)	Front	10mm	DSI 4	661	1880	Config 1	22.09	23.30	1.321	-0.08	0.439	0.580
59	GSM1900_Ant 0-	GPRS (4 Tx slots)	Back	10mm	DSI 4	661	1880	Config 1	22.09	23.30	1.321	-0.03	0.808	1.068
	GSM1900_Ant 0-	GPRS (4 Tx slots)	Back	10mm	DSI 4	512	1850.2	Config 1	21.74	23.30	1.432	-0.1	0.635	0.909
	GSM1900_Ant 0-	GPRS (4 Tx slots)	Back	10mm	DSI 4	810	1909.8	Config 1	21.72	23.30	1.439	-0.02	0.680	0.978



<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	9538	1907.6	Config 0	24.22	24.70	1.117	-0.18	0.880	0.983
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 8	9262	1852.4	Config 0	24.02	24.70	1.169	-0.11	0.851	0.995
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 8	9400	1880	Config 0	24.21	24.70	1.119	-0.05	0.888	0.994
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 8	9538	1907.6	Config 0	24.22	24.70	1.117	0	0.756	0.844
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 8	9262	1852.4	Config 0	24.02	24.70	1.169	-0.08	0.742	0.868
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 8	9400	1880	Config 0	24.21	24.70	1.119	0.04	0.720	0.806
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 4	9538	1907.6	Config 0	24.22	25.50	1.343	-0.18	0.880	1.182
60	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 4	9262	1852.4	Config 0	24.02	25.50	1.406	-0.11	0.851	1.197
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 4	9400	1880	Config 0	24.21	25.50	1.346	-0.05	0.888	1.195
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 4	9538	1907.6	Config 0	24.22	25.50	1.343	0	0.756	1.015
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 4	9262	1852.4	Config 0	24.02	25.50	1.406	-0.08	0.742	1.043
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 4	9400	1880	Config 0	24.21	25.50	1.346	0.04	0.720	0.969
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 8	9538	1907.6	Config 1	19.78	20.20	1.102	-0.04	0.358	0.394
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	9538	1907.6	Config 1	19.78	20.20	1.102	-0.13	0.888	0.978
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	9262	1852.4	Config 1	19.76	20.20	1.107	-0.13	0.844	0.934
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	9400	1880	Config 1	19.78	20.20	1.102	-0.11	0.858	0.945
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 4	9538	1907.6	Config 1	19.78	21.00	1.324	-0.04	0.358	0.474
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4	9538	1907.6	Config 1	19.78	21.00	1.324	-0.13	0.888	1.176
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4	9262	1852.4	Config 1	19.76	21.00	1.330	-0.13	0.844	1.123
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4	9400	1880	Config 1	19.78	21.00	1.324	-0.11	0.858	1.136
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 8	1513	1752.6	Config 0	24.45	25.20	1.189	-0.06	0.798	0.948
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 8	1312	1712.4	Config 0	24.39	25.20	1.205	-0.09	0.821	0.989
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 8	1413	1732.6	Config 0	24.44	25.20	1.191	-0.09	0.838	0.998
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 8	1513	1752.6	Config 0	24.45	25.20	1.189	-0.11	0.764	0.908
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 8	1312	1712.4	Config 0	24.39	25.20	1.205	-0.05	0.797	0.960
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 8	1413	1732.6	Config 0	24.44	25.20	1.191	-0.14	0.815	0.971
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 4	1513	1752.6	Config 0	24.45	25.70	1.334	-0.06	0.798	1.064
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 4	1312	1712.4	Config 0	24.39	25.70	1.352	-0.09	0.821	1.110
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 4	1413	1732.6	Config 0	24.44	25.70	1.337	-0.09	0.838	1.120
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 4	1513	1752.6	Config 0	24.45	25.70	1.334	-0.11	0.764	1.019
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 4	1312	1712.4	Config 0	24.39	25.70	1.352	-0.05	0.797	1.078
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 4	1413	1732.6	Config 0	24.44	25.70	1.337	-0.14	0.815	1.089
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 8	1513	1752.6	Config 1	19.85	20.60	1.189	-0.16	0.332	0.395
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	1513	1752.6	Config 1	19.85	20.60	1.189	-0.01	0.784	0.932
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	1312	1712.4	Config 1	19.82	20.60	1.197	-0.02	0.796	0.953
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	1413	1732.6	Config 1	19.84	20.60	1.191	-0.11	0.776	0.924
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 4	1513	1752.6	Config 1	19.85	21.40	1.429	-0.16	0.332	0.474
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4	1513	1752.6	Config 1	19.85	21.40	1.429	-0.01	0.784	1.120
61	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4	1312	1712.4	Config 1	19.82	21.40	1.439	-0.02	0.796	1.145
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4	1413	1732.6	Config 1	19.84	21.40	1.432	-0.11	0.776	1.111
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 4/8	4182	836.4	Config 0	24.37	25.00	1.156	-0.09	0.302	0.349
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4/8	4182	836.4	Config 0	24.37	25.00	1.156	-0.09	0.470	0.543
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	10mm	DSI 4/8	4182	836.4	Config 1	24.36	25.00	1.159	0	0.304	0.352
62	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	DSI 4/8	4182	836.4	Config 1	24.36	25.00	1.159	-0.13	0.537	0.622



<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	24.42	25.50	1.282	0	0.358	0.459
63	CDMA BC0_Ant 0	1xRTT RC3 SO32	Back	10mm	DSI 4/8	384	836.52	Config 0	24.42	25.50	1.282	-0.08	0.576	0.739
	CDMA BC0_Ant 1	1xRTT RC3 SO32	Front	10mm	DSI 4/8	384	836.52	Config 1	24.46	25.50	1.271	0.01	0.320	0.407
	CDMA BC0_Ant 1	1xRTT RC3 SO32	Back	10mm	DSI 4/8	384	836.52	Config 1	24.46	25.50	1.271	-0.07	0.562	0.714
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Front	10mm	DSI 8	1175	1908.75	Config 0	23.06	23.90	1.213	-0.07	0.736	0.893
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Front	10mm	DSI 8	25	1851.25	Config 0	22.98	23.90	1.236	-0.06	0.701	0.866
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Front	10mm	DSI 8	600	1880	Config 0	23.02	23.90	1.225	-0.09	0.771	0.944
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Back	10mm	DSI 8	1175	1908.75	Config 0	23.06	23.90	1.213	-0.12	0.648	0.786
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Back	10mm	DSI 8	25	1851.25	Config 0	22.98	23.90	1.236	-0.05	0.642	0.793
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Back	10mm	DSI 8	600	1880	Config 0	23.02	23.90	1.225	-0.02	0.676	0.828
	CDMA BC1_Ant 2-	1xRTT RC3 SO32	Front	10mm	DSI 4	1175	1908.75	Config 0	23.06	24.70	1.459	-0.07	0.736	1.074
	CDMA BC1_Ant 2-	1xRTT RC3 SO32	Front	10mm	DSI 4	25	1851.25	Config 0	22.98	24.70	1.486	-0.06	0.701	1.042
64	CDMA BC1_Ant 2-	1xRTT RC3 SO32	Front	10mm	DSI 4	600	1880	Config 0	23.02	24.70	1.472	-0.09	0.771	1.135
	CDMA BC1_Ant 2-	1xRTT RC3 SO32	Back	10mm	DSI 4	1175	1908.75	Config 0	23.06	24.70	1.459	-0.12	0.648	0.945
	CDMA BC1_Ant 2-	1xRTT RC3 SO32	Back	10mm	DSI 4	25	1851.25	Config 0	22.98	24.70	1.486	-0.05	0.642	0.954
	CDMA BC1_Ant 2-	1xRTT RC3 SO32	Back	10mm	DSI 4	600	1880	Config 0	23.02	24.70	1.472	-0.02	0.676	0.995
	CDMA BC1_Ant 0	1xRTT RC3 SO32	Front	10mm	DSI 8	600	1880	Config 1	19.30	20.20	1.230	-0.06	0.356	0.438
	CDMA BC1_Ant 0	1xRTT RC3 SO32	Back	10mm	DSI 8	600	1880	Config 1	19.30	20.20	1.230	-0.13	0.733	0.902
	CDMA BC1_Ant 0	1xRTT RC3 SO32	Back	10mm	DSI 8	25	1851.25	Config 1	19.19	20.20	1.262	-0.14	0.725	0.915
	CDMA BC1_Ant 0	1xRTT RC3 SO32	Back	10mm	DSI 8	1175	1908.75	Config 1	19.26	20.20	1.242	-0.11	0.747	0.928
	CDMA BC1_Ant 0-	1xRTT RC3 SO32	Front	10mm	DSI 4	600	1880	Config 1	19.30	21.00	1.479	-0.06	0.356	0.527
	CDMA BC1_Ant 0-	1xRTT RC3 SO32	Back	10mm	DSI 4	600	1880	Config 1	19.30	21.00	1.479	-0.13	0.733	1.084
	CDMA BC1_Ant 0-	1xRTT RC3 SO32	Back	10mm	DSI 4	25	1851.25	Config 1	19.19	21.00	1.517	-0.14	0.725	1.100
	CDMA BC1_Ant 0-	1xRTT RC3 SO32	Back	10mm	DSI 4	1175	1908.75	Config 1	19.26	21.00	1.493	-0.11	0.747	1.115
	CDMA BC10_Ant 0	1xRTT RC3 SO32	Front	10mm	DSI 4/8	580	820.5	Config 0	24.41	25.50	1.285	-0.08	0.394	0.506
65	CDMA BC10_Ant 0	1xRTT RC3 SO32	Back	10mm	DSI 4/8	580	820.5	Config 0	24.41	25.50	1.285	-0.11	0.589	0.757
	CDMA BC10_Ant 1	1xRTT RC3 SO32	Front	10mm	DSI 4/8	580	820.5	Config 1	24.44	25.50	1.276	-0.02	0.246	0.314
	CDMA BC10_Ant 1	1xRTT RC3 SO32	Back	10mm	DSI 4/8	580	820.5	Config 1	24.44	25.50	1.276	-0.09	0.448	0.572



<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	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 8	21100	2535	Config 0	24.08	24.90	1.208	-0.16	0.711	0.859
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 8	20850	2510	Config 0	23.99	24.90	1.233	-0.03	0.640	0.789
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 8	21350	2560	Config 0	24.04	24.90	1.219	-0.18	0.696	0.848
	LTE Band 7_Ant 2	20M	QPSK	50	50	Front	10mm	DSI 8	21100	2535	Config 0	24.03	24.40	1.089	-0.04	0.715	0.779
	LTE Band 7_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 8	21100	2535	Config 0	23.91	24.40	1.119	-0.08	0.681	0.762
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 8	21100	2535	Config 0	24.08	24.90	1.208	0.04	0.726	0.877
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 8	20850	2510	Config 0	23.99	24.90	1.233	0.01	0.656	0.809
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 8	21350	2560	Config 0	24.04	24.90	1.219	0.13	0.818	0.997
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 8	21100	2535	Config 0	24.03	24.40	1.089	0.02	0.627	0.683
	LTE Band 7_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 8	21100	2535	Config 0	23.91	24.40	1.119	-0.06	0.614	0.687
	LTE Band 7C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	21350+21152	2560	Config 0	24.41	24.90	1.119	0.01	0.812	0.909
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 4	21100	2535	Config 0	24.08	25.70	1.452	-0.16	0.711	1.032
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 4	20850	2510	Config 0	23.99	25.70	1.483	-0.03	0.640	0.949
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 4	21350	2560	Config 0	24.04	25.70	1.466	-0.18	0.696	1.020
	LTE Band 7_Ant 2	20M	QPSK	50	50	Front	10mm	DSI 4	21100	2535	Config 0	24.03	24.70	1.167	-0.04	0.715	0.834
	LTE Band 7_Ant 2	20M	QPSK	50	50	Front	10mm	DSI 4	20850	2510	Config 0	23.96	24.70	1.186	-0.13	0.638	0.757
	LTE Band 7_Ant 2	20M	QPSK	50	50	Front	10mm	DSI 4	21350	2560	Config 0	24.02	24.70	1.169	-0.07	0.733	0.857
	LTE Band 7_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 4	21100	2535	Config 0	23.91	24.70	1.199	-0.08	0.681	0.817
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 4	21100	2535	Config 0	24.08	25.70	1.452	0.04	0.726	1.054
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 4	20850	2510	Config 0	23.99	25.70	1.483	0.01	0.656	0.973
66	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 4	21350	2560	Config 0	24.04	25.70	1.466	0.13	0.818	1.199
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 4	21100	2535	Config 0	24.03	24.70	1.167	0.02	0.627	0.732
	LTE Band 7_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 4	21100	2535	Config 0	23.91	24.70	1.199	-0.06	0.614	0.736
	LTE Band 7C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	21350+21152	2560	Config 0	24.41	25.70	1.346	0.01	0.812	1.093
	LTE Band 7_Ant 0	20M	QPSK	1	99	Front	10mm	DSI 8	21100	2535	Config 1	20.92	22.00	1.282	-0.06	0.254	0.326
	LTE Band 7_Ant 0	20M	QPSK	50	50	Front	10mm	DSI 8	21100	2535	Config 1	21.03	22.00	1.250	-0.09	0.265	0.331
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 8	21100	2535	Config 1	20.92	22.00	1.282	-0.19	0.679	0.871
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 8	20850	2510	Config 1	20.83	22.00	1.309	-0.17	0.578	0.757
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 8	21350	2560	Config 1	20.89	22.00	1.291	-0.18	0.727	0.939
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 8	21100	2535	Config 1	21.03	22.00	1.250	-0.14	0.691	0.864
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 8	20850	2510	Config 1	20.95	22.00	1.274	-0.11	0.581	0.740
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 8	21350	2560	Config 1	21.02	22.00	1.253	-0.13	0.750	0.940
	LTE Band 7_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 8	21100	2535	Config 1	20.94	22.00	1.276	-0.16	0.660	0.842
	LTE Band 7C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	21350+21152	2560	Config 1	21.06	22.00	1.242	-0.05	0.596	0.740
	LTE Band 7_Ant 0	20M	QPSK	1	99	Front	10mm	DSI 4	21100	2535	Config 1	20.92	22.80	1.542	-0.06	0.254	0.392
	LTE Band 7_Ant 0	20M	QPSK	50	50	Front	10mm	DSI 4	21100	2535	Config 1	21.03	22.80	1.503	-0.09	0.265	0.398
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 4	21100	2535	Config 1	20.92	22.80	1.542	-0.19	0.679	1.047
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 4	20850	2510	Config 1	20.83	22.80	1.574	-0.17	0.578	0.910
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 4	21350	2560	Config 1	20.89	22.80	1.552	-0.18	0.727	1.129
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 4	21100	2535	Config 1	21.03	22.80	1.503	-0.14	0.691	1.039
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 4	20850	2510	Config 1	20.95	22.80	1.531	-0.11	0.581	0.890
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 4	21350	2560	Config 1	21.02	22.80	1.507	-0.13	0.750	1.130
	LTE Band 7_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 4	21100	2535	Config 1	20.94	22.80	1.535	-0.16	0.660	1.013
	LTE Band 7C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	21350+21152	2560	Config 1	21.06	22.80	1.493	-0.05	0.596	0.890



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 12_Ant 0	10M	QPSK	1	49	Front	10mm	DSI 4/8	23095	707.5	Config 0	24.71	25.70	1.256	-0.11	0.336	0.422
	LTE Band 12_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 4/8	23095	707.5	Config 0	23.85	24.70	1.216	-0.06	0.253	0.308
67	LTE Band 12_Ant 0	10M	QPSK	1	49	Back	10mm	DSI 4/8	23095	707.5	Config 0	24.71	25.70	1.256	-0.01	0.524	0.658
	LTE Band 12_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 4/8	23095	707.5	Config 0	23.85	24.70	1.216	-0.13	0.445	0.541
	LTE Band 12_Ant 1	10M	QPSK	1	49	Front	10mm	DSI 4/8	23095	707.5	Config 1	24.62	25.70	1.282	-0.06	0.286	0.367
	LTE Band 12_Ant 1	10M	QPSK	25	25	Front	10mm	DSI 4/8	23095	707.5	Config 1	23.75	24.70	1.245	-0.04	0.234	0.291
	LTE Band 12_Ant 1	10M	QPSK	1	49	Back	10mm	DSI 4/8	23095	707.5	Config 1	24.62	25.70	1.282	-0.11	0.481	0.617
	LTE Band 12_Ant 1	10M	QPSK	25	25	Back	10mm	DSI 4/8	23095	707.5	Config 1	23.75	24.70	1.245	-0.04	0.394	0.490
	LTE Band 13_Ant 0	10M	QPSK	1	49	Front	10mm	DSI 4/8	23230	782	Config 0	24.35	25.20	1.216	0.01	0.397	0.483
	LTE Band 13_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 4/8	23230	782	Config 0	23.34	24.20	1.219	-0.07	0.327	0.399
68	LTE Band 13_Ant 0	10M	QPSK	1	49	Back	10mm	DSI 4/8	23230	782	Config 0	24.35	25.20	1.216	-0.11	0.568	0.691
	LTE Band 13_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 4/8	23230	782	Config 0	23.34	24.20	1.219	-0.11	0.510	0.622
	LTE Band 13_Ant 1	10M	QPSK	1	0	Front	10mm	DSI 4/8	23230	782	Config 1	24.17	25.20	1.268	-0.11	0.301	0.382
	LTE Band 13_Ant 1	10M	QPSK	25	25	Front	10mm	DSI 4/8	23230	782	Config 1	23.21	24.20	1.256	-0.01	0.250	0.314
	LTE Band 13_Ant 1	10M	QPSK	1	0	Back	10mm	DSI 4/8	23230	782	Config 1	24.17	25.20	1.268	-0.08	0.486	0.616
	LTE Band 13_Ant 1	10M	QPSK	25	25	Back	10mm	DSI 4/8	23230	782	Config 1	23.21	24.20	1.256	-0.04	0.400	0.502
	LTE Band 14_Ant 0	10M	QPSK	1	49	Front	10mm	DSI 4/8	23330	793	Config 0	24.67	25.70	1.268	0	0.454	0.576
	LTE Band 14_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 4/8	23330	793	Config 0	23.73	24.70	1.250	-0.07	0.366	0.458
69	LTE Band 14_Ant 0	10M	QPSK	1	49	Back	10mm	DSI 4/8	23330	793	Config 0	24.67	25.70	1.268	0.01	0.649	0.823
	LTE Band 14_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 4/8	23330	793	Config 0	23.73	24.70	1.250	0	0.533	0.666
	LTE Band 14_Ant 0	10M	QPSK	50	0	Back	10mm	DSI 4/8	23330	793	Config 0	23.67	24.70	1.268	-0.13	0.518	0.657
	LTE Band 14_Ant 1	10M	QPSK	1	0	Front	10mm	DSI 4/8	23330	793	Config 1	24.59	25.70	1.291	-0.08	0.338	0.436
	LTE Band 14_Ant 1	10M	QPSK	25	25	Front	10mm	DSI 4/8	23330	793	Config 1	23.59	24.70	1.291	-0.04	0.250	0.323
	LTE Band 14_Ant 1	10M	QPSK	1	0	Back	10mm	DSI 4/8	23330	793	Config 1	24.59	25.70	1.291	-0.04	0.500	0.646
	LTE Band 14_Ant 1	10M	QPSK	25	25	Back	10mm	DSI 4/8	23330	793	Config 1	23.59	24.70	1.291	-0.04	0.407	0.526



FCC SAR TEST REPORT

Report No. : FA050515A

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		10mm	DSI 8	26340	1880	Config 0	23.12	24.20	1.282	-0.09	0.741	0.950
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 8	26140	1860	Config 0	23.09	24.20	1.291	-0.11	0.705	0.910
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 8	26590	1905	Config 0	23.05	24.20	1.303	-0.09	0.646	0.842
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 8	26340	1880	Config 0	23.28	24.00	1.180	-0.12	0.757	0.894
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 8	26140	1860	Config 0	23.02	24.00	1.253	-0.1	0.736	0.922
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 8	26590	1905	Config 0	23.12	24.00	1.225	-0.16	0.684	0.838
	LTE Band 25_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 8	26340	1880	Config 0	23.24	24.00	1.191	-0.17	0.743	0.885
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	26340	1880	Config 0	23.12	24.20	1.282	-0.17	0.617	0.791
	LTE Band 25_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 8	26340	1880	Config 0	23.28	24.00	1.180	-0.06	0.613	0.724
70	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	26340	1880	Config 0	23.12	25.00	1.542	-0.09	0.741	1.142
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	26140	1860	Config 0	23.09	25.00	1.552	-0.11	0.705	1.094
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	26590	1905	Config 0	23.05	25.00	1.567	-0.09	0.646	1.012
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 4	26340	1880	Config 0	23.28	24.00	1.180	-0.12	0.757	0.894
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 4	26140	1860	Config 0	23.02	24.00	1.253	-0.1	0.736	0.922
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 4	26590	1905	Config 0	23.12	24.00	1.225	-0.16	0.684	0.838
	LTE Band 25_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 4	26340	1880	Config 0	23.24	24.00	1.191	-0.17	0.743	0.885
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	26340	1880	Config 0	23.12	25.00	1.542	-0.17	0.617	0.951
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	26140	1860	Config 0	23.09	25.00	1.552	-0.08	0.562	0.872
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	26590	1905	Config 0	23.05	25.00	1.567	-0.04	0.531	0.832
	LTE Band 25_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 4	26340	1880	Config 0	23.28	24.00	1.180	-0.06	0.613	0.724
	LTE Band 25_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 4	26340	1880	Config 0	23.24	24.00	1.191	-0.09	0.623	0.742
	LTE Band 25_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 8	26340	1880	Config 1	18.31	19.40	1.285	-0.16	0.383	0.492
	LTE Band 25_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 8	26340	1880	Config 1	18.43	19.40	1.250	-0.13	0.420	0.525
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	26340	1880	Config 1	18.31	19.40	1.285	-0.16	0.717	0.922
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	26140	1860	Config 1	18.30	19.40	1.288	-0.09	0.613	0.790
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	26590	1905	Config 1	18.23	19.40	1.309	-0.15	0.725	0.949
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	26340	1880	Config 1	18.43	19.40	1.250	-0.08	0.758	0.948
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	26140	1860	Config 1	18.40	19.40	1.259	-0.13	0.654	0.823
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	26590	1905	Config 1	18.35	19.40	1.274	-0.13	0.709	0.903
	LTE Band 25_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 8	26340	1880	Config 1	18.42	19.40	1.253	-0.09	0.754	0.945
	LTE Band 25_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 4	26340	1880	Config 1	18.31	20.20	1.545	-0.16	0.383	0.592
	LTE Band 25_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 4	26340	1880	Config 1	18.43	20.20	1.503	-0.13	0.420	0.631
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	26340	1880	Config 1	18.31	20.20	1.545	-0.16	0.717	1.108
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	26140	1860	Config 1	18.30	20.20	1.549	-0.09	0.613	0.949
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	26590	1905	Config 1	18.23	20.20	1.574	-0.15	0.725	1.141
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	26340	1880	Config 1	18.43	20.20	1.503	-0.08	0.758	1.139
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	26140	1860	Config 1	18.40	20.20	1.514	-0.13	0.654	0.990
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	26590	1905	Config 1	18.35	20.20	1.531	-0.13	0.709	1.086
	LTE Band 25_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 4	26340	1880	Config 1	18.42	20.20	1.507	-0.09	0.754	1.136



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 26_Ant 0	15M	QPSK	1	0	Front	10mm	DSI 4/8	26865	831.5	Config 0	24.52	25.70	1.312	-0.02	0.265	0.348
	LTE Band 26_Ant 0	15M	QPSK	36	0	Front	10mm	DSI 4/8	26865	831.5	Config 0	23.65	24.70	1.274	-0.06	0.264	0.336
71	LTE Band 26_Ant 0	15M	QPSK	1	0	Back	10mm	DSI 4/8	26865	831.5	Config 0	24.52	25.70	1.312	-0.11	0.538	0.706
	LTE Band 26_Ant 0	15M	QPSK	36	0	Back	10mm	DSI 4/8	26865	831.5	Config 0	23.65	24.70	1.274	-0.05	0.454	0.578
	LTE Band 5B_Ant 0	10M	QPSK	1	0	Back	10mm	DSI 4/8	20600+20501	844	Config 0	24.82	25.70	1.225	-0.06	0.567	0.694
	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	10mm	DSI 4/8	26865	831.5	Config 1	24.40	25.70	1.349	-0.01	0.244	0.329
	LTE Band 26_Ant 1	15M	QPSK	36	0	Front	10mm	DSI 4/8	26865	831.5	Config 1	23.51	24.70	1.315	0.08	0.214	0.281
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	10mm	DSI 4/8	26865	831.5	Config 1	24.40	25.70	1.349	0.04	0.481	0.649
	LTE Band 26_Ant 1	15M	QPSK	36	0	Back	10mm	DSI 4/8	26865	831.5	Config 1	23.51	24.70	1.315	0.08	0.427	0.562
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Back	10mm	DSI 4/8	20600+20501	844	Config 1	25.40	25.70	1.072	-0.02	0.602	0.645
	LTE Band 30_Ant 2	10M	QPSK	1	0	Front	10mm	DSI 4/8	27710	2310	Config 0	23.02	23.70	1.169	-0.14	0.422	0.494
	LTE Band 30_Ant 2	10M	QPSK	25	25	Front	10mm	DSI 4/8	27710	2310	Config 0	22.11	22.70	1.146	-0.18	0.359	0.411
	LTE Band 30_Ant 2	10M	QPSK	1	0	Back	10mm	DSI 4/8	27710	2310	Config 0	23.02	23.70	1.169	0.11	0.364	0.426
	LTE Band 30_Ant 2	10M	QPSK	25	25	Back	10mm	DSI 4/8	27710	2310	Config 0	22.11	22.70	1.146	-0.07	0.311	0.356
	LTE Band 30_Ant 0	10M	QPSK	1	0	Front	10mm	DSI 8	27710	2310	Config 1	20.52	21.50	1.253	-0.08	0.382	0.479
	LTE Band 30_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 8	27710	2310	Config 1	20.70	21.50	1.202	-0.13	0.396	0.476
	LTE Band 30_Ant 0	10M	QPSK	1	0	Back	10mm	DSI 8	27710	2310	Config 1	20.72	21.50	1.197	-0.13	0.828	0.991
	LTE Band 30_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 8	27710	2310	Config 1	20.70	21.50	1.202	-0.19	0.775	0.932
	LTE Band 30_Ant 0	10M	QPSK	50	0	Back	10mm	DSI 8	27710	2310	Config 1	20.59	21.50	1.233	-0.15	0.780	0.962
	LTE Band 30_Ant 0	10M	QPSK	1	0	Front	10mm	DSI 4	27710	2310	Config 1	20.52	22.30	1.507	-0.08	0.382	0.576
	LTE Band 30_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 4	27710	2310	Config 1	20.70	22.30	1.445	-0.13	0.396	0.572
72	LTE Band 30_Ant 0	10M	QPSK	1	0	Back	10mm	DSI 4	27710	2310	Config 1	20.72	22.30	1.439	-0.13	0.828	1.191
	LTE Band 30_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 4	27710	2310	Config 1	20.70	22.30	1.445	-0.19	0.775	1.120
	LTE Band 30_Ant 0	10M	QPSK	50	0	Back	10mm	DSI 4	27710	2310	Config 1	20.59	22.30	1.483	-0.15	0.780	1.156



FCC SAR TEST REPORT

Report No. : FA050515A

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 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 8	132072	1720	Config 0	22.96	24.10	1.300	-0.14	0.719	0.935
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 8	132322	1745	Config 0	22.88	24.10	1.324	0.02	0.680	0.901
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 8	132572	1770	Config 0	22.80	24.10	1.349	-0.08	0.615	0.830
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 8	132072	1720	Config 0	23.08	24.10	1.265	-0.14	0.735	0.930
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 8	132322	1745	Config 0	22.93	24.10	1.309	-0.17	0.668	0.875
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 8	132572	1770	Config 0	22.85	24.10	1.334	0.01	0.617	0.823
	LTE Band 66_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 8	132072	1720	Config 0	23.06	24.10	1.271	0.06	0.718	0.912
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	132072	1720	Config 0	22.96	24.10	1.300	0.03	0.654	0.850
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	132322	1745	Config 0	22.88	24.10	1.324	-0.02	0.608	0.805
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	132572	1770	Config 0	22.80	24.10	1.349	-0.13	0.557	0.751
	LTE Band 66_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 8	132072	1720	Config 0	23.08	24.10	1.265	0	0.657	0.831
	LTE Band 66_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 8	132322	1745	Config 0	22.93	24.10	1.309	-0.09	0.600	0.786
	LTE Band 66_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 8	132572	1770	Config 0	22.85	24.10	1.334	-0.08	0.549	0.732
	LTE Band 66_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 8	132072	1720	Config 0	23.06	24.10	1.271	-0.15	0.593	0.753
	LTE Band 66C_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 8	132072+132270	1720	Config 0	23.02	24.10	1.282	-0.11	0.668	0.857
	LTE Band 66B_Ant 2	15M	QPSK	1	74	Front	10mm	DSI 8	132047+132140	1717.5	Config 0	22.82	24.10	1.343	-0.08	0.674	0.905
73	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	132072	1720	Config 0	23.72	24.90	1.312	-0.13	0.880	1.155
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	132322	1745	Config 0	23.65	24.90	1.334	-0.18	0.818	1.091
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	132572	1770	Config 0	23.50	24.90	1.380	-0.07	0.750	1.035
	LTE Band 66_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 4	132072	1720	Config 0	23.68	24.70	1.265	-0.05	0.828	1.047
	LTE Band 66_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 4	132322	1745	Config 0	23.47	24.70	1.327	-0.01	0.748	0.993
	LTE Band 66_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 4	132572	1770	Config 0	23.37	24.70	1.358	-0.04	0.695	0.944
	LTE Band 66_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 4	132072	1720	Config 0	23.64	24.70	1.276	-0.05	0.812	1.036
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	132072	1720	Config 0	23.72	24.90	1.312	-0.19	0.770	1.010
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	132322	1745	Config 0	23.65	24.90	1.334	-0.16	0.724	0.965
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	132572	1770	Config 0	23.50	24.90	1.380	-0.12	0.678	0.936
	LTE Band 66_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 4	132072	1720	Config 0	23.68	24.70	1.265	-0.1	0.768	0.971
	LTE Band 66_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 4	132322	1745	Config 0	23.47	24.70	1.327	-0.13	0.722	0.958
	LTE Band 66_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 4	132572	1770	Config 0	23.37	24.70	1.358	-0.1	0.667	0.906
	LTE Band 66_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 4	132072	1720	Config 0	23.64	24.70	1.276	-0.1	0.738	0.942
	LTE Band 66C_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 4	132072+132270	1720	Config 0	23.84	24.90	1.276	-0.05	0.781	0.997
	LTE Band 66B_Ant 2	15M	QPSK	1	74	Front	10mm	DSI 4	132047+132140	1717.5	Config 0	23.61	24.90	1.346	-0.03	0.777	1.046
	LTE Band 66_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 8	132322	1745	Config 1	18.90	20.00	1.288	-0.07	0.261	0.336
	LTE Band 66_Ant 0	20M	QPSK	50	50	Front	10mm	DSI 8	132322	1745	Config 1	18.83	20.00	1.309	-0.1	0.274	0.359
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	132322	1745	Config 1	18.90	20.00	1.288	-0.17	0.621	0.800
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	132072	1720	Config 1	18.83	20.00	1.309	-0.15	0.616	0.806
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	132572	1770	Config 1	18.88	20.00	1.294	-0.14	0.615	0.796
	LTE Band 66_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 8	132322	1745	Config 1	18.83	20.00	1.309	-0.14	0.680	0.890
	LTE Band 66_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 8	132072	1720	Config 1	18.81	20.00	1.315	-0.19	0.670	0.881
	LTE Band 66_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 8	132572	1770	Config 1	18.81	20.00	1.315	-0.12	0.571	0.751
	LTE Band 66_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 8	132572	1770	Config 1	18.92	20.00	1.282	-0.11	0.589	0.755
	LTE Band 66C_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 8	132072+132270	1720	Config 1	18.66	20.00	1.361	-0.06	0.561	0.764
	LTE Band 66B_Ant 0	15M	QPSK	1	74	Back	10mm	DSI 8	132047+132140	1717.5	Config 1	18.59	20.00	1.384	-0.02	0.568	0.786
	LTE Band 66_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 4	132322	1745	Config 1	18.90	20.80	1.549	-0.07	0.261	0.404
	LTE Band 66_Ant 0	20M	QPSK	50	50	Front	10mm	DSI 4	132322	1745	Config 1	18.83	20.80	1.574	-0.1	0.274	0.431
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	132322	1745	Config 1	18.90	20.80	1.549	-0.17	0.621	0.962
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	132072	1720	Config 1	18.83	20.80	1.574	-0.15	0.616	0.970
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	132572	1770	Config 1	18.88	20.80	1.556	-0.14	0.615	0.957
	LTE Band 66_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 4	132322	1745	Config 1	18.83	20.80	1.574	-0.14	0.680	1.070
	LTE Band 66_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 4	132072	1720	Config 1	18.81	20.80	1.581	-0.19	0.670	1.059
	LTE Band 66_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 4	132572	1770	Config 1	18.81	20.80	1.581	-0.12	0.571	0.903
	LTE Band 66_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 4	132572	1770	Config 1	18.92	20.80	1.542	-0.11	0.589	0.908
	LTE Band 66C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	132322+132124	1745	Config 1	19.69	20.80	1.291	-0.09	0.656	0.847
	LTE Band 66B_Ant 0	15M	QPSK	1	74	Back	10mm	DSI 4	132047+132140	1717.5	Config 1	19.50	20.80	1.349	-0.13	0.677	0.913



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	DSI4/8	133322	683	Config 0	24.67	25.70	1.268	-0.1	0.297	0.376
	LTE Band 71_Ant 0	20M	QPSK	50	50	Front	10mm	DSI4/8	133322	683	Config 0	23.78	24.70	1.236	-0.17	0.239	0.295
	LTE Band 71_Ant 0	20M	QPSK	1	0	Back	10mm	DSI4/8	133322	683	Config 0	24.67	25.70	1.268	0.01	0.445	0.564
	LTE Band 71_Ant 0	20M	QPSK	50	50	Back	10mm	DSI4/8	133322	683	Config 0	23.78	24.70	1.236	-0.07	0.391	0.483
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	DSI 4/8	133322	683	Config 1	24.60	25.70	1.288	-0.18	0.279	0.359
	LTE Band 71_Ant 1	20M	QPSK	50	50	Front	10mm	DSI 4/8	133322	683	Config 1	23.69	24.70	1.262	-0.03	0.237	0.299
74	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	DSI 4/8	133322	683	Config 1	24.60	25.70	1.288	-0.09	0.487	0.627
	LTE Band 71_Ant 1	20M	QPSK	50	50	Back	10mm	DSI 4/8	133322	683	Config 1	23.69	24.70	1.262	-0.12	0.399	0.503

<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	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	40620	2593	Config 0	24.45	25.10	1.161	62.9	1.006	-0.13	0.444	0.519
	LTE Band 41_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 8	40620	2593	Config 0	24.16	24.70	1.132	62.9	1.006	0.11	0.406	0.463
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	40620	2593	Config 0	24.45	25.10	1.161	62.9	1.006	-0.12	0.566	0.661
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	39750	2506	Config 0	24.23	25.10	1.222	62.9	1.006	-0.17	0.431	0.530
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	40185	2549.5	Config 0	24.38	25.10	1.180	62.9	1.006	-0.12	0.498	0.591
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 8	41055	2636.5	Config 0	24.40	25.10	1.175	62.9	1.006	-0.11	0.515	0.609
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 8	41490	2680	Config 0	24.10	25.10	1.259	62.9	1.006	-0.15	0.719	0.911
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 8	40620	2593	Config 0	24.16	24.70	1.132	62.9	1.006	-0.1	0.537	0.612
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 8	39750	2506	Config 0	23.90	24.70	1.202	62.9	1.006	-0.03	0.413	0.500
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 8	40185	2549.5	Config 0	24.07	24.70	1.156	62.9	1.006	-0.08	0.477	0.555
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 8	41055	2636.5	Config 0	24.15	24.70	1.135	62.9	1.006	-0.13	0.524	0.598
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 8	41490	2680	Config 0	24.02	24.70	1.169	62.9	1.006	-0.1	0.671	0.789
	LTE Band 41_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 8	41055	2636.5	Config 0	24.10	24.70	1.148	62.9	1.006	-0.15	0.530	0.612
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 8	41490	2680	Config 0	25.81	26.90	1.285	42.9	1.009	-0.13	0.688	0.892
	LTE Band 41C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	41490+41292	2680	Config 0	24.71	25.10	1.094	62.9	1.006	-0.08	0.693	0.763
	LTE Band 41_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	40620	2593	Config 0	24.45	25.70	1.334	62.9	1.006	-0.13	0.444	0.596
	LTE Band 41_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 4	40620	2593	Config 0	24.16	24.70	1.132	62.9	1.006	0.11	0.406	0.463
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	40620	2593	Config 0	24.45	25.70	1.334	62.9	1.006	-0.12	0.566	0.759
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	39750	2506	Config 0	24.23	25.70	1.403	62.9	1.006	-0.17	0.431	0.608
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	40185	2549.5	Config 0	24.38	25.70	1.355	62.9	1.006	-0.12	0.498	0.679
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 4	41055	2636.5	Config 0	24.40	25.70	1.349	62.9	1.006	-0.11	0.515	0.699
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 4	41490	2680	Config 0	24.10	25.70	1.445	62.9	1.006	-0.15	0.719	1.046
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 4	40620	2593	Config 0	24.16	24.70	1.132	62.9	1.006	-0.1	0.537	0.612
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 4	39750	2506	Config 0	23.90	24.70	1.202	62.9	1.006	-0.03	0.413	0.500
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 4	40185	2549.5	Config 0	24.07	24.70	1.156	62.9	1.006	-0.08	0.477	0.555
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 4	41055	2636.5	Config 0	24.15	24.70	1.135	62.9	1.006	-0.13	0.524	0.598
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 4	41490	2680	Config 0	24.02	24.70	1.169	62.9	1.006	-0.1	0.671	0.789
	LTE Band 41_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 4	41055	2636.5	Config 0	24.10	24.70	1.148	62.9	1.006	-0.15	0.530	0.612
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 4	41490	2680	Config 0	25.81	27.50	1.476	42.9	1.009	-0.13	0.688	1.024
	LTE Band 41C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	41490+41292	2680	Config 0	24.71	25.70	1.256	62.9	1.006	-0.08	0.693	0.876



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 0	20M	QPSK	1	0	Front	10mm	DSI 8	40620	2593	Config 1	21.07	22.40	1.358	62.9	1.006	-0.12	0.163	0.223
	LTE Band 41_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 8	40620	2593	Config 1	21.16	22.40	1.330	62.9	1.006	-0.08	0.168	0.225
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	40620	2593	Config 1	21.07	22.40	1.358	62.9	1.006	-0.12	0.539	0.737
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 8	39750	2506	Config 1	20.97	22.40	1.390	62.9	1.006	-0.16	0.389	0.544
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 8	40185	2549.5	Config 1	20.98	22.40	1.387	62.9	1.006	-0.1	0.443	0.618
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 8	41055	2636.5	Config 1	20.96	22.40	1.393	62.9	1.006	-0.16	0.674	0.945
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 8	41490	2680	Config 1	20.82	22.40	1.439	62.9	1.006	-0.1	0.685	0.991
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	40620	2593	Config 1	21.16	22.40	1.330	62.9	1.006	-0.12	0.535	0.716
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	39750	2506	Config 1	21.12	22.40	1.343	62.9	1.006	-0.11	0.377	0.509
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	40185	2549.5	Config 1	21.16	22.40	1.330	62.9	1.006	-0.16	0.444	0.594
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	41055	2636.5	Config 1	21.06	22.40	1.361	62.9	1.006	-0.07	0.671	0.919
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	41490	2680	Config 1	20.88	22.40	1.419	62.9	1.006	-0.03	0.689	0.984
	LTE Band 41_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 8	40185	2549.5	Config 1	21.15	22.40	1.334	62.9	1.006	-0.14	0.437	0.586
	LTE Band 41_HPUE_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 8	41490	2680	Config 1	22.39	24.20	1.517	42.9	1.009	0	0.622	0.952
	LTE Band 41C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	40185	2549.5	Config 1	21.30	22.40	1.288	62.9	1.006	-0.03	0.525	0.680
	LTE Band 41_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 4	40620	2593	Config 1	21.85	23.20	1.365	62.9	1.006	-0.08	0.197	0.270
	LTE Band 41_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 4	40620	2593	Config 1	21.96	23.20	1.330	62.9	1.006	-0.1	0.203	0.272
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	40620	2593	Config 1	21.85	23.20	1.365	62.9	1.006	-0.05	0.580	0.796
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	39750	2506	Config 1	21.73	23.20	1.403	62.9	1.006	-0.13	0.422	0.596
	LTE Band 41_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 4	40185	2549.5	Config 1	21.77	23.20	1.390	62.9	1.006	-0.14	0.521	0.729
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 4	41055	2636.5	Config 1	21.73	23.20	1.403	62.9	1.006	0.07	0.741	1.046
75	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 4	41490	2680	Config 1	21.65	23.20	1.429	62.9	1.006	-0.12	0.826	1.187
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	40620	2593	Config 1	21.96	23.20	1.330	62.9	1.006	-0.14	0.618	0.827
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	39750	2506	Config 1	21.90	23.20	1.349	62.9	1.006	-0.16	0.443	0.601
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	40185	2549.5	Config 1	21.95	23.20	1.334	62.9	1.006	-0.11	0.529	0.710
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	41055	2636.5	Config 1	21.85	23.20	1.365	62.9	1.006	-0.04	0.797	1.094
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	41490	2680	Config 1	21.68	23.20	1.419	62.9	1.006	-0.06	0.821	1.172
	LTE Band 41_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 4	40185	2549.5	Config 1	21.95	23.20	1.334	62.9	1.006	-0.19	0.527	0.707
	LTE Band 41_HPUE_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 4	41490	2680	Config 1	23.27	25.00	1.489	42.9	1.009	-0.05	0.789	1.186
	LTE Band 41C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	40185	2549.5	Config 1	22.16	23.20	1.271	62.9	1.006	-0.06	0.405	0.518



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 8	55340	3560	Config 0	22.80	23.80	1.259	62.9	1.006	-0.04	0.221	0.280
	LTE Band 48_Ant 7	20M	QPSK	50	0	Front	10mm	DSI 8	55340	3560	Config 0	22.80	23.30	1.122	62.9	1.006	-0.1	0.227	0.256
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 8	55340	3560	Config 0	22.80	23.80	1.259	62.9	1.006	0.04	0.544	0.689
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 8	55830	3609	Config 0	22.72	23.80	1.282	62.9	1.006	-0.1	0.584	0.753
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 8	56150	3641	Config 0	22.60	23.80	1.318	62.9	1.006	0.02	0.620	0.822
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 8	56640	3690	Config 0	22.45	23.80	1.365	62.9	1.006	-0.01	0.725	0.995
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 8	55340	3560	Config 0	22.80	23.30	1.122	62.9	1.006	0.02	0.554	0.625
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 8	55830	3609	Config 0	22.73	23.30	1.140	62.9	1.006	0.04	0.587	0.673
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 8	56150	3641	Config 0	22.58	23.30	1.180	62.9	1.006	-0.01	0.629	0.747
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 8	56640	3690	Config 0	22.33	23.30	1.250	62.9	1.006	0.02	0.736	0.926
	LTE Band 48_Ant 7	20M	QPSK	100	0	Back	10mm	DSI 8	55340	3560	Config 0	22.76	23.30	1.132	62.9	1.006	0.01	0.559	0.637
	LTE Band 48C_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 8	55830+55632	3609	Config 0	14.51	15.50	1.256	62.9	1.006	0.06	0.089	0.112
	LTE Band 48_Ant 7	20M	QPSK	1	0	Front	10mm	DSI 4	55340	3560	Config 0	23.60	24.60	1.259	62.9	1.006	-0.04	0.307	0.389
	LTE Band 48_Ant 7	20M	QPSK	50	0	Front	10mm	DSI 4	55340	3560	Config 0	23.15	24.10	1.245	62.9	1.006	-0.08	0.275	0.344
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 4	55340	3560	Config 0	23.60	24.60	1.259	62.9	1.006	0.07	0.687	0.870
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 4	55830	3609	Config 0	23.51	24.60	1.285	62.9	1.006	-0.1	0.719	0.930
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 4	56150	3641	Config 0	23.39	24.60	1.321	62.9	1.006	0	0.767	1.020
76	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 4	56640	3690	Config 0	23.25	24.60	1.365	62.9	1.006	0	0.871	1.196
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 4	55340	3560	Config 0	23.15	24.10	1.245	62.9	1.006	-0.01	0.621	0.777
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 4	55830	3609	Config 0	23.02	24.10	1.282	62.9	1.006	-0.01	0.643	0.829
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 4	56150	3641	Config 0	22.88	24.10	1.324	62.9	1.006	0.01	0.697	0.929
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 4	56640	3690	Config 0	22.63	24.10	1.403	62.9	1.006	0.04	0.789	1.113
	LTE Band 48_Ant 7	20M	QPSK	100	0	Back	10mm	DSI 4	55340	3560	Config 0	23.06	24.10	1.271	62.9	1.006	-0.04	0.627	0.801
	LTE Band 48C_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 4	55830+55632	3609	Config 0	14.52	15.50	1.253	62.9	1.006	-0.07	0.427	0.538



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 2	20M	QPSK	1	0	Front	10mm	DSI 8	55340	3560	Config 1	20.38	21.70	1.355	62.9	1.006	-0.06	0.283	0.386
	LTE Band 48_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 8	55340	3560	Config 1	20.39	21.20	1.205	62.9	1.006	0	0.285	0.345
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	55340	3560	Config 1	20.38	21.70	1.355	62.9	1.006	-0.1	0.693	0.945
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	55830	3609	Config 1	20.29	21.70	1.384	62.9	1.006	-0.17	0.569	0.792
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	56150	3641	Config 1	20.20	21.70	1.413	62.9	1.006	-0.19	0.526	0.747
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	56640	3690	Config 1	20.20	21.70	1.413	62.9	1.006	-0.17	0.488	0.693
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 8	55340	3560	Config 1	20.39	21.20	1.205	62.9	1.006	0.05	0.691	0.838
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 8	55830	3609	Config 1	20.31	21.20	1.227	62.9	1.006	-0.15	0.574	0.709
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 8	56150	3641	Config 1	20.19	21.20	1.262	62.9	1.006	0	0.510	0.647
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 8	56640	3690	Config 1	20.17	21.20	1.268	62.9	1.006	0.02	0.456	0.582
	LTE Band 48_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 8	55340	3560	Config 1	20.32	21.20	1.225	62.9	1.006	-0.06	0.671	0.827
	LTE Band 48C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	55830+55632	3609	Config 1	12.97	14.00	1.268	62.9	1.006	-0.04	0.090	0.115
	LTE Band 48_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	55340	3560	Config 1	21.18	22.30	1.294	62.9	1.006	-0.09	0.342	0.445
	LTE Band 48_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 4	55340	3560	Config 1	20.83	21.30	1.114	62.9	1.006	0.18	0.312	0.350
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	55340	3560	Config 1	21.18	22.30	1.294	62.9	1.006	0	0.851	1.108
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	55830	3609	Config 1	21.13	22.30	1.309	62.9	1.006	-0.12	0.712	0.938
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	56150	3641	Config 1	21.00	22.30	1.349	62.9	1.006	-0.1	0.641	0.870
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	56640	3690	Config 1	20.75	22.30	1.429	62.9	1.006	-0.13	0.590	0.848
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 4	55340	3560	Config 1	20.83	21.30	1.114	62.9	1.006	-0.04	0.768	0.861
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 4	55830	3609	Config 1	20.67	21.30	1.156	62.9	1.006	-0.1	0.637	0.741
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 4	56150	3641	Config 1	20.58	21.30	1.180	62.9	1.006	-0.15	0.577	0.685
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 4	56640	3690	Config 1	20.36	21.30	1.242	62.9	1.006	-0.09	0.520	0.650
	LTE Band 48_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 4	55340	3560	Config 1	20.78	21.30	1.127	62.9	1.006	-0.15	0.732	0.830
	LTE Band 48C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	55830+55632	3609	Config 1	13.08	14.00	1.236	62.9	1.006	-0.08	0.377	0.469



< 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	167300	836.5	Config 0	23.72	25.00	1.343	0.02	0.158	0.212
	FR1 n5_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 4/8	167300	836.5	Config 0	23.70	25.00	1.349	0	0.158	0.213
	FR1 n5_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 4/8	167300	836.5	Config 0	23.72	25.00	1.343	-0.01	0.247	0.332
	FR1 n5_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 4/8	167300	836.5	Config 0	23.70	25.00	1.349	-0.03	0.239	0.322
	FR1 n5_Ant 1	20M	BPSK	1	53	Front	10mm	DSI 4/8	167300	836.5	Config 1	23.38	25.00	1.452	0.02	0.145	0.211
	FR1 n5_Ant 1	20M	BPSK	50	28	Front	10mm	DSI 4/8	167300	836.5	Config 1	23.34	25.00	1.466	-0.03	0.142	0.208
77	FR1 n5_Ant 1	20M	BPSK	1	53	Back	10mm	DSI 4/8	167300	836.5	Config 1	23.38	25.00	1.452	0	0.262	0.380
	FR1 n5_Ant 1	20M	BPSK	50	28	Back	10mm	DSI 4/8	167300	836.5	Config 1	23.34	25.00	1.466	0.05	0.249	0.365
	FR1 n12_Ant 0	15M	BPSK	1	1	Front	10mm	DSI 4/8	141500	707.5	Config 0	23.76	24.70	1.242	-0.1	0.256	0.318
	FR1 n12_Ant 0	15M	BPSK	36	22	Front	10mm	DSI 4/8	141500	707.5	Config 0	23.62	24.70	1.282	0.02	0.255	0.327
	FR1 n12_Ant 0	15M	BPSK	1	1	Back	10mm	DSI 4/8	141500	707.5	Config 0	23.76	24.70	1.242	0.05	0.423	0.525
78	FR1 n12_Ant 0	15M	BPSK	36	22	Back	10mm	DSI 4/8	141500	707.5	Config 0	23.62	24.70	1.282	-0.12	0.414	0.531
	FR1 n12_Ant 1	15M	BPSK	1	1	Front	10mm	DSI 4/8	141500	707.5	Config 1	23.32	24.70	1.374	0.1	0.001	0.001
	FR1 n12_Ant 1	15M	BPSK	36	22	Front	10mm	DSI 4/8	141500	707.5	Config 1	23.26	24.70	1.393	0.08	0.001	0.001
	FR1 n12_Ant 1	15M	BPSK	1	1	Back	10mm	DSI 4/8	141500	707.5	Config 1	23.32	24.70	1.374	-0.09	0.044	0.060
	FR1 n12_Ant 1	15M	BPSK	36	22	Back	10mm	DSI 4/8	141500	707.5	Config 1	23.26	24.70	1.393	-0.07	0.047	0.065



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	53	Front	10mm	DSI 8	376000	1880	Config 0	23.15	23.70	1.135	-0.01	0.878	0.997
	FR1 n25_Ant 2	20M	BPSK	1	53	Front	10mm	DSI 8	372000	1860	Config 0	23.11	23.70	1.146	0.02	0.816	0.935
	FR1 n25_Ant 2	20M	BPSK	1	53	Front	10mm	DSI 8	381000	1905	Config 0	23.12	23.70	1.143	-0.05	0.719	0.822
	FR1 n25_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 8	376000	1880	Config 0	23.13	23.70	1.140	0.06	0.862	0.983
	FR1 n25_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 8	372000	1860	Config 0	23.10	23.70	1.148	-0.08	0.844	0.969
	FR1 n25_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 8	381000	1905	Config 0	23.12	23.70	1.143	0.1	0.678	0.775
	FR1 n25_Ant 2	20M	BPSK	100	0	Front	10mm	DSI 8	376000	1880	Config 0	23.07	23.70	1.156	0.05	0.813	0.940
	FR1 n25_Ant 2	20M	BPSK	1	53	Back	10mm	DSI 8	376000	1880	Config 0	23.15	23.70	1.135	0.06	0.765	0.868
	FR1 n25_Ant 2	20M	BPSK	1	53	Back	10mm	DSI 8	372000	1860	Config 0	23.11	23.70	1.146	-0.04	0.708	0.811
	FR1 n25_Ant 2	20M	BPSK	1	53	Back	10mm	DSI 8	381000	1905	Config 0	23.12	23.70	1.143	0.02	0.680	0.777
	FR1 n25_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 8	376000	1880	Config 0	23.13	23.70	1.140	0.01	0.776	0.885
	FR1 n25_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 8	372000	1860	Config 0	23.10	23.70	1.148	0	0.732	0.840
	FR1 n25_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 8	381000	1905	Config 0	23.12	23.70	1.143	0.05	0.668	0.763
	FR1 n25_Ant 2	20M	BPSK	100	0	Back	10mm	DSI 8	376000	1880	Config 0	23.07	23.70	1.156	-0.08	0.692	0.800
79	FR1 n25_Ant 2-	20M	BPSK	1	53	Front	10mm	DSI 4	376000	1880	Config 0	23.15	24.50	1.365	-0.01	0.878	1.198
	FR1 n25_Ant 2-	20M	BPSK	1	53	Front	10mm	DSI 4	372000	1860	Config 0	23.11	24.50	1.377	0.02	0.816	1.124
	FR1 n25_Ant 2-	20M	BPSK	1	53	Front	10mm	DSI 4	381000	1905	Config 0	23.12	24.50	1.374	-0.05	0.719	0.988
	FR1 n25_Ant 2-	20M	BPSK	50	28	Front	10mm	DSI 4	376000	1880	Config 0	23.13	24.50	1.371	0.06	0.862	1.182
	FR1 n25_Ant 2-	20M	BPSK	50	28	Front	10mm	DSI 4	372000	1860	Config 0	23.10	24.50	1.380	-0.08	0.844	1.165
	FR1 n25_Ant 2-	20M	BPSK	50	28	Front	10mm	DSI 4	381000	1905	Config 0	23.12	24.50	1.374	0.1	0.678	0.932
	FR1 n25_Ant 2-	20M	BPSK	100	0	Front	10mm	DSI 4	376000	1880	Config 0	23.07	24.00	1.239	0.05	0.813	1.007
	FR1 n25_Ant 2-	20M	BPSK	1	53	Back	10mm	DSI 4	376000	1880	Config 0	23.15	24.50	1.365	0.06	0.765	1.044
	FR1 n25_Ant 2-	20M	BPSK	1	53	Back	10mm	DSI 4	372000	1860	Config 0	23.11	24.50	1.377	-0.04	0.708	0.975
	FR1 n25_Ant 2-	20M	BPSK	1	53	Back	10mm	DSI 4	381000	1905	Config 0	23.12	24.50	1.374	0.02	0.680	0.934
	FR1 n25_Ant 2-	20M	BPSK	50	28	Back	10mm	DSI 4	376000	1880	Config 0	23.13	24.50	1.371	0.01	0.776	1.064
	FR1 n25_Ant 2-	20M	BPSK	50	28	Back	10mm	DSI 4	372000	1860	Config 0	23.10	24.50	1.380	0	0.732	1.010
	FR1 n25_Ant 2-	20M	BPSK	50	28	Back	10mm	DSI 4	381000	1905	Config 0	23.12	24.50	1.374	0.05	0.668	0.918
	FR1 n25_Ant 2-	20M	BPSK	100	0	Back	10mm	DSI 4	376000	1880	Config 0	23.07	24.00	1.239	-0.08	0.692	0.857
	FR1 n25_Ant 0	20M	BPSK	1	53	Front	10mm	DSI 8	372000	1860	Config 1	17.76	18.40	1.159	0.03	0.374	0.433
	FR1 n25_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 8	372000	1860	Config 1	17.83	18.40	1.140	-0.02	0.354	0.404
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	DSI 8	372000	1860	Config 1	17.76	18.40	1.159	0	0.692	0.802
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	DSI 8	372000	1880	Config 1	17.71	18.40	1.172	-0.1	0.845	0.991
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	DSI 8	381000	1905	Config 1	17.75	18.40	1.161	0.05	0.781	0.907
	FR1 n25_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 8	372000	1860	Config 1	17.83	18.40	1.140	-0.06	0.660	0.753
	FR1 n25_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 8	376000	1880	Config 1	17.82	18.40	1.143	0.08	0.738	0.843
	FR1 n25_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 8	381000	1905	Config 1	17.81	18.40	1.146	0.1	0.745	0.853
	FR1 n25_Ant 0	20M	BPSK	100	0	Back	10mm	DSI 8	372000	1860	Config 1	17.70	18.40	1.175	0.04	0.675	0.793
	FR1 n25_Ant 0	20M	BPSK	1	53	Front	10mm	DSI 4	372000	1860	Config 1	17.76	19.20	1.393	0.03	0.374	0.521
	FR1 n25_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 4	372000	1860	Config 1	17.83	19.20	1.371	-0.02	0.354	0.485
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	DSI 4	372000	1860	Config 1	17.76	19.20	1.393	0	0.692	0.964
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	DSI 4	372000	1880	Config 1	17.71	19.20	1.409	-0.1	0.845	1.191
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	DSI 4	381000	1905	Config 1	17.75	19.20	1.396	0.05	0.781	1.091
	FR1 n25_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 4	372000	1860	Config 1	17.83	19.20	1.371	-0.06	0.660	0.905
	FR1 n25_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 4	376000	1880	Config 1	17.82	19.20	1.374	0.08	0.738	1.014
	FR1 n25_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 4	381000	1905	Config 1	17.81	19.20	1.377	0.1	0.745	1.026
	FR1 n25_Ant 0	20M	BPSK	100	0	Back	10mm	DSI 4	372000	1860	Config 1	17.70	19.20	1.413	0.04	0.675	0.953



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	20M	BPSK	1	104	Front	10mm	DSI 8	344000	1720	Config 0	24.75	25.30	1.135	0.02	0.850	0.965
	FR1 n66_Ant 2	20M	BPSK	1	104	Front	10mm	DSI 8	349000	1745	Config 0	24.63	25.30	1.167	0.05	0.782	0.912
	FR1 n66_Ant 2	20M	BPSK	1	104	Front	10mm	DSI 8	354000	1770	Config 0	24.63	25.30	1.167	-0.06	0.672	0.784
	FR1 n66_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 8	344000	1720	Config 0	24.75	25.30	1.135	-0.09	0.880	0.999
	FR1 n66_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 8	349000	1745	Config 0	24.72	25.30	1.143	0.08	0.795	0.909
	FR1 n66_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 8	354000	1770	Config 0	24.63	25.30	1.167	-0.09	0.640	0.747
	FR1 n66_Ant 2	20M	BPSK	100	0	Front	10mm	DSI 8	344000	1720	Config 0	24.22	24.80	1.143	0.1	0.838	0.958
	FR1 n66_Ant 2	20M	BPSK	1	104	Back	10mm	DSI 8	344000	1720	Config 0	24.75	25.30	1.135	0.04	0.801	0.909
	FR1 n66_Ant 2	20M	BPSK	1	104	Back	10mm	DSI 8	349000	1745	Config 0	24.63	25.30	1.167	-0.08	0.707	0.825
	FR1 n66_Ant 2	20M	BPSK	1	104	Back	10mm	DSI 8	354000	1770	Config 0	24.63	25.30	1.167	0.06	0.621	0.725
	FR1 n66_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 8	344000	1720	Config 0	24.75	25.30	1.135	0.04	0.817	0.927
	FR1 n66_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 8	349000	1745	Config 0	24.72	25.30	1.143	0.01	0.795	0.909
	FR1 n66_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 8	354000	1770	Config 0	24.63	25.30	1.167	0.02	0.595	0.694
	FR1 n66_Ant 2	20M	BPSK	100	0	Back	10mm	DSI 8	344000	1720	Config 0	24.22	24.80	1.143	-0.03	0.748	0.855
	FR1 n66_Ant 2-	20M	BPSK	1	104	Front	10mm	DSI 4	344000	1720	Config 0	24.75	25.70	1.245	0.02	0.850	1.058
	FR1 n66_Ant 2-	20M	BPSK	1	104	Front	10mm	DSI 4	349000	1745	Config 0	24.63	25.70	1.279	-0.01	0.782	1.000
	FR1 n66_Ant 2-	20M	BPSK	1	104	Front	10mm	DSI 4	354000	1770	Config 0	24.63	25.70	1.279	0	0.672	0.860
	FR1 n66_Ant 2-	20M	BPSK	50	28	Front	10mm	DSI 4	344000	1720	Config 0	24.75	25.70	1.245	-0.09	0.880	1.095
	FR1 n66_Ant 2-	20M	BPSK	50	28	Front	10mm	DSI 4	349000	1745	Config 0	24.72	25.70	1.253	0.03	0.795	0.996
	FR1 n66_Ant 2-	20M	BPSK	50	28	Front	10mm	DSI 4	354000	1770	Config 0	24.63	25.70	1.279	-0.06	0.640	0.819
	FR1 n66_Ant 2-	20M	BPSK	100	0	Front	10mm	DSI 4	344000	1720	Config 0	24.22	25.20	1.253	0.1	0.838	1.050
	FR1 n66_Ant 2-	20M	BPSK	1	104	Back	10mm	DSI 4	344000	1720	Config 0	24.75	25.70	1.245	0.11	0.801	0.997
	FR1 n66_Ant 2-	20M	BPSK	1	104	Back	10mm	DSI 4	349000	1745	Config 0	24.63	25.70	1.279	0.02	0.707	0.905
	FR1 n66_Ant 2-	20M	BPSK	1	104	Back	10mm	DSI 4	354000	1770	Config 0	24.63	25.70	1.279	0.05	0.621	0.794
	FR1 n66_Ant 2-	20M	BPSK	50	28	Back	10mm	DSI 4	344000	1720	Config 0	24.75	25.70	1.245	0.1	0.817	1.017
	FR1 n66_Ant 2-	20M	BPSK	50	28	Back	10mm	DSI 4	349000	1745	Config 0	24.72	25.70	1.253	-0.08	0.795	0.996
	FR1 n66_Ant 2-	20M	BPSK	50	28	Back	10mm	DSI 4	354000	1770	Config 0	24.63	25.70	1.279	0.06	0.595	0.761
	FR1 n66_Ant 2-	20M	BPSK	100	0	Back	10mm	DSI 4	344000	1720	Config 0	24.22	25.20	1.253	0.01	0.748	0.937
	FR1 n66_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 8	344000	1720	Config 1	19.20	20.10	1.230	0.02	0.314	0.386
	FR1 n66_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 8	344000	1720	Config 1	19.16	20.10	1.242	-0.03	0.304	0.377
	FR1 n66_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 8	344000	1720	Config 1	19.20	20.10	1.230	0.05	0.794	0.977
	FR1 n66_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 8	349000	1745	Config 1	19.13	20.10	1.250	-0.06	0.636	0.795
	FR1 n66_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 8	354000	1770	Config 1	19.80	20.10	1.072	0	0.614	0.658
	FR1 n66_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 8	344000	1720	Config 1	19.16	20.10	1.242	-0.1	0.802	0.996
	FR1 n66_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 8	349000	1745	Config 1	19.14	20.10	1.247	0.1	0.663	0.827
	FR1 n66_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 8	354000	1770	Config 1	19.12	20.10	1.253	0.05	0.593	0.743
	FR1 n66_Ant 0	20M	BPSK	100	0	Back	10mm	DSI 8	344000	1720	Config 1	19.04	20.10	1.276	0.04	0.771	0.984
	FR1 n66_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 4	344000	1720	Config 1	19.20	20.90	1.479	0.02	0.314	0.464
	FR1 n66_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 4	344000	1720	Config 1	19.16	20.90	1.493	-0.03	0.304	0.454
	FR1 n66_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 4	344000	1720	Config 1	19.20	20.90	1.479	0.05	0.794	1.174
	FR1 n66_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 4	349000	1745	Config 1	19.13	20.90	1.503	-0.06	0.636	0.956
	FR1 n66_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 4	354000	1770	Config 1	19.80	20.90	1.288	0	0.614	0.791
80	FR1 n66_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 4	344000	1720	Config 1	19.16	20.90	1.493	-0.1	0.802	1.197
	FR1 n66_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 4	349000	1745	Config 1	19.14	20.90	1.500	0.1	0.663	0.994
	FR1 n66_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 4	354000	1770	Config 1	19.12	20.90	1.507	0.05	0.593	0.893
	FR1 n66_Ant 0	20M	BPSK	100	0	Back	10mm	DSI 4	344000	1720	Config 1	19.04	20.90	1.535	0.04	0.771	1.183



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 n71_Ant 0	20M	BPSK	1	53	Front	10mm	DSI 4/8	136100	680.5	Config 0	24.84	25.70	1.219	0.02	0.250	0.305
	FR1 n71_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 4/8	136100	680.5	Config 0	24.95	25.70	1.189	-0.03	0.270	0.321
81	FR1 n71_Ant 0	20M	BPSK	1	53	Back	10mm	DSI 4/8	136100	680.5	Config 0	24.84	25.70	1.219	0.01	0.445	0.542
	FR1 n71_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 4/8	136100	680.5	Config 0	24.95	25.70	1.189	0.05	0.434	0.516
	FR1 n71_Ant 1	20M	BPSK	1	1	Front	10mm	DSI 4/8	136100	680.5	Config 1	24.51	25.70	1.315	0.06	0.078	0.103
	FR1 n71_Ant 1	20M	BPSK	50	28	Front	10mm	DSI 4/8	136100	680.5	Config 1	24.63	25.70	1.279	-0.05	0.090	0.115
	FR1 n71_Ant 1	20M	BPSK	1	1	Back	10mm	DSI 4/8	136100	680.5	Config 1	24.51	25.70	1.315	0.02	0.153	0.201
	FR1 n71_Ant 1	20M	BPSK	50	28	Back	10mm	DSI 4/8	136100	680.5	Config 1	24.63	25.70	1.279	-0.09	0.165	0.211

<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	15.80	16.00	1.047	100	1.000	-0.07	0.131	0.137
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4	3	1	2412	15.80	16.00	1.047	100	1.000	-0.1	0.262	0.274
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4	1	1	2412	19.10	19.50	1.096	100	1.000	0.03	0.244	0.268
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4	1	1	2412	19.10	19.50	1.096	100	1.000	-0.16	0.497	0.545
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 3	1/3	1	2412	19.20	19.50	1.072	100	1.000	-0.16	0.164	0.176
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	1/3	1	2412	19.20	19.50	1.072	100	1.000	-0.1	0.253	0.271
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(4)	1/3	1	2412	19.50	19.50	1.000	100	1.000	-0.12	0.288	0.288
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(3)	1/3	1	2412	19.40	19.50	1.023	100	1.000	-0.12	0.168	0.172
82	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(4)	1/3	1	2412	19.50	19.50	1.000	100	1.000	-0.13	0.591	0.591
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(3)	1/3	1	2412	19.40	19.50	1.023	100	1.000	-0.13	0.218	0.223



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)
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4	3	54	5270	17.40	17.50	1.023	95.67	1.045	0.17	0.096	0.103
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4	3	54	5270	17.40	17.50	1.023	95.67	1.045	-0.13	0.257	0.275
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4	1	52	5260	17.40	18.00	1.148	97.84	1.022	-0.11	0.093	0.109
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	1	52	5260	17.40	18.00	1.148	97.84	1.022	0.06	0.275	0.323
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3	3	58	5290	15.10	15.50	1.096	91.94	1.088	0.18	0.050	0.060
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3	3	58	5290	15.10	15.50	1.096	91.94	1.088	0.07	0.248	0.296
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 3	1	52	5260	17.20	18.00	1.202	97.83	1.022	-0.13	0.071	0.087
83	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 3	1	52	5260	17.20	18.00	1.202	97.83	1.022	0.11	0.469	0.576
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3(4)	3	54	5270	17.40	17.50	1.023	95.66	1.045	0.1	0.085	0.091
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3(3)	3	54	5270	15.20	15.50	1.072	95.66	1.045	0.1	0.054	0.060
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(4)	3	54	5270	17.40	17.50	1.023	95.66	1.045	-0.14	0.236	0.252
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(3)	3	54	5270	15.20	15.50	1.072	95.66	1.045	-0.14	0.202	0.226
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(4)	1	52	5260	17.60	18.00	1.096	98.08	1.020	-0.17	0.067	0.075
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(3)	1	52	5260	17.50	18.00	1.122	98.08	1.020	-0.17	0.068	0.078
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	1	52	5260	17.60	18.00	1.096	98.08	1.020	0.17	0.223	0.249
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	1	52	5260	17.50	18.00	1.122	98.08	1.020	0.17	0.445	0.509
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4	3	122	5610	15.90	16.00	1.023	92.68	1.079	-0.18	0.100	0.110
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4	3	122	5610	15.90	16.00	1.023	92.68	1.079	-0.09	0.241	0.266
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4	1	116	5580	18.40	18.50	1.023	97.84	1.022	-0.18	0.170	0.178
84	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	1	116	5580	18.40	18.50	1.023	97.84	1.022	-0.11	0.418	0.437
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 3	1/3	144	5720	17.80	18.50	1.175	97.83	1.022	-0.15	0.027	0.032
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 3	1/3	144	5720	17.80	18.50	1.175	97.83	1.022	-0.08	0.096	0.115
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(4)	3	144	5720	15.80	16.00	1.047	98.08	1.020	0.17	0.073	0.078
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(3)	3	144	5720	18.40	18.50	1.023	98.08	1.020	0.17	0.037	0.039
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	3	144	5720	15.80	16.00	1.047	98.08	1.020	-0.13	0.216	0.231
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	3	144	5720	18.40	18.50	1.023	98.08	1.020	-0.13	0.183	0.191
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(4)	1	144	5720	18.30	18.50	1.047	98.08	1.020	-0.17	0.126	0.135
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(3)	1	144	5720	18.10	18.50	1.096	98.08	1.020	-0.17	0.126	0.141
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	1	144	5720	18.30	18.50	1.047	98.08	1.020	-0.14	0.357	0.381
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	1	144	5720	18.10	18.50	1.096	98.08	1.020	-0.14	0.116	0.130
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4	3	155	5775	16.10	16.50	1.096	92.68	1.079	0.09	0.095	0.112
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4	3	155	5775	16.10	16.50	1.096	92.68	1.079	-0.13	0.235	0.278
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4	1	149	5745	18.40	18.50	1.023	97.84	1.022	0.15	0.136	0.142
85	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	1	149	5745	18.40	18.50	1.023	97.84	1.022	-0.13	0.341	0.357
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 3	1/3	149	5745	18.20	18.50	1.072	97.83	1.022	-0.11	0.040	0.044
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 3	1/3	149	5745	18.20	18.50	1.072	97.83	1.022	-0.09	0.140	0.153
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(4)	3	157	5785	16.20	16.50	1.072	98.08	1.020	0.03	0.075	0.082
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(3)	3	157	5785	18.30	18.50	1.047	98.08	1.020	0.03	0.046	0.049
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	3	157	5785	16.20	16.50	1.072	98.08	1.020	-0.17	0.245	0.268
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	3	157	5785	18.30	18.50	1.047	98.08	1.020	-0.17	0.107	0.114
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(4)	1	149	5745	18.50	18.50	1.000	98.08	1.020	-0.14	0.122	0.124
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(3)	1	149	5745	18.30	18.50	1.047	98.08	1.020	-0.14	0.056	0.060
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	1	149	5745	18.50	18.50	1.000	98.08	1.020	-0.19	0.347	0.354
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	1	149	5745	18.30	18.50	1.047	98.08	1.020	-0.19	0.176	0.188

<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	3	0	2402	16.55	17.00	1.109	77.13	1.080	-0.18	0.091	0.109
	Bluetooth	1Mbps	Back	10mm	Ant 4	3	0	2402	16.55	17.00	1.109	77.13	1.080	0.1	0.205	0.246
	Bluetooth	1Mbps	Front	10mm	Ant 4	1	78	2480	17.89	18.00	1.026	77.13	1.080	-0.13	0.152	0.168
86	Bluetooth	1Mbps	Back	10mm	Ant 4	1	78	2480	17.89	18.00	1.026	77.13	1.080	-0.16	0.348	0.385

15.4 Product Specific 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 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4	1	52	5260	17.40	18.00	1.148	97.84	1.022	0.09	0.426	0.500
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4	1	52	5260	17.40	18.00	1.148	97.84	1.022	-0.16	0.401	0.471
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4	1	52	5260	17.40	18.00	1.148	97.84	1.022	0.19	0.481	0.564
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4	1	52	5260	17.40	18.00	1.148	97.84	1.022	-0.13	0.834	0.979
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 3	1	52	5260	17.20	18.00	1.202	97.83	1.022	0.05	0.186	0.229
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 3	1	52	5260	17.20	18.00	1.202	97.83	1.022	-0.09	0.551	0.677
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 3	1	52	5260	17.20	18.00	1.202	97.83	1.022	-0.17	0.411	0.505
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(4)	1	52	5260	17.60	18.00	1.096	98.08	1.020	0.11	0.554	0.620
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(3)	1	52	5260	17.50	18.00	1.122	98.08	1.020	0.11	0.554	0.634
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3(4)	1	52	5260	17.60	18.00	1.096	98.08	1.020	0.02	0.361	0.404
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3(3)	1	52	5260	17.50	18.00	1.122	98.08	1.020	0.02	0.597	0.683
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(3)	1	52	5260	17.50	18.00	1.122	98.08	1.020	-0.17	0.346	0.396
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+3(4)	1	52	5260	17.60	18.00	1.096	98.08	1.020	-0.17	0.598	0.669
87	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+3(4)	1	52	5260	17.60	18.00	1.096	98.08	1.020	0.11	0.896	1.002
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4	1	116	5580	18.40	18.50	1.023	97.84	1.022	0.03	0.823	0.861
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4	1	116	5580	18.40	18.50	1.023	97.84	1.022	-0.17	0.764	0.799
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4	1	116	5580	18.40	18.50	1.023	97.84	1.022	-0.01	0.886	0.927
88	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4	1	116	5580	18.40	18.50	1.023	97.84	1.022	-0.17	1.370	1.433
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 3	1	144	5720	17.80	18.50	1.175	97.83	1.022	-0.18	0.083	0.100
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 3	1	144	5720	17.80	18.50	1.175	97.83	1.022	-0.06	0.488	0.586
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 3	1	144	5720	17.80	18.50	1.175	97.83	1.022	-0.11	0.244	0.293
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(4)	1	144	5720	18.30	18.50	1.047	98.08	1.020	-0.11	0.664	0.709
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(3)	1	144	5720	18.10	18.50	1.096	98.08	1.020	-0.11	0.117	0.131
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3(4)	1	144	5720	18.30	18.50	1.047	98.08	1.020	0.1	0.584	0.624
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3(3)	1	144	5720	18.10	18.50	1.096	98.08	1.020	0.1	0.634	0.709
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(3)	1	144	5720	18.10	18.50	1.096	98.08	1.020	0.13	0.337	0.377
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+3(4)	1	144	5720	18.30	18.50	1.047	98.08	1.020	0.13	0.574	0.613
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+3(4)	1	144	5720	18.30	18.50	1.047	98.08	1.020	0	1.270	1.356



15.5 Repeated SAR Measurement

No.	Band	BW (MHz)	Modulation / Mode	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)	Ratio	Reported 1g SAR (W/kg)
1st	FR1 n5_Ant 1-	20M	BPSK	1	53	Right Cheek	0mm	DSI 2	167300	836.5	Config 1	22.78	24.00	1.324			-0.14	0.897	-	1.188
2nd	FR1 n5_Ant 1-	20M	BPSK	1	53	Right Cheek	0mm	DSI 2	167300	836.5	Config 1	22.78	24.00	1.324			-0.05	0.812	1.11	1.075
1st	WCDMA II_Ant 2-		RMC 12.2Kbps			Front	10mm	DSI 4	9400	1880	Config 0	24.21	25.50	1.346			-0.05	0.888	-	1.195
2nd	WCDMA II_Ant 2-		RMC 12.2Kbps			Front	10mm	DSI 4	9400	1880	Config 0	24.21	25.50	1.346			-0.17	0.848	1.05	1.141
1st	LTE Band 30_Ant 0-	10M	QPSK	1	0	Back	10mm	DSI 4	27710	2310	Config 1	20.72	22.30	1.439			-0.13	0.828	-	1.191
2nd	LTE Band 30_Ant 0-	10M	QPSK	1	0	Back	10mm	DSI 4	27710	2310	Config 1	20.72	22.30	1.439			0.01	0.781	1.06	1.124
1st	LTE Band 41_Ant 0-	20M	QPSK	1	49	Back	10mm	DSI 4	41490	2680	Config 1	21.65	23.20	1.429	62.9	1.006	-0.12	0.826	-	1.187
2nd	LTE Band 41_Ant 0-	20M	QPSK	1	49	Back	10mm	DSI 4	41490	2680	Config 1	21.65	23.20	1.429	62.9	1.006	-0.02	0.798	1.03	1.147
1st	LTE Band 48_Ant 7-	20M	QPSK	1	0	Back	10mm	DSI 4	56640	3690	Config 0	23.25	24.60	1.365	62.9	1.006	0	0.871	-	1.196
2nd	LTE Band 48_Ant 7-	20M	QPSK	1	0	Back	10mm	DSI 4	56640	3690	Config 0	23.25	24.60	1.365	62.9	1.006	0.01	0.867	1.01	1.190
1st	LTE Band 66_Ant 2-	20M	QPSK	1	0	Front	10mm	DSI 4	132072	1720	Config 0	23.72	24.90	1.312			-0.13	0.880	-	1.155
2nd	LTE Band 66_Ant 2-	20M	QPSK	1	0	Front	10mm	DSI 4	132072	1720	Config 0	23.72	24.90	1.312			0.07	0.849	1.04	1.114

General Note:

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is $\geq 0.8W/kg$.
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.



15.6 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>

Standalone	Config 0	
	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25.7	27.5
Reported 1g SAR (W/kg)	0.099	0.096
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	235.18	243.49
Linearity SAR(W/kg)	0.10	
% deviation from expected linearity		-6.34%

Standalone	Config 1	
	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25.7	27.5
Reported 1g SAR (W/kg)	0.443	0.425
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	235.18	243.49
Linearity SAR(W/kg)	0.46	
% deviation from expected linearity		-7.34%



<LTE Band 41 Linearity Data for Hotspot>

Standalone	Config 0	
	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25.1	26.9
Reported 1g SAR (W/kg)	0.911	0.892
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	204.83	212.07
Linearity SAR(W/kg)	0.94	
% deviation from expected linearity		-5.43%

Standalone	Config 1	
	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	22.4	24.2
Reported 1g SAR (W/kg)	0.991	0.952
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	110.00	113.89
Linearity SAR(W/kg)	1.03	
% deviation from expected linearity		-7.21%

<LTE Band 41 Linearity Data for Body-worn>

Standalone	Config 0	
	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25.7	27.5
Reported 1g SAR (W/kg)	1.046	1.024
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	235.18	243.49
Linearity SAR(W/kg)	1.08	
% deviation from expected linearity		-5.45%

Standalone	Config 1	
	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	23.2	25
Reported 1g SAR (W/kg)	1.187	1.186
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	132.25	136.93
Linearity SAR(W/kg)	1.23	
% deviation from expected linearity		-3.50%



16. Simultaneous Transmission Analysis

Config	Mode	Capable TX Configurations
1	WWAN OFF (Cellular off)	WiFi 5G SISO (Chain0) + Bluetooth
2		WiFi 5G SISO (Chain1) + Bluetooth
3		WiFi 5G MIMO + Bluetooth
4		WiFi 5G SISO (Chain1)
5		WiFi 5G SISO (Chain0)
6		WiFi 5G MIMO
7		WiFi 2.4G SISO (Chain1)
8		WiFi 2.4G SISO (Chain0)
9		WiFi 2.4G MIMO/CDD
10		Bluetooth
11		WiFi 2.4G SISO (Chain0) + WiFi 5G SISO (Chain1)
12	WWAN ON (Cellular on)	WiFi 5G SISO (Chain0) + Bluetooth
13		WiFi 5G SISO (Chain1) + Bluetooth
14		WiFi 5G MIMO + Bluetooth
15		WiFi 5G SISO (Chain1)
16		WiFi 5G SISO (Chain0)
17		WiFi 5G MIMO
18		WiFi 2.4G SISO (Chain1)
19		WiFi 2.4G SISO (Chain0)
20		WiFi 2.4G MIMO/CDD
21		Bluetooth
22		WiFi 2.4G SISO (Chain0) + WiFi 5G SISO (Chain1)

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's test report FA050515C
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) $SPLSR = (SAR1 + SAR2)^{1.5} / (\text{min. separation distance, mm})$, 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 $SPLSR \leq 0.04$ 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

$$x\% * A + (100-x)\% * B \leq 1.0,$$

Where, A is normalized reported time-averaged SAR exposure ratio from LTE, and $A \leq 1.0$; 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 $B \leq 1.0$.

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

$$x\% * A + (100-x)\% * B + C \leq 1.0 \quad (1)$$

$$x\% * A + (100-x)\% * B \leq x\% * \max(A, B) + (100-x)\% * \max(A, B) \leq \max(A, B)$$

$$x\% * A + (100-x)\% * B + C \leq \max(A, B) + C \leq 1.0 \quad (2)$$

if $A + C \leq 1.0$ and $B + C \leq 1.0$ can be proven, then “ $x\% * A + (100-x)\% * B + C \leq 1.0$ ”. 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	3	4	5	6	7	1+5 Summed 1g SAR (W/kg)	4+7 Summed 1g SAR (W/kg)	5+7 Summed 1g SAR (W/kg)	6+7 Summed 1g SAR (W/kg)
	2.4GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 3 1g SAR (W/kg)	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5GHz WLAN Ant 4 1g SAR (W/kg)	5GHz WLAN Ant 3 1g SAR (W/kg)	5GHz WLAN Ant 4+3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)				
Right Cheek	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.311	0.363	0.237	0.366
Right Tilted	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.253	0.493	0.221	0.492
Left Cheek	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.778	0.655	0.469	0.653
Left Tilted	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.475	0.725	0.235	0.730

**<Simultaneous Transmission is active_WWAN ON>
<Config 0>**

WWAN Band	Exposure Position	1	2	3	8	4	5	7	6	1+3 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 3 1g SAR (W/kg)	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5GHz WLAN Ant 4 1g SAR (W/kg)	5GHz WLAN Ant 3 1g SAR (W/kg)	5GHz WLAN Ant 4+3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)						
GSM850_Ant 0	Right Cheek	0.256	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.505	0.519	0.619	0.493	0.622	0.567
	Right Tilted	0.135	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.201	0.207	0.628	0.356	0.627	0.388
	Left Cheek	0.209	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.721	0.725	0.864	0.678	0.862	0.987
	Left Tilted	0.136	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.184	0.352	0.861	0.371	0.866	0.611
GSM1900_Ant 2	Right Cheek	0.498	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.747	0.761	0.861	0.735	0.864	0.809
	Right Tilted	0.228	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.294	0.300	0.721	0.449	0.720	0.481
	Left Cheek	0.260	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.772	0.776	0.915	0.729	0.913	1.038
	Left Tilted	0.204	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.252	0.420	0.929	0.439	0.934	0.679
WCDMA II_Ant 2	Right Cheek	0.947	0.102	0.249	0.263	0.335	0.209	0.338	0.028	1.196	1.210	1.310	1.184	1.313	1.258
	Right Tilted	0.427	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.493	0.499	0.920	0.648	0.919	0.680
	Left Cheek	0.491	0.553	0.512	0.516	0.411	0.225	0.409	0.244	1.003	1.007	1.146	0.960	1.144	1.269
	Left Tilted	0.429	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.477	0.645	1.154	0.664	1.159	0.904
WCDMA IV_Ant 2	Right Cheek	0.797	0.102	0.249	0.263	0.335	0.209	0.338	0.028	1.046	1.060	1.160	1.034	1.163	1.108
	Right Tilted	0.323	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.389	0.395	0.816	0.544	0.815	0.576
	Left Cheek	0.433	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.945	0.949	1.088	0.902	1.086	1.211
	Left Tilted	0.331	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.379	0.547	1.056	0.566	1.061	0.806
WCDMA V_Ant 0	Right Cheek	0.394	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.643	0.657	0.757	0.631	0.760	0.705
	Right Tilted	0.194	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.260	0.266	0.687	0.415	0.686	0.447
	Left Cheek	0.353	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.865	0.869	1.008	0.822	1.006	1.131
	Left Tilted	0.193	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.241	0.409	0.918	0.428	0.923	0.668
CDMA BC0_Ant 0	Right Cheek	0.481	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.730	0.744	0.844	0.718	0.847	0.792
	Right Tilted	0.238	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.304	0.310	0.731	0.459	0.730	0.491
	Left Cheek	0.454	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.966	0.970	1.109	0.923	1.107	1.232
	Left Tilted	0.237	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.285	0.453	0.962	0.472	0.967	0.712
CDMA BC1_Ant 2	Right Cheek	0.998	0.102	0.249	0.263	0.335	0.209	0.338	0.028	1.247	1.261	1.361	1.235	1.364	1.309
	Right Tilted	0.447	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.513	0.519	0.940	0.668	0.939	0.700
	Left Cheek	0.541	0.553	0.512	0.516	0.411	0.225	0.409	0.244	1.053	1.057	1.196	1.010	1.194	1.319
	Left Tilted	0.439	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.487	0.655	1.164	0.674	1.169	0.914
CDMA BC10_Ant 0	Right Cheek	0.420	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.669	0.683	0.783	0.657	0.786	0.731
	Right Tilted	0.204	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.270	0.276	0.697	0.425	0.696	0.457
	Left Cheek	0.408	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.920	0.924	1.063	0.877	1.061	1.186
	Left Tilted	0.198	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.246	0.414	0.923	0.433	0.928	0.673
LTE Band 7_Ant 2	Right Cheek	0.336	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.585	0.599	0.699	0.573	0.702	0.647
	Right Tilted	0.124	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.190	0.196	0.617	0.345	0.616	0.377
	Left Cheek	0.239	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.751	0.755	0.894	0.708	0.892	1.017
	Left Tilted	0.210	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.258	0.426	0.935	0.445	0.940	0.685



FCC SAR TEST REPORT

Report No. : FA050515A

LTE Band 12_Ant 0	Right Cheek	0.317	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.566	0.580	0.680	0.554	0.683	0.628
	Right Tilted	0.166	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.232	0.238	0.659	0.387	0.658	0.419
	Left Cheek	0.343	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.855	0.859	0.998	0.812	0.996	1.121
	Left Tilted	0.186	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.234	0.402	0.911	0.421	0.916	0.661
LTE Band 13_Ant 0	Right Cheek	0.341	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.590	0.604	0.704	0.578	0.707	0.652
	Right Tilted	0.163	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.229	0.235	0.656	0.384	0.655	0.416
	Left Cheek	0.321	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.833	0.837	0.976	0.790	0.974	1.099
	Left Tilted	0.198	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.246	0.414	0.923	0.433	0.928	0.673
LTE Band 14_Ant 0	Right Cheek	0.423	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.672	0.686	0.786	0.660	0.789	0.734
	Right Tilted	0.255	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.321	0.327	0.748	0.476	0.747	0.508
	Left Cheek	0.409	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.921	0.925	1.064	0.878	1.062	1.187
	Left Tilted	0.265	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.313	0.481	0.990	0.500	0.995	0.740
LTE Band 25_Ant 2	Right Cheek	0.956	0.102	0.249	0.263	0.335	0.209	0.338	0.028	1.205	1.219	1.319	1.193	1.322	1.267
	Right Tilted	0.362	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.428	0.434	0.855	0.583	0.854	0.615
	Left Cheek	0.450	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.962	0.966	1.105	0.919	1.103	1.228
	Left Tilted	0.362	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.410	0.578	1.087	0.597	1.092	0.837
LTE Band 26_Ant 0	Right Cheek	0.480	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.729	0.743	0.843	0.717	0.846	0.791
	Right Tilted	0.241	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.307	0.313	0.734	0.462	0.733	0.494
	Left Cheek	0.388	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.900	0.904	1.043	0.857	1.041	1.166
	Left Tilted	0.265	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.313	0.481	0.990	0.500	0.995	0.740
LTE Band 30_Ant 2	Right Cheek	0.154	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.403	0.417	0.517	0.391	0.520	0.465
	Right Tilted	0.060	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.126	0.132	0.553	0.281	0.552	0.313
	Left Cheek	0.083	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.595	0.599	0.738	0.552	0.736	0.861
	Left Tilted	0.116	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.164	0.332	0.841	0.351	0.846	0.591
LTE Band 41_Ant 2	Right Cheek	0.099	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.348	0.362	0.462	0.336	0.465	0.410
	Right Tilted	0.037	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.103	0.109	0.530	0.258	0.529	0.290
	Left Cheek	0.076	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.588	0.592	0.731	0.545	0.729	0.854
	Left Tilted	0.085	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.133	0.301	0.810	0.320	0.815	0.560
LTE Band 48_Ant 7	Right Cheek	0.113	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.362	0.376	0.476	0.350	0.479	0.424
	Right Tilted	0.136	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.202	0.208	0.629	0.357	0.628	0.389
	Left Cheek	0.272	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.784	0.788	0.927	0.741	0.925	1.050
	Left Tilted	0.281	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.329	0.497	1.006	0.516	1.011	0.756
LTE Band 66_Ant 2	Right Cheek	0.669	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.918	0.932	1.032	0.906	1.035	0.980
	Right Tilted	0.425	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.491	0.497	0.918	0.646	0.917	0.678
	Left Cheek	0.512	0.553	0.512	0.516	0.411	0.225	0.409	0.244	1.024	1.028	1.167	0.981	1.165	1.290
	Left Tilted	0.432	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.480	0.648	1.157	0.667	1.162	0.907
LTE Band 71_Ant 0	Right Cheek	0.352	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.601	0.615	0.715	0.589	0.718	0.663
	Right Tilted	0.161	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.227	0.233	0.654	0.382	0.653	0.414
	Left Cheek	0.376	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.888	0.892	1.031	0.845	1.029	1.154
	Left Tilted	0.152	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.200	0.368	0.877	0.387	0.882	0.627



WWAN Band	Exposure Position	1	2	3	8	4	5	7	6	1+3 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)
		Sub 6G	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4+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)	1g SAR (W/kg)						
FR1 n5_Ant 0	Right Cheek	0.233	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.482	0.496	0.596	0.470	0.599	0.544
	Right Tilted	0.130	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.196	0.202	0.623	0.351	0.622	0.383
	Left Cheek	0.250	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.762	0.766	0.905	0.719	0.903	1.028
	Left Tilted	0.144	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.192	0.360	0.869	0.379	0.874	0.619
FR1 n12_Ant 0	Right Cheek	0.223	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.472	0.486	0.586	0.460	0.589	0.534
	Right Tilted	0.147	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.213	0.219	0.640	0.368	0.639	0.400
	Left Cheek	0.266	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.778	0.782	0.921	0.735	0.919	1.044
	Left Tilted	0.168	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.216	0.384	0.893	0.403	0.898	0.643
FR1 n25_Ant 2	Right Cheek	0.895	0.102	0.249	0.263	0.335	0.209	0.338	0.028	1.144	1.158	1.258	1.132	1.261	1.206
	Right Tilted	0.587	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.653	0.659	1.080	0.808	1.079	0.840
	Left Cheek	0.563	0.553	0.512	0.516	0.411	0.225	0.409	0.244	1.075	1.079	1.218	1.032	1.216	1.341
	Left Tilted	0.445	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.493	0.661	1.170	0.680	1.175	0.920
FR1 n66_Ant 2	Right Cheek	0.628	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.877	0.891	0.991	0.865	0.994	0.939
	Right Tilted	0.396	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.462	0.468	0.889	0.617	0.888	0.649
	Left Cheek	0.563	0.553	0.512	0.516	0.411	0.225	0.409	0.244	1.075	1.079	1.218	1.032	1.216	1.341
	Left Tilted	0.425	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.473	0.641	1.150	0.660	1.155	0.900
FR1 n71_Ant 0	Right Cheek	0.308	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.557	0.571	0.671	0.545	0.674	0.619
	Right Tilted	0.175	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.241	0.247	0.668	0.396	0.667	0.428
	Left Cheek	0.340	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.852	0.856	0.995	0.809	0.993	1.118
	Left Tilted	0.222	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.270	0.438	0.947	0.457	0.952	0.697

<Config 1>

WWAN Band	Exposure Position	1	2	3	8	4	5	7	6	1+3 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4+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)	1g SAR (W/kg)						
GSM850_Ant 1	Right Cheek	0.750	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.999	1.013	1.113	0.987	1.116	1.061
	Right Tilted	0.538	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.604	0.610	1.031	0.759	1.030	0.791
	Left Cheek	0.463	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.975	0.979	1.118	0.932	1.116	1.241
	Left Tilted	0.389	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.437	0.605	1.114	0.624	1.119	0.864
GSM1900_Ant 0	Right Cheek	0.093	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.342	0.356	0.456	0.330	0.459	0.404
	Right Tilted	0.032	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.098	0.104	0.525	0.253	0.524	0.285
	Left Cheek	0.077	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.589	0.593	0.732	0.546	0.730	0.855
	Left Tilted	0.031	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.079	0.247	0.756	0.266	0.761	0.506
WCDMA II_Ant 0	Right Cheek	0.185	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.434	0.448	0.548	0.422	0.551	0.496
	Right Tilted	0.077	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.143	0.149	0.570	0.298	0.569	0.330
	Left Cheek	0.276	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.788	0.792	0.931	0.745	0.929	1.054
	Left Tilted	0.095	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.143	0.311	0.820	0.330	0.825	0.570
WCDMA IV_Ant 0	Right Cheek	0.067	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.316	0.330	0.430	0.304	0.433	0.378
	Right Tilted	0.043	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.109	0.115	0.536	0.264	0.535	0.296
	Left Cheek	0.417	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.929	0.933	1.072	0.886	1.070	1.195
	Left Tilted	0.026	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.074	0.242	0.751	0.261	0.756	0.501
WCDMA V_Ant 1	Right Cheek	0.957	0.102	0.249	0.263	0.335	0.209	0.338	0.028	1.206	1.220	1.320	1.194	1.323	1.268
	Right Tilted	0.597	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.663	0.669	1.090	0.818	1.089	0.850
	Left Cheek	0.446	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.958	0.962	1.101	0.915	1.099	1.224
	Left Tilted	0.397	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.445	0.613	1.122	0.632	1.127	0.872
CDMA BC0_Ant 1	Right Cheek	0.890	0.102	0.249	0.263	0.335	0.209	0.338	0.028	1.139	1.153	1.253	1.127	1.256	1.201
	Right Tilted	0.596	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.662	0.668	1.089	0.817	1.088	0.849
	Left Cheek	0.462	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.974	0.978	1.117	0.931	1.115	1.240
	Left Tilted	0.383	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.431	0.599	1.108	0.618	1.113	0.858



FCC SAR TEST REPORT

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CDMA BC1_Ant 0	Right Cheek	0.202	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.451	0.465	0.565	0.439	0.568	0.513
	Right Tilted	0.115	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.181	0.187	0.608	0.336	0.607	0.368
	Left Cheek	0.349	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.861	0.865	1.004	0.818	1.002	1.127
	Left Tilted	0.111	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.159	0.327	0.836	0.346	0.841	0.586
CDMA BC10_Ant 1	Right Cheek	0.996	0.102	0.249	0.263	0.335	0.209	0.338	0.028	1.245	1.259	1.359	1.233	1.362	1.307
	Right Tilted	0.840	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.906	0.912	1.333	1.061	1.332	1.093
	Left Cheek	0.528	0.553	0.512	0.516	0.411	0.225	0.409	0.244	1.040	1.044	1.183	0.997	1.181	1.306
	Left Tilted	0.440	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.488	0.656	1.165	0.675	1.170	0.915
LTE Band 7_Ant 0	Right Cheek	0.345	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.594	0.608	0.708	0.582	0.711	0.656
	Right Tilted	0.035	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.101	0.107	0.528	0.256	0.527	0.288
	Left Cheek	0.413	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.925	0.929	1.068	0.882	1.066	1.191
	Left Tilted	0.175	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.223	0.391	0.900	0.410	0.905	0.650
LTE Band 12_Ant 1	Right Cheek	0.899	0.102	0.249	0.263	0.335	0.209	0.338	0.028	1.148	1.162	1.262	1.136	1.265	1.210
	Right Tilted	0.578	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.644	0.650	1.071	0.799	1.070	0.831
	Left Cheek	0.454	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.966	0.970	1.109	0.923	1.107	1.232
	Left Tilted	0.338	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.386	0.554	1.063	0.573	1.068	0.813
LTE Band 13_Ant 1	Right Cheek	0.906	0.102	0.249	0.263	0.335	0.209	0.338	0.028	1.155	1.169	1.269	1.143	1.272	1.217
	Right Tilted	0.609	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.675	0.681	1.102	0.830	1.101	0.862
	Left Cheek	0.512	0.553	0.512	0.516	0.411	0.225	0.409	0.244	1.024	1.028	1.167	0.981	1.165	1.290
	Left Tilted	0.403	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.451	0.619	1.128	0.638	1.133	0.878
LTE Band 14_Ant 1	Right Cheek	0.926	0.102	0.249	0.263	0.335	0.209	0.338	0.028	1.175	1.189	1.289	1.163	1.292	1.237
	Right Tilted	0.599	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.665	0.671	1.092	0.820	1.091	0.852
	Left Cheek	0.510	0.553	0.512	0.516	0.411	0.225	0.409	0.244	1.022	1.026	1.165	0.979	1.163	1.288
	Left Tilted	0.409	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.457	0.625	1.134	0.644	1.139	0.884
LTE Band 25_Ant 0	Right Cheek	0.226	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.475	0.489	0.589	0.463	0.592	0.537
	Right Tilted	0.054	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.120	0.126	0.547	0.275	0.546	0.307
	Left Cheek	0.131	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.643	0.647	0.786	0.600	0.784	0.909
	Left Tilted	0.066	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.114	0.282	0.791	0.301	0.796	0.541
LTE Band 26_Ant 1	Right Cheek	0.953	0.102	0.249	0.263	0.335	0.209	0.338	0.028	1.202	1.216	1.316	1.190	1.319	1.264
	Right Tilted	0.708	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.774	0.780	1.201	0.929	1.200	0.961
	Left Cheek	0.485	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.997	1.001	1.140	0.954	1.138	1.263
	Left Tilted	0.404	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.452	0.620	1.129	0.639	1.134	0.879
LTE Band 30_Ant 0	Right Cheek	0.092	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.341	0.355	0.455	0.329	0.458	0.403
	Right Tilted	0.036	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.102	0.108	0.529	0.257	0.528	0.289
	Left Cheek	0.253	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.765	0.769	0.908	0.722	0.906	1.031
	Left Tilted	0.049	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.097	0.265	0.774	0.284	0.779	0.524
LTE Band 41_Ant 0	Right Cheek	0.349	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.598	0.612	0.712	0.586	0.715	0.660
	Right Tilted	0.110	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.176	0.182	0.603	0.331	0.602	0.363
	Left Cheek	0.443	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.955	0.959	1.098	0.912	1.096	1.221
	Left Tilted	0.232	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.280	0.448	0.957	0.467	0.962	0.707
LTE Band 48_Ant 2	Right Cheek	0.199	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.448	0.462	0.562	0.436	0.565	0.510
	Right Tilted	0.049	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.115	0.121	0.542	0.270	0.541	0.302
	Left Cheek	0.093	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.605	0.609	0.748	0.562	0.746	0.871
	Left Tilted	0.114	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.162	0.330	0.839	0.349	0.844	0.589
LTE Band 66_Ant 0	Right Cheek	0.232	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.481	0.495	0.595	0.469	0.598	0.543
	Right Tilted	0.232	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.298	0.304	0.725	0.453	0.724	0.485
	Left Cheek	0.464	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.976	0.980	1.119	0.933	1.117	1.242
	Left Tilted	0.210	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.258	0.426	0.935	0.445	0.940	0.685
LTE Band 71_Ant 1	Right Cheek	0.909	0.102	0.249	0.263	0.335	0.209	0.338	0.028	1.158	1.172	1.272	1.146	1.275	1.220
	Right Tilted	0.646	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.712	0.718	1.139	0.867	1.138	0.899
	Left Cheek	0.398	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.910	0.914	1.053	0.867	1.051	1.176
	Left Tilted	0.315	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.363	0.531	1.040	0.550	1.045	0.790



WWAN Band	Exposure Position	1	2	3	8	4	5	7	6	1+3 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)
		Sub 6G 1g SAR (W/kg)	2.4GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 3 1g SAR (W/kg)	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5GHz WLAN Ant 4 1g SAR (W/kg)	5GHz WLAN Ant 3 1g SAR (W/kg)	5GHz WLAN Ant 4+3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)						
FR1 n5_Ant 1	Right Cheek	0.988	0.102	0.249	0.263	0.335	0.209	0.338	0.028	1.237	1.251	1.351	1.225	1.354	1.299
	Right Tilted	0.695	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.761	0.767	1.188	0.916	1.187	0.948
	Left Cheek	0.518	0.553	0.512	0.516	0.411	0.225	0.409	0.244	1.030	1.034	1.173	0.987	1.171	1.296
	Left Tilted	0.372	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.420	0.588	1.097	0.607	1.102	0.847
FR1 n12_Ant 1	Right Cheek	0.103	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.352	0.366	0.466	0.340	0.469	0.414
	Right Tilted	0.106	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.172	0.178	0.599	0.327	0.598	0.359
	Left Cheek	0.050	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.562	0.566	0.705	0.519	0.703	0.828
	Left Tilted	0.059	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.107	0.275	0.784	0.294	0.789	0.534
FR1 n25_Ant 0	Right Cheek	0.061	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.310	0.324	0.424	0.298	0.427	0.372
	Right Tilted	0.001	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.067	0.073	0.494	0.222	0.493	0.254
	Left Cheek	0.143	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.655	0.659	0.798	0.612	0.796	0.921
	Left Tilted	0.001	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.049	0.217	0.726	0.236	0.731	0.476
FR1 n66_Ant 0	Right Cheek	0.353	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.602	0.616	0.716	0.590	0.719	0.664
	Right Tilted	0.242	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.308	0.314	0.735	0.463	0.734	0.495
	Left Cheek	0.356	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.868	0.872	1.011	0.825	1.009	1.134
	Left Tilted	0.288	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.336	0.504	1.013	0.523	1.018	0.763
FR1 n71_Ant 1	Right Cheek	0.324	0.102	0.249	0.263	0.335	0.209	0.338	0.028	0.573	0.587	0.687	0.561	0.690	0.635
	Right Tilted	0.328	0.093	0.066	0.072	0.432	0.160	0.431	0.061	0.394	0.400	0.821	0.549	0.820	0.581
	Left Cheek	0.165	0.553	0.512	0.516	0.411	0.225	0.409	0.244	0.677	0.681	0.820	0.634	0.818	0.943
	Left Tilted	0.192	0.392	0.048	0.216	0.573	0.083	0.578	0.152	0.240	0.408	0.917	0.427	0.922	0.667



16.3 Hotspot Exposure Conditions

<Config 0>

WWAN Band	Exposure Position	1	2	3	8	4	5	7	6	1+3 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 4	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4						
GSM850_Ant 0	Front	0.284	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.460	0.572	0.505	0.453	0.475	0.481
	Back	0.603	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.874	1.194	1.127	1.166	1.125	1.194
	Left side	0.491		0.218	0.135		0.311	0.290		0.709	0.626	0.491	0.802	0.781	0.802
	Right side	0.450	0.213		0.494	0.396		0.378	0.188	0.450	0.944	1.034	0.638	1.016	0.663
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.141									0.141	0.141	0.141	0.141	0.141
GSM1900_Ant 2	Front	0.552	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.728	0.840	0.773	0.721	0.743	0.749
	Back	0.452	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.723	1.043	0.976	1.015	0.974	1.043
	Left side	0.326		0.218	0.135		0.311	0.290		0.544	0.461	0.326	0.637	0.616	0.637
	Right side	0.437	0.213		0.494	0.396		0.378	0.188	0.437	0.931	1.021	0.625	1.003	0.650
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.230									0.230	0.230	0.230	0.230	0.230
WCDMA II_Ant 2	Front	0.995	0.137	0.176	0.288	0.112	0.060	0.082	0.109	1.171	1.283	1.216	1.164	1.186	1.192
	Back	0.868	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.139	1.459	1.392	1.431	1.390	1.459
	Left side	0.363		0.218	0.135		0.311	0.290		0.581	0.498	0.363	0.674	0.653	0.674
	Right side	0.604	0.213		0.494	0.396		0.378	0.188	0.604	1.098	1.188	0.792	1.170	0.817
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.374									0.374	0.374	0.374	0.374	0.374
WCDMA IV_Ant 2	Front	0.998	0.137	0.176	0.288	0.112	0.060	0.082	0.109	1.174	1.286	1.219	1.167	1.189	1.195
	Back	0.971	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.242	1.562	1.495	1.534	1.493	1.562
	Left side	0.326		0.218	0.135		0.311	0.290		0.544	0.461	0.326	0.637	0.616	0.637
	Right side	0.638	0.213		0.494	0.396		0.378	0.188	0.638	1.132	1.222	0.826	1.204	0.851
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.547									0.547	0.547	0.547	0.547	0.547
WCDMA V_Ant 0	Front	0.349	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.525	0.637	0.570	0.518	0.540	0.546
	Back	0.543	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.814	1.134	1.067	1.106	1.065	1.134
	Left side	0.301		0.218	0.135		0.311	0.290		0.519	0.436	0.301	0.612	0.591	0.612
	Right side	0.291	0.213		0.494	0.396		0.378	0.188	0.291	0.785	0.875	0.479	0.857	0.504
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.146									0.146	0.146	0.146	0.146	0.146
CDMA BC0_Ant 0	Front	0.496	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.672	0.784	0.717	0.665	0.687	0.693
	Back	0.735	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.006	1.326	1.259	1.298	1.257	1.326
	Left side	0.535		0.218	0.135		0.311	0.290		0.753	0.670	0.535	0.846	0.825	0.846
	Right side	0.477	0.213		0.494	0.396		0.378	0.188	0.477	0.971	1.061	0.665	1.043	0.690
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.141									0.141	0.141	0.141	0.141	0.141
CDMA BC1_Ant 2	Front	0.933	0.137	0.176	0.288	0.112	0.060	0.082	0.109	1.109	1.221	1.154	1.102	1.124	1.130
	Back	0.828	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.099	1.419	1.352	1.391	1.350	1.419
	Left side	0.551		0.218	0.135		0.311	0.290		0.769	0.686	0.551	0.862	0.841	0.862
	Right side	0.671	0.213		0.494	0.396		0.378	0.188	0.671	1.165	1.255	0.859	1.237	0.884
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.381									0.381	0.381	0.381	0.381	0.381



WWAN Band	Exposure Position	1	2	3	8	4	5	7	6	1+3 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4+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)	1g SAR (W/kg)						
CDMA BC10_Ant 0	Front	0.512	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.688	0.800	0.733	0.681	0.703	0.709
	Back	0.775	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.046	1.366	1.299	1.338	1.297	1.366
	Left side	0.555		0.218	0.135		0.311	0.290		0.773	0.690	0.555	0.866	0.845	0.866
	Right side	0.495	0.213		0.494	0.396		0.378	0.188	0.495	0.989	1.079	0.683	1.061	0.708
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.132									0.132	0.132	0.132	0.132	0.132
LTE Band 7_Ant 2	Front	0.859	0.137	0.176	0.288	0.112	0.060	0.082	0.109	1.035	1.147	1.080	1.028	1.050	1.056
	Back	0.997	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.268	1.588	1.521	1.560	1.519	1.588
	Left side	0.181		0.218	0.135		0.311	0.290		0.399	0.316	0.181	0.492	0.471	0.492
	Right side	0.715	0.213		0.494	0.396		0.378	0.188	0.715	1.209	1.299	0.903	1.281	0.928
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.750									0.750	0.750	0.750	0.750	0.750
LTE Band 12_Ant 0	Front	0.422	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.598	0.710	0.643	0.591	0.613	0.619
	Back	0.658	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.929	1.249	1.182	1.221	1.180	1.249
	Left side	0.442		0.218	0.135		0.311	0.290		0.660	0.577	0.442	0.753	0.732	0.753
	Right side	0.345	0.213		0.494	0.396		0.378	0.188	0.345	0.839	0.929	0.533	0.911	0.558
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.070									0.070	0.070	0.070	0.070	0.070
LTE Band 13_Ant 0	Front	0.483	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.659	0.771	0.704	0.652	0.674	0.680
	Back	0.691	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.962	1.282	1.215	1.254	1.213	1.282
	Left side	0.480		0.218	0.135		0.311	0.290		0.698	0.615	0.480	0.791	0.770	0.791
	Right side	0.468	0.213		0.494	0.396		0.378	0.188	0.468	0.962	1.052	0.656	1.034	0.681
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.099									0.099	0.099	0.099	0.099	0.099
LTE Band 14_Ant 0	Front	0.576	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.752	0.864	0.797	0.745	0.767	0.773
	Back	0.823	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.094	1.414	1.347	1.386	1.345	1.414
	Left side	0.581		0.218	0.135		0.311	0.290		0.799	0.716	0.581	0.892	0.871	0.892
	Right side	0.578	0.213		0.494	0.396		0.378	0.188	0.578	1.072	1.162	0.766	1.144	0.791
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.117									0.117	0.117	0.117	0.117	0.117
LTE Band 25_Ant 2	Front	0.950	0.137	0.176	0.288	0.112	0.060	0.082	0.109	1.126	1.238	1.171	1.119	1.141	1.147
	Back	0.791	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.062	1.382	1.315	1.354	1.313	1.382
	Left side	0.408		0.218	0.135		0.311	0.290		0.626	0.543	0.408	0.719	0.698	0.719
	Right side	0.744	0.213		0.494	0.396		0.378	0.188	0.744	1.238	1.328	0.932	1.310	0.957
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.413									0.413	0.413	0.413	0.413	0.413
LTE Band 26_Ant 0	Front	0.348	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.524	0.636	0.569	0.517	0.539	0.545
	Back	0.706	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.977	1.297	1.230	1.269	1.228	1.297
	Left side	0.167		0.218	0.135		0.311	0.290		0.385	0.302	0.167	0.478	0.457	0.478
	Right side	0.154	0.213		0.494	0.396		0.378	0.188	0.154	0.648	0.738	0.342	0.720	0.367
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.155									0.155	0.155	0.155	0.155	0.155



WWAN Band	Exposure Position	1	2	3	8	4	5	7	6	1+3 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4+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)	1g SAR (W/kg)						
LTE Band 30_Ant 2	Front	0.494	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.670	0.782	0.715	0.663	0.685	0.691
	Back	0.426	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.697	1.017	0.950	0.989	0.948	1.017
	Left side	0.084		0.218	0.135		0.311	0.290		0.302	0.219	0.084	0.395	0.374	0.395
	Right side	0.280	0.213		0.494	0.396		0.378	0.188	0.280	0.774	0.864	0.468	0.846	0.493
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.395								0.395	0.395	0.395	0.395	0.395	0.395
LTE Band 41_Ant 2	Front	0.519	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.695	0.807	0.740	0.688	0.710	0.716
	Back	0.911	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.182	1.502	1.435	1.474	1.433	1.502
	Left side	0.078		0.218	0.135		0.311	0.290		0.296	0.213	0.078	0.389	0.368	0.389
	Right side	0.599	0.213		0.494	0.396		0.378	0.188	0.599	1.093	1.183	0.787	1.165	0.812
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.564								0.564	0.564	0.564	0.564	0.564	0.564
LTE Band 48_Ant 7	Front	0.280	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.456	0.568	0.501	0.449	0.471	0.477
	Back	0.995	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.266	1.586	1.519	1.558	1.517	1.586
	Left side	0.484		0.218	0.135		0.311	0.290		0.702	0.619	0.484	0.795	0.774	0.795
	Right side	0.044	0.213		0.494	0.396		0.378	0.188	0.044	0.538	0.628	0.232	0.610	0.257
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.155								0.155	0.155	0.155	0.155	0.155	0.155
LTE Band 66_Ant 2	Front	0.935	0.137	0.176	0.288	0.112	0.060	0.082	0.109	1.111	1.223	1.156	1.104	1.126	1.132
	Back	0.850	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.121	1.441	1.374	1.413	1.372	1.441
	Left side	0.312		0.218	0.135		0.311	0.290		0.530	0.447	0.312	0.623	0.602	0.623
	Right side	0.586	0.213		0.494	0.396		0.378	0.188	0.586	1.080	1.170	0.774	1.152	0.799
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.406								0.406	0.406	0.406	0.406	0.406	0.406
LTE Band 71_Ant 0	Front	0.376	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.552	0.664	0.597	0.545	0.567	0.573
	Back	0.564	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.835	1.155	1.088	1.127	1.086	1.155
	Left side	0.392		0.218	0.135		0.311	0.290		0.610	0.527	0.392	0.703	0.682	0.703
	Right side	0.368	0.213		0.494	0.396		0.378	0.188	0.368	0.862	0.952	0.556	0.934	0.581
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.086								0.086	0.086	0.086	0.086	0.086	0.086



WWAN Band	Exposure Position	1	2	3	8	4	5	7	6	1+3 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)
		FR1	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4+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)	1g SAR (W/kg)						
FR1 n5_Ant 0	Front	0.213	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.389	0.501	0.434	0.382	0.404	0.410
	Back	0.332	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.603	0.923	0.856	0.895	0.854	0.923
	Left side	0.225		0.218	0.135		0.311	0.290		0.443	0.360	0.225	0.536	0.515	0.536
	Right side	0.196	0.213		0.494	0.396		0.378	0.188	0.196	0.690	0.780	0.384	0.762	0.409
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.086									0.086	0.086	0.086	0.086	0.086
FR1 n12_Ant 0	Front	0.327	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.503	0.615	0.548	0.496	0.518	0.524
	Back	0.531	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.802	1.122	1.055	1.094	1.053	1.122
	Left side	0.458		0.218	0.135		0.311	0.290		0.676	0.593	0.458	0.769	0.748	0.769
	Right side	0.317	0.213		0.494	0.396		0.378	0.188	0.317	0.811	0.901	0.505	0.883	0.530
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.065									0.065	0.065	0.065	0.065	0.065
FR1 n25_Ant 2	Front	0.997	0.137	0.176	0.288	0.112	0.060	0.082	0.109	1.173	1.285	1.218	1.166	1.188	1.194
	Back	0.885	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.156	1.476	1.409	1.448	1.407	1.476
	Left side	0.322		0.218	0.135		0.311	0.290		0.540	0.457	0.322	0.633	0.612	0.633
	Right side	0.748	0.213		0.494	0.396		0.378	0.188	0.748	1.242	1.332	0.936	1.314	0.961
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.517									0.517	0.517	0.517	0.517	0.517
FR1 n66_Ant 2	Front	0.999	0.137	0.176	0.288	0.112	0.060	0.082	0.109	1.175	1.287	1.220	1.168	1.190	1.196
	Back	0.927	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.198	1.518	1.451	1.490	1.449	1.518
	Left side	0.393		0.218	0.135		0.311	0.290		0.611	0.528	0.393	0.704	0.683	0.704
	Right side	0.285	0.213		0.494	0.396		0.378	0.188	0.285	0.779	0.869	0.473	0.851	0.498
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.507									0.507	0.507	0.507	0.507	0.507
FR1 n71_Ant 0	Front	0.321	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.497	0.609	0.542	0.490	0.512	0.518
	Back	0.542	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.813	1.133	1.066	1.105	1.064	1.133
	Left side	0.283		0.218	0.135		0.311	0.290		0.501	0.418	0.283	0.594	0.573	0.594
	Right side	0.180	0.213		0.494	0.396		0.378	0.188	0.180	0.674	0.764	0.368	0.746	0.393
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.099									0.099	0.099	0.099	0.099	0.099



<Config 1>

WWAN Band	Exposure Position	1	2	3	8	4	5	7	6	1+3 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4+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)	1g SAR (W/kg)						
GSM850_Ant 1	Front	0.215	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.391	0.503	0.436	0.384	0.406	0.412
	Back	0.400	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.671	0.991	0.924	0.963	0.922	0.991
	Left side	0.084		0.218	0.135		0.311	0.290		0.302	0.219	0.084	0.395	0.374	0.395
	Right side	0.086	0.213		0.494	0.396		0.378	0.188	0.086	0.580	0.670	0.274	0.652	0.299
	Top side	0.192	0.112		0.197	0.446		0.425	0.089	0.192	0.389	0.727	0.281	0.706	0.304
	Bottom side									0.000	0.000	0.000	0.000	0.000	0.000
GSM1900_Ant 0	Front	0.482	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.658	0.770	0.703	0.651	0.673	0.679
	Back	0.888	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.159	1.479	1.412	1.451	1.410	1.479
	Left side	0.195		0.218	0.135		0.311	0.290		0.413	0.330	0.195	0.506	0.485	0.506
	Right side	0.032	0.213		0.494	0.396		0.378	0.188	0.032	0.526	0.616	0.220	0.598	0.245
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.550								0.550	0.550	0.550	0.550	0.550	0.550
WCDMA II_Ant 0	Front	0.394	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.570	0.682	0.615	0.563	0.585	0.591
	Back	0.978	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.249	1.569	1.502	1.541	1.500	1.569
	Left side	0.139		0.218	0.135		0.311	0.290		0.357	0.274	0.139	0.450	0.429	0.450
	Right side	0.044	0.213		0.494	0.396		0.378	0.188	0.044	0.538	0.628	0.232	0.610	0.257
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.849								0.849	0.849	0.849	0.849	0.849	0.849
WCDMA IV_Ant 0	Front	0.395	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.571	0.683	0.616	0.564	0.586	0.592
	Back	0.953	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.224	1.544	1.477	1.516	1.475	1.544
	Left side	0.338		0.218	0.135		0.311	0.290		0.556	0.473	0.338	0.649	0.628	0.649
	Right side	0.021	0.213		0.494	0.396		0.378	0.188	0.021	0.515	0.605	0.209	0.587	0.234
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.730								0.730	0.730	0.730	0.730	0.730	0.730
WCDMA V_Ant 1	Front	0.352	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.528	0.640	0.573	0.521	0.543	0.549
	Back	0.622	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.893	1.213	1.146	1.185	1.144	1.213
	Left side	0.145		0.218	0.135		0.311	0.290		0.363	0.280	0.145	0.456	0.435	0.456
	Right side	0.174	0.213		0.494	0.396		0.378	0.188	0.174	0.668	0.758	0.362	0.740	0.387
	Top side	0.283	0.112		0.197	0.446		0.425	0.089	0.283	0.480	0.818	0.372	0.797	0.395
	Bottom side									0.000	0.000	0.000	0.000	0.000	0.000
CDMA BC0_Ant 1	Front	0.422	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.598	0.710	0.643	0.591	0.613	0.619
	Back	0.718	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.989	1.309	1.242	1.281	1.240	1.309
	Left side	0.146		0.218	0.135		0.311	0.290		0.364	0.281	0.146	0.457	0.436	0.457
	Right side	0.219	0.213		0.494	0.396		0.378	0.188	0.219	0.713	0.803	0.407	0.785	0.432
	Top side	0.367	0.112		0.197	0.446		0.425	0.089	0.367	0.564	0.902	0.456	0.881	0.479
	Bottom side									0.000	0.000	0.000	0.000	0.000	0.000
CDMA BC1_Ant 0	Front	0.442	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.618	0.730	0.663	0.611	0.633	0.639
	Back	0.937	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.208	1.528	1.461	1.500	1.459	1.528
	Left side	0.165		0.218	0.135		0.311	0.290		0.383	0.300	0.165	0.476	0.455	0.476
	Right side	0.059	0.213		0.494	0.396		0.378	0.188	0.059	0.553	0.643	0.247	0.625	0.272
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.927								0.927	0.927	0.927	0.927	0.927	0.927
CDMA BC10_Ant 1	Front	0.318	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.494	0.606	0.539	0.487	0.509	0.515
	Back	0.572	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.843	1.163	1.096	1.135	1.094	1.163
	Left side	0.174		0.218	0.135		0.311	0.290		0.392	0.309	0.174	0.485	0.464	0.485
	Right side	0.189	0.213		0.494	0.396		0.378	0.188	0.189	0.683	0.773	0.377	0.755	0.402
	Top side	0.278	0.112		0.197	0.446		0.425	0.089	0.278	0.475	0.813	0.367	0.792	0.390
	Bottom side									0.000	0.000	0.000	0.000	0.000	0.000



WWAN Band	Exposure Position	1	2	3	8	4	5	7	6	1+3 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4+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)	1g SAR (W/kg)						
LTE Band 7_Ant 0	Front	0.331	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.507	0.619	0.552	0.500	0.522	0.528
	Back	0.940	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.211	1.531	1.464	1.503	1.462	1.531
	Left side	0.236		0.218	0.135		0.311	0.290		0.454	0.371	0.236	0.547	0.526	0.547
	Right side	0.071	0.213		0.494	0.396		0.378	0.188	0.071	0.565	0.655	0.259	0.637	0.284
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.927									0.927	0.927	0.927	0.927	0.927
LTE Band 12_Ant 1	Front	0.367	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.543	0.655	0.588	0.536	0.558	0.564
	Back	0.617	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.888	1.208	1.141	1.180	1.139	1.208
	Left side	0.374		0.218	0.135		0.311	0.290		0.592	0.509	0.374	0.685	0.664	0.685
	Right side	0.259	0.213		0.494	0.396		0.378	0.188	0.259	0.753	0.843	0.447	0.825	0.472
	Top side	0.224	0.112		0.197	0.446		0.425	0.089	0.224	0.421	0.759	0.313	0.738	0.336
	Bottom side										0.000	0.000	0.000	0.000	0.000
LTE Band 13_Ant 1	Front	0.382	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.558	0.670	0.603	0.551	0.573	0.579
	Back	0.616	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.887	1.207	1.140	1.179	1.138	1.207
	Left side	0.363		0.218	0.135		0.311	0.290		0.581	0.498	0.363	0.674	0.653	0.674
	Right side	0.311	0.213		0.494	0.396		0.378	0.188	0.311	0.805	0.895	0.499	0.877	0.524
	Top side	0.241	0.112		0.197	0.446		0.425	0.089	0.241	0.438	0.776	0.330	0.755	0.353
	Bottom side										0.000	0.000	0.000	0.000	0.000
LTE Band 14_Ant 1	Front	0.436	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.612	0.724	0.657	0.605	0.627	0.633
	Back	0.646	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.917	1.237	1.170	1.209	1.168	1.237
	Left side	0.236		0.218	0.135		0.311	0.290		0.454	0.371	0.236	0.547	0.526	0.547
	Right side	0.223	0.213		0.494	0.396		0.378	0.188	0.223	0.717	0.807	0.411	0.789	0.436
	Top side	0.279	0.112		0.197	0.446		0.425	0.089	0.279	0.476	0.814	0.368	0.793	0.391
	Bottom side										0.000	0.000	0.000	0.000	0.000
LTE Band 25_Ant 0	Front	0.525	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.701	0.813	0.746	0.694	0.716	0.722
	Back	0.949	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.220	1.540	1.473	1.512	1.471	1.540
	Left side	0.371		0.218	0.135		0.311	0.290		0.589	0.506	0.371	0.682	0.661	0.682
	Right side	0.043	0.213		0.494	0.396		0.378	0.188	0.043	0.537	0.627	0.231	0.609	0.256
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.946									0.946	0.946	0.946	0.946	0.946
LTE Band 26_Ant 1	Front	0.329	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.505	0.617	0.550	0.498	0.520	0.526
	Back	0.649	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.920	1.240	1.173	1.212	1.171	1.240
	Left side	0.139		0.218	0.135		0.311	0.290		0.357	0.274	0.139	0.450	0.429	0.450
	Right side	0.173	0.213		0.494	0.396		0.378	0.188	0.173	0.667	0.757	0.361	0.739	0.386
	Top side	0.317	0.112		0.197	0.446		0.425	0.089	0.317	0.514	0.852	0.406	0.831	0.429
	Bottom side										0.000	0.000	0.000	0.000	0.000
LTE Band 30_Ant 0	Front	0.479	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.655	0.767	0.700	0.648	0.670	0.676
	Back	0.991	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.262	1.582	1.515	1.554	1.513	1.582
	Left side	0.154		0.218	0.135		0.311	0.290		0.372	0.289	0.154	0.465	0.444	0.465
	Right side	0.077	0.213		0.494	0.396		0.378	0.188	0.077	0.571	0.661	0.265	0.643	0.290
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.722									0.722	0.722	0.722	0.722	0.722
LTE Band 41_Ant 0	Front	0.225	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.401	0.513	0.446	0.394	0.416	0.422
	Back	0.991	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.262	1.582	1.515	1.554	1.513	1.582
	Left side	0.209		0.218	0.135		0.311	0.290		0.427	0.344	0.209	0.520	0.499	0.520
	Right side	0.058	0.213		0.494	0.396		0.378	0.188	0.058	0.552	0.642	0.246	0.624	0.271
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.614									0.614	0.614	0.614	0.614	0.614



WWAN Band	Exposure Position	1	2	3	8	4	5	7	6	1+3 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4+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)	1g SAR (W/kg)						
LTE Band 48_Ant 2	Front	0.386	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.562	0.674	0.607	0.555	0.577	0.583
	Back	0.945	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.216	1.536	1.469	1.508	1.467	1.536
	Left side	0.001		0.218	0.135		0.311	0.290		0.219	0.136	0.001	0.312	0.291	0.312
	Right side	0.883	0.213		0.494	0.396		0.378	0.188	0.883	1.377	1.467	1.071	1.449	1.096
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.585								0.585	0.585	0.585	0.585	0.585	0.585
LTE Band 66_Ant 0	Front	0.359	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.535	0.647	0.580	0.528	0.550	0.556
	Back	0.890	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.161	1.481	1.414	1.453	1.412	1.481
	Left side	0.334		0.218	0.135		0.311	0.290		0.552	0.469	0.334	0.645	0.624	0.645
	Right side	0.008	0.213		0.494	0.396		0.378	0.188	0.008	0.502	0.592	0.196	0.574	0.221
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.673								0.673	0.673	0.673	0.673	0.673	0.673
LTE Band 71_Ant 1	Front	0.359	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.535	0.647	0.580	0.528	0.550	0.556
	Back	0.627	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.898	1.218	1.151	1.190	1.149	1.218
	Left side	0.469		0.218	0.135		0.311	0.290		0.687	0.604	0.469	0.780	0.759	0.780
	Right side	0.182	0.213		0.494	0.396		0.378	0.188	0.182	0.676	0.766	0.370	0.748	0.395
	Top side	0.195	0.112		0.197	0.446		0.425	0.089	0.195	0.392	0.730	0.284	0.709	0.307
	Bottom side									0.000	0.000	0.000	0.000	0.000	0.000



WWAN Band	Exposure Position	1	2	3	8	4	5	7	6	1+3 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)
		FR1	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4+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 1	Front	0.211	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.387	0.499	0.432	0.380	0.402	0.408
	Back	0.380	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.651	0.971	0.904	0.943	0.902	0.971
	Left side	0.136		0.218	0.135		0.311	0.290		0.354	0.271	0.136	0.447	0.426	0.447
	Right side	0.073	0.213		0.494	0.396		0.378	0.188	0.073	0.567	0.657	0.261	0.639	0.286
	Top side	0.227	0.112		0.197	0.446		0.425	0.089	0.227	0.424	0.762	0.316	0.741	0.339
	Bottom side									0.000	0.000	0.000	0.000	0.000	0.000
FR1 n12_Ant 1	Front	0.001	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.177	0.289	0.222	0.170	0.192	0.198
	Back	0.065	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.336	0.656	0.589	0.628	0.587	0.656
	Left side	0.001		0.218	0.135		0.311	0.290		0.219	0.136	0.001	0.312	0.291	0.312
	Right side	0.001	0.213		0.494	0.396		0.378	0.188	0.001	0.495	0.585	0.189	0.567	0.214
	Top side	0.001	0.112		0.197	0.446		0.425	0.089	0.001	0.198	0.536	0.090	0.515	0.113
	Bottom side									0.000	0.000	0.000	0.000	0.000	0.000
FR1 n25_Ant 0	Front	0.433	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.609	0.721	0.654	0.602	0.624	0.630
	Back	0.991	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.262	1.582	1.515	1.554	1.513	1.582
	Left side	0.312		0.218	0.135		0.311	0.290		0.530	0.447	0.312	0.623	0.602	0.623
	Right side	0.001	0.213		0.494	0.396		0.378	0.188	0.001	0.495	0.585	0.189	0.567	0.214
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.836								0.836	0.836	0.836	0.836	0.836	0.836
FR1 n66_Ant 0	Front	0.386	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.562	0.674	0.607	0.555	0.577	0.583
	Back	0.996	0.274	0.271	0.591	0.278	0.317	0.276	0.246	1.267	1.587	1.520	1.559	1.518	1.587
	Left side	0.089		0.218	0.135		0.311	0.290		0.307	0.224	0.089	0.400	0.379	0.400
	Right side	0.065	0.213		0.494	0.396		0.378	0.188	0.065	0.559	0.649	0.253	0.631	0.278
	Top side		0.112		0.197	0.446		0.425	0.089	0.000	0.197	0.535	0.089	0.514	0.112
	Bottom side	0.819								0.819	0.819	0.819	0.819	0.819	0.819
FR1 n71_Ant 1	Front	0.115	0.137	0.176	0.288	0.112	0.060	0.082	0.109	0.291	0.403	0.336	0.284	0.306	0.312
	Back	0.211	0.274	0.271	0.591	0.278	0.317	0.276	0.246	0.482	0.802	0.735	0.774	0.733	0.802
	Left side	0.164		0.218	0.135		0.311	0.290		0.382	0.299	0.164	0.475	0.454	0.475
	Right side	0.077	0.213		0.494	0.396		0.378	0.188	0.077	0.571	0.661	0.265	0.643	0.290
	Top side	0.075	0.112		0.197	0.446		0.425	0.089	0.075	0.272	0.610	0.164	0.589	0.187
	Bottom side									0.000	0.000	0.000	0.000	0.000	0.000



**<Simultaneous Transmission is active_WLAN OFF>
<Config 0>**

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	0.284	0.168	0.452
	Back	0.603	0.385	0.988
	Left side	0.491		0.491
	Right side	0.450	0.224	0.674
	Top side		0.111	0.111
	Bottom side	0.141		0.141
GSM1900_Ant 2	Front	0.552	0.168	0.720
	Back	0.452	0.385	0.837
	Left side	0.326		0.326
	Right side	0.437	0.224	0.661
	Top side		0.111	0.111
	Bottom side	0.230		0.230
WCDMA II_Ant 2	Front	0.995	0.168	1.163
	Back	0.868	0.385	1.253
	Left side	0.363		0.363
	Right side	0.604	0.224	0.828
	Top side		0.111	0.111
	Bottom side	0.374		0.374
WCDMA IV_Ant 2	Front	0.998	0.168	1.166
	Back	0.971	0.385	1.356
	Left side	0.326		0.326
	Right side	0.638	0.224	0.862
	Top side		0.111	0.111
	Bottom side	0.547		0.547
WCDMA V_Ant 0	Front	0.349	0.168	0.517
	Back	0.543	0.385	0.928
	Left side	0.301		0.301
	Right side	0.291	0.224	0.515
	Top side		0.111	0.111
	Bottom side	0.146		0.146
CDMA BC0_Ant 0	Front	0.496	0.168	0.664
	Back	0.735	0.385	1.120
	Left side	0.535		0.535
	Right side	0.477	0.224	0.701
	Top side		0.111	0.111
	Bottom side	0.141		0.141
CDMA BC1_Ant 2	Front	0.933	0.168	1.101
	Back	0.828	0.385	1.213
	Left side	0.551		0.551
	Right side	0.671	0.224	0.895
	Top side		0.111	0.111
	Bottom side	0.381		0.381
CDMA BC10_Ant 0	Front	0.512	0.168	0.680
	Back	0.775	0.385	1.160
	Left side	0.555		0.555
	Right side	0.495	0.224	0.719
	Top side		0.111	0.111
	Bottom side	0.132		0.132
LTE Band 7_Ant 2	Front	0.859	0.168	1.027
	Back	0.997	0.385	1.382
	Left side	0.181		0.181
	Right side	0.715	0.224	0.939
	Top side		0.111	0.111
	Bottom side	0.750		0.750



LTE Band 12_Ant 0	Front	0.422	0.168	0.590
	Back	0.658	0.385	1.043
	Left side	0.442		0.442
	Right side	0.345	0.224	0.569
	Top side		0.111	0.111
	Bottom side	0.070		0.070
LTE Band 13_Ant 0	Front	0.483	0.168	0.651
	Back	0.691	0.385	1.076
	Left side	0.480		0.480
	Right side	0.468	0.224	0.692
	Top side		0.111	0.111
	Bottom side	0.099		0.099
LTE Band 14_Ant 0	Front	0.576	0.168	0.744
	Back	0.823	0.385	1.208
	Left side	0.581		0.581
	Right side	0.578	0.224	0.802
	Top side		0.111	0.111
	Bottom side	0.117		0.117
LTE Band 25_Ant 2	Front	0.950	0.168	1.118
	Back	0.791	0.385	1.176
	Left side	0.408		0.408
	Right side	0.744	0.224	0.968
	Top side		0.111	0.111
	Bottom side	0.413		0.413
LTE Band 26_Ant 0	Front	0.348	0.168	0.516
	Back	0.706	0.385	1.091
	Left side	0.167		0.167
	Right side	0.154	0.224	0.378
	Top side		0.111	0.111
	Bottom side	0.155		0.155
LTE Band 30_Ant 2	Front	0.494	0.168	0.662
	Back	0.426	0.385	0.811
	Left side	0.084		0.084
	Right side	0.280	0.224	0.504
	Top side		0.111	0.111
	Bottom side	0.395		0.395
LTE Band 41_Ant 2	Front	0.519	0.168	0.687
	Back	0.911	0.385	1.296
	Left side	0.078		0.078
	Right side	0.599	0.224	0.823
	Top side		0.111	0.111
	Bottom side	0.564		0.564
LTE Band 48_Ant 7	Front	0.280	0.168	0.448
	Back	0.995	0.385	1.380
	Left side	0.484		0.484
	Right side	0.044	0.224	0.268
	Top side		0.111	0.111
	Bottom side	0.155		0.155
LTE Band 66_Ant 2	Front	0.935	0.168	1.103
	Back	0.850	0.385	1.235
	Left side	0.312		0.312
	Right side	0.586	0.224	0.810
	Top side		0.111	0.111
	Bottom side	0.406		0.406
LTE Band 71_Ant 0	Front	0.376	0.168	0.544
	Back	0.564	0.385	0.949
	Left side	0.392		0.392
	Right side	0.368	0.224	0.592
	Top side		0.111	0.111
	Bottom side	0.086		0.086

WWAN Band	Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
		FR1	Bluetooth Ant 4	
		1g SAR (W/kg)	1g SAR (W/kg)	
FR1 n5_Ant 0	Front	0.213	0.168	0.381
	Back	0.332	0.385	0.717
	Left side	0.225		0.225
	Right side	0.196	0.224	0.420
	Top side		0.111	0.111
	Bottom side	0.086		0.086
FR1 n12_Ant 0	Front	0.327	0.168	0.495
	Back	0.531	0.385	0.916
	Left side	0.458		0.458
	Right side	0.317	0.224	0.541
	Top side		0.111	0.111
	Bottom side	0.065		0.065
FR1 n25_Ant 2	Front	0.997	0.168	1.165
	Back	0.885	0.385	1.270
	Left side	0.322		0.322
	Right side	0.748	0.224	0.972
	Top side		0.111	0.111
	Bottom side	0.517		0.517
FR1 n66_Ant 2	Front	0.999	0.168	1.167
	Back	0.927	0.385	1.312
	Left side	0.393		0.393
	Right side	0.285	0.224	0.509
	Top side		0.111	0.111
	Bottom side	0.507		0.507
FR1 n71_Ant 0	Front	0.321	0.168	0.489
	Back	0.542	0.385	0.927
	Left side	0.283		0.283
	Right side	0.180	0.224	0.404
	Top side		0.111	0.111
	Bottom side	0.099		0.099



<Config 1>

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 1	Front	0.215	0.168	0.383
	Back	0.400	0.385	0.785
	Left side	0.084		0.084
	Right side	0.086	0.224	0.310
	Top side	0.192	0.111	0.303
	Bottom side			0.000
GSM1900_Ant 0	Front	0.482	0.168	0.650
	Back	0.888	0.385	1.273
	Left side	0.195		0.195
	Right side	0.032	0.224	0.256
	Top side		0.111	0.111
	Bottom side	0.550		0.550
WCDMA II_Ant 0	Front	0.394	0.168	0.562
	Back	0.978	0.385	1.363
	Left side	0.139		0.139
	Right side	0.044	0.224	0.268
	Top side		0.111	0.111
	Bottom side	0.849		0.849
WCDMA IV_Ant 0	Front	0.395	0.168	0.563
	Back	0.953	0.385	1.338
	Left side	0.338		0.338
	Right side	0.021	0.224	0.245
	Top side		0.111	0.111
	Bottom side	0.730		0.730
WCDMA V_Ant 1	Front	0.352	0.168	0.520
	Back	0.622	0.385	1.007
	Left side	0.145		0.145
	Right side	0.174	0.224	0.398
	Top side	0.283	0.111	0.394
	Bottom side			0.000
CDMA BC0_Ant 1	Front	0.422	0.168	0.590
	Back	0.718	0.385	1.103
	Left side	0.146		0.146
	Right side	0.219	0.224	0.443
	Top side	0.367	0.111	0.478
	Bottom side			0.000
CDMA BC1_Ant 0	Front	0.442	0.168	0.610
	Back	0.937	0.385	1.322
	Left side	0.165		0.165
	Right side	0.059	0.224	0.283
	Top side		0.111	0.111
	Bottom side	0.927		0.927
CDMA BC10_Ant 1	Front	0.318	0.168	0.486
	Back	0.572	0.385	0.957
	Left side	0.174		0.174
	Right side	0.189	0.224	0.413
	Top side	0.278	0.111	0.389
	Bottom side			0.000
LTE Band 7_Ant 0	Front	0.331	0.168	0.499
	Back	0.940	0.385	1.325
	Left side	0.236		0.236
	Right side	0.071	0.224	0.295
	Top side		0.111	0.111
	Bottom side	0.927		0.927
LTE Band 12_Ant 1	Front	0.367	0.168	0.535
	Back	0.617	0.385	1.002
	Left side	0.374		0.374
	Right side	0.259	0.224	0.483
	Top side	0.224	0.111	0.335
	Bottom side			0.000



LTE Band 13_Ant 1	Front	0.382	0.168	0.550
	Back	0.616	0.385	1.001
	Left side	0.363		0.363
	Right side	0.311	0.224	0.535
	Top side	0.241	0.111	0.352
	Bottom side			0.000
LTE Band 14_Ant 1	Front	0.436	0.168	0.604
	Back	0.646	0.385	1.031
	Left side	0.236		0.236
	Right side	0.223	0.224	0.447
	Top side	0.279	0.111	0.390
	Bottom side			0.000
LTE Band 25_Ant 0	Front	0.525	0.168	0.693
	Back	0.949	0.385	1.334
	Left side	0.371		0.371
	Right side	0.043	0.224	0.267
	Top side		0.111	0.111
	Bottom side	0.946		0.946
LTE Band 26_Ant 1	Front	0.329	0.168	0.497
	Back	0.649	0.385	1.034
	Left side	0.139		0.139
	Right side	0.173	0.224	0.397
	Top side	0.317	0.111	0.428
	Bottom side			0.000
LTE Band 30_Ant 0	Front	0.479	0.168	0.647
	Back	0.991	0.385	1.376
	Left side	0.154		0.154
	Right side	0.077	0.224	0.301
	Top side		0.111	0.111
	Bottom side	0.722		0.722
LTE Band 41_Ant 0	Front	0.225	0.168	0.393
	Back	0.991	0.385	1.376
	Left side	0.209		0.209
	Right side	0.058	0.224	0.282
	Top side		0.111	0.111
	Bottom side	0.614		0.614
LTE Band 48_Ant 2	Front	0.386	0.168	0.554
	Back	0.945	0.385	1.330
	Left side	0.001		0.001
	Right side	0.883	0.224	1.107
	Top side		0.111	0.111
	Bottom side	0.585		0.585
LTE Band 66_Ant 0	Front	0.359	0.168	0.527
	Back	0.890	0.385	1.275
	Left side	0.334		0.334
	Right side	0.008	0.224	0.232
	Top side		0.111	0.111
	Bottom side	0.673		0.673
LTE Band 71_Ant 1	Front	0.359	0.168	0.527
	Back	0.627	0.385	1.012
	Left side	0.469		0.469
	Right side	0.182	0.224	0.406
	Top side	0.195	0.111	0.306
	Bottom side			0.000



WWAN Band	Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
		FR1	Bluetooth Ant 4	
		1g SAR (W/kg)	1g SAR (W/kg)	
FR1 n5_Ant 1	Front	0.211	0.168	0.379
	Back	0.380	0.385	0.765
	Left side	0.136		0.136
	Right side	0.073	0.224	0.297
	Top side	0.227	0.111	0.338
	Bottom side			0.000
FR1 n12_Ant 1	Front	0.001	0.168	0.169
	Back	0.065	0.385	0.450
	Left side	0.001		0.001
	Right side	0.001	0.224	0.225
	Top side	0.001	0.111	0.112
	Bottom side			0.000
FR1 n25_Ant 0	Front	0.433	0.168	0.601
	Back	0.991	0.385	1.376
	Left side	0.312		0.312
	Right side	0.001	0.224	0.225
	Top side		0.111	0.111
	Bottom side	0.836		0.836
FR1 n66_Ant 0	Front	0.386	0.168	0.554
	Back	0.996	0.385	1.381
	Left side	0.089		0.089
	Right side	0.065	0.224	0.289
	Top side		0.111	0.111
	Bottom side	0.819		0.819
FR1 n71_Ant 1	Front	0.115	0.168	0.283
	Back	0.211	0.385	0.596
	Left side	0.164		0.164
	Right side	0.077	0.224	0.301
	Top side	0.075	0.111	0.186
	Bottom side			0.000



16.4 Body-Worn Accessory Exposure Conditions

<Standalone_WWAN OFF>

Table with 12 columns: Exposure Position, 7 antenna configurations (1-7), and 4 summed SAR values (1+5, 4+7, 5+7, 6+7).

<Config 0>

Large table with 17 columns: WWAN Band, Exposure Position, 10 antenna configurations (1-10), and 6 summed SAR values (1+3, 1+8, 1+4+6, 1+5+6, 1+6+7, 1+2+5).



WWAN Band	Exposure Position	1	2	3	8	4	5	7	6	1+3 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)
		FR1	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4+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)	1g SAR (W/kg)						
FR1 n5_Ant 0	Front	0.213	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.389	0.501	0.434	0.382	0.413	0.410
	Back	0.332	0.274	0.271	0.591	0.278	0.296	0.268	0.246	0.603	0.923	0.856	0.874	0.846	0.902
FR1 n12_Ant 0	Front	0.327	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.503	0.615	0.548	0.496	0.527	0.524
	Back	0.531	0.274	0.271	0.591	0.278	0.296	0.268	0.246	0.802	1.122	1.055	1.073	1.045	1.101
FR1 n25_Ant 2	Front	0.997	0.137	0.176	0.288	0.112	0.060	0.091	0.109	1.173	1.285	1.218	1.166	1.197	1.194
	Back	0.885	0.274	0.271	0.591	0.278	0.296	0.268	0.246	1.156	1.476	1.409	1.427	1.399	1.455
FR1 n66_Ant 2	Front	0.999	0.137	0.176	0.288	0.112	0.060	0.091	0.109	1.175	1.287	1.220	1.168	1.199	1.196
	Back	0.927	0.274	0.271	0.591	0.278	0.296	0.268	0.246	1.198	1.518	1.451	1.469	1.441	1.497
FR1 n71_Ant 0	Front	0.321	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.497	0.609	0.542	0.490	0.521	0.518
	Back	0.542	0.274	0.271	0.591	0.278	0.296	0.268	0.246	0.813	1.133	1.066	1.084	1.056	1.112



<Config 1>

WWAN Band	Exposure Position	1	2	3	8	4	5	7	6	1+3 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4+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)	1g SAR (W/kg)						
GSM850_Ant 1	Front	0.215	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.391	0.503	0.436	0.384	0.415	0.412
	Back	0.400	0.274	0.271	0.591	0.278	0.296	0.268	0.246	0.671	0.991	0.924	0.942	0.914	0.970
GSM1900_Ant 0	Front	0.482	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.658	0.770	0.703	0.651	0.682	0.679
	Back	0.888	0.274	0.271	0.591	0.278	0.296	0.268	0.246	1.159	1.479	1.412	1.430	1.402	1.458
WCDMA II_Ant 0	Front	0.394	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.570	0.682	0.615	0.563	0.594	0.591
	Back	0.978	0.274	0.271	0.591	0.278	0.296	0.268	0.246	1.249	1.569	1.502	1.520	1.492	1.548
WCDMA IV_Ant 0	Front	0.395	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.571	0.683	0.616	0.564	0.595	0.592
	Back	0.953	0.274	0.271	0.591	0.278	0.296	0.268	0.246	1.224	1.544	1.477	1.495	1.467	1.523
WCDMA V_Ant 1	Front	0.352	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.528	0.640	0.573	0.521	0.552	0.549
	Back	0.622	0.274	0.271	0.591	0.278	0.296	0.268	0.246	0.893	1.213	1.146	1.164	1.136	1.192
CDMA BC0_Ant 1	Front	0.407	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.583	0.695	0.628	0.576	0.607	0.604
	Back	0.714	0.274	0.271	0.591	0.278	0.296	0.268	0.246	0.985	1.305	1.238	1.256	1.228	1.284
CDMA BC1_Ant 0	Front	0.438	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.614	0.726	0.659	0.607	0.638	0.635
	Back	0.928	0.274	0.271	0.591	0.278	0.296	0.268	0.246	1.199	1.519	1.452	1.470	1.442	1.498
CDMA BC10_Ant 1	Front	0.314	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.490	0.602	0.535	0.483	0.514	0.511
	Back	0.572	0.274	0.271	0.591	0.278	0.296	0.268	0.246	0.843	1.163	1.096	1.114	1.086	1.142
LTE Band 7_Ant 0	Front	0.331	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.507	0.619	0.552	0.500	0.531	0.528
	Back	0.940	0.274	0.271	0.591	0.278	0.296	0.268	0.246	1.211	1.531	1.464	1.482	1.454	1.510
LTE Band 12_Ant 1	Front	0.367	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.543	0.655	0.588	0.536	0.567	0.564
	Back	0.617	0.274	0.271	0.591	0.278	0.296	0.268	0.246	0.888	1.208	1.141	1.159	1.131	1.187
LTE Band 13_Ant 1	Front	0.382	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.558	0.670	0.603	0.551	0.582	0.579
	Back	0.616	0.274	0.271	0.591	0.278	0.296	0.268	0.246	0.887	1.207	1.140	1.158	1.130	1.186
LTE Band 14_Ant 1	Front	0.436	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.612	0.724	0.657	0.605	0.636	0.633
	Back	0.646	0.274	0.271	0.591	0.278	0.296	0.268	0.246	0.917	1.237	1.170	1.188	1.160	1.216
LTE Band 25_Ant 0	Front	0.525	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.701	0.813	0.746	0.694	0.725	0.722
	Back	0.949	0.274	0.271	0.591	0.278	0.296	0.268	0.246	1.220	1.540	1.473	1.491	1.463	1.519
LTE Band 26_Ant 1	Front	0.329	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.505	0.617	0.550	0.498	0.529	0.526
	Back	0.649	0.274	0.271	0.591	0.278	0.296	0.268	0.246	0.920	1.240	1.173	1.191	1.163	1.219
LTE Band 30_Ant 0	Front	0.479	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.655	0.767	0.700	0.648	0.679	0.676
	Back	0.991	0.274	0.271	0.591	0.278	0.296	0.268	0.246	1.262	1.582	1.515	1.533	1.505	1.561
LTE Band 41_Ant 0	Front	0.225	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.401	0.513	0.446	0.394	0.425	0.422
	Back	0.991	0.274	0.271	0.591	0.278	0.296	0.268	0.246	1.262	1.582	1.515	1.533	1.505	1.561
LTE Band 48_Ant 2	Front	0.386	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.562	0.674	0.607	0.555	0.586	0.583
	Back	0.945	0.274	0.271	0.591	0.278	0.296	0.268	0.246	1.216	1.536	1.469	1.487	1.459	1.515
LTE Band 66_Ant 0	Front	0.359	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.535	0.647	0.580	0.528	0.559	0.556
	Back	0.890	0.274	0.271	0.591	0.278	0.296	0.268	0.246	1.161	1.481	1.414	1.432	1.404	1.460
LTE Band 71_Ant 1	Front	0.359	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.535	0.647	0.580	0.528	0.559	0.556
	Back	0.627	0.274	0.271	0.591	0.278	0.296	0.268	0.246	0.898	1.218	1.151	1.169	1.141	1.197

WWAN Band	Exposure Position	1	2	3	8	4	5	7	6	1+3 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)
		FR1	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4+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)	1g SAR (W/kg)						
FR1 n5_Ant 1	Front	0.211	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.387	0.499	0.432	0.380	0.411	0.408
	Back	0.380	0.274	0.271	0.591	0.278	0.296	0.268	0.246	0.651	0.971	0.904	0.922	0.894	0.950
FR1 n12_Ant 1	Front	0.001	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.177	0.289	0.222	0.170	0.201	0.198
	Back	0.065	0.274	0.271	0.591	0.278	0.296	0.268	0.246	0.336	0.656	0.589	0.607	0.579	0.635
FR1 n25_Ant 0	Front	0.433	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.609	0.721	0.654	0.602	0.633	0.630
	Back	0.991	0.274	0.271	0.591	0.278	0.296	0.268	0.246	1.262	1.582	1.515	1.533	1.505	1.561
FR1 n66_Ant 0	Front	0.386	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.562	0.674	0.607	0.555	0.586	0.583
	Back	0.996	0.274	0.271	0.591	0.278	0.296	0.268	0.246	1.267	1.587	1.520	1.538	1.510	1.566
FR1 n71_Ant 1	Front	0.115	0.137	0.176	0.288	0.112	0.060	0.091	0.109	0.291	0.403	0.336	0.284	0.315	0.312
	Back	0.211	0.274	0.271	0.591	0.278	0.296	0.268	0.246	0.482	0.802	0.735	0.753	0.725	0.781



**<Simultaneous Transmission is active_WLAN OFF>
<Config 0>**

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	0.284	0.168	0.452
	Back	0.603	0.385	0.988
GSM1900_Ant 2	Front	0.552	0.168	0.720
	Back	0.452	0.385	0.837
WCDMA II_Ant 2	Front	0.995	0.168	1.163
	Back	0.868	0.385	1.253
WCDMA IV_Ant 2	Front	0.998	0.168	1.166
	Back	0.971	0.385	1.356
WCDMA V_Ant 0	Front	0.349	0.168	0.517
	Back	0.543	0.385	0.928
CDMA BC0_Ant 0	Front	0.459	0.168	0.627
	Back	0.739	0.385	1.124
CDMA BC1_Ant 2	Front	0.944	0.168	1.112
	Back	0.828	0.385	1.213
CDMA BC10_Ant 0	Front	0.506	0.168	0.674
	Back	0.757	0.385	1.142
LTE Band 7_Ant 2	Front	0.859	0.168	1.027
	Back	0.997	0.385	1.382
LTE Band 12_Ant 0	Front	0.422	0.168	0.590
	Back	0.658	0.385	1.043
LTE Band 13_Ant 0	Front	0.483	0.168	0.651
	Back	0.691	0.385	1.076
LTE Band 14_Ant 0	Front	0.576	0.168	0.744
	Back	0.823	0.385	1.208
LTE Band 25_Ant 2	Front	0.922	0.168	1.090
	Back	0.791	0.385	1.176
LTE Band 26_Ant 0	Front	0.348	0.168	0.516
	Back	0.706	0.385	1.091
LTE Band 30_Ant 2	Front	0.494	0.168	0.662
	Back	0.426	0.385	0.811
LTE Band 41_Ant 2	Front	0.519	0.168	0.687
	Back	0.911	0.385	1.296
LTE Band 48_Ant 7	Front	0.280	0.168	0.448
	Back	0.995	0.385	1.380
LTE Band 66_Ant 2	Front	0.935	0.168	1.103
	Back	0.850	0.385	1.235
LTE Band 71_Ant 0	Front	0.376	0.168	0.544
	Back	0.564	0.385	0.949



WWAN Band	Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
		FR1	Bluetooth Ant 4	
		1g SAR (W/kg)	1g SAR (W/kg)	
FR1 n5_Ant 0	Front	0.213	0.168	0.381
	Back	0.332	0.385	0.717
FR1 n12_Ant 0	Front	0.327	0.168	0.495
	Back	0.531	0.385	0.916
FR1 n25_Ant 2	Front	0.997	0.168	1.165
	Back	0.885	0.385	1.270
FR1 n66_Ant 2	Front	0.999	0.168	1.167
	Back	0.927	0.385	1.312
FR1 n71_Ant 0	Front	0.321	0.168	0.489
	Back	0.542	0.385	0.927



<Config 1>

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 1	Front	0.215	0.168	0.383
	Back	0.400	0.385	0.785
GSM1900_Ant 0	Front	0.482	0.168	0.650
	Back	0.888	0.385	1.273
WCDMA II_Ant 0	Front	0.394	0.168	0.562
	Back	0.978	0.385	1.363
WCDMA IV_Ant 0	Front	0.395	0.168	0.563
	Back	0.953	0.385	1.338
WCDMA V_Ant 1	Front	0.352	0.168	0.520
	Back	0.622	0.385	1.007
CDMA BC0_Ant 1	Front	0.407	0.168	0.575
	Back	0.714	0.385	1.099
CDMA BC1_Ant 0	Front	0.438	0.168	0.606
	Back	0.928	0.385	1.313
CDMA BC10_Ant 1	Front	0.314	0.168	0.482
	Back	0.572	0.385	0.957
LTE Band 7_Ant 0	Front	0.331	0.168	0.499
	Back	0.940	0.385	1.325
LTE Band 12_Ant 1	Front	0.367	0.168	0.535
	Back	0.617	0.385	1.002
LTE Band 13_Ant 1	Front	0.382	0.168	0.550
	Back	0.616	0.385	1.001
LTE Band 14_Ant 1	Front	0.436	0.168	0.604
	Back	0.646	0.385	1.031
LTE Band 25_Ant 0	Front	0.525	0.168	0.693
	Back	0.949	0.385	1.334
LTE Band 26_Ant 1	Front	0.329	0.168	0.497
	Back	0.649	0.385	1.034
LTE Band 30_Ant 0	Front	0.479	0.168	0.647
	Back	0.991	0.385	1.376
LTE Band 41_Ant 0	Front	0.225	0.168	0.393
	Back	0.991	0.385	1.376
LTE Band 48_Ant 2	Front	0.386	0.168	0.554
	Back	0.945	0.385	1.330
LTE Band 66_Ant 0	Front	0.359	0.168	0.527
	Back	0.890	0.385	1.275
LTE Band 71_Ant 1	Front	0.359	0.168	0.527
	Back	0.627	0.385	1.012

WWAN Band	Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
		FR1	Bluetooth Ant 4	
		1g SAR (W/kg)	1g SAR (W/kg)	
FR1 n5_Ant 1	Front	0.211	0.168	0.379
	Back	0.380	0.385	0.765
FR1 n12_Ant 1	Front	0.001	0.168	0.169
	Back	0.065	0.385	0.450
FR1 n25_Ant 0	Front	0.433	0.168	0.601
	Back	0.991	0.385	1.376
FR1 n66_Ant 0	Front	0.386	0.168	0.554
	Back	0.996	0.385	1.381
FR1 n71_Ant 1	Front	0.115	0.168	0.283
	Back	0.211	0.385	0.596



17. Supplemental Antenna tuner tests results

General Note:

1. This device implements antenna tuning techniques in the antenna0 for WCDMA B5, CDMA BC0, LTE 5, 12, 13, 17, 14, 26, 71 and 5G FR1 n5, n12, n71. 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 70 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. The device supports LTE B5/B26/B12/B17. Since the supported frequency span for LTE B5/B17 falls completely within the supported frequency span for LTE B26/B12, 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 B26/B12. The single point SAR time-sweep measurements were treated independently for each supported ACL frequency band. For the LTE B5/B17 single point SAR measurement selected the highest measured SAR configuration and exposure condition of LTE B26/B12.
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).



17.1 Supplemental Head SAR results

RF exposure position					Average Value of Time Sweep (W/kg)								
WWAN Head (Ant 0)	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	0	10	20	30	7	17	27
	WCDMA V	RMC 12.2Kbps	4182	Right Cheek	0.341	0.388	0.335	0.288	0.225	0.106	0.309	0.248	0.131
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	1	11	21	31	8	18	28
	CDMA BC0	1xRTT RC3 SO55	384	Right Cheek	0.380	0.434	0.331	0.292	0.265	0.115	0.309	0.271	0.168
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	2	12	22	32	9	19	29
	LTE Band 12	10M_QPSK_1_49	23095	Left Cheek	0.273	0.305	0.247	0.234	0.207	0.063	0.243	0.222	0.132
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	3	13	23	0	10	20	30
	LTE Band 13	10M_QPSK_1_49	23230	Right Cheek	0.280	0.312	0.243	0.226	0.175	0.275	0.239	0.195	0.073
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	4	14	24	1	11	21	31
	LTE Band 14	10M_QPSK_1_49	23330	Right Cheek	0.334	0.376	0.289	0.235	0.185	0.329	0.271	0.223	0.066
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	5	15	25	2	12	22	32
	LTE Band 26	15M_QPSK_1_0	26865	Right Cheek	0.366	0.390	0.338	0.311	0.245	0.351	0.327	0.277	0.079
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	6	16	26	3	13	23	0
	LTE Band 71	20M_QPSK_1_0	133322	Left Cheek	0.297	0.314	0.241	0.206	0.129	0.278	0.226	0.154	0.288
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	7	17	27	4	14	24	1
	FR1 n5	20M_BPSK_50_28	167300	Left Cheek	0.185	0.197	0.146	0.095	0.041	0.168	0.113	0.069	0.174
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	8	18	28	5	15	25	2
	FR1 n12	15M_BPSK_1_1	141500	Left Cheek	0.214	0.227	0.179	0.114	0.045	0.193	0.131	0.065	0.201
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	9	19	29	6	16	26	3
	FR1 n71	20M_BPSK_50_28	136100	Left Cheek	0.286	0.304	0.232	0.199	0.108	0.245	0.208	0.134	0.272



17.2 Supplemental Body SAR results

RF exposure position						Average Value of Time Sweep (W/kg)							
WWAN Body (Ant 0)	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	0	10	20	30	7	17	27
	WCDMA V	RMC 12.2Kbps	4182	Back	0.470	0.555	0.465	0.405	0.354	0.158	0.415	0.373	0.231
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	1	11	21	31	8	18	28
	CDMA BC0	1xRTT RC3 SQ32	384	Back	0.576	0.669	0.542	0.501	0.426	0.108	0.503	0.455	0.259
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	2	12	22	32	9	19	29
	LTE Band 12	10M_QPSK_1_49	23095	Back	0.524	0.566	0.488	0.468	0.389	0.065	0.471	0.405	0.205
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	3	13	23	0	10	20	30
	LTE Band 13	10M_QPSK_1_49	23230	Back	0.568	0.702	0.504	0.473	0.377	0.556	0.498	0.428	0.171
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	4	14	24	1	11	21	31
	LTE Band 14	10M_QPSK_1_49	23330	Back	0.649	0.711	0.591	0.532	0.402	0.604	0.542	0.477	0.134
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	5	15	25	2	12	22	32
	LTE Band 26	15M_QPSK_1_0	26865	Back	0.538	0.581	0.519	0.463	0.362	0.519	0.480	0.377	0.125
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	6	16	26	3	13	23	0
	LTE Band 71	20M_QPSK_1_0	133322	Back	0.445	0.487	0.378	0.319	0.199	0.407	0.352	0.238	0.438
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	7	17	27	4	14	24	1
	FR1 n5	20M_BPSK_1_1	167300	Back	0.247	0.261	0.211	0.193	0.089	0.225	0.204	0.113	0.233
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	8	18	28	5	15	25	2
	FR1 n12	15M_BPSK_16_32	141500	Back	0.414	0.448	0.346	0.319	0.195	0.363	0.328	0.277	0.378
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	9	19	29	6	16	26	3
FR1 n71	20M_BPSK_1_53	136100	Back	0.445	0.479	0.366	0.313	0.157	0.371	0.308	0.202	0.409	

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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 $\leq 30\%$, 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

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- [6] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015
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- [9] FCC KDB 941225 D05 v02r05, "SAR Evaluation Considerations for LTE Devices", Dec 2015
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- [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.