FCC SAR TEST REPORT

FCC ID	**:**	**A4RG025I**
Equipment	**:**	**Phone**
Model Name	**:**	**G025I, G025H**
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 May 04, 2020 and testing was started from May 29, 2020 and completed on Jul. 01, 2020. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Approved by: Cona Huang / Deputy Manager

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History of this test report

Report No.	Version	Description	Issued Date
FA022521-04	01	Initial issue of report	Jul. 13, 2020
FA022521-04	02	Update section 3.1, 12, 15	Jul. 20, 2020
FA022521-04	03	Update section 4	Aug. 31, 2020

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for Google LLC, Phone, G025I, G025H, are as following.

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	0.74	0.74		1.58
	GSM1900	0.47	1.19	0.99		
	WCDMA II	1.00	1.20	1.00		
	WCDMA IV	0.65	1.20	0.99		
	WCDMA V	1.00	0.51	0.51		
	LTE Band 7	0.47	1.19	1.00		
	LTE Band 12 / 17	1.03	0.66	0.66		
	LTE Band 13	0.62	0.65	0.65		
	LTE Band 14	1.20	0.74	0.74		
	LTE Band 2 / 25	1.00	1.06	0.97		
	LTE Band 5 / 26	1.12	0.88	0.88		
	LTE Band 30	0.36	1.20	0.99		
	LTE Band 38 / 41	0.33	1.17	0.99		
	LTE Band 48	0.12	1.20	1.00		
	LTE Band 4 / 66	0.67	1.19	0.99		
	LTE Band 71	0.97	0.62	0.62		
	n5	1.19	0.73	0.73		
DTS	2.4GHz WLAN	0.51	0.68	0.39		1.57
NII	5GHz WLAN	0.44	1.19	0.56	1.90	1.58
DSS	Bluetooth	0.20	0.40	0.40		1.58
Date of Testing:		2020/05/29 ~ 2020/07/01				

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

Reviewed by: Jason Wang

Report Producer: Daisy Peng

2. Guidance Applied

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

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

3. Equipment Under Test (EUT) Information

3.1 General Information

Product Feature & Specification	
Equipment Name	Phone
Model Name	G025I, G025H
FCC ID	A4RG025I
Wireless Technology and Frequency Range	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz 5G NR n5 : 824 MHz ~ 849 MHz WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz WLAN 5.2GHz Band: 5150 MHz ~ 5250 MHz WLAN 5.3GHz Band: 5250 MHz ~ 5350 MHz WLAN 5.6GHz Band: 5470 MHz ~ 5725 MHz WLAN 5.8GHz Band: 5725 MHz ~ 5825 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz NFC : 13.56 MHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA HSUPA DC-HSDPA LTE: QPSK, 16QAM, 64QAM 5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM WLAN: 802.11a/b/g/n/ac HT20/HT40/VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE NFC:ASK
GSM / (E)GPRS Transfer mode	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.

Remark:

1. This device implements open loop antenna tuning techniques for several WWAN (cellular) operating modes. Specifically, this technique is employed in the GSM, WCDMA and LTE modes. The detail descriptions of the antenna tuner are included in the operational description.
2. The device implements the power management and sensor detection for SAR compliance at different exposure conditions (head, body-worn, hotspot/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.
3. This device WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications

3.2 Maximum Tune-up Limit

General Note:

1. For each cellular band, the device has several WWAN antennas, the antenna selection is based on the connection quality condition, and only one antenna will transmit at a time.
2. The device implements the power management and sensor detection for SAR compliance at different exposure conditions (head, body-worn, hotspot, 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 used for SAR testing, the other DSI may have the same power levels but DSI 0 is covered for all modes under the mobile RF exposure evaluation, please refer to Sporton's test report FA022521-04B

Antenna configuration	
Config*	Support transmit antenna and band
Config 0	ANT 0: GSM850, UMTS B5, LTE B5/B12/B13/B14/B17/B26/B71, NR n5 ANT 2: GSM1900, UMTS B2/B4, LTE B2/B4/B7/B25/B30/B66/B38/B41 ANT 7: LTE B48
Config 1	ANT 0: GSM1900, UMTS B2/B4, LTE B2/B4/B7/B25/B30/B66/B38/B41 ANT 1: GSM850, UMTS B5, LTE B5/B12/B13/B14/B17/B26/B71, NR n5 ANT 2: LTE B48

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

Config0			Primary 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
GSM/GPRS 1Tx	850	ANT0	33.50	33.50	33.50	33.50	33.50	33.50
GPRS 2Tx	850	ANT0	32.50	32.50	32.50	32.50	32.50	32.50
GPRS 3Tx	850	ANT0	30.50	30.50	30.50	30.50	30.50	30.50
GPRS 4Tx	850	ANT0	29.50	29.50	29.50	29.50	29.50	29.50
EDGE 1Tx	850	ANT0	27.50	27.50	27.50	27.50	27.50	27.50
EDGE 2Tx	850	ANT0	27.00	27.00	27.00	27.00	27.00	27.00
EDGE 3Tx	850	ANT0	25.00	25.00	25.00	25.00	25.00	25.00
EDGE 4Tx	850	ANT0	23.00	23.00	23.00	23.00	23.00	23.00
GSM/GPRS 1Tx	1900	ANT2	30.50	30.50	30.50	30.50	30.50	30.50
GPRS 2Tx	1900	ANT2	29.70	29.70	29.70	29.70	29.70	29.70
GPRS 3Tx	1900	ANT2	28.00	28.00	28.00	28.00	28.00	28.00
GPRS 4Tx	1900	ANT2	27.00	27.00	27.00	27.00	27.00	27.00
EDGE 1Tx	1900	ANT2	26.50	26.50	26.50	26.50	26.50	26.50
EDGE 2Tx	1900	ANT2	26.00	26.00	26.00	26.00	26.00	26.00
EDGE 3Tx	1900	ANT2	25.00	25.00	25.00	25.00	25.00	25.00
EDGE 4Tx	1900	ANT2	24.00	24.00	24.00	24.00	24.00	24.00
WCDMA	B2	ANT2	25.70	25.70	25.30	24.50	25.70	24.50
WCDMA	B4	ANT2	25.70	25.70	25.70	25.00	25.70	25.00
WCDMA	B5	ANT0	25.00	25.00	25.00	25.00	25.00	25.00

Config0			Primary 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
LTE	B2	ANT2	25.70	25.70	24.60	23.80	25.70	23.80
LTE	B4	ANT2	25.70	25.70	25.70	25.10	25.70	25.10
LTE	B5	ANT0	25.70	25.70	25.70	25.70	25.70	25.70
LTE	B7	ANT2	25.70	25.70	25.20	24.40	25.70	24.40
LTE	B12	ANT0	25.70	25.70	25.70	25.70	25.70	25.70
LTE	B13	ANT0	25.20	25.20	25.20	25.20	25.20	25.20
LTE	B14	ANT0	25.70	25.70	25.70	25.70	25.70	25.70
LTE	B17	ANT0	25.70	25.70	25.70	25.70	25.70	25.70
LTE	B25	ANT2	25.70	25.70	24.60	23.80	25.70	23.80
LTE	B26	ANT0	25.70	25.70	25.70	25.70	25.70	25.70
LTE	B30	ANT2	23.70	23.70	23.70	23.70	23.70	23.70
LTE	B38	ANT2	25.70	25.70	25.40	24.60	25.70	24.60
LTE	B38HPUE	ANT2	27.50	27.50	27.20	26.40	27.50	26.40
LTE	B41	ANT2	25.70	25.70	25.40	24.60	25.70	24.60
LTE	B48	ANT7	24.20	24.20	24.20	23.80	24.20	23.80
LTE	B66	ANT2	25.70	25.70	25.70	25.10	25.70	25.10
LTE	B71	ANT0	25.70	25.70	25.70	25.70	25.70	25.70
FR1	n5	ANT0	25.00	25.00	25.00	25.00	25.00	25.00

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
GSM/GPRS 1Tx	850	ANT1	33.50	33.50	33.50	33.50	33.00	33.50
GPRS 2Tx	850	ANT1	32.50	31.00	32.50	32.50	30.00	32.50
GPRS 3Tx	850	ANT1	30.50	29.00	30.50	30.50	28.30	30.50
GPRS 4Tx	850	ANT1	29.50	28.00	29.50	29.50	27.20	29.50
EDGE 1Tx	850	ANT1	27.50	27.50	27.50	27.50	27.50	27.50
EDGE 2Tx	850	ANT1	27.00	27.00	27.00	27.00	27.00	27.00
EDGE 3Tx	850	ANT1	25.00	25.00	25.00	25.00	25.00	25.00
EDGE 4Tx	850	ANT1	23.00	23.00	23.00	23.00	23.00	23.00
WCDMA	B5	ANT1	25.00	25.00	25.00	25.00	25.00	25.00
LTE	B5	ANT1	25.70	24.60	25.70	25.70	23.80	25.70
LTE	B12	ANT1	25.70	25.70	25.70	25.70	25.10	25.70
LTE	B13	ANT1	25.20	25.20	25.20	25.20	25.20	25.20
LTE	B14	ANT1	25.70	25.70	25.70	25.70	24.90	25.70
LTE	B17	ANT1	25.70	25.70	25.70	25.70	25.10	25.70
LTE	B26	ANT1	25.70	24.60	25.70	25.70	23.80	25.70
LTE	B71	ANT1	25.70	25.70	25.70	25.70	25.70	25.70
FR1	n5	ANT1	25.00	24.90	25.00	25.00	24.10	25.00

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
GSM/GPRS 1Tx	1900	ANT0	30.00	30.00	29.20	28.40	30.00	28.40
GPRS 2Tx	1900	ANT0	29.20	29.20	26.20	25.40	29.20	25.40
GPRS 3Tx	1900	ANT0	27.50	27.50	24.40	23.60	27.50	23.60
GPRS 4Tx	1900	ANT0	26.50	26.50	23.20	22.40	26.50	22.40
EDGE 1Tx	1900	ANT0	26.00	26.00	26.00	26.00	26.00	26.00
EDGE 2Tx	1900	ANT0	25.50	25.50	25.50	25.30	25.50	25.30
EDGE 3Tx	1900	ANT0	24.50	24.50	24.10	23.50	24.50	23.50
EDGE 4Tx	1900	ANT0	23.50	23.50	22.40	21.70	23.50	21.70
WCDMA	B2	ANT0	25.70	25.70	21.30	20.50	25.70	20.50
WCDMA	B4	ANT0	25.70	25.70	20.80	20.00	25.70	20.00
LTE	B2	ANT0	25.70	25.70	19.70	18.90	25.70	18.90
LTE	B4	ANT0	25.70	25.70	21.90	21.10	25.70	21.10
LTE	B7	ANT0	25.70	25.70	22.40	21.60	25.70	21.60
LTE	B25	ANT0	25.70	25.70	19.70	18.90	25.70	18.90
LTE	B30	ANT0	23.70	23.70	22.40	21.60	23.70	21.60
LTE	B38	ANT0	25.70	25.70	24.00	23.20	25.70	23.20
LTE	B38HPUE	ANT0	27.50	27.50	25.80	25.00	27.50	25.00
LTE	B41	ANT0	25.70	25.70	24.00	23.20	25.70	23.20
LTE	B48	ANT2	22.60	22.60	22.20	21.40	22.60	21.40
LTE	B66	ANT0	25.70	25.70	21.90	21.10	25.70	21.10

<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		
	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	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	17.50	17.50	17.50	17.50	20.5
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	18.00	18.00	18.00	18.00	21.0
	802.11n-HT20 MCS0	1	2412	16.50	16.50	16.50	16.50	19.5
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	16.50	16.50	16.50	16.50	19.5
	802.11ac-VHT20 MCS0	1	2412	16.50	16.50	16.50	16.50	19.5
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	16.50	16.50	16.50	16.50	19.5

<5GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	17.50	17.50	17.50	17.50	20.5
		40	5200	17.50	17.50	17.50	17.50	20.5
		44	5220	17.50	17.50	17.50	17.50	20.5
		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	17.50	17.50	17.50	17.50	20.5
		44	5220	17.50	17.50	17.50	17.50	20.5
		48	5240	17.50	17.50	17.50	17.50	20.5
	802.11n-HT40 MCS0	38	5190	13.50	13.50	13.50	13.50	16.5
		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	17.50	17.50	17.50	17.50	20.5
		44	5220	17.50	17.50	17.50	17.50	20.5
		48	5240	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT40 MCS0	38	5190	13.50	13.50	13.50	13.50	16.5
		46	5230	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT80 MCS0	42	5210	13.00	13.00	13.00	13.00	16.0

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	17.50	17.50	17.50	17.50	20.5
		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	17.50	17.50	17.50	17.50	20.5
		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-HT40 MCS0	54	5270	17.50	17.50	17.50	17.50	20.5
		62	5310	14.00	14.00	14.00	14.00	17.0
	802.11ac-VHT20 MCS0	52	5260	17.50	17.50	17.50	17.50	20.5
		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
	802.11ac-VHT40 MCS0	54	5270	17.50	17.50	17.50	17.50	20.5
		62	5310	14.00	14.00	14.00	14.00	17.0
	802.11ac-VHT80 MCS0	58	5290	12.00	12.00	12.00	12.00	15.0

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	17.50	17.50	17.50	17.50	20.5
		116	5580	17.50	17.50	17.50	17.50	20.5
		124	5620	17.50	17.50	17.50	17.50	20.5
		132	5660	17.50	17.50	17.50	17.50	20.5
		140	5700	17.50	17.50	17.50	17.50	20.5
		144	5720	17.50	17.50	17.50	17.50	20.5
	802.11n-HT20 MCS0	100	5500	17.50	17.50	17.50	17.50	20.5
		116	5580	17.50	17.50	17.50	17.50	20.5
		124	5620	17.50	17.50	17.50	17.50	20.5
		132	5660	18.00	18.00	18.00	18.00	21.0
		140	5700	18.00	18.00	18.00	18.00	21.0
		144	5720	17.50	17.50	17.50	17.50	20.5
	802.11n-HT40 MCS0	102	5510	16.00	16.00	16.00	16.00	19.0
		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	17.50	17.50	17.50	17.50	20.5
		116	5580	17.50	17.50	17.50	17.50	20.5
		124	5620	17.50	17.50	17.50	17.50	20.5
		132	5660	18.00	18.00	18.00	18.00	21.0
		140	5700	18.00	18.00	18.00	18.00	21.0
		144	5720	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT40 MCS0	102	5510	16.00	16.00	16.00	16.00	19.0
		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	12.50	12.50	12.50	12.50	15.5
		122	5610	17.00	17.00	17.00	17.00	20.0
		138	5690	17.00	17.00	17.00	17.00	20.0

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
5.8GHz 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	18.50	18.50	18.50	18.50	21.5
	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	17.00	17.00	17.00	17.00	20.0

<Power Table 1>

<2.4GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	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	17.50	17.50	17.50	17.50	20.5
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	18.00	18.00	18.00	18.00	21.0
	802.11n-HT20 MCS0	1	2412	16.50	16.50	16.50	16.50	19.5
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	16.50	16.50	16.50	16.50	19.5
	802.11ac-VHT20 MCS0	1	2412	16.50	16.50	16.50	16.50	19.5
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	16.50	16.50	16.50	16.50	19.5

<5GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	17.50	17.50	17.50	17.50	20.5
		40	5200	17.50	17.50	17.50	17.50	20.5
		44	5220	17.50	17.50	17.50	17.50	20.5
		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	17.50	17.50	17.50	17.50	20.5
		44	5220	17.50	17.50	17.50	17.50	20.5
		48	5240	17.50	17.50	17.50	17.50	20.5
	802.11n-HT40 MCS0	38	5190	13.50	13.50	13.50	13.50	16.5
		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	17.50	17.50	17.50	17.50	20.5
		44	5220	17.50	17.50	17.50	17.50	20.5
		48	5240	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT40 MCS0	38	5190	13.50	13.50	13.50	13.50	16.5
		46	5230	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT80 MCS0	42	5210	13.00	13.00	13.00	13.00	16.0

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	17.50	17.50	17.50	17.50	20.5
		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	17.50	17.50	17.50	17.50	20.5
		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-HT40 MCS0	54	5270	17.50	17.50	17.50	17.50	20.5
		62	5310	14.00	14.00	14.00	14.00	17.0
	802.11ac-VHT20 MCS0	52	5260	17.50	17.50	17.50	17.50	20.5
		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
	802.11ac-VHT40 MCS0	54	5270	17.50	17.50	17.50	17.50	20.5
		62	5310	14.00	14.00	14.00	14.00	17.0
	802.11ac-VHT80 MCS0	58	5290	12.00	12.00	12.00	12.00	15.0

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	17.50	13.50	17.50	16.00	19.8
		116	5580	17.50	13.50	17.50	16.00	19.8
		124	5620	17.50	13.50	17.50	16.00	19.8
		132	5660	17.50	13.50	17.50	16.00	19.8
		140	5700	17.50	13.50	17.50	16.00	19.8
		144	5720	17.50	13.50	17.50	16.00	19.8
	802.11n-HT20 MCS0	100	5500	17.50	13.50	17.50	16.00	19.8
		116	5580	17.50	13.50	17.50	16.00	19.8
		124	5620	17.50	13.50	17.50	16.00	19.8
		132	5660	18.00	13.50	18.00	16.00	20.1
		140	5700	18.00	13.50	18.00	16.00	20.1
		144	5720	17.50	13.50	17.50	16.00	19.8
	802.11n-HT40 MCS0	102	5510	16.00	13.50	16.00	16.00	19.0
		110	5550	17.50	13.50	17.50	16.00	19.8
		126	5630	17.50	13.50	17.50	16.00	19.8
		134	5670	17.50	13.50	17.50	16.00	19.8
		142	5710	17.50	13.50	17.50	16.00	19.8
	802.11ac-VHT20 MCS0	100	5500	17.50	13.50	17.50	16.00	19.8
		116	5580	17.50	13.50	17.50	16.00	19.8
		124	5620	17.50	13.50	17.50	16.00	19.8
		132	5660	18.00	13.50	18.00	16.00	20.1
		140	5700	18.00	13.50	18.00	16.00	20.1
		144	5720	17.50	13.50	17.50	16.00	19.8
	802.11ac-VHT40 MCS0	102	5510	16.00	13.50	16.00	16.00	19.0
		110	5550	17.50	13.50	17.50	16.00	19.8
		126	5630	17.50	13.50	17.50	16.00	19.8
		134	5670	17.50	13.50	17.50	16.00	19.8
		142	5710	17.50	13.50	17.50	16.00	19.8
	802.11ac-VHT80 MCS0	106	5530	12.50	12.50	12.50	12.50	15.5
		122	5610	17.00	13.50	17.00	16.00	19.5
		138	5690	17.00	13.50	17.00	16.00	19.5

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	13.50	18.50	16.00	20.4
		157	5785	18.50	13.50	18.50	16.00	20.4
		165	5825	18.50	13.50	18.50	16.00	20.4
	802.11n-HT20 MCS0	149	5745	18.50	13.50	18.50	16.00	20.4
		157	5785	18.50	13.50	18.50	16.00	20.4
		165	5825	18.50	13.50	18.50	16.00	20.4
	802.11n-HT40 MCS0	151	5755	17.50	13.50	17.50	16.00	19.8
		159	5795	17.50	13.50	17.50	16.00	19.8
	802.11ac-VHT20 MCS0	149	5745	18.50	13.50	18.50	16.00	20.4
		157	5785	18.50	13.50	18.50	16.00	20.4
		165	5825	18.50	13.50	18.50	16.00	20.4
	802.11ac-VHT40 MCS0	151	5755	17.50	13.50	17.50	16.00	19.8
		159	5795	17.50	13.50	17.50	16.00	19.8
	802.11ac-VHT80 MCS0	155	5775	17.00	13.50	17.00	16.00	19.5

<Power Table 2>

<2.4GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	12.00	15.00	14.00	15.00	17.5
		6	2437	12.00	15.00	14.00	15.00	17.5
		11	2462	12.00	15.00	14.00	15.00	17.5
	802.11g 6Mbps	1	2412	12.00	15.00	14.00	15.00	17.5
		6	2437	12.00	15.00	14.00	15.00	17.5
		11	2462	12.00	15.00	14.00	15.00	17.5
	802.11n-HT20 MCS0	1	2412	12.00	15.00	14.00	15.00	17.5
		6	2437	12.00	15.00	14.00	15.00	17.5
		11	2462	12.00	15.00	14.00	15.00	17.5
	802.11ac-VHT20 MCS0	1	2412	12.00	15.00	14.00	15.00	17.5
		6	2437	12.00	15.00	14.00	15.00	17.5
		11	2462	12.00	15.00	14.00	15.00	17.5

<5GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	11.00	15.50	11.00	15.50	16.8
		40	5200	11.00	15.50	11.00	15.50	16.8
		44	5220	11.00	15.50	11.00	15.50	16.8
		48	5240	11.00	15.50	11.00	15.50	16.8
	802.11n-HT20 MCS0	36	5180	11.00	15.50	11.00	15.50	16.8
		40	5200	11.00	15.50	11.00	15.50	16.8
		44	5220	11.00	15.50	11.00	15.50	16.8
		48	5240	11.00	15.50	11.00	15.50	16.8
	802.11n-HT40 MCS0	38	5190	11.00	13.50	11.00	13.50	15.4
		46	5230	11.00	15.50	11.00	15.50	16.8
	802.11ac-VHT20 MCS0	36	5180	11.00	15.50	11.00	15.50	16.8
		40	5200	11.00	15.50	11.00	15.50	16.8
		44	5220	11.00	15.50	11.00	15.50	16.8
		48	5240	11.00	15.50	11.00	15.50	16.8
	802.11ac-VHT40 MCS0	38	5190	11.00	13.50	11.00	13.50	15.4
		46	5230	11.00	15.50	11.00	15.50	16.8
	802.11ac-VHT80 MCS0	42	5210	11.00	13.00	11.00	13.00	15.1

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	11.00	15.50	11.00	15.50	16.8
		56	5280	11.00	15.50	11.00	15.50	16.8
		60	5300	11.00	15.50	11.00	15.50	16.8
		64	5320	11.00	15.50	11.00	15.50	16.8
	802.11n-HT20 MCS0	52	5260	11.00	15.50	11.00	15.50	16.8
		56	5280	11.00	15.50	11.00	15.50	16.8
		60	5300	11.00	15.50	11.00	15.50	16.8
		64	5320	11.00	15.50	11.00	15.50	16.8
	802.11n-HT40 MCS0	54	5270	11.00	15.50	11.00	15.50	16.8
		62	5310	11.00	14.00	11.00	14.00	15.8
	802.11ac-VHT20 MCS0	52	5260	11.00	15.50	11.00	15.50	16.8
		56	5280	11.00	15.50	11.00	15.50	16.8
		60	5300	11.00	15.50	11.00	15.50	16.8
		64	5320	11.00	15.50	11.00	15.50	16.8
	802.11ac-VHT40 MCS0	54	5270	11.00	15.50	11.00	15.50	16.8
		62	5310	11.00	14.00	11.00	14.00	15.8
	802.11ac-VHT80 MCS0	58	5290	11.00	12.00	11.00	12.00	14.5

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
5.5GHz WLAN	802.11a 6Mbps	100	5500	13.00	12.00	13.00	12.00	15.5
		116	5580	13.00	12.00	13.00	12.00	15.5
		124	5620	13.00	12.00	13.00	12.00	15.5
		132	5660	13.00	12.00	13.00	12.00	15.5
		140	5700	13.00	12.00	13.00	12.00	15.5
		144	5720	13.00	12.00	13.00	12.00	15.5
	802.11n-HT20 MCS0	100	5500	13.00	12.00	13.00	12.00	15.5
		116	5580	13.00	12.00	13.00	12.00	15.5
		124	5620	13.00	12.00	13.00	12.00	15.5
		132	5660	13.00	12.00	13.00	12.00	15.5
		140	5700	13.00	12.00	13.00	12.00	15.5
		144	5720	13.00	12.00	13.00	12.00	15.5
	802.11n-HT40 MCS0	102	5510	13.00	12.00	13.00	12.00	15.5
		110	5550	13.00	12.00	13.00	12.00	15.5
		126	5630	13.00	12.00	13.00	12.00	15.5
		134	5670	13.00	12.00	13.00	12.00	15.5
		142	5710	13.00	12.00	13.00	12.00	15.5
	802.11ac-VHT20 MCS0	100	5500	13.00	12.00	13.00	12.00	15.5
		116	5580	13.00	12.00	13.00	12.00	15.5
		124	5620	13.00	12.00	13.00	12.00	15.5
		132	5660	13.00	12.00	13.00	12.00	15.5
		140	5700	13.00	12.00	13.00	12.00	15.5
		144	5720	13.00	12.00	13.00	12.00	15.5
	802.11ac-VHT40 MCS0	102	5510	13.00	12.00	13.00	12.00	15.5
		110	5550	13.00	12.00	13.00	12.00	15.5
		126	5630	13.00	12.00	13.00	12.00	15.5
		134	5670	13.00	12.00	13.00	12.00	15.5
		142	5710	13.00	12.00	13.00	12.00	15.5
	802.11ac-VHT80 MCS0	106	5530	12.50	12.00	12.50	12.00	15.3
		122	5610	13.00	12.00	13.00	12.00	15.5
		138	5690	13.00	12.00	13.00	12.00	15.5

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	14.50	12.50	14.50	12.50	16.6
		157	5785	14.50	12.50	14.50	12.50	16.6
		165	5825	14.50	12.50	14.50	12.50	16.6
	802.11n-HT20 MCS0	149	5745	14.50	12.50	14.50	12.50	16.6
		157	5785	14.50	12.50	14.50	12.50	16.6
		165	5825	14.50	12.50	14.50	12.50	16.6
	802.11n-HT40 MCS0	151	5755	14.50	12.50	14.50	12.50	16.6
		159	5795	14.50	12.50	14.50	12.50	16.6
	802.11ac-VHT20 MCS0	149	5745	14.50	12.50	14.50	12.50	16.6
		157	5785	14.50	12.50	14.50	12.50	16.6
		165	5825	14.50	12.50	14.50	12.50	16.6
	802.11ac-VHT40 MCS0	151	5755	14.50	12.50	14.50	12.50	16.6
		159	5795	14.50	12.50	14.50	12.50	16.6
	802.11ac-VHT80 MCS0	155	5775	14.50	12.50	14.50	12.50	16.6

<Power Table 3>

<2.4GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	14.50	19.00	17.00	19.00	21.1
		6	2437	14.50	19.00	17.00	19.00	21.1
		11	2462	14.50	19.00	17.00	19.00	21.1
	802.11g 6Mbps	1	2412	14.50	17.50	17.00	17.50	20.3
		6	2437	14.50	19.00	17.00	19.00	21.1
		11	2462	14.50	19.00	17.00	19.00	21.1
	802.11n-HT20 MCS0	1	2412	14.50	16.50	16.50	16.50	19.5
		6	2437	14.50	19.00	17.00	19.00	21.1
		11	2462	14.50	16.50	16.50	16.50	19.5
	802.11ac-VHT20 MCS0	1	2412	14.50	16.50	16.50	16.50	19.5
		6	2437	14.50	19.00	17.00	19.00	21.1
		11	2462	14.50	16.50	16.50	16.50	19.5

<5GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	16.50	14.00	16.50	14.50	18.6
		40	5200	16.50	14.00	16.50	14.50	18.6
		44	5220	16.50	14.00	16.50	14.50	18.6
		48	5240	16.50	14.00	16.50	14.50	18.6
	802.11n-HT20 MCS0	36	5180	16.50	14.00	16.50	14.50	18.6
		40	5200	16.50	14.00	16.50	14.50	18.6
		44	5220	16.50	14.00	16.50	14.50	18.6
		48	5240	16.50	14.00	16.50	14.50	18.6
	802.11n-HT40 MCS0	38	5190	13.50	13.50	13.50	13.50	16.5
		46	5230	16.50	14.00	16.50	14.50	18.6
	802.11ac-VHT20 MCS0	36	5180	16.50	14.00	16.50	14.50	18.6
		40	5200	16.50	14.00	16.50	14.50	18.6
		44	5220	16.50	14.00	16.50	14.50	18.6
		48	5240	16.50	14.00	16.50	14.50	18.6
	802.11ac-VHT40 MCS0	38	5190	13.50	13.50	13.50	13.50	16.5
		46	5230	16.50	14.00	16.50	14.50	18.6
	802.11ac-VHT80 MCS0	42	5210	13.00	13.00	13.00	13.00	16.0

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	17.50	14.00	17.50	15.00	19.4
		56	5280	17.50	14.00	17.50	15.00	19.4
		60	5300	17.50	14.00	17.50	15.00	19.4
		64	5320	17.50	14.00	17.50	15.00	19.4
	802.11n-HT20 MCS0	52	5260	17.50	14.00	17.50	15.00	19.4
		56	5280	17.50	14.00	17.50	15.00	19.4
		60	5300	17.50	14.00	17.50	15.00	19.4
		64	5320	17.50	14.00	17.50	15.00	19.4
	802.11n-HT40 MCS0	54	5270	17.50	14.00	17.50	15.00	19.4
		62	5310	14.00	14.00	14.00	14.00	17.0
	802.11ac-VHT20 MCS0	52	5260	17.50	14.00	17.50	15.00	19.4
		56	5280	17.50	14.00	17.50	15.00	19.4
		60	5300	17.50	14.00	17.50	15.00	19.4
		64	5320	17.50	14.00	17.50	15.00	19.4
	802.11ac-VHT40 MCS0	54	5270	17.50	14.00	17.50	15.00	19.4
		62	5310	14.00	14.00	14.00	14.00	17.0
	802.11ac-VHT80 MCS0	58	5290	12.00	12.00	12.00	12.00	15.0

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	17.50	10.50	17.50	11.50	18.47
		116	5580	17.50	10.50	17.50	11.50	18.47
		124	5620	17.50	10.50	17.50	11.50	18.47
		132	5660	17.50	10.50	17.50	11.50	18.47
		140	5700	17.50	10.50	17.50	11.50	18.47
		144	5720	17.50	10.50	17.50	11.50	18.47
	802.11n-HT20 MCS0	100	5500	17.50	10.50	17.50	11.50	18.47
		116	5580	17.50	10.50	17.50	11.50	18.47
		124	5620	17.50	10.50	17.50	11.50	18.47
		132	5660	18.00	10.50	18.00	11.50	18.88
		140	5700	18.00	10.50	18.00	11.50	18.88
		144	5720	17.50	10.50	17.50	11.50	18.47
	802.11n-HT40 MCS0	102	5510	16.00	10.50	16.00	11.50	17.32
		110	5550	17.50	10.50	17.50	11.50	18.47
		126	5630	17.50	10.50	17.50	11.50	18.47
		134	5670	17.50	10.50	17.50	11.50	18.47
		142	5710	17.50	10.50	17.50	11.50	18.47
	802.11ac-VHT20 MCS0	100	5500	17.50	10.50	17.50	11.50	18.47
		116	5580	17.50	10.50	17.50	11.50	18.47
		124	5620	17.50	10.50	17.50	11.50	18.47
		132	5660	18.00	10.50	18.00	11.50	18.88
		140	5700	18.00	10.50	18.00	11.50	18.88
		144	5720	17.50	10.50	17.50	11.50	18.47
	802.11ac-VHT40 MCS0	102	5510	16.00	10.50	16.00	11.50	17.32
		110	5550	17.50	10.50	17.50	11.50	18.47
		126	5630	17.50	10.50	17.50	11.50	18.47
		134	5670	17.50	10.50	17.50	11.50	18.47
		142	5710	17.50	10.50	17.50	11.50	18.47
	802.11ac-VHT80 MCS0	106	5530	12.50	10.50	12.50	11.50	15.04
		122	5610	17.00	10.50	17.00	11.50	18.08
		138	5690	17.00	10.50	17.00	11.50	18.08

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	10.00	18.50	10.50	19.1
		157	5785	18.50	10.00	18.50	10.50	19.1
		165	5825	18.50	10.00	18.50	10.50	19.1
	802.11n-HT20 MCS0	149	5745	18.50	10.00	18.50	10.50	19.1
		157	5785	18.50	10.00	18.50	10.50	19.1
		165	5825	18.50	10.00	18.50	10.50	19.1
	802.11n-HT40 MCS0	151	5755	17.50	10.00	17.50	10.50	18.3
		159	5795	17.50	10.00	17.50	10.50	18.3
	802.11ac-VHT20 MCS0	149	5745	18.50	10.00	18.50	10.50	19.1
		157	5785	18.50	10.00	18.50	10.50	19.1
		165	5825	18.50	10.00	18.50	10.50	19.1
	802.11ac-VHT40 MCS0	151	5755	17.50	10.00	17.50	10.50	18.3
		159	5795	17.50	10.00	17.50	10.50	18.3
	802.11ac-VHT80 MCS0	155	5775	17.00	10.00	17.00	10.50	17.9

<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	12.5	12.5

<Power Table1>

Mode	Average power (dBm)				
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	18	18	18	12.5	12.5

<Power Table 2>

Mode	Average power (dBm)				
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	12	12	12	12	12

<Power Table 3>

Mode	Average power (dBm)				
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	14.5	14.5	14.5	12.5	12.5

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

<table>
<tr><th colspan="2">LTE Information</th></tr>
<tr><td>FCC ID</td><td>A4RG025I</td></tr>
<tr><td>Equipment Name</td><td>Phone</td></tr>
<tr><td>Operating Frequency Range of each LTE transmission band</td><td>LTE Band 2: 1850 MHz ~ 1910 MHz
LTE Band 4: 1710 MHz ~ 1755 MHz
LTE Band 5: 824 MHz ~ 849 MHz
LTE Band 7: 2500 MHz ~ 2570 MHz
LTE Band 12: 699 MHz ~ 716 MHz
LTE Band 13: 777 MHz ~ 787 MHz
LTE Band 14: 788 MHz ~ 798 MHz
LTE Band 17: 704 MHz ~ 716 MHz
LTE Band 25: 1850 MHz ~ 1915 MHz
LTE Band 26: 814 MHz ~ 849 MHz
LTE Band 30: 2305 MHz ~ 2315 MHz
LTE Band 38: 2570 MHz ~ 2620 MHz
LTE Band 41: 2496 MHz ~ 2690 MHz
LTE Band 48: 3550 MHz ~ 3700 MHz
LTE Band 66: 1710 MHz ~ 1780 MHz
LTE Band 71: 663 MHz ~ 698 MHz</td></tr>
<tr><td>Channel Bandwidth</td><td>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</td></tr>
<tr><td>UE Rel and Cat.</td><td>Rel15, UL cat. 13, DL cat. 18</td></tr>
<tr><td>uplink modulations used</td><td>QPSK / 16QAM / 64QAM</td></tr>
<tr><td>LTE Voice / Data requirements</td><td>Voice and Data</td></tr>
<tr><td>LTE MPR permanently built-in by design</td><td>Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3
<table>
<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>
<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>
</table></td></tr>
<tr><td>LTE A-MPR</td><td>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)</td></tr>
<tr><td>Spectrum plots for RB configuration</td><td>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.</td></tr>
<tr><td>Power reduction applied to satisfy SAR compliance</td><td>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.</td></tr>
<tr><td>LTE Carrier Aggregation Combinations</td><td>Inter-Band and Intra-Band possible combinations and the detail power measurement please referred to section13</td></tr>
<tr><td>LTE Carrier Aggregation Additional Information</td><td>1. This device supports LTE Carrier Aggregation (CA) in the uplink for LTE B5/B7/B41/B48/B66 with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per FCC Guidance.
2. This device supports maximum of 2 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.</td></tr>
</table>

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

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

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

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

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

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

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

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

5G NR Information	
FCC ID	A4RG025I
Equipment Name	Phone
Operating Frequency Range of each 5G NR transmission band	5G NR n5 : 824 MHz ~ 849 MHz
Channel Bandwidth	5G NR n5: 5MHz, 10MHz, 15MHz, 20MHz
SCS	FDD: SCS15KHz
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 n5	LTE B7

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

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

4. Smart Transmit feature for RF Exposure compliance

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

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

<Terminologies in this report>

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

<SAR Characterization>

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

<SAR design target and uncertainty>

Exposure conditions	Device State Index (DSI)	SAR design target	W/kg
Head Standalone (Head)	2	1g SAR design target	0.95
Head Simultaneous (Head_WiFi)	7	1g SAR design target	0.79
Hotspot	6	1g SAR design target	0.79
Body Standalone (Body)	4	1g SAR design target	0.95
Body Simultaneous (Body_WiFi)	8	1g SAR design target	0.79

Item	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	28.6	27.9	27.1	27.8	27.1	25.5
GSM1900(GPRS 4 Tx slots)**	2	27.1	26.6	25.8	26.3	25.8	23.0
WCDMA B2	2	27.1	24.3	23.5	26.3	23.5	24.7
WCDMA B4	2	27.1	24.8	24.0	26.3	24.0	24.7
WCDMA B5	0	28.7	27.5	26.7	27.9	26.7	24.0
LTE B7	2	29.8	24.2	23.4	29.0	23.4	24.7
LTE B12/17	0	29.4	28.7	27.9	28.6	27.9	24.7
LTE B13	0	29.4	26.8	26.0	28.6	26.0	24.2
LTE B14	0	29.1	26.8	26.0	28.3	26.0	24.7
LTE B25/2	2	25.5	23.6	22.8	24.7	22.8	24.7
LTE B26/5	0	29.5	27.8	27.0	28.7	27.0	24.7
LTE B30	2	30.0	25.2	24.4	29.2	24.4	22.7
LTE B41/38**	2	31.2	22.4	21.6	30.4	21.6	22.7
LTE B38 HPUE**	2	34.4	22.6	21.8	33.6	21.8	22.9
LTE B48**	7	32.9	21.6	20.8	32.1	20.8	21.2
LTE B66/4	2	27.6	24.9	24.1	26.8	24.1	24.7
LTE B71	0	28.9	27.0	26.2	28.1	26.2	24.7
5G FR1 n5	0	31.5	30.0	29.2	30.7	29.2	24.0

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	24.0	27.8	27.0	23.2	27.0	25.5
GSM1900(GPRS 4 Tx slots)**	0	30.4	19.2	18.4	29.6	18.4	22.5
WCDMA B2	0	30.0	20.3	19.5	29.2	19.5	24.7
WCDMA B4	0	32.2	19.8	19.0	31.4	19.0	24.7
WCDMA B5	1	24.8	26.9	26.0	24.0	26.0	24.0
LTE B7	0	28.2	21.4	20.6	27.4	20.6	24.7
LTE B12/17	1	24.9	28.2	27.4	24.1	27.4	24.7
LTE B13	1	28.0	29.9	29.1	27.2	29.1	24.2
LTE B14	1	24.7	30.0	29.2	23.9	29.2	24.7
LTE B25/2	0	33.9	18.7	17.9	33.1	17.9	24.7
LTE B26/5	1	23.6	26.6	25.8	22.8	25.8	24.7
LTE B30	0	32.7	21.4	20.6	31.9	20.6	22.7
LTE B41/38**	0	28.6	21.0	20.2	27.8	20.2	22.7
LTE B38 HPUE**	0	27.5	21.2	20.4	26.7	20.4	22.9
LTE B48	2	27.1	19.2	18.4	26.3	18.4	19.6
LTE B66/4	0	30.3	20.9	20.1	29.5	20.1	24.7
LTE B71	1	27.2	27.4	26.6	26.4	26.6	24.7
5G FR1 n5	1	24.4	27.5	26.7	23.6	26.7	24.0

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

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

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

5. RF Exposure Limits

5.1 Uncontrolled Environment

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

5.2 Controlled Environment

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

Limits for Occupational/Controlled Exposure (W/kg)

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

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

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

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

6. Specific Absorption Rate (SAR)

6.1 Introduction

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

6.2 SAR Definition

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

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

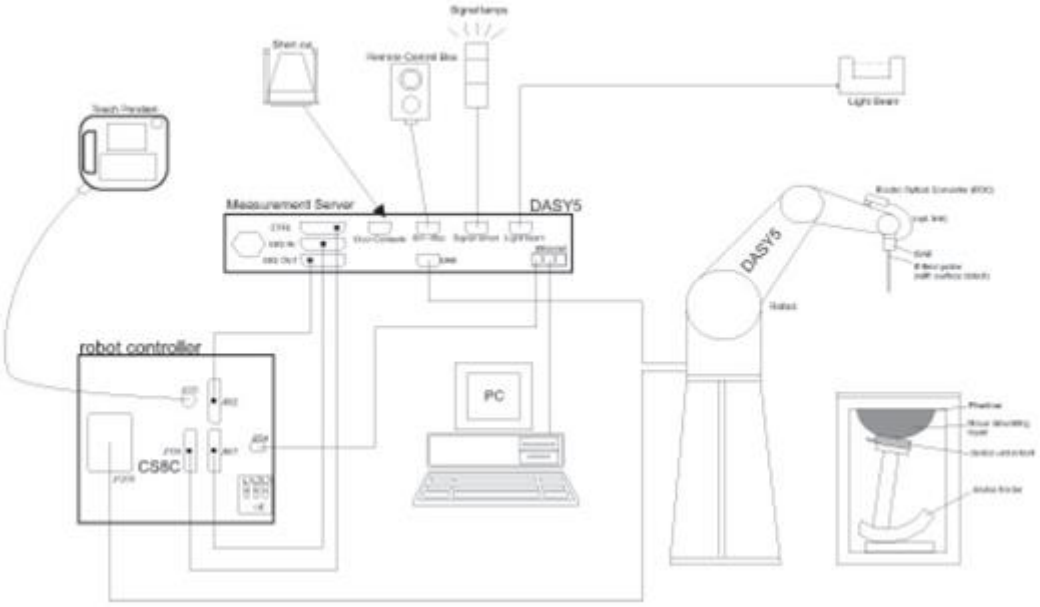
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

7. System Description and Setup

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



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running WinXP or Win7 and the DASY5 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

7.1 Test Side Location

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

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

7.2 E-Field Probe

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

<ES3DV3 Probe>

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

<EX3DV4 Probe>

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

7.3 Data Acquisition Electronics (DAE)

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

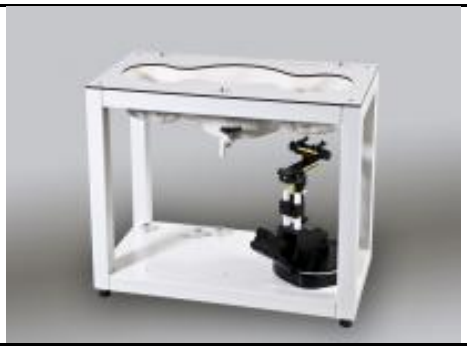
The input impedance of the DAE is 200 MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.

Fig 5.1 Photo of DAE

7.4 Phantom

<SAM Twin Phantom>

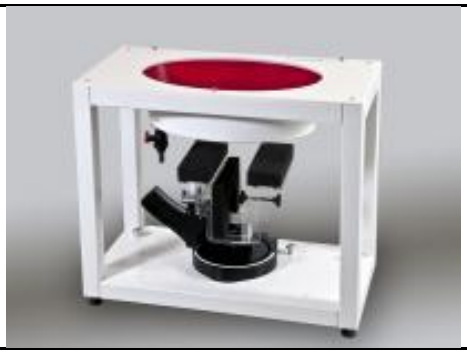
Shell Thickness	2 ± 0.2 mm; Center ear point: 6 ± 0.2 mm
Filling Volume	Approx. 25 liters
Dimensions	Length: 1000 mm; Width: 500 mm; Height: adjustable feet
Measurement Areas	Left Hand, Right Hand, Flat Phantom



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

<ELI Phantom>

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



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

7.5 Device Holder

<Mounting Device for Hand-Held Transmitter>

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

Mounting Device for Hand-Held Transmitters

Mounting Device Adaptor for Wide-Phones

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

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

Mounting Device for Laptops

8. Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>

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

<SAR measurement>

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

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

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

8.1 Spatial Peak SAR Evaluation

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

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

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

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

8.2 Power Reference Measurement

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

8.3 Area Scan

The area scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in DASY software can find the maximum found in the scanned area, within a range of the global maximum. The range (in dB0 is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan), if only one zoom scan follows the area scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of zoom scans has to be increased accordingly.

Area scan parameters extracted from FCC KDB 865664 D01v01r04 SAR measurement 100 MHz to 6 GHz.

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

8.4 Zoom Scan

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

Zoom scan parameters extracted from FCC KDB 865664 D01v01r04 SAR measurement 100 MHz to 6 GHz.

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

Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.

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

8.5 Volume Scan Procedures

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

8.6 Power Drift Monitoring

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

9. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit	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	D1750V2	1112	Mar. 07, 2019	Mar. 05, 2021
SPEAG	1900MHz System Validation Kit	D1900V2	5d185	Mar. 07, 2019	Mar. 05, 2021
SPEAG	2300MHz System Validation Kit	D2300V2	1006	Jan. 28, 2019	Jan. 26, 2021
SPEAG	2450MHz System Validation Kit	D2450V2	736	Aug. 31, 2018	Aug. 29, 2020
SPEAG	2600MHz System Validation Kit	D2600V2	1078	Mar. 06, 2019	Mar. 04, 2021
SPEAG	3500MHz System Validation Kit	D3500V2	1014	Jan. 29, 2019	Jan. 27, 2021
SPEAG	3700MHz System Validation Kit	D3700V2	1006	Mar. 05, 2019	Mar. 03, 2021
SPEAG	5GHz System Validation Kit	D5GHzV2	1006	Sep. 27, 2018	Sep. 25, 2020
SPEAG	5GHz System Validation Kit	D5GHzV2	1128	Dec. 16, 2019	Dec. 15, 2020
SPEAG	Data Acquisition Electronics	DAE4	376	Dec. 06, 2019	Dec. 05, 2020
SPEAG	Data Acquisition Electronics	DAE4	853	Jul. 18, 2019	Jul. 17, 2020
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	7515	Oct. 22, 2019	Oct. 21, 2020
SPEAG	Dosimetric E-Field Probe	EX3DV4	3925	Sep. 20, 2019	Sep. 19, 2020
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. Referring to KDB 865664 D01v01r04, the dipole calibration interval can be extended to 3 years with justification. The dipoles are also not physically damaged, or repaired during the interval.
3. The justification data of dipole D750V2, SN: 1107, D1750V2, SN: 1112, D1900V2, SN: 5d185, D2300V2, SN:1006, D2450V2, SN:736, D2600V2, SN:1078, D3500V2, SN:1014, D3700V2, SN:1006 and 5GHzV2, SN:1006 can be found in appendix C. The return loss is < -20dB, within 20% of prior calibration, the impedance is within 5 ohm of prior calibration.

10. System Verification

10.1 Tissue Simulating Liquids

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

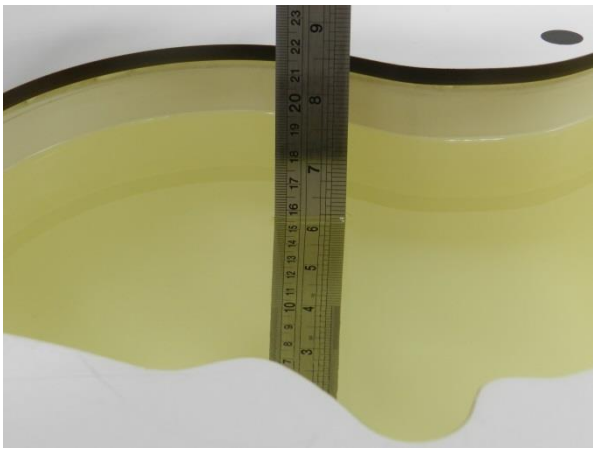


Fig 10.1Photo of Liquid Height for Head SAR

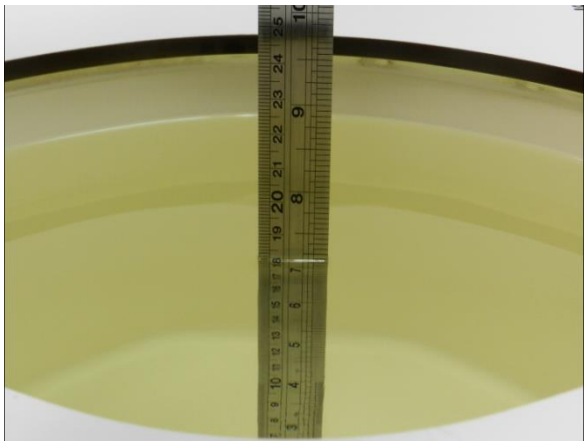


Fig 10.2 Photo of Liquid Height for Body SAR

10.2 Tissue Verification

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

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

Simulating Liquid for 5GHz, Manufactured by SPEAG

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

<Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Liquid Temp. (℃)	Conductivity (σ)	Permittivity (ε_r)	Conductivity Target (σ)	Permittivity Target (ε_r)	Delta (σ) (%)	Delta (ε_r) (%)	Limit (%)	Date
750	22.8	0.917	43.803	0.89	41.90	3.03	4.54	±5	2020/5/31
750	22.2	0.917	41.887	0.89	41.90	3.03	-0.03	±5	2020/6/3
750	22.6	0.921	41.987	0.89	41.90	3.48	0.21	±5	2020/6/4
750	22.6	0.901	43.165	0.89	41.90	1.24	3.02	±5	2020/6/23
835	22.3	0.889	40.674	0.90	41.50	-1.22	-1.99	±5	2020/6/1
835	22.7	0.911	42.388	0.90	41.50	1.22	2.14	±5	2020/6/5
835	22.6	0.933	42.491	0.90	41.50	3.67	2.39	±5	2020/6/9
835	22.4	0.929	42.411	0.90	41.50	3.22	2.20	±5	2020/6/16
835	22.6	0.878	42.530	0.90	41.50	-2.44	2.48	±5	2020/6/17
835	22.5	0.887	41.846	0.90	41.50	-1.44	0.83	±5	2020/6/22
835	22.2	0.934	41.929	0.90	41.50	3.78	1.03	±5	2020/6/26
835	22.2	0.879	42.488	0.90	41.50	-2.33	2.38	±5	2020/7/1
1750	22.4	1.355	41.330	1.37	40.10	-1.09	3.07	±5	2020/5/31
1750	22.6	1.382	40.823	1.37	40.10	0.88	1.80	±5	2020/6/3
1750	22.2	1.363	40.923	1.37	40.10	-0.51	2.05	±5	2020/6/6
1750	22.5	1.383	39.548	1.37	40.10	0.95	-1.38	±5	2020/6/7
1750	22.5	1.383	39.353	1.37	40.10	0.95	-1.86	±5	2020/6/7
1750	22.3	1.371	41.322	1.37	40.10	0.07	3.05	±5	2020/6/26
1900	22.4	1.401	40.465	1.40	40.00	0.07	1.16	±5	2020/5/31
1900	22.6	1.410	40.385	1.40	40.00	0.71	0.96	±5	2020/6/3
1900	22.5	1.422	41.123	1.40	40.00	1.57	2.81	±5	2020/6/4
1900	22.2	1.444	39.959	1.40	40.00	3.14	-0.10	±5	2020/6/6
1900	22.6	1.432	40.334	1.40	40.00	2.29	0.84	±5	2020/6/23
1900	22.2	1.421	39.714	1.40	40.00	1.50	-0.72	±5	2020/6/26
1900	22.5	1.401	39.575	1.40	40.00	0.07	-1.06	±5	2020/6/27
2300	22.5	1.692	39.210	1.67	39.50	1.32	-0.73	±5	2020/6/2
2300	22.6	1.681	39.290	1.67	39.50	0.66	-0.53	±5	2020/6/6
2300	22.5	1.668	39.368	1.67	39.50	-0.12	-0.33	±5	2020/6/27
2450	22.5	1.798	39.012	1.80	39.20	-0.11	-0.48	±5	2020/5/29
2450	22.2	1.842	38.487	1.80	39.20	2.33	-1.82	±5	2020/5/30
2450	22.6	1.759	40.160	1.80	39.20	-2.28	2.45	±5	2020/6/11
2600	22.5	2.013	37.944	1.96	39.00	2.70	-2.71	±5	2020/6/2
2600	22.6	2.030	38.694	1.96	39.00	3.57	-0.78	±5	2020/6/8
2600	22.8	2.010	37.814	1.96	39.00	2.55	-3.04	±5	2020/6/20
2600	22.5	2.012	39.188	1.96	39.00	2.65	0.48	±5	2020/6/22
3500	22.4	2.970	38.043	2.91	37.90	2.06	0.38	±5	2020/6/1
3500	22.3	3.043	39.267	2.91	37.90	4.57	3.61	±5	2020/7/1
3700	22.4	3.182	37.841	3.12	37.70	1.99	0.37	±5	2020/6/1
3700	22.3	3.198	38.997	3.12	37.70	2.50	3.44	±5	2020/7/1
5250	22.3	4.683	36.786	4.71	35.95	-0.57	2.33	±5	2020/5/29
5250	22.7	4.588	36.996	4.71	35.95	-2.59	2.91	±5	2020/5/30
5250	22.3	4.502	35.561	4.71	35.95	-4.42	-1.08	±5	2020/6/2
5250	22.9	4.599	36.972	4.71	35.95	-2.36	2.84	±5	2020/6/13
5600	22.3	5.046	36.304	5.07	35.50	-0.47	2.26	±5	2020/5/29
5600	22.7	4.943	36.468	5.07	35.50	-2.50	2.73	±5	2020/5/30
5600	22.3	5.101	36.196	5.07	35.50	0.61	1.96	±5	2020/6/4
5600	22.5	5.063	36.888	5.07	35.50	-0.14	3.91	±5	2020/6/5
5600	22.9	4.952	36.432	5.07	35.50	-2.33	2.63	±5	2020/6/13
5750	22.7	5.101	36.334	5.22	35.35	-2.28	2.78	±5	2020/5/30
5750	22.5	5.217	36.752	5.22	35.35	-0.06	3.97	±5	2020/6/5
5750	22.6	5.132	36.417	5.22	35.35	-1.69	3.02	±5	2020/6/12

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 (%)
2020/5/31	750	250	D750V3-1107	ES3DV3 - SN3184	DAE4 Sn916	2.05	8.32	8.2	-1.44
2020/6/3	750	250	D750V3-1107	ES3DV3 - SN3184	DAE4 Sn916	2.05	8.32	8.2	-1.44
2020/6/4	750	250	D750V3-1107	ES3DV3 - SN3184	DAE4 Sn916	2.06	8.32	8.24	-0.96
2020/6/23	750	250	D750V3-1107	EX3DV4 - SN3925	DAE4 Sn376	2.12	8.32	8.48	1.92
2020/6/1	835	250	D835V2-4d167	ES3DV3 - SN3184	DAE4 Sn916	2.26	9.55	9.04	-5.34
2020/6/5	835	250	D835V2-4d167	ES3DV3 - SN3184	DAE4 Sn916	2.24	9.55	8.96	-6.18
2020/6/9	835	250	D835V2-4d167	ES3DV3 - SN3184	DAE4 Sn916	2.29	9.55	9.16	-4.08
2020/6/16	835	250	D835V2-4d167	EX3DV4 - SN3642	DAE4 Sn376	2.34	9.55	9.36	-1.99
2020/6/17	835	250	D835V2-4d167	ES3DV3 - SN3270	DAE4 Sn1399	2.24	9.55	8.96	-6.18
2020/6/22	835	250	D835V2-4d167	EX3DV4 - SN3925	DAE4 Sn376	2.38	9.55	9.52	-0.31
2020/6/26	835	250	D835V2-4d167	ES3DV3 - SN3184	DAE4 Sn916	2.29	9.55	9.16	-4.08
2020/7/1	835	250	D835V2-4d167	ES3DV3 - SN3270	DAE4 Sn1399	2.25	9.55	9	-5.76
2020/5/31	1750	250	D1750V2-1112	EX3DV4 - SN3925	DAE4 Sn376	9.15	36.70	36.6	-0.27
2020/6/3	1750	250	D1750V2-1112	EX3DV4 - SN3925	DAE4 Sn376	9.39	36.70	37.56	2.34
2020/6/6	1750	250	D1750V2-1112	EX3DV4 - SN3925	DAE4 Sn376	9.26	36.70	37.04	0.93
2020/6/7	1750	250	D1750V2-1112	EX3DV4 - SN3925	DAE4 Sn376	9.34	36.70	37.36	1.80
2020/6/7	1750	250	D1750V2-1112	ES3DV3 - SN3184	DAE4 Sn916	8.89	36.70	35.56	-3.11
2020/6/26	1750	250	D1750V2-1112	ES3DV3 - SN3184	DAE4 Sn916	8.81	36.70	35.24	-3.98
2020/5/31	1900	250	D1900V2-5d185	EX3DV4 - SN3925	DAE4 Sn376	9.35	39.40	37.4	-5.08
2020/6/3	1900	250	D1900V2-5d185	EX3DV4 - SN3925	DAE4 Sn376	10.40	39.40	41.6	5.58
2020/6/4	1900	250	D1900V2-5d185	EX3DV4 - SN3925	DAE4 Sn376	9.12	39.40	36.48	-7.41
2020/6/6	1900	250	D1900V2-5d185	EX3DV4 - SN3925	DAE4 Sn376	9.63	39.40	38.52	-2.23
2020/6/23	1900	250	D1900V2-5d185	EX3DV4 - SN3925	DAE4 Sn376	9.73	39.40	38.92	-1.22
2020/6/26	1900	250	D1900V2-5d185	ES3DV3 - SN3184	DAE4 Sn916	9.64	39.40	38.56	-2.13
2020/6/27	1900	250	D1900V2-5d185	ES3DV3 - SN3184	DAE4 Sn916	9.50	39.40	38	-3.55
2020/6/2	2300	250	D2300V2-1006	ES3DV3 - SN3184	DAE4 Sn916	11.40	48.70	45.6	-6.37
2020/6/6	2300	250	D2300V2-1006	ES3DV3 - SN3184	DAE4 Sn916	11.30	48.70	45.2	-7.19
2020/6/27	2300	250	D2300V2-1006	ES3DV3 - SN3184	DAE4 Sn916	11.20	48.70	44.8	-8.01
2020/5/29	2450	250	D2450V2-736	EX3DV4 - SN3925	DAE4 Sn376	12.40	52.70	49.6	-5.88
2020/5/30	2450	250	D2450V2-736	ES3DV3 - SN3184	DAE4 Sn916	12.90	52.70	51.6	-2.09
2020/6/11	2450	250	D2450V2-736	ES3DV3 - SN3184	DAE4 Sn916	12.30	52.70	49.2	-6.64
2020/6/2	2600	250	D2600V2-1078	ES3DV3 - SN3184	DAE4 Sn916	14.40	57.60	57.6	0.00
2020/6/8	2600	250	D2600V2-1078	ES3DV3 - SN3184	DAE4 Sn916	14.10	57.60	56.4	-2.08
2020/6/20	2600	250	D2600V2-1078	EX3DV4 - SN3925	DAE4 Sn376	15.00	57.60	60	4.17
2020/6/22	2600	250	D2600V2-1078	EX3DV4 - SN3925	DAE4 Sn376	15.00	57.60	60	4.17
2020/6/1	3500	100	D3500V2-1014	EX3DV4 - SN3925	DAE4 Sn376	6.56	67.90	65.6	-3.39
2020/7/1	3500	100	D3500V2-1014	EX3DV4 - SN3925	DAE4 Sn376	6.72	67.90	67.2	-1.03
2020/6/1	3700	100	D3700V2-1006	EX3DV4 - SN3925	DAE4 Sn376	6.94	67.30	69.4	3.12
2020/7/1	3700	100	D3700V2-1006	EX3DV4 - SN3925	DAE4 Sn376	6.98	67.30	69.8	3.71

Date	Frequency (MHz)	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
2020/5/29	5250	100	D5GHzV2-1128-5250	EX3DV4 - SN7515	DAE4 Sn853	2.11	22.90	21.1	-7.86
2020/5/30	5250	100	D5GHzV2-1128-5250	EX3DV4 - SN7515	DAE4 Sn853	2.13	22.90	21.3	-6.99
2020/6/2	5250	100	D5GHzV2-1128-5250	EX3DV4 - SN7515	DAE4 Sn853	2.09	22.90	20.9	-8.73
2020/6/13	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3642	DAE4 Sn376	2.34	23.20	23.4	0.86
2020/5/29	5600	100	D5GHzV2-1128-5600	EX3DV4 - SN7515	DAE4 Sn853	2.42	23.60	24.2	2.54
2020/5/30	5600	100	D5GHzV2-1128-5600	EX3DV4 - SN7515	DAE4 Sn853	2.37	23.60	23.7	0.42
2020/6/4	5600	100	D5GHzV2-1128-5600	EX3DV4 - SN7515	DAE4 Sn853	2.44	23.60	24.4	3.39
2020/6/5	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3925	DAE4 Sn376	2.49	23.80	24.9	4.62
2020/6/13	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3642	DAE4 Sn376	2.43	23.80	24.3	2.10
2020/5/30	5750	100	D5GHzV2-1128-5750	EX3DV4 - SN7515	DAE4 Sn853	2.21	22.60	22.1	-2.21
2020/6/5	5750	100	D5GHzV2-1128-5750	EX3DV4 - SN3925	DAE4 Sn376	2.22	22.60	22.2	-1.77
2020/6/12	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3642	DAE4 Sn376	2.38	22.90	23.8	3.93

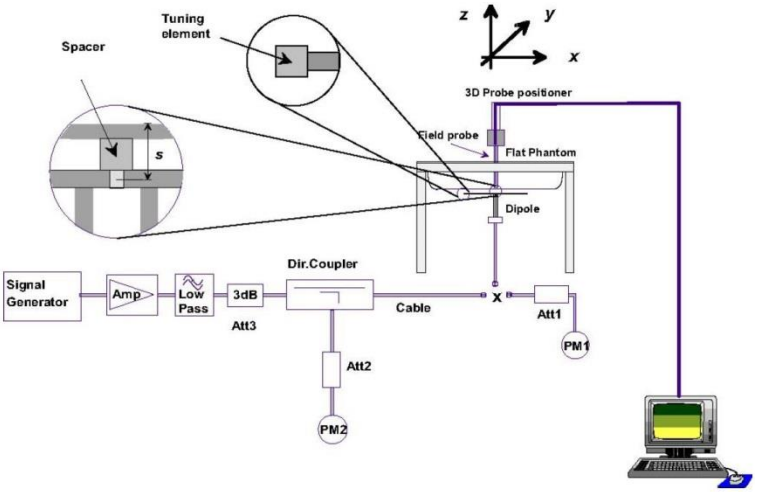


Fig 8.3.1 System Performance Check Setup

Fig 8.3.2 Setup Photo

11. RF Exposure Positions

11.1 Ear and handset reference point

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

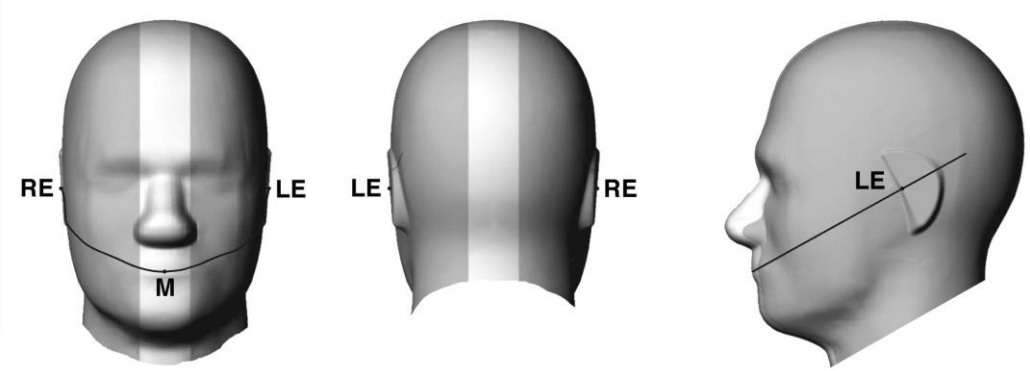


Fig 9.1.1 Front, back, and side views of SAM twin phantom

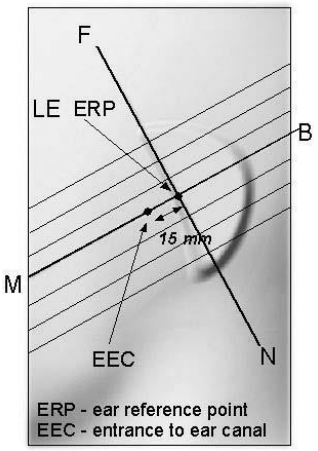


Fig 9.1.2 Close-up side view of phantom showing the ear region.

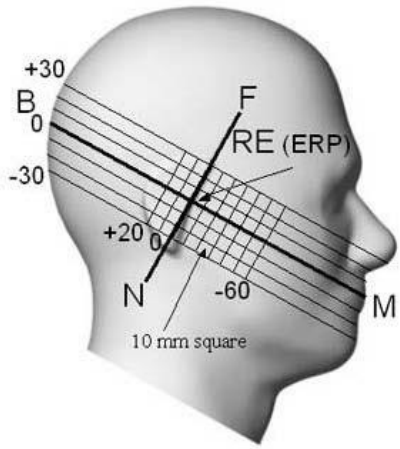


Fig 9.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

11.2 Definition of the cheek position

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

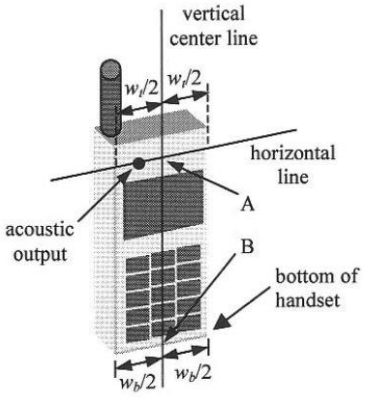


Fig 9.2.1 Handset vertical and horizontal reference lines—"fixed case

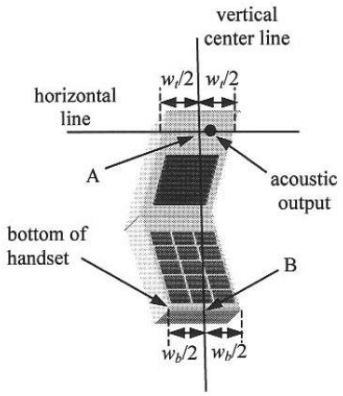


Fig 9.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

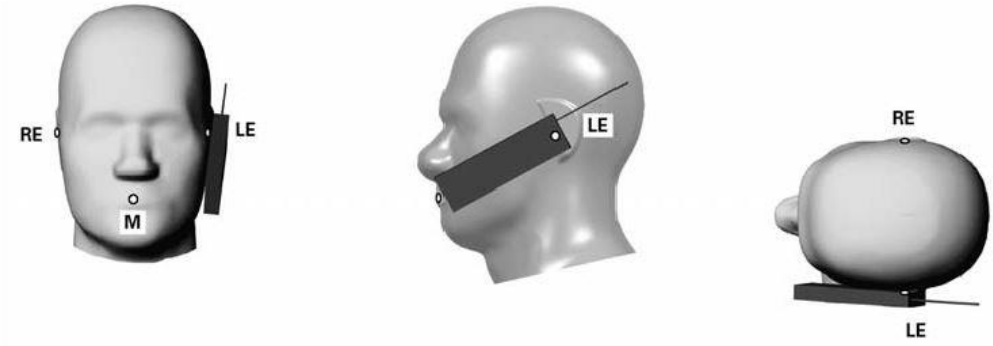


Fig 9.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

11.3 Definition of the tilt position

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

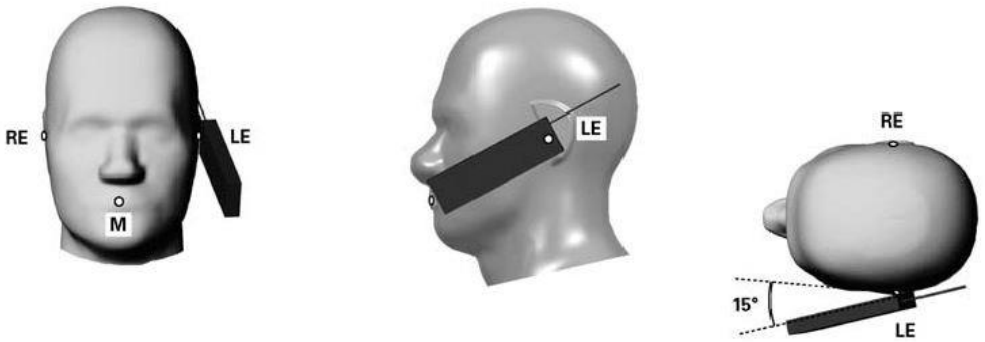


Fig 9.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

11.4 Body Worn Accessory

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 9.4). Per KDB648474 D04v01r03, body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB 447498 D01v06 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for body-worn accessory, measured without a headset connected to the handset is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a handset attached to the handset.

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

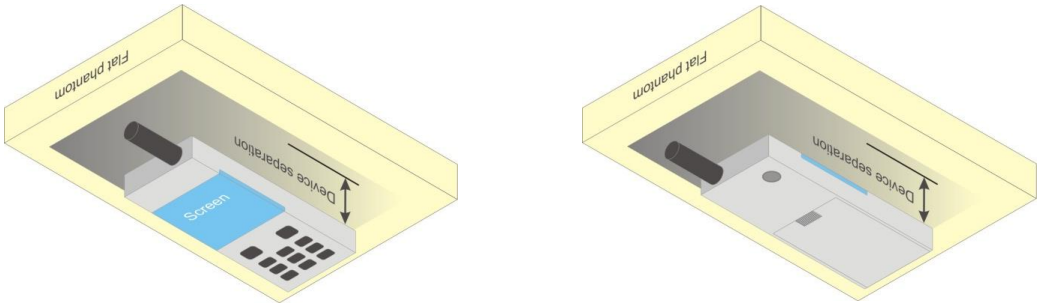


Fig 9.4 Body Worn Position

11.5 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 ≥ 9 cm x 5 cm) are based on a composite test separation distance of 10mm from the front, back and edges of the device containing transmitting antennas within 2.5cm of their edges, determined form general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.

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

12. Measurement procedure for output power and SAR

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

<GSM Note>

1. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested. Therefore, the GPRS (4Tx slots) for GSM850/GSM1900 is considered as the primary mode.
2. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

<WCDMA Note>

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

A summary of these settings are illustrated below:

HSDPA Setup Configuration:

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

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

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (Note 4)	15/15 (Note 4)	64	12/15 (Note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with $\beta_{hs} = 30/15 * \beta_c$.

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

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

Note 4: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to β_c = 11/15 and β_d = 15/15.

Setup Configuration

HSUPA Setup Configuration:

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

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

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note1)	β_{ec}	β_{ed} (Note 4) (Note 5)	β_{ed} (SF)	β_{ed} (Codes)	CM (dB) (Note 2)	MPR (dB) (Note 2) (Note 6)	AG Index (Note 5)	E-TFCI
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/225	1309/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{ed}1$: 47/15 $\beta_{ed}2$: 47/15	4 4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67

Note 1: For sub-test 1 to 4, Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with β_{hs} = 30/15 * β_c. For sub-test 5, Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 5/15 with β_{hs} = 5/15 * β_c.

Note 2: CM = 1 for β_c/β_d =12/15, β_{hs}/β_c=24/15. For all other combinations of DPDCH, DPCCH, HS- DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.

Note 3: For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to β_c = 10/15 and β_d = 15/15.

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

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

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

Setup Configuration

DC-HSDPA 3GPP release 8 Setup Configuration:

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

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

C.8.1.12 Fixed Reference Channel Definition H-Set 12

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

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

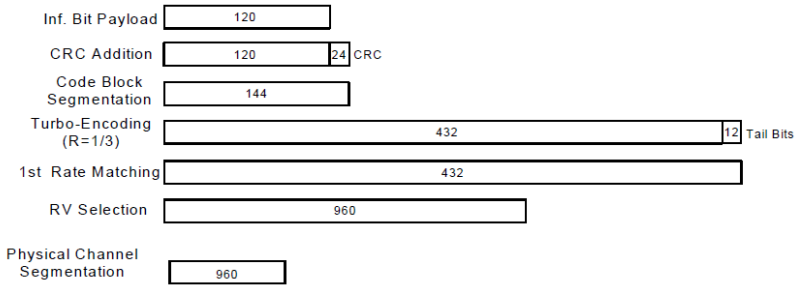
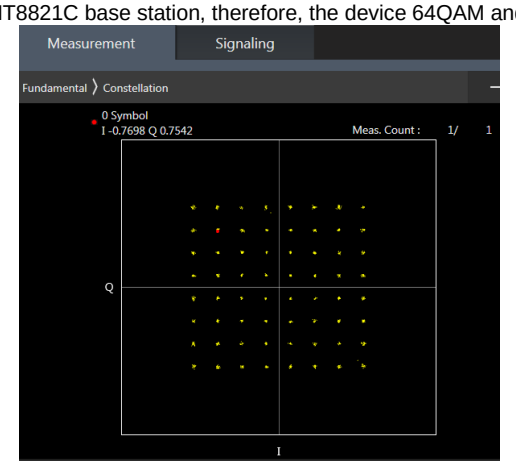


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

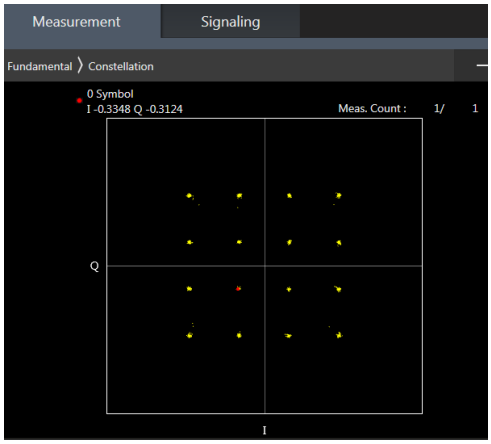
Setup Configuration

<LTE Note>

1. Anritsu MT8821C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is > not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B12/B26/B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
9. LTE B2/B4/B5/B17/B38 SAR test was covered by B12/B25/B26/B66/B41, except B38 HPUE; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
   a. the maximum output power, including tolerance, for the smaller band is ≤ the larger band to qualify for the SAR test exclusion
   b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band
   c. For B38 HPUE was according to FCC guidance to verify highest SAR test configuration in Power Class 3 for each LTE B41 configuration and exposure condition combination.
10. According to 2017 TCB workshop, for 64 QAM and 16 QAM should be verified by checking the signal constellation with a call box to avoid incorrect maximum power levels due to MPR and other requirements associated with signal modulation, and the following figure is taken from the "Fundamental Measurement >> Modulation Analysis >> constellation" mode of the device connect to the MT8821C base station, therefore, the device 64QAM and 16QAM signal modulation are correct.



64QAM



16QAM

<Additional information for TDD LTE>

TDD LTE configuration setup for SAR measurement

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

a. 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations
b. "special subframe S" contains both uplink and downlink transmissions, it has been taken into consideration to determine the transmission duty factor according to the worst case uplink and downlink cyclic prefix requirements for UpPTS
c. Establishing connections with base station simulators ensure a consistent means for testing SAR and recommended for evaluating SAR. The Anritsu MT8820C (firmware: #22.52#004) was used for LTE output power measurements and SAR testing.

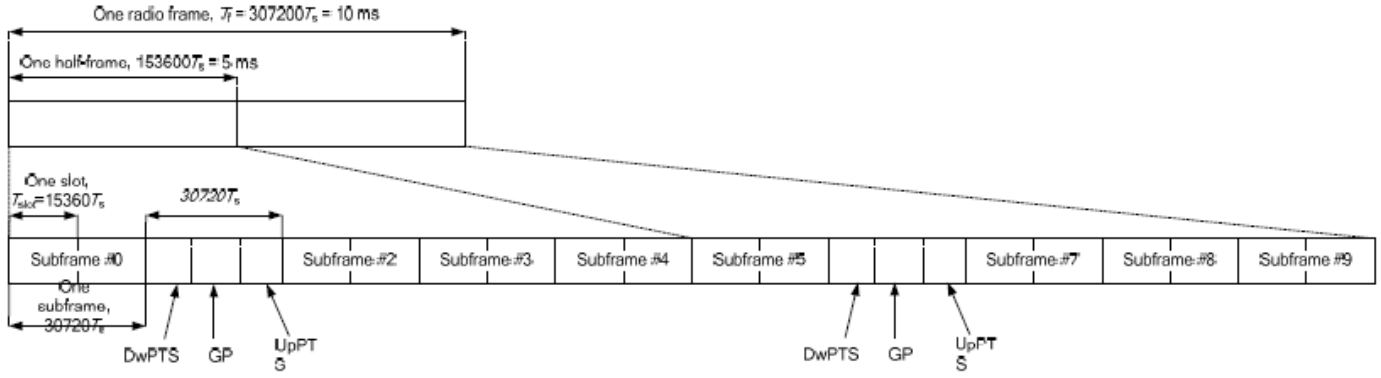


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

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

Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS).

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

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

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

The highest duty factor is resulted from:

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

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

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

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

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

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

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

<5G FR1 Note>

1. NR implementation of n5 is limited to EN-DC operations only (NSA), with LTE Band 7 acting as anchor bands, SAR tests for NR Bands and LTE Anchors Bands were performed separately due to limitations in SAR probe calibration factors.
2. 5G FR1 n5 support SCS: 15KHz, DFT-s/CP-OFDM, QPSK/16QAM/64QAM/256QAM, Bandwidth 5M/10M/15M/20M.
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		
	256 QAM	≤ 4.5		
CP-OFDM	QPSK	≤ 3		≤ 1.5
	16 QAM	≤ 3		≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		

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

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

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

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

<WLAN>

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 only for inter and intra band, Uplink CA is not supported. 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			
Number	Combination	Restriction	Covered by Measurement Superset
1	CA_5A-7A		
2	CA_5A-5A		
3	CA_7A-7A		
4	CA_5B		2CC-2
5	CA_7C		2CC-2
6	CA_38C		
7	CA_41C		

<Power verification when LTE Carrier Aggregation Active>

General Note:

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

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

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

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

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

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

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

<Two Carrier power verification>

Configure		CA Configuration (BCS)	PCC							SCC				Power	
			LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band		CA_5A-7A	5	10	836.5	20525	QPSK	1	49	7	20	2655	3100	24.51	24.54
Intra-Band	Non-Contiguous	CA_5A-5A	5	10	836.5	20525	QPSK	1	49	5	5	891.5	2625	24.49	24.54
		CA_7A-7A	7	20	2510	20850	QPSK	1	99	7	5	2687.5	3425	24.52	24.57
	Contiguous	CA_38C	38	20	2580	37850	QPSK	1	49	38	20	2599.80	38048	24.31	24.32
		CA_41C	41	20	2636.5	41055	QPSK	1	49	41	20	2616.70	40857	24.35	24.37

<Uplink Carrier Aggregation Active>

<Intra-Band Uplink carrier aggregation>

General Note:

1. The device supports intra-band uplink carrier aggregation for LTE B5/7/41/66 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.

Config 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	25.38	25.70
20575	20476	QPSK	1	0	1	49	2	0	25.22	25.70
20600	20501	QPSK	1	0	1	49	2	0	25.25	25.70

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	24.60	25.70
21100	20902	QPSK	1	0	1	99	2	0	24.46	25.70
21350	21152	QPSK	1	0	1	99	2	0	24.46	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	23.72	25.20
21100	20902	QPSK	1	0	1	99	2	0	23.73	25.20
21350	21152	QPSK	1	0	1	99	2	0	23.77	25.20

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	23.72	24.40
21100	20902	QPSK	1	0	1	99	2	0	23.73	24.40
21350	21152	QPSK	1	0	1	99	2	0	23.77	24.40

CA_66B_DSI 2/4/7										
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	25.05	25.70
132322	132229	QPSK	1	0	1	24	2	0	24.91	25.70
132597	132504	QPSK	1	0	1	24	2	0	24.86	25.70

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	23.54	25.10
132322	132229	QPSK	1	0	1	24	2	0	23.31	25.10
132597	132504	QPSK	1	0	1	24	2	0	23.35	25.10

CA_66C_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				
132072	132270	QPSK	1	99	1	0	2	0	25.07	25.70
132322	132124	QPSK	1	0	1	99	2	0	25.07	25.70
132572	132374	QPSK	1	0	1	99	2	0	24.99	25.70

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	23.71	25.10
132322	132124	QPSK	1	0	1	99	2	0	23.63	25.10
132572	132374	QPSK	1	0	1	99	2	0	23.55	25.10

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	25.43	25.70
40185	39987	QPSK	1	0	1	99	2	0	25.38	25.70
40620	40422	QPSK	1	0	1	99	2	0	25.68	25.70
41055	40857	QPSK	1	0	1	99	2	0	25.53	25.70
41490	41292	QPSK	1	0	1	99	2	0	25.66	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	24.11	25.40
40185	39987	QPSK	1	0	1	99	2	0	23.93	25.40
40620	40422	QPSK	1	0	1	99	2	0	24.13	25.40
41055	40857	QPSK	1	0	1	99	2	0	25.17	25.40
41490	41292	QPSK	1	0	1	99	2	0	24.79	25.40

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	23.22	24.60
40185	39987	QPSK	1	0	1	99	2	0	23.17	24.60
40620	40422	QPSK	1	0	1	99	2	0	23.37	24.60
41055	40857	QPSK	1	0	1	99	2	0	24.14	24.60
41490	41292	QPSK	1	0	1	99	2	0	23.89	24.60

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	7.43	9
55830	55632	QPSK	1	0	1	99	2	0	16.07	17.2
56150	55952	QPSK	1	0	1	99	2	0	16	17.2
56640	56442	QPSK	1	0	1	99	2	0	7.71	9

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	7.41	9
55830	55632	QPSK	1	0	1	99	2	0	16.09	17.2
56150	55952	QPSK	1	0	1	99	2	0	15.98	17.2
56640	56442	QPSK	1	0	1	99	2	0	7.62	9

Config 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	24.93	25.7
20575	20476	QPSK	1	0	1	49	2	0	25.03	25.7
20600	20501	QPSK	1	0	1	49	2	0	24.88	25.7

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	23.00	23.8
20575	20476	QPSK	1	0	1	49	2	0	23.02	23.8
20600	20501	QPSK	1	0	1	49	2	0	22.98	23.8

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	23.00	24.60
20575	20476	QPSK	1	0	1	49	2	0	23.02	24.60
20600	20501	QPSK	1	0	1	49	2	0	22.98	24.60

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	24.65	25.7
21100	20902	QPSK	1	0	1	99	2	0	24.59	25.7
21350	21152	QPSK	1	0	1	99	2	0	24.17	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	20.81	21.6
21100	20902	QPSK	1	0	1	99	2	0	20.86	21.6
21350	21152	QPSK	1	0	1	99	2	0	20.47	21.6

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	20.81	22.4
21100	20902	QPSK	1	0	1	99	2	0	20.86	22.4
21350	21152	QPSK	1	0	1	99	2	0	20.47	22.4

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	25.29	25.70
132322	132229	QPSK	1	0	1	24	2	0	25.26	25.70
132597	132504	QPSK	1	0	1	24	2	0	25.35	25.70

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	19.86	21.10
132322	132229	QPSK	1	0	1	24	2	0	19.71	21.10
132597	132504	QPSK	1	0	1	24	2	0	19.76	21.10

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	20.94	21.90
132322	132229	QPSK	1	0	1	24	2	0	20.56	21.90
132597	132504	QPSK	1	0	1	24	2	0	20.79	21.90

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	25.24	25.70
132322	132124	QPSK	1	0	1	99	2	0	25.56	25.70
132572	132374	QPSK	1	0	1	99	2	0	25.31	25.70

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	20.05	21.10
132322	132124	QPSK	1	0	1	99	2	0	19.93	21.10
132572	132374	QPSK	1	0	1	99	2	0	20.08	21.10

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	20.05	21.90
132322	132124	QPSK	1	0	1	99	2	0	19.93	21.90
132572	132374	QPSK	1	0	1	99	2	0	20.08	21.90

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	25.70	25.70
40185	39987	QPSK	1	0	1	99	2	0	25.52	25.70
40620	40422	QPSK	1	0	1	99	2	0	25.18	25.70
41055	40857	QPSK	1	0	1	99	2	0	25.24	25.70
41490	41292	QPSK	1	0	1	99	2	0	25.62	25.70

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	21.61	23.20
40185	39987	QPSK	1	0	1	99	2	0	22.28	23.20
40620	40422	QPSK	1	0	1	99	2	0	21.61	23.20
41055	40857	QPSK	1	0	1	99	2	0	22.17	23.20
41490	41292	QPSK	1	0	1	99	2	0	21.85	23.20

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	22.34	24.00
40185	39987	QPSK	1	0	1	99	2	0	23.17	24.00
40620	40422	QPSK	1	0	1	99	2	0	22.99	24.00
41055	40857	QPSK	1	0	1	99	2	0	23.06	24.00
41490	41292	QPSK	1	0	1	99	2	0	22.65	24.00

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	5.74	7
55830	55632	QPSK	1	0	1	99	2	0	14.47	15.6
56150	55952	QPSK	1	0	1	99	2	0	14.45	15.6
56640	56442	QPSK	1	0	1	99	2	0	5.74	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	5.61	7
55830	55632	QPSK	1	0	1	99	2	0	14.47	15.6
56150	55952	QPSK	1	0	1	99	2	0	14.35	15.6
56640	56442	QPSK	1	0	1	99	2	0	5.85	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	5.61	7
55830	55632	QPSK	1	0	1	99	2	0	14.47	15.6
56150	55952	QPSK	1	0	1	99	2	0	14.35	15.6
56640	56442	QPSK	1	0	1	99	2	0	5.85	7

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 7	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	≤ 25mm
2.4GHz WLAN Ant 3	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm
2.4GHz WLAN/BT Ant 4	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm
5GHz WLAN Ant 3	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm
5GHz WLAN Ant 4	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm

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

General Note:

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

15. SAR Test Results

General Note:

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

GSM Note:

1. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested. Therefore, the GPRS (4Tx slots) for GSM850/GSM1900 is considered as the primary mode.
2. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

UMTS Note:

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

LTE Note:

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is > not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B12/B26/B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
7. LTE B2/B4/B5/B17/B38 SAR test was covered by B12/B25/B26/B66/B41, except B38 HPUE; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
   a. The maximum output power, including tolerance, for the smaller band is ≤ the larger band to qualify for the SAR test exclusion.
   b. The channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.
   c. For B38 HPUE was according to FCC guidance to verify highest SAR test configuration in Power Class 3 for each LTE B41 configuration and exposure condition combination.
8. For UL CA, SAR was first measured with only a single carrier active in the uplink (CA non-active) for each exposure condition; the uplink CA scenario with two component carriers was additionally tested for the configuration with the highest SAR when UL CA was not acive. The SCC was configuraed with the closest available contiguous channel. The two component carriers were configured so the resource blocks are physically allocated side by side to achieve the maximum output power
9. TCB Workshop Notes, SAR tests were performed with Power Class 3 (given the specific UL/DL limitations for Power Class 2). Additionally, SAR testing for the power class condition was evaluated for the highest configuration in Power Class 3 for each test configuration to confirm the results were scalable linearly.

5G NR Note:

1. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
   a. SAR testing start with the largest channel bandwidth and measure SAR for PI/2 BPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
   b. 50% RB allocation for PI/2 BPSK SAR testing follows 1RB PI/2 BPSK allocation procedure
   c. PI/2 BPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
   d. QPSK/16QAM/64QAM/256QAM output powers are not ½ dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/16QAM/64QAM/256QAM SAR testing are not required.
   e. Smaller bandwidth output power for each RB allocation configuration for this device will not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
   f. For 5G FR1 n5 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	251	848.8	config 0	28.06	29.50	1.393	0.02	0.304	0.424
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Tilted	0mm	DSI 2/7	251	848.8	config 0	28.06	29.50	1.393	-0.18	0.171	0.238
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	DSI 2/7	251	848.8	config 0	28.06	29.50	1.393	-0.09	0.373	0.520
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Tilted	0mm	DSI 2/7	251	848.8	config 0	28.06	29.50	1.393	-0.07	0.183	0.255
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 7	128	824.2	config 1	25.86	27.20	1.361	-0.01	0.703	0.957
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 7	189	836.4	config 1	25.68	27.20	1.419	-0.09	0.662	0.939
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 7	251	848.8	config 1	25.49	27.20	1.483	-0.16	0.577	0.855
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	DSI 7	128	824.2	config 1	25.86	27.20	1.361	-0.05	0.545	0.742
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	DSI 7	128	824.2	config 1	25.86	27.20	1.361	-0.07	0.462	0.629
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	DSI 7	128	824.2	config 1	25.86	27.20	1.361	0.02	0.380	0.517
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 2	189	836.4	config 1	26.21	28.00	1.510	0.06	0.723	1.092
01	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 2	128	824.2	config 1	26.16	28.00	1.528	-0.03	0.771	1.178
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 2	251	848.8	config 1	26.03	28.00	1.574	-0.03	0.706	1.111
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	DSI 2	189	836.4	config 1	26.21	28.00	1.510	-0.09	0.492	0.743
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	DSI 2	189	836.4	config 1	26.21	28.00	1.510	-0.15	0.423	0.639
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	DSI 2	189	836.4	config 1	26.21	28.00	1.510	-0.01	0.342	0.516
02	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 2/7	512	1850.2	config 0	25.72	27.00	1.343	-0.08	0.346	0.465
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Tilted	0mm	DSI 2/7	512	1850.2	config 0	25.72	27.00	1.343	-0.1	0.215	0.289
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Cheek	0mm	DSI 2/7	512	1850.2	config 0	25.72	27.00	1.343	-0.12	0.181	0.243
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Tilted	0mm	DSI 2/7	512	1850.2	config 0	25.72	27.00	1.343	-0.13	0.230	0.309
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 2/7	661	1880	config 1	25.39	26.50	1.291	-0.11	0.056	0.072
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Tilted	0mm	DSI 2/7	661	1880	config 1	25.39	26.50	1.291	-0.07	0.060	0.077
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	DSI 2/7	661	1880	config 1	25.39	26.50	1.291	-0.14	0.071	0.092
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Tilted	0mm	DSI 2/7	661	1880	config 1	25.39	26.50	1.291	0.15	0.032	0.041

<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	Right Cheek	0mm	DSI 2/7	9400	1880	config 0	24.27	25.70	1.390	-0.13	0.666	0.926
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	9262	1852.4	config 0	24.20	25.70	1.413	-0.06	0.578	0.816
03	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	9538	1907.6	config 0	24.15	25.70	1.429	-0.11	0.698	0.997
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	9400	1880	config 0	24.27	25.70	1.390	-0.07	0.324	0.450
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	9400	1880	config 0	24.27	25.70	1.390	-0.13	0.333	0.463
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	9400	1880	config 0	24.27	25.70	1.390	-0.11	0.288	0.400
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	9400	1880	config 1	24.45	25.70	1.334	-0.01	0.164	0.219
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	9400	1880	config 1	24.45	25.70	1.334	-0.04	0.173	0.231
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	9400	1880	config 1	24.45	25.70	1.334	0	0.337	0.449
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	9400	1880	config 1	24.45	25.70	1.334	-0.13	0.154	0.205
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	1413	1732.6	config 0	24.06	25.70	1.459	-0.06	0.424	0.619
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	1413	1732.6	config 0	24.06	25.70	1.459	-0.08	0.253	0.369
04	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	1413	1732.6	config 0	24.06	25.70	1.459	-0.05	0.443	0.646
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	1413	1732.6	config 0	24.06	25.70	1.459	-0.1	0.254	0.371
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	1312	1712.4	config 1	24.23	25.70	1.403	-0.06	0.036	0.051
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	1312	1712.4	config 1	24.23	25.70	1.403	-0.05	0.055	0.077
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	1312	1712.4	config 1	24.23	25.70	1.403	0.12	0.092	0.129
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	1312	1712.4	config 1	24.23	25.70	1.403	-0.13	0.037	0.052
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	4182	836.4	config 0	24.08	25.00	1.236	-0.18	0.290	0.358
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	4182	836.4	config 0	24.08	25.00	1.236	-0.09	0.153	0.189
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	4182	836.4	config 0	24.08	25.00	1.236	-0.19	0.296	0.366
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	4182	836.4	config 0	24.08	25.00	1.236	-0.12	0.161	0.199
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	4132	826.4	config 1	24.09	25.00	1.233	-0.07	0.707	0.872
05	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	4182	836.4	config 1	24.05	25.00	1.245	-0.05	0.801	0.997
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	4233	846.6	config 1	24.08	25.00	1.236	-0.03	0.806	0.996
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	4132	826.4	config 1	24.09	25.00	1.233	-0.03	0.457	0.564
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	4132	826.4	config 1	24.09	25.00	1.233	-0.11	0.369	0.455
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	4132	826.4	config 1	24.09	25.00	1.233	-0.05	0.303	0.374

<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	24.57	25.70	1.297	0.06	0.257	0.333
	LTE Band 7_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	DSI 2/7	20850	2510	config 0	23.70	24.70	1.259	0.07	0.239	0.301
	LTE Band 7_Ant 2	20M	QPSK	1	99	Right Tilted	0mm	DSI 2/7	20850	2510	config 0	24.57	25.70	1.297	0.15	0.092	0.119
	LTE Band 7_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	DSI 2/7	20850	2510	config 0	23.70	24.70	1.259	0.15	0.084	0.106
	LTE Band 7_Ant 2	20M	QPSK	1	99	Left Cheek	0mm	DSI 2/7	20850	2510	config 0	24.57	25.70	1.297	-0.06	0.230	0.298
	LTE Band 7_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	DSI 2/7	20850	2510	config 0	23.70	24.70	1.259	-0.16	0.209	0.263
	LTE Band 7_Ant 2	20M	QPSK	1	99	Left Tilted	0mm	DSI 2/7	20850	2510	config 0	24.57	25.70	1.297	-0.02	0.174	0.226
	LTE Band 7_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	DSI 2/7	20850	2510	config 0	23.70	24.70	1.259	-0.08	0.157	0.198
	LTE Band 7C_Ant 2	20M	QPSK	1	99	Right Cheek	0mm	DSI 2/7	20850+21048	2510	config 0	24.60	25.70	1.288	0.05	0.161	0.207
	LTE Band 7_Ant 0	20M	QPSK	1	99	Right Cheek	0mm	DSI 2/7	20850	2510	config 1	24.53	25.70	1.309	-0.11	0.203	0.266
	LTE Band 7_Ant 0	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	20850	2510	config 1	23.62	24.70	1.282	-0.13	0.216	0.277
	LTE Band 7_Ant 0	20M	QPSK	1	99	Right Tilted	0mm	DSI 2/7	20850	2510	config 1	24.53	25.70	1.309	0.14	0.085	0.111
	LTE Band 7_Ant 0	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	20850	2510	config 1	23.62	24.70	1.282	0.12	0.081	0.104
06	LTE Band 7_Ant 0	20M	QPSK	1	99	Left Cheek	0mm	DSI 2/7	20850	2510	config 1	24.53	25.70	1.309	0.15	0.360	0.471
	LTE Band 7_Ant 0	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	20850	2510	config 1	23.62	24.70	1.282	-0.11	0.306	0.392
	LTE Band 7_Ant 0	20M	QPSK	1	99	Left Tilted	0mm	DSI 2/7	20850	2510	config 1	24.53	25.70	1.309	0.15	0.172	0.225
	LTE Band 7_Ant 0	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	20850	2510	config 1	23.62	24.70	1.282	0.14	0.112	0.144
	LTE Band 7C_Ant 0	20M	QPSK	1	99	Left Cheek	0mm	DSI 2/7	20850+21048	2510	config 1	24.65	25.70	1.274	0.02	0.315	0.401
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	23095	707.5	config 0	24.12	25.70	1.439	-0.12	0.284	0.409
	LTE Band 12_Ant 0	10M	QPSK	25	12	Right Cheek	0mm	DSI 2/7	23095	707.5	config 0	23.34	24.70	1.368	-0.12	0.239	0.327
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	23095	707.5	config 0	24.12	25.70	1.439	-0.15	0.145	0.209
	LTE Band 12_Ant 0	10M	QPSK	25	12	Right Tilted	0mm	DSI 2/7	23095	707.5	config 0	23.34	24.70	1.368	-0.15	0.118	0.161
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	23095	707.5	config 0	24.12	25.70	1.439	-0.18	0.315	0.453
	LTE Band 12_Ant 0	10M	QPSK	25	12	Left Cheek	0mm	DSI 2/7	23095	707.5	config 0	23.34	24.70	1.368	-0.13	0.252	0.345
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	23095	707.5	config 0	24.12	25.70	1.439	-0.13	0.132	0.190
	LTE Band 12_Ant 0	10M	QPSK	25	12	Left Tilted	0mm	DSI 2/7	23095	707.5	config 0	23.34	24.70	1.368	-0.1	0.105	0.144
	LTE Band 12_Ant 1	10M	QPSK	1	49	Right Cheek	0mm	DSI 7	23095	707.5	config 1	23.85	25.10	1.334	-0.07	0.674	0.899
	LTE Band 12_Ant 1	10M	QPSK	25	25	Right Cheek	0mm	DSI 7	23095	707.5	config 1	23.54	24.10	1.138	-0.12	0.623	0.709
	LTE Band 12_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	DSI 7	23095	707.5	config 1	23.47	24.10	1.156	-0.09	0.610	0.705
	LTE Band 12_Ant 1	10M	QPSK	1	49	Right Tilted	0mm	DSI 7	23095	707.5	config 1	23.85	25.10	1.334	0	0.427	0.569
	LTE Band 12_Ant 1	10M	QPSK	25	25	Right Tilted	0mm	DSI 7	23095	707.5	config 1	23.54	24.10	1.138	-0.06	0.394	0.448
	LTE Band 12_Ant 1	10M	QPSK	1	49	Left Cheek	0mm	DSI 7	23095	707.5	config 1	23.85	25.10	1.334	-0.08	0.341	0.455
	LTE Band 12_Ant 1	10M	QPSK	25	25	Left Cheek	0mm	DSI 7	23095	707.5	config 1	23.54	24.10	1.138	-0.11	0.313	0.356
	LTE Band 12_Ant 1	10M	QPSK	1	49	Left Tilted	0mm	DSI 7	23095	707.5	config 1	23.85	25.10	1.334	-0.09	0.239	0.319
	LTE Band 12_Ant 1	10M	QPSK	25	25	Left Tilted	0mm	DSI 7	23095	707.5	config 1	23.54	24.10	1.138	-0.07	0.220	0.250
07	LTE Band 12_Ant 1	10M	QPSK	1	49	Right Cheek	0mm	DSI 2	23095	707.5	config 1	23.85	25.70	1.531	-0.07	0.674	1.032
	LTE Band 12_Ant 1	10M	QPSK	25	25	Right Cheek	0mm	DSI 2	23095	707.5	config 1	23.54	24.70	1.306	-0.12	0.623	0.814
	LTE Band 12_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	DSI 2	23095	707.5	config 1	23.47	24.70	1.327	-0.09	0.610	0.810
	LTE Band 12_Ant 1	10M	QPSK	1	49	Right Tilted	0mm	DSI 2	23095	707.5	config 1	23.85	25.70	1.531	0	0.427	0.654
	LTE Band 12_Ant 1	10M	QPSK	25	25	Right Tilted	0mm	DSI 2	23095	707.5	config 1	23.54	24.70	1.306	-0.06	0.394	0.515
	LTE Band 12_Ant 1	10M	QPSK	1	49	Left Cheek	0mm	DSI 2	23095	707.5	config 1	23.85	25.70	1.531	-0.08	0.341	0.522
	LTE Band 12_Ant 1	10M	QPSK	25	25	Left Cheek	0mm	DSI 2	23095	707.5	config 1	23.54	24.70	1.306	-0.11	0.313	0.409
	LTE Band 12_Ant 1	10M	QPSK	1	49	Left Tilted	0mm	DSI 2	23095	707.5	config 1	23.85	25.70	1.531	-0.09	0.239	0.366
	LTE Band 12_Ant 1	10M	QPSK	25	25	Left Tilted	0mm	DSI 2	23095	707.5	config 1	23.54	24.70	1.306	-0.07	0.220	0.287

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	23.97	25.20	1.327	-0.17	0.287	0.381
	LTE Band 13_Ant 0	10M	QPSK	25	12	Right Cheek	0mm	DSI 2/7	23230	782	config 0	23.01	24.20	1.315	-0.1	0.243	0.320
	LTE Band 13_Ant 0	10M	QPSK	1	49	Right Tilted	0mm	DSI 2/7	23230	782	config 0	23.97	25.20	1.327	-0.08	0.162	0.215
	LTE Band 13_Ant 0	10M	QPSK	25	12	Right Tilted	0mm	DSI 2/7	23230	782	config 0	23.01	24.20	1.315	-0.12	0.141	0.185
	LTE Band 13_Ant 0	10M	QPSK	1	49	Left Cheek	0mm	DSI 2/7	23230	782	config 0	23.97	25.20	1.327	-0.18	0.308	0.409
	LTE Band 13_Ant 0	10M	QPSK	25	12	Left Cheek	0mm	DSI 2/7	23230	782	config 0	23.01	24.20	1.315	-0.13	0.258	0.339
	LTE Band 13_Ant 0	10M	QPSK	1	49	Left Tilted	0mm	DSI 2/7	23230	782	config 0	23.97	25.20	1.327	0	0.161	0.214
	LTE Band 13_Ant 0	10M	QPSK	25	12	Left Tilted	0mm	DSI 2/7	23230	782	config 0	23.01	24.20	1.315	-0.06	0.136	0.179
08	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	23230	782	config 1	23.60	25.20	1.445	-0.18	0.426	0.616
	LTE Band 13_Ant 1	10M	QPSK	25	12	Right Cheek	0mm	DSI 2/7	23230	782	config 1	22.65	24.20	1.429	0.1	0.123	0.176
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	23230	782	config 1	23.60	25.20	1.445	-0.03	0.302	0.437
	LTE Band 13_Ant 1	10M	QPSK	25	12	Right Tilted	0mm	DSI 2/7	23230	782	config 1	22.65	24.20	1.429	0.06	0.084	0.120
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	23230	782	config 1	23.60	25.20	1.445	-0.05	0.072	0.104
	LTE Band 13_Ant 1	10M	QPSK	25	12	Left Cheek	0mm	DSI 2/7	23230	782	config 1	22.65	24.20	1.429	0	0.070	0.100
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	23230	782	config 1	23.60	25.20	1.445	-0.12	0.054	0.078
	LTE Band 13_Ant 1	10M	QPSK	25	12	Left Tilted	0mm	DSI 2/7	23230	782	config 1	22.65	24.20	1.429	0.04	0.052	0.074
	LTE Band 14_Ant 0	10M	QPSK	1	25	Right Cheek	0mm	DSI 2/7	23330	793	config 0	24.49	25.70	1.321	-0.04	0.294	0.388
	LTE Band 14_Ant 0	10M	QPSK	25	0	Right Cheek	0mm	DSI 2/7	23330	793	config 0	23.51	24.70	1.315	-0.09	0.253	0.333
	LTE Band 14_Ant 0	10M	QPSK	1	25	Right Tilted	0mm	DSI 2/7	23330	793	config 0	24.49	25.70	1.321	-0.13	0.171	0.226
	LTE Band 14_Ant 0	10M	QPSK	25	0	Right Tilted	0mm	DSI 2/7	23330	793	config 0	23.51	24.70	1.315	-0.09	0.138	0.182
	LTE Band 14_Ant 0	10M	QPSK	1	25	Left Cheek	0mm	DSI 2/7	23330	793	config 0	24.49	25.70	1.321	-0.11	0.323	0.427
	LTE Band 14_Ant 0	10M	QPSK	25	0	Left Cheek	0mm	DSI 2/7	23330	793	config 0	23.51	24.70	1.315	-0.13	0.240	0.316
	LTE Band 14_Ant 0	10M	QPSK	1	25	Left Tilted	0mm	DSI 2/7	23330	793	config 0	24.49	25.70	1.321	-0.17	0.172	0.227
	LTE Band 14_Ant 0	10M	QPSK	25	0	Left Tilted	0mm	DSI 2/7	23330	793	config 0	23.51	24.70	1.315	-0.11	0.139	0.183
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	DSI 7	23330	793	config 1	23.99	24.90	1.233	-0.13	0.808	0.996
	LTE Band 14_Ant 1	10M	QPSK	25	25	Right Cheek	0mm	DSI 7	23330	793	config 1	23.75	23.90	1.035	-0.03	0.783	0.811
	LTE Band 14_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	DSI 7	23330	793	config 1	23.68	23.90	1.052	-0.09	0.788	0.829
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	DSI 7	23330	793	config 1	23.99	24.90	1.233	-0.01	0.520	0.641
	LTE Band 14_Ant 1	10M	QPSK	25	25	Right Tilted	0mm	DSI 7	23330	793	config 1	23.75	23.90	1.035	-0.07	0.493	0.510
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	DSI 7	23330	793	config 1	23.99	24.90	1.233	-0.13	0.479	0.591
	LTE Band 14_Ant 1	10M	QPSK	25	25	Left Cheek	0mm	DSI 7	23330	793	config 1	23.75	23.90	1.035	-0.1	0.445	0.461
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	DSI 7	23330	793	config 1	23.99	24.90	1.233	-0.01	0.375	0.462
	LTE Band 14_Ant 1	10M	QPSK	25	25	Left Tilted	0mm	DSI 7	23330	793	config 1	23.75	23.90	1.035	-0.04	0.350	0.362
09	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	DSI 2	23330	793	config 1	23.99	25.70	1.483	-0.13	0.808	1.198
	LTE Band 14_Ant 1	10M	QPSK	25	25	Right Cheek	0mm	DSI 2	23330	793	config 1	23.75	24.70	1.245	-0.03	0.783	0.974
	LTE Band 14_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	DSI 2	23330	793	config 1	23.68	24.70	1.265	-0.09	0.788	0.997
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	DSI 2	23330	793	config 1	23.99	25.70	1.483	-0.01	0.520	0.771
	LTE Band 14_Ant 1	10M	QPSK	25	25	Right Tilted	0mm	DSI 2	23330	793	config 1	23.75	24.70	1.245	-0.07	0.493	0.614
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	DSI 2	23330	793	config 1	23.99	25.70	1.483	-0.13	0.479	0.710
	LTE Band 14_Ant 1	10M	QPSK	25	25	Left Cheek	0mm	DSI 2	23330	793	config 1	23.75	24.70	1.245	-0.1	0.445	0.554
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	DSI 2	23330	793	config 1	23.99	25.70	1.483	-0.01	0.375	0.556
	LTE Band 14_Ant 1	10M	QPSK	25	25	Left Tilted	0mm	DSI 2	23330	793	config 1	23.75	24.70	1.245	-0.04	0.350	0.436

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	Right Cheek	0mm	DSI 2/7	26140	1860	config 0	24.56	25.70	1.300	-0.15	0.691	0.898
10	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	26340	1880	config 0	24.54	25.70	1.306	-0.14	0.764	0.998
	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	26590	1905	config 0	24.48	25.70	1.324	-0.19	0.625	0.828
	LTE Band 25_Ant 2	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	26140	1860	config 0	23.70	24.70	1.259	-0.12	0.597	0.752
	LTE Band 25_Ant 2	20M	QPSK	100	0	Right Cheek	0mm	DSI 2/7	26140	1860	config 0	23.70	24.70	1.259	-0.18	0.596	0.750
	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	26140	1860	config 0	24.56	25.70	1.300	-0.09	0.401	0.521
	LTE Band 25_Ant 2	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	26140	1860	config 0	23.70	24.70	1.259	-0.09	0.338	0.426
	LTE Band 25_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	26140	1860	config 0	24.56	25.70	1.300	-0.04	0.380	0.494
	LTE Band 25_Ant 2	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	26140	1860	config 0	23.70	24.70	1.259	-0.05	0.296	0.373
	LTE Band 25_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	26140	1860	config 0	24.56	25.70	1.300	-0.15	0.304	0.395
	LTE Band 25_Ant 2	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	26140	1860	config 0	23.70	24.70	1.259	-0.08	0.264	0.332
	LTE Band 25_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	26140	1860	config 1	24.37	25.70	1.358	-0.04	0.054	0.073
	LTE Band 25_Ant 0	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	26140	1860	config 1	23.33	24.70	1.371	0.02	0.035	0.048
	LTE Band 25_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	26140	1860	config 1	24.37	25.70	1.358	-0.03	0.035	0.048
	LTE Band 25_Ant 0	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	26140	1860	config 1	23.33	24.70	1.371	0.05	0.020	0.027
	LTE Band 25_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	26140	1860	config 1	24.37	25.70	1.358	-0.02	0.062	0.084
	LTE Band 25_Ant 0	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	26140	1860	config 1	23.33	24.70	1.371	-0.1	0.051	0.070
	LTE Band 25_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	26140	1860	config 1	24.37	25.70	1.358	-0.04	0.034	0.046
	LTE Band 25_Ant 0	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	26140	1860	config 1	23.33	24.70	1.371	-0.06	0.022	0.030
	LTE Band 26_Ant 0	15M	QPSK	1	74	Right Cheek	0mm	DSI 2/7	26865	831.5	config 0	24.52	25.70	1.312	-0.11	0.319	0.419
	LTE Band 26_Ant 0	15M	QPSK	36	0	Right Cheek	0mm	DSI 2/7	26865	831.5	config 0	23.39	24.70	1.352	-0.13	0.281	0.380
	LTE Band 26_Ant 0	15M	QPSK	1	74	Right Tilted	0mm	DSI 2/7	26865	831.5	config 0	24.52	25.70	1.312	-0.06	0.157	0.206
	LTE Band 26_Ant 0	15M	QPSK	36	0	Right Tilted	0mm	DSI 2/7	26865	831.5	config 0	23.39	24.70	1.352	-0.01	0.138	0.187
	LTE Band 26_Ant 0	15M	QPSK	1	74	Left Cheek	0mm	DSI 2/7	26865	831.5	config 0	24.52	25.70	1.312	-0.15	0.312	0.409
	LTE Band 26_Ant 0	15M	QPSK	36	0	Left Cheek	0mm	DSI 2/7	26865	831.5	config 0	23.39	24.70	1.352	-0.14	0.280	0.379
	LTE Band 26_Ant 0	15M	QPSK	1	74	Left Tilted	0mm	DSI 2/7	26865	831.5	config 0	24.52	25.70	1.312	-0.09	0.172	0.226
	LTE Band 26_Ant 0	15M	QPSK	36	0	Left Tilted	0mm	DSI 2/7	26865	831.5	config 0	23.39	24.70	1.352	-0.17	0.157	0.212
	LTE Band 5B_Ant 0	10M	QPSK	1	49	Right Cheek	0mm	DSI 2/7	20450+20549	829	config 0	25.38	25.70	1.076	-0.02	0.261	0.281
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Cheek	0mm	DSI 7	26865	831.5	config 1	22.65	23.80	1.303	-0.13	0.715	0.932
	LTE Band 26_Ant 1	15M	QPSK	36	20	Right Cheek	0mm	DSI 7	26865	831.5	config 1	22.80	23.80	1.259	-0.08	0.750	0.944
	LTE Band 26_Ant 1	15M	QPSK	75	0	Right Cheek	0mm	DSI 7	26865	831.5	config 1	22.82	23.80	1.253	-0.07	0.746	0.935
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Tilted	0mm	DSI 7	26865	831.5	config 1	22.65	23.80	1.303	-0.03	0.435	0.567
	LTE Band 26_Ant 1	15M	QPSK	36	20	Right Tilted	0mm	DSI 7	26865	831.5	config 1	22.80	23.80	1.259	0	0.458	0.577
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Cheek	0mm	DSI 7	26865	831.5	config 1	22.65	23.80	1.303	-0.11	0.384	0.500
	LTE Band 26_Ant 1	15M	QPSK	36	20	Left Cheek	0mm	DSI 7	26865	831.5	config 1	22.80	23.80	1.259	-0.06	0.405	0.510
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Tilted	0mm	DSI 7	26865	831.5	config 1	22.65	23.80	1.303	-0.08	0.284	0.370
	LTE Band 26_Ant 1	15M	QPSK	36	20	Left Tilted	0mm	DSI 7	26865	831.5	config 1	22.80	23.80	1.259	-0.1	0.299	0.376
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	DSI 7	20575+20476	841.5	config 1	23.02	23.80	1.197	0.03	0.697	0.834
11	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Cheek	0mm	DSI 2	26865	831.5	config 1	22.65	24.60	1.567	-0.13	0.715	1.120
	LTE Band 26_Ant 1	15M	QPSK	36	20	Right Cheek	0mm	DSI 2	26865	831.5	config 1	22.80	24.10	1.349	-0.08	0.750	1.012
	LTE Band 26_Ant 1	15M	QPSK	75	0	Right Cheek	0mm	DSI 2	26865	831.5	config 1	22.82	24.10	1.343	-0.07	0.746	1.002
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Tilted	0mm	DSI 2	26865	831.5	config 1	22.65	24.60	1.567	-0.03	0.435	0.682
	LTE Band 26_Ant 1	15M	QPSK	36	20	Right Tilted	0mm	DSI 2	26865	831.5	config 1	22.80	24.10	1.349	0	0.458	0.618
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Cheek	0mm	DSI 2	26865	831.5	config 1	22.65	24.60	1.567	-0.11	0.384	0.602
	LTE Band 26_Ant 1	15M	QPSK	36	20	Left Cheek	0mm	DSI 2	26865	831.5	config 1	22.80	24.10	1.349	-0.06	0.405	0.546
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Tilted	0mm	DSI 2	26865	831.5	config 1	22.65	24.60	1.567	-0.08	0.284	0.445
	LTE Band 26_Ant 1	15M	QPSK	36	20	Left Tilted	0mm	DSI 2	26865	831.5	config 1	22.80	24.10	1.349	-0.1	0.299	0.403
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	DSI 2	20575+20476	841.5	config 1	23.02	24.60	1.439	0.03	0.697	1.003

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	22.18	23.70	1.419	0.05	0.184	0.261
	LTE Band 30_Ant 2	10M	QPSK	25	25	Right Cheek	0mm	DSI 2/7	27710	2310	config 0	21.23	22.70	1.403	0.07	0.093	0.130
	LTE Band 30_Ant 2	10M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	27710	2310	config 0	22.18	23.70	1.419	0.01	0.056	0.079
	LTE Band 30_Ant 2	10M	QPSK	25	25	Right Tilted	0mm	DSI 2/7	27710	2310	config 0	21.23	22.70	1.403	0.08	0.048	0.067
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	27710	2310	config 0	22.18	23.70	1.419	-0.16	0.083	0.118
	LTE Band 30_Ant 2	10M	QPSK	25	25	Left Cheek	0mm	DSI 2/7	27710	2310	config 0	21.23	22.70	1.403	0.1	0.065	0.091
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	27710	2310	config 0	22.18	23.70	1.419	0.11	0.079	0.112
	LTE Band 30_Ant 2	10M	QPSK	25	25	Left Tilted	0mm	DSI 2/7	27710	2310	config 0	21.23	22.70	1.403	-0.03	0.065	0.091
	LTE Band 30_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	27710	2310	config 1	22.60	23.70	1.288	-0.15	0.128	0.165
	LTE Band 30_Ant 0	10M	QPSK	25	12	Right Cheek	0mm	DSI 2/7	27710	2310	config 1	21.64	22.70	1.276	0.17	0.095	0.121
	LTE Band 30_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	27710	2310	config 1	22.60	23.70	1.288	0.13	0.054	0.070
	LTE Band 30_Ant 0	10M	QPSK	25	12	Right Tilted	0mm	DSI 2/7	27710	2310	config 1	21.64	22.70	1.276	0.17	0.045	0.057
12	LTE Band 30_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	27710	2310	config 1	22.60	23.70	1.288	-0.01	0.280	0.361
	LTE Band 30_Ant 0	10M	QPSK	25	12	Left Cheek	0mm	DSI 2/7	27710	2310	config 1	21.64	22.70	1.276	0.16	0.221	0.282
	LTE Band 30_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	27710	2310	config 1	22.60	23.70	1.288	0.12	0.071	0.091
	LTE Band 30_Ant 0	10M	QPSK	25	12	Left Tilted	0mm	DSI 2/7	27710	2310	config 1	21.64	22.70	1.276	0.19	0.054	0.069
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	132322	1745	config 0	24.20	25.70	1.413	-0.06	0.401	0.566
	LTE Band 66_Ant 2	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	132072	1720	config 0	23.24	24.70	1.400	-0.05	0.326	0.456
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	132322	1745	config 0	24.20	25.70	1.413	-0.07	0.282	0.398
	LTE Band 66_Ant 2	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	132072	1720	config 0	23.24	24.70	1.400	-0.14	0.239	0.335
13	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	132322	1745	config 0	24.20	25.70	1.413	-0.06	0.477	0.674
	LTE Band 66_Ant 2	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	132072	1720	config 0	23.24	24.70	1.400	-0.12	0.400	0.560
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	132322	1745	config 0	24.20	25.70	1.413	-0.05	0.298	0.421
	LTE Band 66_Ant 2	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	132072	1720	config 0	23.24	24.70	1.400	-0.07	0.246	0.344
	LTE Band 66C_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	132322+132124	1745	config 0	25.07	25.70	1.156	0.02	0.121	0.140
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	132072	1720	config 1	24.30	25.70	1.380	-0.02	0.013	0.018
	LTE Band 66_Ant 0	20M	QPSK	50	50	Right Cheek	0mm	DSI 2/7	132072	1720	config 1	23.21	24.70	1.409	-0.05	0.015	0.021
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	132072	1720	config 1	24.30	25.70	1.380	0.07	0.026	0.036
	LTE Band 66_Ant 0	20M	QPSK	50	50	Right Tilted	0mm	DSI 2/7	132072	1720	config 1	23.21	24.70	1.409	-0.01	0.023	0.032
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	132072	1720	config 1	24.30	25.70	1.380	-0.03	0.044	0.061
	LTE Band 66_Ant 0	20M	QPSK	50	50	Left Cheek	0mm	DSI 2/7	132072	1720	config 1	23.21	24.70	1.409	-0.05	0.024	0.034
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	132072	1720	config 1	24.30	25.70	1.380	0.11	0.016	0.022
	LTE Band 66_Ant 0	20M	QPSK	50	50	Left Tilted	0mm	DSI 2/7	132072	1720	config 1	23.21	24.70	1.409	-0.09	0.011	0.016
	LTE Band 66C_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	132322+132124	1745	config 1	25.56	25.70	1.033	-0.05	0.001	0.001
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	133322	683	config 0	24.65	25.70	1.274	-0.14	0.218	0.278
	LTE Band 71_Ant 0	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	133322	683	config 0	23.75	24.70	1.245	-0.05	0.172	0.214
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	133322	683	config 0	24.65	25.70	1.274	0	0.103	0.131
	LTE Band 71_Ant 0	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	133322	683	config 0	23.75	24.70	1.245	-0.03	0.084	0.105
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	133322	683	config 0	24.65	25.70	1.274	-0.11	0.243	0.309
	LTE Band 71_Ant 0	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	133322	683	config 0	23.75	24.70	1.245	-0.09	0.190	0.236
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	133322	683	config 0	24.65	25.70	1.274	-0.06	0.124	0.158
	LTE Band 71_Ant 0	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	133322	683	config 0	23.75	24.70	1.245	-0.1	0.101	0.126
14	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	133322	683	config 1	24.17	25.70	1.422	-0.11	0.683	0.971
	LTE Band 71_Ant 1	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	133322	683	config 1	23.28	24.70	1.387	-0.09	0.576	0.799
	LTE Band 71_Ant 1	20M	QPSK	100	0	Right Cheek	0mm	DSI 2/7	133322	683	config 1	23.32	24.70	1.374	-0.1	0.577	0.793
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	133322	683	config 1	24.17	25.70	1.422	-0.11	0.513	0.730
	LTE Band 71_Ant 1	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	133322	683	config 1	23.28	24.70	1.387	-0.11	0.424	0.588
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	133322	683	config 1	24.17	25.70	1.422	-0.13	0.342	0.486
	LTE Band 71_Ant 1	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	133322	683	config 1	23.28	24.70	1.387	-0.09	0.292	0.405
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	133322	683	config 1	24.17	25.70	1.422	-0.04	0.247	0.351
	LTE Band 71_Ant 1	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	133322	683	config 1	23.28	24.70	1.387	-0.1	0.207	0.287

<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	24.37	25.70	1.358	62.9	1.006	0.01	0.071	0.097
	LTE Band 41_Ant 2	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	41055	2636.5	config 0	23.44	24.70	1.337	62.9	1.006	0.02	0.056	0.075
	LTE Band 41_Ant 2	20M	QPSK	1	49	Right Tilted	0mm	DSI 2/7	41055	2636.5	config 0	24.37	25.70	1.358	62.9	1.006	0.14	0.025	0.034
	LTE Band 41_Ant 2	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	41055	2636.5	config 0	23.44	24.70	1.337	62.9	1.006	0.11	0.020	0.027
	LTE Band 41_Ant 2	20M	QPSK	1	49	Left Cheek	0mm	DSI 2/7	41055	2636.5	config 0	24.37	25.70	1.358	62.9	1.006	-0.19	0.064	0.087
	LTE Band 41_Ant 2	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	41055	2636.5	config 0	23.44	24.70	1.337	62.9	1.006	0.17	0.051	0.069
	LTE Band 41_Ant 2	20M	QPSK	1	49	Left Tilted	0mm	DSI 2/7	41055	2636.5	config 0	24.37	25.70	1.358	62.9	1.006	-0.02	0.058	0.079
	LTE Band 41_Ant 2	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	41055	2636.5	config 0	23.44	24.70	1.337	62.9	1.006	0.14	0.046	0.062
	LTE Band 38_HPUE_Ant 2	20M	QPSK	1	99	Right Cheek	0mm	DSI 2/7	38000	2595	config 0	26.12	27.50	1.374	42.9	1.009	0.16	0.067	0.093
	LTE Band 41C_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	40620+40422	2593	config 0	25.68	25.70	1.005	62.9	1.006	0.03	0.095	0.096
	LTE Band 41_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	41055	2636.5	config 1	24.22	25.70	1.406	62.9	1.006	-0.15	0.224	0.317
	LTE Band 41_Ant 0	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	41055	2636.5	config 1	23.31	24.70	1.377	62.9	1.006	-0.04	0.192	0.266
	LTE Band 41_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	41055	2636.5	config 1	24.22	25.70	1.406	62.9	1.006	0.07	0.075	0.106
	LTE Band 41_Ant 0	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	41055	2636.5	config 1	23.31	24.70	1.377	62.9	1.006	0.19	0.062	0.086
15	LTE Band 41_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	41055	2636.5	config 1	24.22	25.70	1.406	62.9	1.006	0	0.233	0.330
	LTE Band 41_Ant 0	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	41055	2636.5	config 1	23.31	24.70	1.377	62.9	1.006	-0.04	0.192	0.266
	LTE Band 41_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	41055	2636.5	config 1	24.22	25.70	1.406	62.9	1.006	-0.04	0.140	0.198
	LTE Band 41_Ant 0	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	41055	2636.5	config 1	23.31	24.70	1.377	62.9	1.006	-0.05	0.114	0.158
	LTE Band 38_HPUE_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	DSI 2/7	38000	2595	config 1	26.12	27.50	1.374	42.9	1.009	0.07	0.226	0.313
	LTE Band 41C_Ant 0	20M	QPSK	1	99	Left Cheek	0mm	DSI 2/7	39750+39948	2506	config 1	25.70	25.70	1.000	62.9	1.006	0.02	0.270	0.272
	LTE Band 48_Ant 7	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	56640	3690	config 0	23.11	24.20	1.285	62.9	1.006	0.01	0.027	0.035
	LTE Band 48_Ant 7	20M	QPSK	50	0	Right Cheek	0mm	DSI 2/7	56640	3690	config 0	22.09	23.20	1.291	62.9	1.006	-0.03	0.021	0.027
	LTE Band 48_Ant 7	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	56640	3690	config 0	23.11	24.20	1.285	62.9	1.006	0.04	0.046	0.059
	LTE Band 48_Ant 7	20M	QPSK	50	0	Right Tilted	0mm	DSI 2/7	56640	3690	config 0	22.09	23.20	1.291	62.9	1.006	0.02	0.034	0.044
16	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	56640	3690	config 0	23.11	24.20	1.285	62.9	1.006	0.04	0.089	0.115
	LTE Band 48_Ant 7	20M	QPSK	50	0	Left Cheek	0mm	DSI 2/7	56640	3690	config 0	22.09	23.20	1.291	62.9	1.006	-0.13	0.076	0.099
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	56640	3690	config 0	23.11	24.20	1.285	62.9	1.006	0.19	0.017	0.022
	LTE Band 48_Ant 7	20M	QPSK	50	0	Left Tilted	0mm	DSI 2/7	56640	3690	config 0	22.09	23.20	1.291	62.9	1.006	0.05	0.011	0.014
	LTE Band 48C_Ant 7	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	55830+55632	3609	config 0	16.07	17.20	1.297	62.9	1.006	0.01	0.033	0.043
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	55830	3609	config 1	21.64	22.60	1.247	62.9	1.006	-0.14	0.031	0.039
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	DSI 2/7	55830	3609	config 1	20.65	21.60	1.245	62.9	1.006	0.04	0.021	0.026
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	55830	3609	config 1	21.64	22.60	1.247	62.9	1.006	0.01	0.029	0.036
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	DSI 2/7	55830	3609	config 1	20.65	21.60	1.245	62.9	1.006	0.01	0.021	0.026
	LTE Band 48_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	55830	3609	config 1	21.64	22.60	1.247	62.9	1.006	-0.14	0.078	0.098
	LTE Band 48_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	DSI 2/7	55830	3609	config 1	20.65	21.60	1.245	62.9	1.006	0.03	0.062	0.078
	LTE Band 48_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	55830	3609	config 1	21.64	22.60	1.247	62.9	1.006	0.01	0.026	0.033
	LTE Band 48_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	DSI 2/7	55830	3609	config 1	20.65	21.60	1.245	62.9	1.006	0.15	0.020	0.025
	LTE Band 48C_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	55830+55632	3609	config 1	14.47	15.60	1.297	62.9	1.006	0.04	0.027	0.035

<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	23.56	25.00	1.393	-0.17	0.202	0.281
	FR1 n5_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	DSI 2/7	167300	836.5	Config 0	23.55	25.00	1.396	-0.17	0.229	0.320
	FR1 n5_Ant 0	20M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	167300	836.5	Config 0	23.56	25.00	1.393	-0.17	0.103	0.143
	FR1 n5_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	DSI 2/7	167300	836.5	Config 0	23.55	25.00	1.396	-0.15	0.109	0.152
	FR1 n5_Ant 0	20M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	167300	836.5	Config 0	23.56	25.00	1.393	-0.14	0.211	0.294
	FR1 n5_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	DSI 2/7	167300	836.5	Config 0	23.55	25.00	1.396	-0.14	0.229	0.320
	FR1 n5_Ant 0	20M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	167300	836.5	Config 0	23.56	25.00	1.393	-0.07	0.106	0.148
	FR1 n5_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	DSI 2/7	167300	836.5	Config 0	23.55	25.00	1.396	-0.13	0.122	0.170
	FR1 n5_Ant 1	20M	BPSK	1	1	Right Cheek	0mm	DSI 7	167300	836.5	Config 1	23.24	24.10	1.219	-0.04	0.805	0.981
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	DSI 7	167300	836.5	Config 1	23.31	24.10	1.199	-0.08	0.803	0.963
	FR1 n5_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	DSI 7	167300	836.5	Config 1	23.30	24.10	1.202	-0.04	0.825	0.992
	FR1 n5_Ant 1	20M	BPSK	1	1	Right Tilted	0mm	DSI 7	167300	836.5	Config 1	23.24	24.10	1.219	-0.05	0.513	0.625
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	DSI 7	167300	836.5	Config 1	23.31	24.10	1.199	0.03	0.531	0.637
	FR1 n5_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	DSI 7	167300	836.5	Config 1	23.24	24.10	1.219	-0.01	0.457	0.557
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	DSI 7	167300	836.5	Config 1	23.31	24.10	1.199	-0.03	0.457	0.548
	FR1 n5_Ant 1	20M	BPSK	1	1	Left Tilted	0mm	DSI 7	167300	836.5	Config 1	23.24	24.10	1.219	0.05	0.376	0.458
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	DSI 7	167300	836.5	Config 1	23.31	24.10	1.199	-0.02	0.382	0.458
	FR1 n5_Ant 1	20M	BPSK	1	1	Right Cheek	0mm	DSI 2	167300	836.5	Config 1	23.24	24.90	1.466	-0.04	0.805	1.180
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	DSI 2	167300	836.5	Config 1	23.31	24.90	1.442	-0.08	0.803	1.158
17	FR1 n5_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	DSI 2	167300	836.5	Config 1	23.30	24.90	1.445	-0.04	0.825	1.192
	FR1 n5_Ant 1	20M	BPSK	1	1	Right Tilted	0mm	DSI 2	167300	836.5	Config 1	23.24	24.90	1.466	-0.05	0.513	0.752
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	DSI 2	167300	836.5	Config 1	23.31	24.90	1.442	0.03	0.531	0.766
	FR1 n5_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	DSI 2	167300	836.5	Config 1	23.24	24.90	1.466	-0.01	0.457	0.670
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	DSI 2	167300	836.5	Config 1	23.31	24.90	1.442	-0.03	0.457	0.659
	FR1 n5_Ant 1	20M	BPSK	1	1	Left Tilted	0mm	DSI 2	167300	836.5	Config 1	23.24	24.90	1.466	0.05	0.376	0.551
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	DSI 2	167300	836.5	Config 1	23.31	24.90	1.442	-0.02	0.382	0.551

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power table	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4	2	6	2437	11.90	12.00	1.023	98.72	1.013	-0.03	0.068	0.070
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4	2	6	2437	11.90	12.00	1.023	98.72	1.013	-0.18	0.073	0.076
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	2	6	2437	11.90	12.00	1.023	98.72	1.013	0.15	0.275	0.285
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4	2	6	2437	11.90	12.00	1.023	98.72	1.013	0.04	0.223	0.231
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	2	1	2412	14.90	15.00	1.023	98.92	1.011	-0.09	0.254	0.263
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 3	2	1	2412	14.90	15.00	1.023	98.92	1.011	0.19	0.051	0.053
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	2	1	2412	14.90	15.00	1.023	98.92	1.011	-0.12	0.244	0.252
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3	2	1	2412	14.90	15.00	1.023	98.92	1.011	0.14	0.034	0.035
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(4)	2	1	2412	13.70	14.00	1.072	98.92	1.011	-0.02	0.270	0.292
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(3)	2	1	2412	14.90	15.00	1.023	98.92	1.011	-0.02	0.006	0.006
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4+3(4)	2	1	2412	13.70	14.00	1.072	98.92	1.011	0.04	0.091	0.099
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4+3(3)	2	1	2412	14.90	15.00	1.023	98.92	1.011	0.04	0.009	0.009
18	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3(4)	2	1	2412	13.70	14.00	1.072	98.92	1.011	-0.11	0.466	0.505
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3(3)	2	1	2412	14.90	15.00	1.023	98.92	1.011	-0.11	0.360	0.372
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3(4)	2	1	2412	13.70	14.00	1.072	98.92	1.011	-0.01	0.339	0.367
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3(3)	2	1	2412	14.90	15.00	1.023	98.92	1.011	-0.01	0.027	0.028

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	58	5290	10.90	11.00	1.023	92.00	1.087	-0.09	0.129	0.143
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	2	58	5290	10.90	11.00	1.023	92.00	1.087	0.09	0.129	0.143
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	58	5290	10.90	11.00	1.023	92.00	1.087	0.15	0.158	0.176
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	2	58	5290	10.90	11.00	1.023	92.00	1.087	0.13	0.172	0.191
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 3	2	54	5270	15.40	15.50	1.023	95.96	1.042	-0.19	0.248	0.264
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 3	2	54	5270	15.40	15.50	1.023	95.96	1.042	-0.01	0.010	0.011
19	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 3	2	54	5270	15.40	15.50	1.023	95.96	1.042	0.16	0.256	0.273
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 3	2	54	5270	15.40	15.50	1.023	95.96	1.042	0.01	0.020	0.021
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(4)	2	54	5270	10.80	11.00	1.047	95.93	1.042	-0.06	0.075	0.082
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(3)	2	54	5270	15.30	15.50	1.047	95.93	1.042	-0.06	0.245	0.267
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 4+3(4)	2	54	5270	10.80	11.00	1.047	95.93	1.042	-0.04	0.082	0.089
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 4+3(3)	2	54	5270	15.30	15.50	1.047	95.93	1.042	-0.04	0.051	0.056
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3(4)	2	54	5270	10.80	11.00	1.047	95.93	1.042	-0.17	0.135	0.147
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3(3)	2	54	5270	15.30	15.50	1.047	95.93	1.042	-0.17	0.201	0.219
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 4+3(4)	2	54	5270	10.80	11.00	1.047	95.93	1.042	-0.09	0.195	0.213
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 4+3(3)	2	54	5270	15.30	15.50	1.047	95.93	1.042	-0.09	0.029	0.032
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	2	138	5690	12.90	13.00	1.023	92.00	1.087	0.06	0.125	0.139
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	2	138	5690	12.90	13.00	1.023	92.00	1.087	0.11	0.158	0.176
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	138	5690	12.90	13.00	1.023	92.00	1.087	0.17	0.161	0.179
20	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	2	138	5690	12.90	13.00	1.023	92.00	1.087	0.15	0.277	0.308
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3	2	138	5690	11.80	12.00	1.047	92.00	1.087	-0.06	0.127	0.145
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 3	2	138	5690	11.80	12.00	1.047	92.00	1.087	0.01	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3	2	138	5690	11.80	12.00	1.047	92.00	1.087	-0.01	0.099	0.113
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 3	2	138	5690	11.80	12.00	1.047	92.00	1.087	-0.11	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(4)	2	138	5690	12.90	13.00	1.023	92.00	1.087	-0.05	0.078	0.087
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(3)	2	138	5690	11.90	12.00	1.023	92.00	1.087	-0.05	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3(4)	2	138	5690	12.90	13.00	1.023	92.00	1.087	-0.05	0.089	0.099
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3(3)	2	138	5690	11.90	12.00	1.023	92.00	1.087	-0.05	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(4)	2	138	5690	12.90	13.00	1.023	92.00	1.087	-0.16	0.246	0.274
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(3)	2	138	5690	11.90	12.00	1.023	92.00	1.087	-0.16	0.160	0.178
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(4)	2	138	5690	12.90	13.00	1.023	92.00	1.087	-0.01	0.138	0.154
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(3)	2	138	5690	11.90	12.00	1.023	92.00	1.087	-0.01	0.005	0.006
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	2	155	5775	14.40	14.50	1.023	92.00	1.087	0.18	0.146	0.162
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	2	155	5775	14.40	14.50	1.023	92.00	1.087	0.17	0.193	0.215
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	155	5775	14.40	14.50	1.023	92.00	1.087	0	0.257	0.286
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	2	155	5775	14.40	14.50	1.023	92.00	1.087	0.06	0.319	0.355
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3	2	155	5775	12.40	12.50	1.023	92.00	1.087	-0.03	0.004	0.004
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 3	2	155	5775	12.40	12.50	1.023	92.00	1.087	-0.02	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3	2	155	5775	12.40	12.50	1.023	92.00	1.087	0.05	0.136	0.151
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 3	2	155	5775	12.40	12.50	1.023	92.00	1.087	0.06	0.002	0.002
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(4)	2	155	5775	14.40	14.50	1.023	92.00	1.087	-0.16	0.109	0.121
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(3)	2	155	5775	12.30	12.50	1.047	92.00	1.087	-0.16	0.105	0.120
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3(4)	2	155	5775	14.40	14.50	1.023	92.00	1.087	-0.13	0.115	0.128
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3(3)	2	155	5775	12.30	12.50	1.047	92.00	1.087	-0.13	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(4)	2	155	5775	14.40	14.50	1.023	92.00	1.087	0.11	0.327	0.364
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(3)	2	155	5775	12.30	12.50	1.047	92.00	1.087	0.11	0.157	0.179
21	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(4)	2	155	5775	14.40	14.50	1.023	92.00	1.087	0.04	0.394	0.438
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(3)	2	155	5775	12.30	12.50	1.047	92.00	1.087	0.04	0.001	0.001

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power table	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 4	2	39	2441	11.97	12.00	1.007	77.13	1.080	0.02	0.046	0.050
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 4	2	39	2441	11.97	12.00	1.007	77.13	1.080	0.03	0.038	0.041
22	Bluetooth	1Mbps	Left Cheek	0mm	Ant 4	2	39	2441	11.97	12.00	1.007	77.13	1.080	-0.11	0.179	0.195
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 4	2	39	2441	11.97	12.00	1.007	77.13	1.080	0.11	0.140	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)
	GSM850_Ant 0	GPRS (4 Tx slots)	Front	10mm	DSI 6	251	848.8	config 0	28.06	29.50	1.393	-0.16	0.254	0.354
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 6	251	848.8	config 0	28.06	29.50	1.393	-0.11	0.347	0.483
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	DSI 6	251	848.8	config 0	28.06	29.50	1.393	0.1	0.275	0.383
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Side	10mm	DSI 6	251	848.8	config 0	28.06	29.50	1.393	-0.12	0.326	0.454
	GSM850_Ant 0	GPRS (4 Tx slots)	Bottom Side	10mm	DSI 6	251	848.8	config 0	28.06	29.50	1.393	-0.16	0.108	0.150
	GSM850_Ant 1	GPRS (4 Tx slots)	Front	10mm	DSI 6	128	824.2	config 1	28.28	29.50	1.324	-0.09	0.269	0.356
23	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	DSI 6	128	824.2	config 1	28.28	29.50	1.324	-0.17	0.556	0.736
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Side	10mm	DSI 6	128	824.2	config 1	28.28	29.50	1.324	0.17	0.161	0.213
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Side	10mm	DSI 6	128	824.2	config 1	28.28	29.50	1.324	-0.04	0.208	0.275
	GSM850_Ant 1	GPRS (4 Tx slots)	Top Side	10mm	DSI 6	128	824.2	config 1	28.28	29.50	1.324	-0.09	0.257	0.340
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	DSI 6	512	1850.2	config 0	25.72	27.00	1.343	-0.12	0.419	0.563
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	DSI 6	512	1850.2	config 0	25.72	27.00	1.343	-0.13	0.357	0.479
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Side	10mm	DSI 6	512	1850.2	config 0	25.72	27.00	1.343	-0.04	0.251	0.337
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Side	10mm	DSI 6	512	1850.2	config 0	25.72	27.00	1.343	-0.13	0.356	0.478
	GSM1900_Ant 2	GPRS (4 Tx slots)	Bottom Side	10mm	DSI 6	512	1850.2	config 0	25.72	27.00	1.343	-0.14	0.158	0.212
	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	DSI 6	661	1880	config 1	21.19	22.40	1.321	0.04	0.306	0.404
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 6	661	1880	config 1	21.19	22.40	1.321	0.05	0.641	0.847
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 6	512	1850.2	config 1	21.12	22.40	1.343	-0.13	0.583	0.783
24	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 6	810	1909.8	config 1	21.05	22.40	1.365	0.11	0.728	0.993
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	DSI 6	661	1880	config 1	21.19	22.40	1.321	-0.02	0.147	0.194
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Side	10mm	DSI 6	661	1880	config 1	21.19	22.40	1.321	-0.11	0.042	0.055
	GSM1900_Ant 0	GPRS (4 Tx slots)	Bottom Side	10mm	DSI 6	661	1880	config 1	21.19	22.40	1.321	0.02	0.543	0.717

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 6	9400	1880	config 0	23.53	24.50	1.250	-0.09	0.767	0.959
25	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 6	9262	1852.4	config 0	23.35	24.50	1.303	-0.02	0.764	0.996
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 6	9538	1907.6	config 0	23.42	24.50	1.282	-0.15	0.734	0.941
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 6	9400	1880	config 0	23.53	24.50	1.250	-0.08	0.529	0.661
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Side	10mm	DSI 6	9400	1880	config 0	23.53	24.50	1.250	-0.18	0.537	0.671
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Side	10mm	DSI 6	9400	1880	config 0	23.53	24.50	1.250	-0.17	0.616	0.770
	WCDMA II_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	9400	1880	config 0	23.53	24.50	1.250	-0.05	0.298	0.373
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 6	9400	1880	config 1	19.65	20.50	1.216	-0.04	0.333	0.405
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	9400	1880	config 1	19.65	20.50	1.216	-0.08	0.807	0.981
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	9262	1852.4	config 1	19.62	20.50	1.225	-0.04	0.803	0.983
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	9538	1907.6	config 1	19.50	20.50	1.259	-0.09	0.777	0.978
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Side	10mm	DSI 6	9400	1880	config 1	19.65	20.50	1.216	-0.13	0.089	0.108
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Side	10mm	DSI 6	9400	1880	config 1	19.65	20.50	1.216	-0.12	0.075	0.091
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	9400	1880	config 1	19.65	20.50	1.216	-0.17	0.647	0.787
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 6	1312	1712.4	config 0	24.03	25.00	1.250	-0.16	0.770	0.963
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 6	1413	1732.6	config 0	24.01	25.00	1.256	-0.16	0.779	0.978
26	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 6	1513	1752.6	config 0	23.99	25.00	1.262	-0.09	0.788	0.994
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 6	1312	1712.4	config 0	24.03	25.00	1.250	-0.14	0.622	0.778
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Side	10mm	DSI 6	1312	1712.4	config 0	24.03	25.00	1.250	-0.12	0.222	0.278
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Side	10mm	DSI 6	1312	1712.4	config 0	24.03	25.00	1.250	-0.14	0.509	0.636
	WCDMA IV_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	1312	1712.4	config 0	24.03	25.00	1.250	-0.17	0.420	0.525
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 6	1312	1712.4	config 1	18.86	20.00	1.300	-0.01	0.298	0.387
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	1312	1712.4	config 1	18.86	20.00	1.300	-0.03	0.763	0.992
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	1413	1732.6	config 1	18.79	20.00	1.321	-0.02	0.748	0.988
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	1513	1752.6	config 1	18.67	20.00	1.358	-0.1	0.731	0.993
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Side	10mm	DSI 6	1312	1712.4	config 1	18.86	20.00	1.300	-0.05	0.244	0.317
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Side	10mm	DSI 6	1312	1712.4	config 1	18.86	20.00	1.300	-0.05	0.013	0.017
	WCDMA IV_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	1312	1712.4	config 1	18.86	20.00	1.300	-0.03	0.598	0.778
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 6	4182	836.4	config 0	24.08	25.00	1.236	-0.16	0.258	0.319
27	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	4182	836.4	config 0	24.08	25.00	1.236	-0.17	0.410	0.507
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Side	10mm	DSI 6	4182	836.4	config 0	24.08	25.00	1.236	-0.06	0.291	0.360
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Side	10mm	DSI 6	4182	836.4	config 0	24.08	25.00	1.236	-0.01	0.299	0.370
	WCDMA V_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	4182	836.4	config 0	24.08	25.00	1.236	-0.11	0.088	0.109
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	10mm	DSI 6	4132	826.4	config 1	24.09	25.00	1.233	-0.17	0.195	0.240
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	DSI 6	4132	826.4	config 1	24.09	25.00	1.233	-0.14	0.378	0.466
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 6	4132	826.4	config 1	24.09	25.00	1.233	-0.07	0.097	0.120
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Side	10mm	DSI 6	4132	826.4	config 1	24.09	25.00	1.233	-0.03	0.122	0.150
	WCDMA V_Ant 1	RMC 12.2Kbps	Top Side	10mm	DSI 6	4132	826.4	config 1	24.09	25.00	1.233	-0.01	0.172	0.212

<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	23.42	24.40	1.253	-0.04	0.622	0.779
	LTE Band 7_Ant 2	20M	QPSK	50	50	Front	10mm	DSI 6	21100	2535	config 0	23.55	23.90	1.084	-0.03	0.646	0.700
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 6	21100	2535	config 0	23.42	24.40	1.253	-0.13	0.733	0.919
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 6	20850	2510	config 0	23.29	24.40	1.291	-0.1	0.642	0.829
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 6	21350	2560	config 0	23.40	24.40	1.259	-0.07	0.783	0.986
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 6	21100	2535	config 0	23.55	23.90	1.084	-0.11	0.757	0.821
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 6	20850	2510	config 0	23.32	23.90	1.143	0	0.610	0.697
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 6	21350	2560	config 0	23.44	23.90	1.112	-0.08	0.704	0.783
	LTE Band 7_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 6	21100	2535	config 0	23.45	23.90	1.109	-0.18	0.724	0.803
	LTE Band 7_Ant 2	20M	QPSK	1	99	Left Side	10mm	DSI 6	21100	2535	config 0	23.42	24.40	1.253	-0.08	0.163	0.204
	LTE Band 7_Ant 2	20M	QPSK	50	50	Left Side	10mm	DSI 6	21100	2535	config 0	23.55	23.90	1.084	-0.05	0.174	0.189
	LTE Band 7_Ant 2	20M	QPSK	1	99	Right Side	10mm	DSI 6	21100	2535	config 0	23.42	24.40	1.253	-0.05	0.654	0.820
	LTE Band 7_Ant 2	20M	QPSK	1	99	Right Side	10mm	DSI 6	20850	2510	config 0	23.29	24.40	1.291	0.14	0.609	0.786
28	LTE Band 7_Ant 2	20M	QPSK	1	99	Right Side	10mm	DSI 6	21350	2560	config 0	23.40	24.40	1.259	0.11	0.793	0.998
	LTE Band 7_Ant 2	20M	QPSK	50	50	Right Side	10mm	DSI 6	21100	2535	config 0	23.55	23.90	1.084	0.07	0.669	0.725
	LTE Band 7_Ant 2	20M	QPSK	100	0	Right Side	10mm	DSI 6	21100	2535	config 0	23.45	23.90	1.109	0.11	0.656	0.728
	LTE Band 7_Ant 2	20M	QPSK	1	99	Bottom Side	10mm	DSI 6	21100	2535	config 0	23.42	24.40	1.253	-0.06	0.602	0.754
	LTE Band 7_Ant 2	20M	QPSK	50	50	Bottom Side	10mm	DSI 6	21100	2535	config 0	23.55	23.90	1.084	-0.04	0.635	0.688
	LTE Band 7C_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	21350+21152	2560	config 0	23.77	24.40	1.156	-0.01	0.703	0.813
	LTE Band 7_Ant 0	20M	QPSK	1	99	Front	10mm	DSI 6	21100	2535	config 1	20.72	21.60	1.225	0.02	0.255	0.312
	LTE Band 7_Ant 0	20M	QPSK	50	50	Front	10mm	DSI 6	21100	2535	config 1	20.84	21.60	1.191	-0.05	0.261	0.311
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 6	21100	2535	config 1	20.72	21.60	1.225	-0.07	0.692	0.847
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 6	20850	2510	config 1	20.62	21.60	1.253	-0.01	0.678	0.850
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 6	21350	2560	config 1	20.63	21.60	1.250	0	0.709	0.886
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 6	21100	2535	config 1	20.84	21.60	1.191	-0.06	0.718	0.855
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 6	20850	2510	config 1	20.69	21.60	1.233	-0.05	0.653	0.805
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 6	21350	2560	config 1	20.76	21.60	1.213	0.01	0.735	0.892
	LTE Band 7_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 6	21100	2535	config 1	20.73	21.60	1.222	0	0.708	0.865
	LTE Band 7_Ant 0	20M	QPSK	1	99	Left Side	10mm	DSI 6	21100	2535	config 1	20.72	21.60	1.225	-0.19	0.205	0.251
	LTE Band 7_Ant 0	20M	QPSK	50	50	Left Side	10mm	DSI 6	21100	2535	config 1	20.84	21.60	1.191	-0.03	0.210	0.250
	LTE Band 7_Ant 0	20M	QPSK	1	99	Right Side	10mm	DSI 6	21100	2535	config 1	20.72	21.60	1.225	-0.06	0.062	0.076
	LTE Band 7_Ant 0	20M	QPSK	50	50	Right Side	10mm	DSI 6	21100	2535	config 1	20.84	21.60	1.191	-0.02	0.062	0.074
	LTE Band 7_Ant 0	20M	QPSK	1	99	Bottom Side	10mm	DSI 6	21100	2535	config 1	20.72	21.60	1.225	-0.17	0.600	0.735
	LTE Band 7_Ant 0	20M	QPSK	50	50	Bottom Side	10mm	DSI 6	21100	2535	config 1	20.84	21.60	1.191	0.11	0.629	0.749
	LTE Band 7C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	21100+20902	2535	config 1	20.86	21.60	1.186	0.01	0.712	0.844

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	24.24	25.70	1.400	-0.17	0.314	0.439
	LTE Band 12_Ant 0	10M	QPSK	25	12	Front	10mm	DSI 6	23095	707.5	config 0	23.34	24.70	1.368	-0.15	0.246	0.336
	LTE Band 12_Ant 0	10M	QPSK	1	49	Back	10mm	DSI 6	23095	707.5	config 0	24.24	25.70	1.400	-0.14	0.458	0.641
	LTE Band 12_Ant 0	10M	QPSK	25	12	Back	10mm	DSI 6	23095	707.5	config 0	23.34	24.70	1.368	-0.16	0.353	0.483
	LTE Band 12_Ant 0	10M	QPSK	1	49	Left Side	10mm	DSI 6	23095	707.5	config 0	24.24	25.70	1.400	0.04	0.273	0.382
	LTE Band 12_Ant 0	10M	QPSK	25	12	Left Side	10mm	DSI 6	23095	707.5	config 0	23.34	24.70	1.368	-0.04	0.209	0.286
	LTE Band 12_Ant 0	10M	QPSK	1	49	Right Side	10mm	DSI 6	23095	707.5	config 0	24.24	25.70	1.400	-0.06	0.277	0.388
	LTE Band 12_Ant 0	10M	QPSK	25	12	Right Side	10mm	DSI 6	23095	707.5	config 0	23.34	24.70	1.368	-0.08	0.224	0.306
	LTE Band 12_Ant 0	10M	QPSK	1	49	Bottom Side	10mm	DSI 6	23095	707.5	config 0	24.24	25.70	1.400	-0.04	0.084	0.118
	LTE Band 12_Ant 0	10M	QPSK	25	12	Bottom Side	10mm	DSI 6	23095	707.5	config 0	23.34	24.70	1.368	-0.02	0.068	0.093
	LTE Band 12_Ant 1	10M	QPSK	1	49	Front	10mm	DSI 6	23095	707.5	config 1	23.88	25.70	1.521	-0.11	0.234	0.356
	LTE Band 12_Ant 1	10M	QPSK	25	12	Front	10mm	DSI 6	23095	707.5	config 1	22.92	24.70	1.507	-0.1	0.206	0.310
29	LTE Band 12_Ant 1	10M	QPSK	1	49	Back	10mm	DSI 6	23095	707.5	config 1	23.88	25.70	1.521	-0.02	0.434	0.660
	LTE Band 12_Ant 1	10M	QPSK	25	12	Back	10mm	DSI 6	23095	707.5	config 1	22.92	24.70	1.507	-0.07	0.349	0.526
	LTE Band 12_Ant 1	10M	QPSK	1	49	Left Side	10mm	DSI 6	23095	707.5	config 1	23.88	25.70	1.521	-0.05	0.340	0.517
	LTE Band 12_Ant 1	10M	QPSK	25	12	Left Side	10mm	DSI 6	23095	707.5	config 1	22.92	24.70	1.507	-0.11	0.281	0.423
	LTE Band 12_Ant 1	10M	QPSK	1	49	Right Side	10mm	DSI 6	23095	707.5	config 1	23.88	25.70	1.521	-0.04	0.198	0.301
	LTE Band 12_Ant 1	10M	QPSK	25	12	Right Side	10mm	DSI 6	23095	707.5	config 1	22.92	24.70	1.507	-0.07	0.160	0.241
	LTE Band 12_Ant 1	10M	QPSK	1	49	Top Side	10mm	DSI 6	23095	707.5	config 1	23.88	25.70	1.521	-0.02	0.129	0.196
	LTE Band 12_Ant 1	10M	QPSK	25	12	Top Side	10mm	DSI 6	23095	707.5	config 1	22.92	24.70	1.507	0	0.101	0.152
	LTE Band 13_Ant 0	10M	QPSK	1	49	Front	10mm	DSI 6	23230	782	config 0	23.97	25.20	1.327	0	0.358	0.475
	LTE Band 13_Ant 0	10M	QPSK	25	12	Front	10mm	DSI 6	23230	782	config 0	23.01	24.20	1.315	-0.13	0.302	0.397
30	LTE Band 13_Ant 0	10M	QPSK	1	49	Back	10mm	DSI 6	23230	782	config 0	23.97	25.20	1.327	-0.04	0.489	0.649
	LTE Band 13_Ant 0	10M	QPSK	25	12	Back	10mm	DSI 6	23230	782	config 0	23.01	24.20	1.315	-0.17	0.417	0.548
	LTE Band 13_Ant 0	10M	QPSK	1	49	Left Side	10mm	DSI 6	23230	782	config 0	23.97	25.20	1.327	-0.01	0.459	0.609
	LTE Band 13_Ant 0	10M	QPSK	25	12	Left Side	10mm	DSI 6	23230	782	config 0	23.01	24.20	1.315	-0.03	0.380	0.500
	LTE Band 13_Ant 0	10M	QPSK	1	49	Right Side	10mm	DSI 6	23230	782	config 0	23.97	25.20	1.327	0	0.446	0.592
	LTE Band 13_Ant 0	10M	QPSK	25	12	Right Side	10mm	DSI 6	23230	782	config 0	23.01	24.20	1.315	-0.09	0.377	0.496
	LTE Band 13_Ant 0	10M	QPSK	1	49	Bottom Side	10mm	DSI 6	23230	782	config 0	23.97	25.20	1.327	-0.13	0.073	0.097
	LTE Band 13_Ant 0	10M	QPSK	25	12	Bottom Side	10mm	DSI 6	23230	782	config 0	23.01	24.20	1.315	-0.07	0.060	0.079
	LTE Band 13_Ant 1	10M	QPSK	1	0	Front	10mm	DSI 6	23230	782	config 1	23.60	25.20	1.445	-0.08	0.042	0.061
	LTE Band 13_Ant 1	10M	QPSK	25	12	Front	10mm	DSI 6	23230	782	config 1	22.65	24.20	1.429	-0.06	0.040	0.057
	LTE Band 13_Ant 1	10M	QPSK	1	0	Back	10mm	DSI 6	23230	782	config 1	23.60	25.20	1.445	-0.09	0.078	0.113
	LTE Band 13_Ant 1	10M	QPSK	25	12	Back	10mm	DSI 6	23230	782	config 1	22.65	24.20	1.429	0.08	0.075	0.107
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Side	10mm	DSI 6	23230	782	config 1	23.60	25.20	1.445	-0.09	0.054	0.078
	LTE Band 13_Ant 1	10M	QPSK	25	12	Left Side	10mm	DSI 6	23230	782	config 1	22.65	24.20	1.429	0.04	0.045	0.064
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Side	10mm	DSI 6	23230	782	config 1	23.60	25.20	1.445	0.08	0.038	0.055
	LTE Band 13_Ant 1	10M	QPSK	25	12	Right Side	10mm	DSI 6	23230	782	config 1	22.65	24.20	1.429	0.05	0.031	0.044
	LTE Band 13_Ant 1	10M	QPSK	1	0	Top Side	10mm	DSI 6	23230	782	config 1	23.60	25.20	1.445	-0.05	0.043	0.062
	LTE Band 13_Ant 1	10M	QPSK	25	12	Top Side	10mm	DSI 6	23230	782	config 1	22.65	24.20	1.429	0.09	0.027	0.039

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	25	Front	10mm	DSI 6	23330	793	config 0	24.49	25.70	1.321	-0.12	0.329	0.435
	LTE Band 14_Ant 0	10M	QPSK	25	0	Front	10mm	DSI 6	23330	793	config 0	23.51	24.70	1.315	-0.1	0.280	0.368
	LTE Band 14_Ant 0	10M	QPSK	1	25	Back	10mm	DSI 6	23330	793	config 0	24.49	25.70	1.321	-0.18	0.441	0.583
	LTE Band 14_Ant 0	10M	QPSK	25	0	Back	10mm	DSI 6	23330	793	config 0	23.51	24.70	1.315	-0.17	0.353	0.464
	LTE Band 14_Ant 0	10M	QPSK	1	25	Left Side	10mm	DSI 6	23330	793	config 0	24.49	25.70	1.321	-0.06	0.377	0.498
	LTE Band 14_Ant 0	10M	QPSK	25	0	Left Side	10mm	DSI 6	23330	793	config 0	23.51	24.70	1.315	-0.05	0.292	0.384
	LTE Band 14_Ant 0	10M	QPSK	1	25	Right Side	10mm	DSI 6	23330	793	config 0	24.49	25.70	1.321	-0.06	0.431	0.569
	LTE Band 14_Ant 0	10M	QPSK	25	0	Right Side	10mm	DSI 6	23330	793	config 0	23.51	24.70	1.315	-0.04	0.343	0.451
	LTE Band 14_Ant 0	10M	QPSK	1	25	Bottom Side	10mm	DSI 6	23330	793	config 0	24.49	25.70	1.321	-0.06	0.088	0.116
	LTE Band 14_Ant 0	10M	QPSK	25	0	Bottom Side	10mm	DSI 6	23330	793	config 0	23.51	24.70	1.315	-0.01	0.069	0.091
	LTE Band 14_Ant 1	10M	QPSK	1	0	Front	10mm	DSI 6	23330	793	config 1	24.23	25.70	1.403	-0.02	0.303	0.425
	LTE Band 14_Ant 1	10M	QPSK	25	12	Front	10mm	DSI 6	23330	793	config 1	23.16	24.70	1.426	-0.03	0.243	0.346
31	LTE Band 14_Ant 1	10M	QPSK	1	0	Back	10mm	DSI 6	23330	793	config 1	24.23	25.70	1.403	-0.03	0.526	0.738
	LTE Band 14_Ant 1	10M	QPSK	25	12	Back	10mm	DSI 6	23330	793	config 1	23.16	24.70	1.426	-0.04	0.426	0.607
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Side	10mm	DSI 6	23330	793	config 1	24.23	25.70	1.403	-0.09	0.249	0.349
	LTE Band 14_Ant 1	10M	QPSK	25	12	Left Side	10mm	DSI 6	23330	793	config 1	23.16	24.70	1.426	-0.08	0.187	0.267
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Side	10mm	DSI 6	23330	793	config 1	24.23	25.70	1.403	0	0.219	0.307
	LTE Band 14_Ant 1	10M	QPSK	25	12	Right Side	10mm	DSI 6	23330	793	config 1	23.16	24.70	1.426	-0.06	0.169	0.241
	LTE Band 14_Ant 1	10M	QPSK	1	0	Top Side	10mm	DSI 6	23330	793	config 1	24.23	25.70	1.403	-0.04	0.196	0.275
	LTE Band 14_Ant 1	10M	QPSK	25	12	Top Side	10mm	DSI 6	23330	793	config 1	23.16	24.70	1.426	-0.03	0.156	0.222
	LTE Band 25_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 6	26340	1880	config 0	22.38	23.80	1.387	-0.09	0.556	0.771
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 6	26340	1880	config 0	22.55	23.80	1.334	-0.04	0.614	0.819
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 6	26140	1860	config 0	22.48	23.80	1.355	-0.19	0.617	0.836
	LTE Band 25_Ant 2	20M	QPSK	50	50	Front	10mm	DSI 6	26590	1905	config 0	22.41	23.80	1.377	-0.16	0.616	0.848
	LTE Band 25_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 6	26340	1880	config 0	22.56	23.80	1.330	-0.12	0.611	0.813
	LTE Band 25_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 6	26340	1880	config 0	22.38	23.80	1.387	-0.08	0.478	0.663
	LTE Band 25_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	26340	1880	config 0	22.55	23.80	1.334	-0.11	0.519	0.692
	LTE Band 25_Ant 2	20M	QPSK	1	99	Left Side	10mm	DSI 6	26340	1880	config 0	22.38	23.80	1.387	-0.11	0.211	0.293
	LTE Band 25_Ant 2	20M	QPSK	50	24	Left Side	10mm	DSI 6	26340	1880	config 0	22.55	23.80	1.334	-0.1	0.250	0.333
	LTE Band 25_Ant 2	20M	QPSK	1	99	Right Side	10mm	DSI 6	26340	1880	config 0	22.38	23.80	1.387	-0.18	0.452	0.627
	LTE Band 25_Ant 2	20M	QPSK	50	24	Right Side	10mm	DSI 6	26340	1880	config 0	22.55	23.80	1.334	-0.19	0.515	0.687
	LTE Band 25_Ant 2	20M	QPSK	1	99	Bottom Side	10mm	DSI 6	26340	1880	config 0	22.38	23.80	1.387	0	0.209	0.290
	LTE Band 25_Ant 2	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	26340	1880	config 0	22.55	23.80	1.334	0	0.240	0.320
	LTE Band 25_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 6	26340	1880	config 1	17.70	18.90	1.318	-0.12	0.367	0.484
	LTE Band 25_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 6	26140	1860	config 1	17.83	18.90	1.279	-0.11	0.370	0.473
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	26340	1880	config 1	17.70	18.90	1.318	-0.15	0.685	0.903
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	26140	1860	config 1	17.68	18.90	1.324	-0.14	0.611	0.809
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	26590	1905	config 1	17.58	18.90	1.355	-0.18	0.676	0.916
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	26140	1860	config 1	17.83	18.90	1.279	-0.19	0.654	0.837
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	26340	1880	config 1	17.82	18.90	1.282	-0.19	0.724	0.928
	LTE Band 25_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 6	26590	1905	config 1	17.75	18.90	1.303	-0.16	0.647	0.843
	LTE Band 25_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 6	26140	1860	config 1	17.81	18.90	1.285	-0.19	0.654	0.841
	LTE Band 25_Ant 0	20M	QPSK	1	0	Left Side	10mm	DSI 6	26340	1880	config 1	17.70	18.90	1.318	-0.17	0.203	0.268
	LTE Band 25_Ant 0	20M	QPSK	50	24	Left Side	10mm	DSI 6	26140	1860	config 1	17.83	18.90	1.279	-0.18	0.194	0.248
	LTE Band 25_Ant 0	20M	QPSK	1	0	Right Side	10mm	DSI 6	26340	1880	config 1	17.70	18.90	1.318	-0.11	0.026	0.034
	LTE Band 25_Ant 0	20M	QPSK	50	24	Right Side	10mm	DSI 6	26140	1860	config 1	17.83	18.90	1.279	0.07	0.025	0.032
	LTE Band 25_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	26340	1880	config 1	17.70	18.90	1.318	-0.13	0.649	0.856
	LTE Band 25_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	26140	1860	config 1	17.68	18.90	1.324	-0.13	0.567	0.751
32	LTE Band 25_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	26590	1905	config 1	17.58	18.90	1.355	-0.1	0.713	0.966
	LTE Band 25_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	26140	1860	config 1	17.83	18.90	1.279	-0.18	0.621	0.794
	LTE Band 25_Ant 0	20M	QPSK	100	0	Bottom Side	10mm	DSI 6	26140	1860	config 1	17.81	18.90	1.285	-0.08	0.620	0.797

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	74	Front	10mm	DSI 6	26865	831.5	config 0	24.52	25.70	1.312	-0.12	0.198	0.260
	LTE Band 26_Ant 0	15M	QPSK	36	0	Front	10mm	DSI 6	26865	831.5	config 0	23.39	24.70	1.352	-0.1	0.235	0.318
	LTE Band 26_Ant 0	15M	QPSK	1	74	Back	10mm	DSI 6	26865	831.5	config 0	24.52	25.70	1.312	-0.12	0.433	0.568
	LTE Band 26_Ant 0	15M	QPSK	36	0	Back	10mm	DSI 6	26865	831.5	config 0	23.39	24.70	1.352	-0.09	0.340	0.460
	LTE Band 26_Ant 0	15M	QPSK	1	74	Left Side	10mm	DSI 6	26865	831.5	config 0	24.52	25.70	1.312	-0.02	0.255	0.335
	LTE Band 26_Ant 0	15M	QPSK	36	0	Left Side	10mm	DSI 6	26865	831.5	config 0	23.39	24.70	1.352	-0.05	0.220	0.297
	LTE Band 26_Ant 0	15M	QPSK	1	74	Right Side	10mm	DSI 6	26865	831.5	config 0	24.52	25.70	1.312	-0.06	0.304	0.399
	LTE Band 26_Ant 0	15M	QPSK	36	0	Right Side	10mm	DSI 6	26865	831.5	config 0	23.39	24.70	1.352	-0.03	0.271	0.366
	LTE Band 26_Ant 0	15M	QPSK	1	74	Bottom Side	10mm	DSI 6	26865	831.5	config 0	24.52	25.70	1.312	-0.12	0.070	0.092
	LTE Band 26_Ant 0	15M	QPSK	36	0	Bottom Side	10mm	DSI 6	26865	831.5	config 0	23.39	24.70	1.352	-0.15	0.074	0.100
	LTE Band 5B_Ant 0	10M	QPSK	1	49	Back	10mm	DSI 6	20450+20549	829	config 0	25.38	25.70	1.076	0.01	0.521	0.561
	LTE Band 26_Ant 1	15M	QPSK	1	74	Front	10mm	DSI 6	26865	831.5	config 1	24.33	25.70	1.371	-0.1	0.352	0.483
	LTE Band 26_Ant 1	15M	QPSK	36	20	Front	10mm	DSI 6	26865	831.5	config 1	23.18	24.70	1.419	-0.17	0.278	0.394
33	LTE Band 26_Ant 1	15M	QPSK	1	74	Back	10mm	DSI 6	26865	831.5	config 1	24.33	25.70	1.371	-0.18	0.644	0.883
	LTE Band 26_Ant 1	15M	QPSK	36	20	Back	10mm	DSI 6	26865	831.5	config 1	23.18	24.70	1.419	-0.11	0.523	0.742
	LTE Band 26_Ant 1	15M	QPSK	75	0	Back	10mm	DSI 6	26865	831.5	config 1	23.17	24.70	1.422	-0.17	0.528	0.751
	LTE Band 26_Ant 1	15M	QPSK	1	74	Left Side	10mm	DSI 6	26865	831.5	config 1	24.33	25.70	1.371	-0.06	0.161	0.221
	LTE Band 26_Ant 1	15M	QPSK	36	20	Left Side	10mm	DSI 6	26865	831.5	config 1	23.18	24.70	1.419	-0.05	0.122	0.173
	LTE Band 26_Ant 1	15M	QPSK	1	74	Right Side	10mm	DSI 6	26865	831.5	config 1	24.33	25.70	1.371	-0.02	0.167	0.229
	LTE Band 26_Ant 1	15M	QPSK	36	20	Right Side	10mm	DSI 6	26865	831.5	config 1	23.18	24.70	1.419	-0.1	0.137	0.194
	LTE Band 26_Ant 1	15M	QPSK	1	74	Top Side	10mm	DSI 6	26865	831.5	config 1	24.33	25.70	1.371	-0.05	0.260	0.356
	LTE Band 26_Ant 1	15M	QPSK	36	20	Top Side	10mm	DSI 6	26865	831.5	config 1	23.18	24.70	1.419	-0.06	0.207	0.294
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Back	10mm	DSI 6	20575+20476	841.5	config 1	25.03	25.70	1.167	-0.02	0.742	0.866
	LTE Band 30_Ant 2	10M	QPSK	1	0	Front	10mm	DSI 6	27710	2310	config 0	22.18	23.70	1.419	-0.08	0.359	0.509
	LTE Band 30_Ant 2	10M	QPSK	25	25	Front	10mm	DSI 6	27710	2310	config 0	21.23	22.70	1.403	-0.14	0.286	0.401
	LTE Band 30_Ant 2	10M	QPSK	1	0	Back	10mm	DSI 6	27710	2310	config 0	22.18	23.70	1.419	-0.09	0.280	0.397
	LTE Band 30_Ant 2	10M	QPSK	25	25	Back	10mm	DSI 6	27710	2310	config 0	21.23	22.70	1.403	-0.07	0.241	0.338
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Side	10mm	DSI 6	27710	2310	config 0	22.18	23.70	1.419	0.18	0.059	0.084
	LTE Band 30_Ant 2	10M	QPSK	25	25	Left Side	10mm	DSI 6	27710	2310	config 0	21.23	22.70	1.403	-0.02	0.049	0.069
	LTE Band 30_Ant 2	10M	QPSK	1	0	Right Side	10mm	DSI 6	27710	2310	config 0	22.18	23.70	1.419	-0.05	0.221	0.314
	LTE Band 30_Ant 2	10M	QPSK	25	25	Right Side	10mm	DSI 6	27710	2310	config 0	21.23	22.70	1.403	-0.04	0.180	0.253
	LTE Band 30_Ant 2	10M	QPSK	1	0	Bottom Side	10mm	DSI 6	27710	2310	config 0	22.18	23.70	1.419	0.11	0.284	0.403
	LTE Band 30_Ant 2	10M	QPSK	25	25	Bottom Side	10mm	DSI 6	27710	2310	config 0	21.23	22.70	1.403	0.13	0.225	0.316
	LTE Band 30_Ant 0	10M	QPSK	1	0	Front	10mm	DSI 6	27710	2310	config 1	20.54	21.60	1.276	-0.15	0.392	0.500
	LTE Band 30_Ant 0	10M	QPSK	25	12	Front	10mm	DSI 6	27710	2310	config 1	20.60	21.60	1.259	-0.17	0.397	0.500
	LTE Band 30_Ant 0	10M	QPSK	1	0	Back	10mm	DSI 6	27710	2310	config 1	20.54	21.60	1.276	-0.14	0.757	0.966
	LTE Band 30_Ant 0	10M	QPSK	25	12	Back	10mm	DSI 6	27710	2310	config 1	20.60	21.60	1.259	-0.14	0.750	0.944
34	LTE Band 30_Ant 0	10M	QPSK	50	0	Back	10mm	DSI 6	27710	2310	config 1	20.75	21.60	1.216	-0.13	0.816	0.992
	LTE Band 30_Ant 0	10M	QPSK	1	0	Left Side	10mm	DSI 6	27710	2310	config 1	20.54	21.60	1.276	-0.09	0.123	0.157
	LTE Band 30_Ant 0	10M	QPSK	25	12	Left Side	10mm	DSI 6	27710	2310	config 1	20.60	21.60	1.259	-0.11	0.123	0.155
	LTE Band 30_Ant 0	10M	QPSK	1	0	Right Side	10mm	DSI 6	27710	2310	config 1	20.54	21.60	1.276	-0.18	0.104	0.133
	LTE Band 30_Ant 0	10M	QPSK	25	12	Right Side	10mm	DSI 6	27710	2310	config 1	20.60	21.60	1.259	-0.14	0.104	0.131
	LTE Band 30_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	DSI 6	27710	2310	config 1	20.54	21.60	1.276	0.09	0.638	0.814
	LTE Band 30_Ant 0	10M	QPSK	25	12	Bottom Side	10mm	DSI 6	27710	2310	config 1	20.60	21.60	1.259	0.07	0.631	0.794
	LTE Band 30_Ant 0	10M	QPSK	50	0	Bottom Side	10mm	DSI 6	27710	2310	config 1	20.75	21.60	1.216	0.11	0.630	0.766

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)
35	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	132072	1720	config 0	23.95	25.10	1.303	-0.15	0.762	0.993
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	132322	1745	config 0	23.87	25.10	1.327	-0.09	0.743	0.986
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	132572	1770	config 0	23.78	25.10	1.355	-0.02	0.695	0.942
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 6	132072	1720	config 0	23.65	24.70	1.274	-0.01	0.714	0.909
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 6	132322	1745	config 0	23.51	24.70	1.315	-0.09	0.690	0.908
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 6	132572	1770	config 0	23.52	24.70	1.312	-0.01	0.629	0.825
	LTE Band 66_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 6	132072	1720	config 0	23.66	24.70	1.271	-0.06	0.706	0.897
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	132072	1720	config 0	23.95	25.10	1.303	-0.1	0.650	0.847
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	132322	1745	config 0	23.87	25.10	1.327	-0.01	0.607	0.806
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	132572	1770	config 0	23.78	25.10	1.355	-0.06	0.553	0.749
	LTE Band 66_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	132072	1720	config 0	23.65	24.70	1.274	-0.12	0.598	0.762
	LTE Band 66_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 6	132072	1720	config 0	23.66	24.70	1.271	-0.12	0.596	0.757
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Side	10mm	DSI 6	132072	1720	config 0	23.95	25.10	1.303	-0.15	0.175	0.228
	LTE Band 66_Ant 2	20M	QPSK	50	24	Left Side	10mm	DSI 6	132072	1720	config 0	23.65	24.70	1.274	-0.12	0.179	0.228
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	132072	1720	config 0	23.95	25.10	1.303	-0.18	0.323	0.421
	LTE Band 66_Ant 2	20M	QPSK	50	24	Right Side	10mm	DSI 6	132072	1720	config 0	23.65	24.70	1.274	-0.17	0.313	0.399
	LTE Band 66_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	132072	1720	config 0	23.95	25.10	1.303	-0.16	0.190	0.248
	LTE Band 66_Ant 2	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	132072	1720	config 0	23.65	24.70	1.274	-0.12	0.179	0.228
	LTE Band 66C_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 6	132072+132270	1720	config 0	23.71	25.10	1.377	0.05	0.720	0.992
	LTE Band 66_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 6	132072	1720	config 1	20.05	21.10	1.274	0	0.388	0.494
	LTE Band 66_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 6	132072	1720	config 1	20.17	21.10	1.239	-0.03	0.402	0.498
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	132072	1720	config 1	20.05	21.10	1.274	-0.19	0.776	0.988
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	132322	1745	config 1	19.96	21.10	1.300	-0.18	0.759	0.987
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	132572	1770	config 1	19.93	21.10	1.309	-0.03	0.656	0.859
	LTE Band 66_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	132072	1720	config 1	20.17	21.10	1.239	-0.19	0.797	0.987
	LTE Band 66_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	132322	1745	config 1	20.00	21.10	1.288	-0.14	0.766	0.987
	LTE Band 66_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	132572	1770	config 1	20.03	21.10	1.279	-0.03	0.626	0.801
	LTE Band 66_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 6	132072	1720	config 1	20.02	21.10	1.282	-0.18	0.755	0.968
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Side	10mm	DSI 6	132072	1720	config 1	20.05	21.10	1.274	-0.19	0.266	0.339
	LTE Band 66_Ant 0	20M	QPSK	50	24	Left Side	10mm	DSI 6	132072	1720	config 1	20.17	21.10	1.239	-0.11	0.280	0.347
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Side	10mm	DSI 6	132072	1720	config 1	20.05	21.10	1.274	-0.18	0.011	0.014
	LTE Band 66_Ant 0	20M	QPSK	50	24	Right Side	10mm	DSI 6	132072	1720	config 1	20.17	21.10	1.239	0.18	0.012	0.015
	LTE Band 66_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	132072	1720	config 1	20.05	21.10	1.274	-0.14	0.690	0.879
	LTE Band 66_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	132322	1745	config 1	19.96	21.10	1.300	0.02	0.661	0.859
	LTE Band 66_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	132572	1770	config 1	19.93	21.10	1.309	0.06	0.605	0.792
	LTE Band 66_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	132072	1720	config 1	20.17	21.10	1.239	-0.15	0.725	0.898
	LTE Band 66_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	132322	1745	config 1	20.00	21.10	1.288	-0.12	0.726	0.935
	LTE Band 66_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	132572	1770	config 1	20.03	21.10	1.279	-0.18	0.613	0.784
	LTE Band 66_Ant 0	20M	QPSK	100	0	Bottom Side	10mm	DSI 6	132072	1720	config 1	20.02	21.10	1.282	-0.1	0.725	0.930
	LTE Band 66C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	132572+132374	1770	config 1	20.08	21.10	1.265	0.02	0.761	0.962

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	24.32	25.70	1.374	-0.15	0.272	0.374
	LTE Band 71_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 6	133322	683	config 0	23.42	24.70	1.343	-0.1	0.224	0.301
	LTE Band 71_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	133322	683	config 0	24.32	25.70	1.374	-0.16	0.421	0.578
	LTE Band 71_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	133322	683	config 0	23.42	24.70	1.343	-0.13	0.327	0.439
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Side	10mm	DSI 6	133322	683	config 0	24.32	25.70	1.374	-0.04	0.296	0.407
	LTE Band 71_Ant 0	20M	QPSK	50	24	Left Side	10mm	DSI 6	133322	683	config 0	23.42	24.70	1.343	-0.06	0.265	0.356
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Side	10mm	DSI 6	133322	683	config 0	24.32	25.70	1.374	-0.11	0.236	0.324
	LTE Band 71_Ant 0	20M	QPSK	50	24	Right Side	10mm	DSI 6	133322	683	config 0	23.42	24.70	1.343	-0.09	0.203	0.273
	LTE Band 71_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	133322	683	config 0	24.32	25.70	1.374	-0.13	0.081	0.111
	LTE Band 71_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	133322	683	config 0	23.42	24.70	1.343	-0.12	0.060	0.081
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	DSI 6	133322	683	config 1	24.17	25.70	1.422	-0.16	0.249	0.354
	LTE Band 71_Ant 1	20M	QPSK	50	24	Front	10mm	DSI 6	133322	683	config 1	23.28	24.70	1.387	-0.19	0.209	0.290
36	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	DSI 6	133322	683	config 1	24.17	25.70	1.422	-0.16	0.433	0.616
	LTE Band 71_Ant 1	20M	QPSK	50	24	Back	10mm	DSI 6	133322	683	config 1	23.28	24.70	1.387	-0.13	0.374	0.519
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 6	133322	683	config 1	24.17	25.70	1.422	-0.07	0.398	0.566
	LTE Band 71_Ant 1	20M	QPSK	50	24	Left Side	10mm	DSI 6	133322	683	config 1	23.28	24.70	1.387	-0.1	0.319	0.442
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Side	10mm	DSI 6	133322	683	config 1	24.17	25.70	1.422	-0.06	0.154	0.219
	LTE Band 71_Ant 1	20M	QPSK	50	24	Right Side	10mm	DSI 6	133322	683	config 1	23.28	24.70	1.387	-0.05	0.134	0.186
	LTE Band 71_Ant 1	20M	QPSK	1	0	Top Side	10mm	DSI 6	133322	683	config 1	24.17	25.70	1.422	-0.1	0.119	0.169
	LTE Band 71_Ant 1	20M	QPSK	50	24	Top Side	10mm	DSI 6	133322	683	config 1	23.28	24.70	1.387	0.03	0.108	0.150

<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	23.52	24.60	1.282	62.9	1.006	-0.16	0.251	0.324
	LTE Band 41_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 6	40185	2549.5	config 0	23.75	24.60	1.216	62.9	1.006	-0.13	0.376	0.460
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	40620	2593	config 0	23.52	24.60	1.282	62.9	1.006	-0.11	0.549	0.708
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 6	39750	2506	config 0	23.36	24.60	1.330	62.9	1.006	-0.1	0.421	0.563
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 6	40185	2549.5	config 0	23.51	24.60	1.285	62.9	1.006	-0.16	0.476	0.615
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 6	41055	2636.5	config 0	23.52	24.60	1.282	62.9	1.006	-0.12	0.536	0.691
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 6	41490	2680	config 0	23.38	24.60	1.324	62.9	1.006	-0.06	0.653	0.870
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	40185	2549.5	config 0	23.75	24.60	1.216	62.9	1.006	-0.17	0.500	0.612
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	39750	2506	config 0	23.50	24.60	1.288	62.9	1.006	-0.14	0.440	0.570
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	40620	2593	config 0	23.62	24.60	1.253	62.9	1.006	-0.07	0.559	0.705
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	41055	2636.5	config 0	23.59	24.60	1.262	62.9	1.006	-0.11	0.553	0.702
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	41490	2680	config 0	23.50	24.60	1.288	62.9	1.006	-0.07	0.664	0.861
	LTE Band 41_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 6	40185	2549.5	config 0	23.65	24.60	1.245	62.9	1.006	-0.13	0.495	0.620
	LTE Band 41_Ant 2	20M	QPSK	1	0	Left Side	10mm	DSI 6	40620	2593	config 0	23.52	24.60	1.282	62.9	1.006	-0.17	0.058	0.075
	LTE Band 41_Ant 2	20M	QPSK	50	24	Left Side	10mm	DSI 6	40185	2549.5	config 0	23.75	24.60	1.216	62.9	1.006	-0.17	0.095	0.116
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	40620	2593	config 0	23.52	24.60	1.282	62.9	1.006	0.03	0.424	0.547
	LTE Band 41_Ant 2	20M	QPSK	50	24	Right Side	10mm	DSI 6	40185	2549.5	config 0	23.75	24.60	1.216	62.9	1.006	0.04	0.383	0.469
	LTE Band 41_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	40620	2593	config 0	23.52	24.60	1.282	62.9	1.006	-0.08	0.400	0.516
	LTE Band 41_Ant 2	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	40185	2549.5	config 0	23.75	24.60	1.216	62.9	1.006	0	0.465	0.569
	LTE Band 38_HPUE_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	38000	2595	config 0	25.33	26.40	1.279	42.9	1.009	-0.13	0.657	0.848
	LTE Band 41C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	41055+40857	2636.5	config 0	24.14	24.60	1.112	62.9	1.006	0.06	0.623	0.697
	LTE Band 41_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 6	40185	2549.5	config 1	21.80	23.20	1.380	62.9	1.006	-0.14	0.151	0.210
	LTE Band 41_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 6	40185	2549.5	config 1	21.90	23.20	1.349	62.9	1.006	-0.09	0.151	0.205
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	40185	2549.5	config 1	21.80	23.20	1.380	62.9	1.006	-0.03	0.518	0.719
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	39750	2506	config 1	21.69	23.20	1.416	62.9	1.006	-0.05	0.457	0.651
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	40620	2593	config 1	21.66	23.20	1.426	62.9	1.006	-0.06	0.579	0.830
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 6	41055	2636.5	config 1	21.79	23.20	1.384	62.9	1.006	-0.02	0.713	0.992
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 6	41490	2680	config 1	21.52	23.20	1.472	62.9	1.006	-0.03	0.603	0.893
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	40185	2549.5	config 1	21.90	23.20	1.349	62.9	1.006	-0.06	0.543	0.737
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	39750	2506	config 1	21.80	23.20	1.380	62.9	1.006	-0.05	0.500	0.694
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	40620	2593	config 1	21.78	23.20	1.387	62.9	1.006	-0.02	0.619	0.864
37	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	41055	2636.5	config 1	21.89	23.20	1.352	62.9	1.006	-0.18	0.731	0.994
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	41490	2680	config 1	21.57	23.20	1.455	62.9	1.006	0	0.620	0.908
	LTE Band 41_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 6	40185	2549.5	config 1	21.83	23.20	1.371	62.9	1.006	-0.14	0.541	0.746
	LTE Band 41_Ant 0	20M	QPSK	1	0	Left Side	10mm	DSI 6	40185	2549.5	config 1	21.80	23.20	1.380	62.9	1.006	-0.12	0.068	0.094
	LTE Band 41_Ant 0	20M	QPSK	50	24	Left Side	10mm	DSI 6	40185	2549.5	config 1	21.90	23.20	1.349	62.9	1.006	0.09	0.073	0.099
	LTE Band 41_Ant 0	20M	QPSK	1	0	Right Side	10mm	DSI 6	40185	2549.5	config 1	21.80	23.20	1.380	62.9	1.006	-0.13	0.035	0.049
	LTE Band 41_Ant 0	20M	QPSK	50	24	Right Side	10mm	DSI 6	40185	2549.5	config 1	21.90	23.20	1.349	62.9	1.006	-0.07	0.039	0.053
	LTE Band 41_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	40185	2549.5	config 1	21.80	23.20	1.380	62.9	1.006	-0.17	0.245	0.340
	LTE Band 41_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	40185	2549.5	config 1	21.90	23.20	1.349	62.9	1.006	-0.13	0.248	0.337
	LTE Band 38_HPUE_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	38000	2595	config 1	23.83	25.00	1.309	42.9	1.009	-0.18	0.684	0.904
	LTE Band 41C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	40185+39987	2549.5	config 1	22.28	23.20	1.236	62.9	1.006	-0.01	0.489	0.608

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	56640	3690	config 0	22.93	23.80	1.222	62.9	1.006	-0.1	0.229	0.281
	LTE Band 48_Ant 7	20M	QPSK	50	0	Front	10mm	DSI 6	56640	3690	config 0	22.23	23.20	1.250	62.9	1.006	-0.01	0.197	0.248
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 6	56640	3690	config 0	22.93	23.80	1.222	62.9	1.006	0.05	0.736	0.905
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 6	55340	3560	config 0	22.70	23.80	1.288	62.9	1.006	0.03	0.673	0.872
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 6	55830	3609	config 0	22.79	23.80	1.262	62.9	1.006	0.01	0.661	0.839
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 6	56150	3641	config 0	22.84	23.80	1.247	62.9	1.006	-0.04	0.695	0.872
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 6	56640	3690	config 0	22.23	23.20	1.250	62.9	1.006	0.02	0.629	0.791
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 6	55340	3560	config 0	22.02	23.20	1.312	62.9	1.006	-0.05	0.573	0.756
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 6	55830	3609	config 0	22.11	23.20	1.285	62.9	1.006	0.01	0.569	0.736
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 6	56150	3641	config 0	22.14	23.20	1.276	62.9	1.006	0.02	0.606	0.778
	LTE Band 48_Ant 7	20M	QPSK	100	0	Back	10mm	DSI 6	56640	3690	config 0	22.16	23.20	1.271	62.9	1.006	0.03	0.635	0.812
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Side	10mm	DSI 6	56640	3690	config 0	22.93	23.80	1.222	62.9	1.006	0.16	0.505	0.621
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Side	10mm	DSI 6	55340	3560	config 0	22.70	23.80	1.288	62.9	1.006	0.15	0.530	0.687
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Side	10mm	DSI 6	55830	3609	config 0	22.79	23.80	1.262	62.9	1.006	0.12	0.505	0.641
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Side	10mm	DSI 6	56150	3641	config 0	22.84	23.80	1.247	62.9	1.006	0.14	0.500	0.627
	LTE Band 48_Ant 7	20M	QPSK	50	0	Left Side	10mm	DSI 6	56640	3690	config 0	22.93	23.20	1.064	62.9	1.006	0.13	0.463	0.496
	LTE Band 48_Ant 7	20M	QPSK	100	0	Left Side	10mm	DSI 6	56640	3690	config 0	22.16	23.20	1.271	62.9	1.006	0.01	0.483	0.617
	LTE Band 48_Ant 7	20M	QPSK	1	0	Right Side	10mm	DSI 6	56640	3690	config 0	22.93	23.80	1.222	62.9	1.006	0.04	0.028	0.034
	LTE Band 48_Ant 7	20M	QPSK	50	0	Right Side	10mm	DSI 6	56640	3690	config 0	22.23	23.20	1.250	62.9	1.006	0.19	0.025	0.031
	LTE Band 48_Ant 7	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	56640	3690	config 0	22.93	23.80	1.222	62.9	1.006	0	0.147	0.181
	LTE Band 48_Ant 7	20M	QPSK	50	0	Bottom Side	10mm	DSI 6	56640	3690	config 0	22.23	23.20	1.250	62.9	1.006	0.06	0.126	0.158
	LTE Band 48C_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 6	55830+55632	3609	config 0	16.09	17.20	1.291	62.9	1.006	0.03	0.125	0.162
	LTE Band 48_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	55830	3609	config 1	21.17	21.40	1.054	62.9	1.006	-0.19	0.052	0.055
	LTE Band 48_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 6	55830	3609	config 1	20.86	21.40	1.132	62.9	1.006	0.12	0.047	0.054
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	55830	3609	config 1	21.17	21.40	1.054	62.9	1.006	0.01	0.802	0.851
38	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	55340	3560	config 1	21.16	21.40	1.057	62.9	1.006	0.09	0.939	0.998
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	56150	3641	config 1	21.13	21.40	1.064	62.9	1.006	0.18	0.743	0.795
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	56640	3690	config 1	21.00	21.40	1.096	62.9	1.006	0.13	0.667	0.736
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 6	55830	3609	config 1	20.86	21.40	1.132	62.9	1.006	0.06	0.560	0.638
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 6	55340	3560	config 1	20.83	21.40	1.140	62.9	1.006	-0.07	0.557	0.639
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 6	56150	3641	config 1	20.85	21.40	1.135	62.9	1.006	-0.01	0.575	0.657
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 6	56640	3690	config 1	20.68	21.40	1.180	62.9	1.006	0.01	0.603	0.716
	LTE Band 48_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 6	55830	3609	config 1	20.81	21.40	1.146	62.9	1.006	-0.02	0.550	0.634
	LTE Band 48_Ant 2	20M	QPSK	1	0	Left Side	10mm	DSI 6	55830	3609	config 1	21.17	21.40	1.054	62.9	1.006	-0.17	0.520	0.552
	LTE Band 48_Ant 2	20M	QPSK	50	0	Left Side	10mm	DSI 6	55830	3609	config 1	20.86	21.40	1.132	62.9	1.006	0.07	0.450	0.513
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	55830	3609	config 1	21.17	21.40	1.054	62.9	1.006	-0.19	0.721	0.765
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Side	10mm	DSI 6	55830	3609	config 1	20.86	21.40	1.132	62.9	1.006	-0.12	0.674	0.768
	LTE Band 48_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	55830	3609	config 1	21.17	21.40	1.054	62.9	1.006	0.08	0.130	0.138
	LTE Band 48_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	DSI 6	55830	3609	config 1	20.86	21.40	1.132	62.9	1.006	0.01	0.111	0.126
	LTE Band 48C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	55830+55632	3609	config 1	14.47	15.60	1.297	62.9	1.006	0.02	0.149	0.194

<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	23.56	25.00	1.393	0.01	0.206	0.287
	FR1 n5_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 6	167300	836.5	Config 0	23.55	25.00	1.396	0	0.229	0.320
	FR1 n5_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 6	167300	836.5	Config 0	23.56	25.00	1.393	-0.08	0.300	0.418
	FR1 n5_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 6	167300	836.5	Config 0	23.55	25.00	1.396	-0.04	0.340	0.475
	FR1 n5_Ant 0	20M	BPSK	1	1	Left Side	10mm	DSI 6	167300	836.5	Config 0	23.56	25.00	1.393	-0.04	0.195	0.272
	FR1 n5_Ant 0	20M	BPSK	50	28	Left Side	10mm	DSI 6	167300	836.5	Config 0	23.55	25.00	1.396	-0.02	0.216	0.302
	FR1 n5_Ant 0	20M	BPSK	1	1	Right Side	10mm	DSI 6	167300	836.5	Config 0	23.56	25.00	1.393	-0.08	0.199	0.277
	FR1 n5_Ant 0	20M	BPSK	50	28	Right Side	10mm	DSI 6	167300	836.5	Config 0	23.55	25.00	1.396	-0.11	0.217	0.303
	FR1 n5_Ant 0	20M	BPSK	1	1	Bottom Side	10mm	DSI 6	167300	836.5	Config 0	23.56	25.00	1.393	-0.03	0.078	0.109
	FR1 n5_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	DSI 6	167300	836.5	Config 0	23.55	25.00	1.396	-0.1	0.093	0.129
	FR1 n5_Ant 1	20M	BPSK	1	1	Front	10mm	DSI 6	167300	836.5	Config 1	23.41	25.00	1.442	0.11	0.286	0.412
	FR1 n5_Ant 1	20M	BPSK	50	28	Front	10mm	DSI 6	167300	836.5	Config 1	23.46	25.00	1.426	-0.09	0.293	0.418
	FR1 n5_Ant 1	20M	BPSK	1	1	Back	10mm	DSI 6	167300	836.5	Config 1	23.41	25.00	1.442	-0.14	0.498	0.718
39	FR1 n5_Ant 1	20M	BPSK	50	28	Back	10mm	DSI 6	167300	836.5	Config 1	23.46	25.00	1.426	-0.06	0.514	0.733
	FR1 n5_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 6	167300	836.5	Config 1	23.41	25.00	1.442	-0.19	0.129	0.186
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Side	10mm	DSI 6	167300	836.5	Config 1	23.46	25.00	1.426	-0.19	0.113	0.161
	FR1 n5_Ant 1	20M	BPSK	1	1	Right Side	10mm	DSI 6	167300	836.5	Config 1	23.41	25.00	1.442	-0.04	0.157	0.226
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Side	10mm	DSI 6	167300	836.5	Config 1	23.46	25.00	1.426	-0.17	0.141	0.201
	FR1 n5_Ant 1	20M	BPSK	1	1	Top Side	10mm	DSI 6	167300	836.5	Config 1	23.41	25.00	1.442	-0.07	0.221	0.319
	FR1 n5_Ant 1	20M	BPSK	50	28	Top Side	10mm	DSI 6	167300	836.5	Config 1	23.46	25.00	1.426	-0.07	0.228	0.325

<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	6	2437	14.40	14.50	1.023	98.72	1.013	-0.05	0.102	0.106
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4	3	6	2437	14.40	14.50	1.023	98.72	1.013	-0.08	0.204	0.211
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 4	3	6	2437	14.40	14.50	1.023	98.72	1.013	0	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 4	3	6	2437	14.40	14.50	1.023	98.72	1.013	0.02	0.168	0.174
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4	3	6	2437	14.40	14.50	1.023	98.72	1.013	-0.05	0.101	0.105
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 3	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.17	0.248	0.263
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.18	0.369	0.391
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.12	0.321	0.340
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 3	3	6	2437	18.80	19.00	1.047	98.92	1.011	0.14	0.017	0.018
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 3	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.05	0.050	0.053
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(4)	3	6	2437	16.70	17.00	1.072	98.92	1.011	-0.03	0.241	0.261
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(3)	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.03	0.207	0.219
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(4)	3	6	2437	16.70	17.00	1.072	98.92	1.011	0.17	0.361	0.391
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(3)	3	6	2437	18.80	19.00	1.047	98.92	1.011	0.17	0.340	0.360
40	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 4+3(3)	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.07	0.372	0.394
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 4+3(4)	3	6	2437	16.70	17.00	1.072	98.92	1.011	0.09	0.278	0.301
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4+3(4)	3	6	2437	16.70	17.00	1.072	98.92	1.011	0.15	0.244	0.264

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	46	5230	15.20	16.50	1.349	95.34	1.049	-0.17	0.051	0.072
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4	3	46	5230	15.20	16.50	1.349	95.34	1.049	0.09	0.073	0.103
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 4	3	46	5230	15.20	16.50	1.349	95.34	1.049	0.01	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 4	3	46	5230	15.20	16.50	1.349	95.34	1.049	-0.11	0.018	0.025
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4	3	46	5230	15.20	16.50	1.349	95.34	1.049	-0.19	0.102	0.144
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 3	3	46	5230	13.90	14.00	1.023	95.96	1.042	-0.08	0.072	0.077
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3	3	46	5230	13.90	14.00	1.023	95.96	1.042	-0.12	0.234	0.250
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 3	3	46	5230	13.90	14.00	1.023	95.96	1.042	0.16	0.384	0.409
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 3	3	46	5230	13.90	14.00	1.023	95.96	1.042	0	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 3	3	46	5230	13.90	14.00	1.023	95.96	1.042	-0.17	0.021	0.022
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3(4)	3	46	5230	15.20	16.50	1.349	95.34	1.049	-0.19	0.048	0.068
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3(3)	3	46	5230	13.60	14.50	1.230	95.34	1.049	-0.19	0.062	0.080
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(4)	3	46	5230	15.20	16.50	1.349	95.34	1.049	-0.06	0.062	0.088
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(3)	3	46	5230	13.60	14.50	1.230	95.34	1.049	-0.06	0.206	0.266
41	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 4+3(3)	3	46	5230	13.60	14.50	1.230	95.34	1.049	0.13	0.345	0.445
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 4+3(4)	3	46	5230	15.20	16.50	1.349	95.34	1.049	-0.09	0.090	0.127
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4+3(4)	3	46	5230	15.20	16.50	1.349	95.34	1.049	-0.16	0.059	0.083
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4	3	157	5785	18.40	18.50	1.023	97.83	1.022	-0.19	0.050	0.052
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	3	157	5785	18.40	18.50	1.023	97.83	1.022	-0.14	0.116	0.121
	WLAN5GHz	802.11a 6Mbps	Left Side	10mm	Ant 4	3	157	5785	18.40	18.50	1.023	97.83	1.022	-0.16	0.015	0.016
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	Ant 4	3	157	5785	18.40	18.50	1.023	97.83	1.022	0.07	0.234	0.245
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4	3	157	5785	18.40	18.50	1.023	97.83	1.022	0.12	0.245	0.256
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3	3	155	5775	9.30	10.00	1.175	92.00	1.087	0.02	0.040	0.051
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3	3	155	5775	9.30	10.00	1.175	92.00	1.087	0.1	0.284	0.363
42	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 3	3	155	5775	9.30	10.00	1.175	92.00	1.087	0.05	0.437	0.558
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 3	3	155	5775	9.30	10.00	1.175	92.00	1.087	0	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 3	3	155	5775	9.30	10.00	1.175	92.00	1.087	0.11	0.001	0.002
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(4)	3	157	5785	18.40	18.50	1.023	97.83	1.022	-0.09	0.064	0.067
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(3)	3	157	5785	9.70	10.50	1.202	97.83	1.022	-0.09	0.081	0.100
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	3	157	5785	18.40	18.50	1.023	97.83	1.022	0.16	0.082	0.086
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	3	157	5785	9.70	10.50	1.202	97.83	1.022	0.16	0.222	0.273
	WLAN5GHz	802.11a 6Mbps	Left Side	10mm	Ant 4+3(3)	3	157	5785	9.70	10.50	1.202	97.83	1.022	-0.19	0.326	0.401
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	Ant 4+3(4)	3	157	5785	18.40	18.50	1.023	97.83	1.022	-0.01	0.212	0.222
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4+3(4)	3	157	5785	18.40	18.50	1.023	97.83	1.022	0.16	0.221	0.231
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4+3(3)	3	157	5785	9.70	10.50	1.202	97.83	1.022	0.16	0.038	0.047

<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	39	2441	14.50	14.50	1.000	77.13	1.080	-0.12	0.077	0.083
	Bluetooth	1Mbps	Back	10mm	Ant 4	3	39	2441	14.50	14.50	1.000	77.13	1.080	-0.18	0.156	0.168
	Bluetooth	1Mbps	Left Side	10mm	Ant 4	3	39	2441	14.50	14.50	1.000	77.13	1.080	0	0.001	0.001
	Bluetooth	1Mbps	Right Side	10mm	Ant 4	3	39	2441	14.50	14.50	1.000	77.13	1.080	-0.02	0.149	0.161
	Bluetooth	1Mbps	Top Side	10mm	Ant 4	3	39	2441	14.50	14.50	1.000	77.13	1.080	0.11	0.076	0.082
	Bluetooth	1Mbps	Front	10mm	Ant 4	1	0	2402	17.92	18.00	1.019	77.13	1.080	-0.12	0.182	0.200
43	Bluetooth	1Mbps	Back	10mm	Ant 4	1	0	2402	17.92	18.00	1.019	77.13	1.080	-0.1	0.366	0.403
	Bluetooth	1Mbps	Left Side	10mm	Ant 4	1	0	2402	17.92	18.00	1.019	77.13	1.080	0.02	0.003	0.003
	Bluetooth	1Mbps	Right Side	10mm	Ant 4	1	0	2402	17.92	18.00	1.019	77.13	1.080	-0.09	0.339	0.373
	Bluetooth	1Mbps	Top Side	10mm	Ant 4	1	0	2402	17.92	18.00	1.019	77.13	1.080	0.14	0.175	0.193

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	251	848.8	config 0	28.06	29.50	1.393	-0.16	0.254	0.354
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 4/8	251	848.8	config 0	28.06	29.50	1.393	-0.11	0.347	0.483
	GSM850_Ant 1	GPRS (4 Tx slots)	Front	10mm	DSI 4/8	128	824.2	config 1	28.28	29.50	1.324	-0.09	0.269	0.356
44	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	DSI 4/8	128	824.2	config 1	28.28	29.50	1.324	-0.17	0.556	0.736
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	DSI 4/8	512	1850.2	config 0	25.72	27.00	1.343	-0.12	0.419	0.563
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	DSI 4/8	512	1850.2	config 0	25.72	27.00	1.343	-0.13	0.357	0.479
	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	DSI 8	661	1880	config 1	21.19	22.40	1.321	0.04	0.306	0.404
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 8	661	1880	config 1	21.19	22.40	1.321	0.05	0.641	0.847
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 8	512	1850.2	config 1	21.12	22.40	1.343	-0.13	0.583	0.783
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 8	810	1909.8	config 1	21.05	22.40	1.365	0.11	0.728	0.993
	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	DSI 4	661	1880	config 1	21.82	23.20	1.374	0.13	0.359	0.493
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 4	661	1880	config 1	21.82	23.20	1.374	-0.08	0.808	1.110
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 4	512	1850.2	config 1	21.81	23.20	1.377	-0.14	0.697	0.960
45	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 4	810	1909.8	config 1	21.65	23.20	1.429	-0.12	0.830	1.186

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 8	9400	1880	config 0	23.53	24.50	1.250	-0.09	0.767	0.959
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 8	9262	1852.4	config 0	23.35	24.50	1.303	-0.02	0.764	0.996
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 8	9538	1907.6	config 0	23.42	24.50	1.282	-0.15	0.734	0.941
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 8	9400	1880	config 0	23.53	24.50	1.250	-0.08	0.529	0.661
	WCDMA II_Ant 2-	RMC 12.2Kbps	Front	10mm	DSI 4	9400	1880	config 0	23.53	25.30	1.503	-0.09	0.767	1.153
46	WCDMA II_Ant 2-	RMC 12.2Kbps	Front	10mm	DSI 4	9262	1852.4	config 0	23.35	25.30	1.567	-0.02	0.764	1.197
	WCDMA II_Ant 2-	RMC 12.2Kbps	Front	10mm	DSI 4	9538	1907.6	config 0	23.42	25.30	1.542	-0.15	0.734	1.132
	WCDMA II_Ant 2-	RMC 12.2Kbps	Back	10mm	DSI 4	9400	1880	config 0	23.53	25.30	1.503	-0.08	0.529	0.795
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 8	9400	1880	config 1	19.65	20.50	1.216	-0.04	0.333	0.405
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	9400	1880	config 1	19.65	20.50	1.216	-0.08	0.807	0.981
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	9262	1852.4	config 1	19.62	20.50	1.225	-0.04	0.803	0.983
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	9538	1907.6	config 1	19.50	20.50	1.259	-0.09	0.777	0.978
	WCDMA II_Ant 0-	RMC 12.2Kbps	Front	10mm	DSI 4	9400	1880	config 1	19.65	21.30	1.462	-0.04	0.333	0.487
	WCDMA II_Ant 0-	RMC 12.2Kbps	Back	10mm	DSI 4	9400	1880	config 1	19.65	21.30	1.462	-0.08	0.807	1.180
	WCDMA II_Ant 0-	RMC 12.2Kbps	Back	10mm	DSI 4	9262	1852.4	config 1	19.62	21.30	1.472	-0.04	0.803	1.182
	WCDMA II_Ant 0-	RMC 12.2Kbps	Back	10mm	DSI 4	9538	1907.6	config 1	19.50	21.30	1.514	-0.09	0.777	1.176
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 8	1312	1712.4	config 0	24.03	25.00	1.250	-0.16	0.770	0.963
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 8	1413	1732.6	config 0	24.01	25.00	1.256	-0.16	0.779	0.978
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 8	1513	1752.6	config 0	23.99	25.00	1.262	-0.09	0.788	0.994
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 8	1312	1712.4	config 0	24.03	25.00	1.250	-0.14	0.622	0.778
	WCDMA IV_Ant 2-	RMC 12.2Kbps	Front	10mm	DSI 4	1312	1712.4	config 0	24.03	25.70	1.469	-0.16	0.770	1.131
	WCDMA IV_Ant 2-	RMC 12.2Kbps	Front	10mm	DSI 4	1413	1732.6	config 0	24.01	25.70	1.476	-0.16	0.779	1.150
	WCDMA IV_Ant 2-	RMC 12.2Kbps	Front	10mm	DSI 4	1513	1752.6	config 0	23.99	25.70	1.483	-0.09	0.788	1.168
	WCDMA IV_Ant 2-	RMC 12.2Kbps	Back	10mm	DSI 4	1312	1712.4	config 0	24.03	25.70	1.469	-0.14	0.622	0.914
	WCDMA IV_Ant 2-	RMC 12.2Kbps	Back	10mm	DSI 4	1413	1732.6	config 0	24.01	25.70	1.476	0.02	0.584	0.862
	WCDMA IV_Ant 2-	RMC 12.2Kbps	Back	10mm	DSI 4	1513	1752.6	config 0	23.99	25.70	1.483	0.15	0.526	0.780
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 8	1312	1712.4	config 1	18.86	20.00	1.300	-0.01	0.298	0.387
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	1312	1712.4	config 1	18.86	20.00	1.300	-0.03	0.763	0.992
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	1413	1732.6	config 1	18.79	20.00	1.321	-0.02	0.748	0.988
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	1513	1752.6	config 1	18.67	20.00	1.358	-0.1	0.731	0.993
	WCDMA IV_Ant 0-	RMC 12.2Kbps	Front	10mm	DSI 4	1312	1712.4	config 1	19.49	20.80	1.352	-0.1	0.383	0.518
47	WCDMA IV_Ant 0-	RMC 12.2Kbps	Back	10mm	DSI 4	1312	1712.4	config 1	19.49	20.80	1.352	-0.17	0.886	1.198
	WCDMA IV_Ant 0-	RMC 12.2Kbps	Back	10mm	DSI 4	1413	1732.6	config 1	19.40	20.80	1.380	-0.04	0.861	1.189
	WCDMA IV_Ant 0-	RMC 12.2Kbps	Back	10mm	DSI 4	1513	1752.6	config 1	19.35	20.80	1.396	-0.1	0.838	1.170
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 4/8	4182	836.4	config 0	24.08	25.00	1.236	-0.16	0.258	0.319
48	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4/8	4182	836.4	config 0	24.08	25.00	1.236	-0.17	0.410	0.507
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	10mm	DSI 4/8	4132	826.4	config 1	24.09	25.00	1.233	-0.17	0.195	0.240
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	DSI 4/8	4132	826.4	config 1	24.09	25.00	1.233	-0.14	0.378	0.466

<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 8	21100	2535	config 0	23.42	24.40	1.253	-0.04	0.622	0.779
	LTE Band 7_Ant 2	20M	QPSK	50	50	Front	10mm	DSI 8	21100	2535	config 0	23.55	23.90	1.084	-0.03	0.646	0.700
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 8	21100	2535	config 0	23.42	24.40	1.253	-0.13	0.733	0.919
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 8	20850	2510	config 0	23.29	24.40	1.291	-0.1	0.642	0.829
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 8	21350	2560	config 0	23.40	24.40	1.259	-0.07	0.783	0.986
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 8	21100	2535	config 0	23.55	23.90	1.084	-0.11	0.757	0.821
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 8	20850	2510	config 0	23.32	23.90	1.143	0	0.610	0.697
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 8	21350	2560	config 0	23.44	23.90	1.112	-0.08	0.704	0.783
	LTE Band 7_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 8	21100	2535	config 0	23.45	23.90	1.109	-0.18	0.724	0.803
	LTE Band 7C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	21350+21152	2560	config 0	23.77	24.40	1.156	0.03	0.822	0.950
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 4	21100	2535	config 0	23.42	25.20	1.507	-0.04	0.622	0.937
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 4	20850	2510	config 0	23.29	25.20	1.552	-0.12	0.635	0.986
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 4	21350	2560	config 0	23.40	25.20	1.514	-0.04	0.595	0.901
	LTE Band 7_Ant 2	20M	QPSK	50	50	Front	10mm	DSI 4	21100	2535	config 0	23.55	24.20	1.161	-0.03	0.646	0.750
	LTE Band 7_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 4	21100	2535	config 0	23.45	24.20	1.189	-0.02	0.653	0.776
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 4	21100	2535	config 0	23.42	25.20	1.507	-0.13	0.733	1.104
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 4	20850	2510	config 0	23.29	25.20	1.552	-0.1	0.642	0.997
49	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 4	21350	2560	config 0	23.40	25.20	1.514	-0.07	0.783	1.185
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 4	21100	2535	config 0	23.55	24.20	1.161	-0.11	0.757	0.879
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 4	20850	2510	config 0	23.32	24.20	1.225	0	0.610	0.747
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 4	21350	2560	config 0	23.44	24.20	1.191	-0.08	0.704	0.839
	LTE Band 7_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 4	21100	2535	config 0	23.45	24.20	1.189	-0.18	0.724	0.860
	LTE Band 7C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	21350+21152	2560	config 0	23.77	25.20	1.390	0.03	0.822	1.143
	LTE Band 7_Ant 0	20M	QPSK	1	99	Front	10mm	DSI 8	21100	2535	config 1	20.72	21.60	1.225	0.02	0.255	0.312
	LTE Band 7_Ant 0	20M	QPSK	50	50	Front	10mm	DSI 8	21100	2535	config 1	20.84	21.60	1.191	-0.05	0.261	0.311
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 8	21100	2535	config 1	20.72	21.60	1.225	-0.07	0.692	0.847
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 8	20850	2510	config 1	20.62	21.60	1.253	-0.01	0.678	0.850
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 8	21350	2560	config 1	20.63	21.60	1.250	0	0.709	0.886
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 8	21100	2535	config 1	20.84	21.60	1.191	-0.06	0.718	0.855
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 8	20850	2510	config 1	20.69	21.60	1.233	-0.05	0.653	0.805
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 8	21350	2560	config 1	20.76	21.60	1.213	0.01	0.735	0.892
	LTE Band 7_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 8	21100	2535	config 1	20.73	21.60	1.222	0	0.708	0.865
	LTE Band 7C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	21100+20902	2535	config 1	20.86	21.60	1.186	0.01	0.712	0.844
	LTE Band 7_Ant 0	20M	QPSK	1	99	Front	10mm	DSI 4	21100	2535	config 1	20.72	22.40	1.472	0.02	0.255	0.375
	LTE Band 7_Ant 0	20M	QPSK	50	50	Front	10mm	DSI 4	21100	2535	config 1	20.84	22.40	1.432	-0.05	0.261	0.374
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 4	21100	2535	config 1	20.72	22.40	1.472	-0.07	0.692	1.019
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 4	20850	2510	config 1	20.62	22.40	1.507	-0.01	0.678	1.021
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 4	21350	2560	config 1	20.63	22.40	1.503	0	0.709	1.066
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 4	21100	2535	config 1	20.84	22.40	1.432	-0.06	0.718	1.028
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 4	20850	2510	config 1	20.69	22.40	1.483	-0.05	0.653	0.968
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 4	21350	2560	config 1	20.76	22.40	1.459	0.01	0.735	1.072
	LTE Band 7_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 4	21100	2535	config 1	20.73	22.40	1.469	0	0.708	1.040
	LTE Band 7C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	21100+20902	2535	config 1	20.86	22.40	1.426	0.01	0.712	1.015

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	24.24	25.70	1.400	-0.17	0.314	0.439
	LTE Band 12_Ant 0	10M	QPSK	25	12	Front	10mm	DSI 4/8	23095	707.5	config 0	23.34	24.70	1.368	-0.15	0.246	0.336
	LTE Band 12_Ant 0	10M	QPSK	1	49	Back	10mm	DSI 4/8	23095	707.5	config 0	24.24	25.70	1.400	-0.14	0.458	0.641
	LTE Band 12_Ant 0	10M	QPSK	25	12	Back	10mm	DSI 4/8	23095	707.5	config 0	23.34	24.70	1.368	-0.16	0.353	0.483
	LTE Band 12_Ant 1	10M	QPSK	1	49	Front	10mm	DSI 4/8	23095	707.5	config 1	23.88	25.70	1.521	-0.11	0.234	0.356
	LTE Band 12_Ant 1	10M	QPSK	25	12	Front	10mm	DSI 4/8	23095	707.5	config 1	22.92	24.70	1.507	-0.1	0.206	0.310
50	LTE Band 12_Ant 1	10M	QPSK	1	49	Back	10mm	DSI 4/8	23095	707.5	config 1	23.88	25.70	1.521	-0.02	0.434	0.660
	LTE Band 12_Ant 1	10M	QPSK	25	12	Back	10mm	DSI 4/8	23095	707.5	config 1	22.92	24.70	1.507	-0.07	0.349	0.526
	LTE Band 13_Ant 0	10M	QPSK	1	49	Front	10mm	DSI 4/8	23230	782	config 0	23.97	25.20	1.327	0	0.358	0.475
	LTE Band 13_Ant 0	10M	QPSK	25	12	Front	10mm	DSI 4/8	23230	782	config 0	23.01	24.20	1.315	-0.13	0.302	0.397
51	LTE Band 13_Ant 0	10M	QPSK	1	49	Back	10mm	DSI 4/8	23230	782	config 0	23.97	25.20	1.327	-0.04	0.489	0.649
	LTE Band 13_Ant 0	10M	QPSK	25	12	Back	10mm	DSI 4/8	23230	782	config 0	23.01	24.20	1.315	-0.17	0.417	0.548
	LTE Band 13_Ant 1	10M	QPSK	1	0	Front	10mm	DSI 4/8	23230	782	config 1	23.60	25.20	1.445	-0.08	0.042	0.061
	LTE Band 13_Ant 1	10M	QPSK	25	12	Front	10mm	DSI 4/8	23230	782	config 1	22.65	24.20	1.429	-0.06	0.040	0.057
	LTE Band 13_Ant 1	10M	QPSK	1	0	Back	10mm	DSI 4/8	23230	782	config 1	23.60	25.20	1.445	-0.09	0.078	0.113
	LTE Band 13_Ant 1	10M	QPSK	25	12	Back	10mm	DSI 4/8	23230	782	config 1	22.65	24.20	1.429	0.08	0.075	0.107
	LTE Band 14_Ant 0	10M	QPSK	1	25	Front	10mm	DSI 4/8	23330	793	config 0	24.49	25.70	1.321	-0.12	0.329	0.435
	LTE Band 14_Ant 0	10M	QPSK	25	0	Front	10mm	DSI 4/8	23330	793	config 0	23.51	24.70	1.315	-0.1	0.280	0.368
	LTE Band 14_Ant 0	10M	QPSK	1	25	Back	10mm	DSI 4/8	23330	793	config 0	24.49	25.70	1.321	-0.18	0.441	0.583
	LTE Band 14_Ant 0	10M	QPSK	25	0	Back	10mm	DSI 4/8	23330	793	config 0	23.51	24.70	1.315	-0.17	0.353	0.464
	LTE Band 14_Ant 1	10M	QPSK	1	0	Front	10mm	DSI 4/8	23330	793	config 1	24.23	25.70	1.403	-0.02	0.303	0.425
	LTE Band 14_Ant 1	10M	QPSK	25	12	Front	10mm	DSI 4/8	23330	793	config 1	23.16	24.70	1.426	-0.03	0.243	0.346
52	LTE Band 14_Ant 1	10M	QPSK	1	0	Back	10mm	DSI 4/8	23330	793	config 1	24.23	25.70	1.403	-0.03	0.526	0.738
	LTE Band 14_Ant 1	10M	QPSK	25	12	Back	10mm	DSI 4/8	23330	793	config 1	23.16	24.70	1.426	-0.04	0.426	0.607
	LTE Band 25_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 8	26340	1880	config 0	22.38	23.80	1.387	-0.09	0.556	0.771
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 8	26340	1880	config 0	22.55	23.80	1.334	-0.04	0.614	0.819
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 8	26140	1860	config 0	22.48	23.80	1.355	-0.19	0.617	0.836
	LTE Band 25_Ant 2	20M	QPSK	50	50	Front	10mm	DSI 8	26590	1905	config 0	22.41	23.80	1.377	-0.16	0.616	0.848
	LTE Band 25_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 8	26340	1880	config 0	22.56	23.80	1.330	0.02	0.609	0.810
	LTE Band 25_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 8	26340	1880	config 0	22.38	23.80	1.387	-0.08	0.478	0.663
	LTE Band 25_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 8	26340	1880	config 0	22.55	23.80	1.334	-0.11	0.519	0.692
	LTE Band 25_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 4	26340	1880	config 0	22.99	24.60	1.449	-0.14	0.656	0.950
	LTE Band 25_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 4	26140	1860	config 0	22.86	24.60	1.493	-0.19	0.665	0.993
	LTE Band 25_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 4	26590	1905	config 0	22.92	24.60	1.472	-0.11	0.685	1.009
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 4	26340	1880	config 0	23.12	24.60	1.406	-0.13	0.706	0.993
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 4	26140	1860	config 0	23.04	24.60	1.432	-0.16	0.695	0.995
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 4	26590	1905	config 0	22.98	24.60	1.452	-0.13	0.692	1.005
	LTE Band 25_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 4	26340	1880	config 0	23.11	24.60	1.409	-0.13	0.702	0.989
	LTE Band 25_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 4	26340	1880	config 0	22.99	24.60	1.449	-0.05	0.550	0.797
	LTE Band 25_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 4	26340	1880	config 0	23.12	24.60	1.406	-0.1	0.598	0.841
	LTE Band 25_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 4	26140	1860	config 0	23.04	24.60	1.432	-0.1	0.595	0.852
	LTE Band 25_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 4	26590	1905	config 0	22.98	24.60	1.452	-0.12	0.616	0.895
	LTE Band 25_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 4	26340	1880	config 0	23.11	24.60	1.409	-0.07	0.595	0.839
	LTE Band 25_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 8	26340	1880	config 1	17.70	18.90	1.318	-0.12	0.367	0.484
	LTE Band 25_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 8	26140	1860	config 1	17.83	18.90	1.279	-0.11	0.370	0.473
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	26340	1880	config 1	17.70	18.90	1.318	-0.15	0.685	0.903
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	26140	1860	config 1	17.68	18.90	1.324	-0.14	0.611	0.809
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	26590	1905	config 1	17.58	18.90	1.355	-0.18	0.676	0.916
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	26140	1860	config 1	17.83	18.90	1.279	-0.19	0.654	0.837
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	26340	1880	config 1	17.82	18.90	1.282	-0.19	0.724	0.928
	LTE Band 25_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 8	26590	1905	config 1	17.75	18.90	1.303	-0.16	0.647	0.843
	LTE Band 25_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 8	26140	1860	config 1	17.81	18.90	1.285	0.01	0.698	0.897
	LTE Band 25_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 4	26340	1880	config 1	18.00	19.70	1.479	0.02	0.382	0.565
	LTE Band 25_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 4	26340	1880	config 1	18.14	19.70	1.432	-0.06	0.411	0.589
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	26340	1880	config 1	18.00	19.70	1.479	-0.16	0.704	1.041
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	26140	1860	config 1	17.99	19.70	1.483	-0.11	0.634	0.940
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	26590	1905	config 1	17.88	19.70	1.521	-0.13	0.667	1.014
53	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	26340	1880	config 1	18.14	19.70	1.432	-0.11	0.739	1.058
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	26590	1905	config 1	18.09	19.70	1.449	-0.17	0.653	0.946
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	26140	1860	config 1	17.93	19.70	1.503	-0.16	0.679	1.021
	LTE Band 25_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 4	26340	1880	config 1	18.11	19.70	1.442	-0.15	0.723	1.043

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	74	Front	10mm	DSI 4/8	26865	831.5	config 0	24.52	25.70	1.312	-0.12	0.198	0.260
	LTE Band 26_Ant 0	15M	QPSK	36	0	Front	10mm	DSI 4/8	26865	831.5	config 0	23.39	24.70	1.352	-0.1	0.235	0.318
	LTE Band 26_Ant 0	15M	QPSK	1	74	Back	10mm	DSI 4/8	26865	831.5	config 0	24.52	25.70	1.312	-0.12	0.433	0.568
	LTE Band 26_Ant 0	15M	QPSK	36	0	Back	10mm	DSI 4/8	26865	831.5	config 0	23.39	24.70	1.352	-0.09	0.340	0.460
	LTE Band 5B_Ant 0	10M	QPSK	1	49	Back	10mm	DSI 4/8	20450+20549	829	config 0	25.38	25.70	1.076	0.01	0.521	0.561
	LTE Band 26_Ant 1	15M	QPSK	1	74	Front	10mm	DSI 4/8	26865	831.5	config 1	24.33	25.70	1.371	-0.1	0.352	0.483
	LTE Band 26_Ant 1	15M	QPSK	36	20	Front	10mm	DSI 4/8	26865	831.5	config 1	23.18	24.70	1.419	-0.17	0.278	0.394
54	LTE Band 26_Ant 1	15M	QPSK	1	74	Back	10mm	DSI 4/8	26865	831.5	config 1	24.33	25.70	1.371	-0.18	0.644	0.883
	LTE Band 26_Ant 1	15M	QPSK	36	20	Back	10mm	DSI 4/8	26865	831.5	config 1	23.18	24.70	1.419	-0.11	0.523	0.742
	LTE Band 26_Ant 1	15M	QPSK	75	0	Back	10mm	DSI 4/8	26865	831.5	config 1	23.17	24.70	1.422	-0.17	0.528	0.751
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Back	10mm	DSI 4/8	20575+20476	841.5	config 1	25.03	25.70	1.167	-0.02	0.742	0.866
	LTE Band 30_Ant 2	10M	QPSK	1	0	Front	10mm	DSI 4/8	27710	2310	config 0	22.18	23.70	1.419	-0.08	0.359	0.509
	LTE Band 30_Ant 2	10M	QPSK	25	25	Front	10mm	DSI 4/8	27710	2310	config 0	21.23	22.70	1.403	-0.14	0.286	0.401
	LTE Band 30_Ant 2	10M	QPSK	1	0	Back	10mm	DSI 4/8	27710	2310	config 0	22.18	23.70	1.419	-0.09	0.280	0.397
	LTE Band 30_Ant 2	10M	QPSK	25	25	Back	10mm	DSI 4/8	27710	2310	config 0	21.23	22.70	1.403	-0.07	0.241	0.338
	LTE Band 30_Ant 0	10M	QPSK	1	0	Front	10mm	DSI 8	27710	2310	config 1	20.54	21.60	1.276	-0.15	0.392	0.500
	LTE Band 30_Ant 0	10M	QPSK	25	12	Front	10mm	DSI 8	27710	2310	config 1	20.60	21.60	1.259	-0.17	0.397	0.500
	LTE Band 30_Ant 0	10M	QPSK	1	0	Back	10mm	DSI 8	27710	2310	config 1	20.54	21.60	1.276	-0.14	0.757	0.966
	LTE Band 30_Ant 0	10M	QPSK	25	12	Back	10mm	DSI 8	27710	2310	config 1	20.60	21.60	1.259	-0.14	0.750	0.944
	LTE Band 30_Ant 0	10M	QPSK	50	0	Back	10mm	DSI 8	27710	2310	config 1	20.75	21.60	1.216	-0.13	0.816	0.992
	LTE Band 30_Ant 0-	10M	QPSK	1	0	Front	10mm	DSI 4	27710	2310	config 1	21.11	22.40	1.346	0	0.470	0.633
	LTE Band 30_Ant 0-	10M	QPSK	25	25	Front	10mm	DSI 4	27710	2310	config 1	21.27	22.40	1.297	-0.14	0.495	0.642
	LTE Band 30_Ant 0-	10M	QPSK	1	0	Back	10mm	DSI 4	27710	2310	config 1	21.11	22.40	1.346	-0.07	0.887	1.194
	LTE Band 30_Ant 0-	10M	QPSK	25	25	Back	10mm	DSI 4	27710	2310	config 1	21.27	22.40	1.297	-0.11	0.922	1.196
55	LTE Band 30_Ant 0-	10M	QPSK	50	0	Back	10mm	DSI 4	27710	2310	config 1	21.30	22.40	1.288	-0.1	0.930	1.198

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	23.95	25.10	1.303	-0.15	0.762	0.993
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 8	132322	1745	config 0	23.87	25.10	1.327	-0.09	0.743	0.986
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 8	132572	1770	config 0	23.78	25.10	1.355	-0.02	0.695	0.942
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 8	132072	1720	config 0	23.65	24.70	1.274	-0.01	0.714	0.909
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 8	132322	1745	config 0	23.51	24.70	1.315	-0.09	0.690	0.908
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 8	132572	1770	config 0	23.52	24.70	1.312	-0.01	0.629	0.825
	LTE Band 66_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 8	132072	1720	config 0	23.66	24.70	1.271	-0.06	0.706	0.897
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	132072	1720	config 0	23.95	25.10	1.303	-0.1	0.650	0.847
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	132322	1745	config 0	23.87	25.10	1.327	-0.01	0.607	0.806
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	132572	1770	config 0	23.78	25.10	1.355	-0.06	0.553	0.749
	LTE Band 66_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 8	132072	1720	config 0	23.65	24.70	1.274	-0.12	0.598	0.762
	LTE Band 66_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 8	132072	1720	config 0	23.66	24.70	1.271	-0.12	0.596	0.757
	LTE Band 66C_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 8	132072+132270	1720	config 0	23.71	25.10	1.377	0.05	0.720	0.992
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	132072	1720	config 0	23.95	25.70	1.496	-0.15	0.762	1.140
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	132322	1745	config 0	23.87	25.70	1.524	-0.09	0.743	1.132
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	132572	1770	config 0	23.78	25.70	1.556	-0.02	0.695	1.081
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 4	132072	1720	config 0	23.65	24.70	1.274	-0.01	0.714	0.909
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 4	132322	1745	config 0	23.51	24.70	1.315	-0.09	0.690	0.908
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 4	132572	1770	config 0	23.52	24.70	1.312	-0.01	0.629	0.825
	LTE Band 66_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 4	132072	1720	config 0	23.66	24.70	1.271	-0.06	0.706	0.897
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	132072	1720	config 0	23.95	25.70	1.496	-0.1	0.650	0.973
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	132322	1745	config 0	23.87	25.70	1.524	-0.01	0.607	0.925
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	132572	1770	config 0	23.78	25.70	1.556	-0.06	0.553	0.860
	LTE Band 66_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 4	132072	1720	config 0	23.65	24.70	1.274	-0.12	0.598	0.762
	LTE Band 66_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 4	132072	1720	config 0	23.66	24.70	1.271	-0.12	0.596	0.757
	LTE Band 66C_Ant 2	20M	QPSK	1	0	Front	0mm	DSI 4	132322+132124	1745	config 0	25.07	25.70	1.156	0.01	0.984	1.138
	LTE Band 66_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 8	132072	1720	config 1	20.05	21.10	1.274	0	0.388	0.494
	LTE Band 66_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 8	132072	1720	config 1	20.17	21.10	1.239	-0.03	0.402	0.498
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	132072	1720	config 1	20.05	21.10	1.274	-0.19	0.776	0.988
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	132322	1745	config 1	19.96	21.10	1.300	-0.18	0.759	0.987
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	132572	1770	config 1	19.93	21.10	1.309	-0.03	0.656	0.859
	LTE Band 66_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	132072	1720	config 1	20.17	21.10	1.239	-0.19	0.797	0.987
	LTE Band 66_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	132322	1745	config 1	20.00	21.10	1.288	-0.14	0.766	0.987
	LTE Band 66_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	132572	1770	config 1	20.03	21.10	1.279	-0.03	0.626	0.801
	LTE Band 66_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 8	132072	1720	config 1	20.02	21.10	1.282	-0.18	0.755	0.968
	LTE Band 66C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	132572+132374	1770	config 1	20.08	21.10	1.265	0.02	0.761	0.962
	LTE Band 66_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 4	132072	1720	config 1	20.05	21.90	1.531	0	0.388	0.594
	LTE Band 66_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 4	132072	1720	config 1	20.17	21.90	1.489	-0.03	0.402	0.599
56	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	132072	1720	config 1	20.05	21.90	1.531	-0.19	0.776	1.188
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	132322	1745	config 1	19.96	21.90	1.563	-0.18	0.759	1.186
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	132572	1770	config 1	19.93	21.90	1.574	-0.03	0.656	1.033
	LTE Band 66_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	132072	1720	config 1	20.17	21.90	1.489	-0.19	0.797	1.187
	LTE Band 66_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	132322	1745	config 1	20.00	21.90	1.549	-0.14	0.766	1.186
	LTE Band 66_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	132572	1770	config 1	20.03	21.90	1.538	-0.03	0.626	0.963
	LTE Band 66_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 4	132072	1720	config 1	20.02	21.90	1.542	-0.18	0.755	1.164
	LTE Band 66C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	132572+132374	1770	config 1	20.08	21.90	1.521	0.02	0.766	1.165
	LTE Band 71_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 4/8	133322	683	config 0	24.32	25.70	1.374	-0.15	0.272	0.374
	LTE Band 71_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 4/8	133322	683	config 0	23.42	24.70	1.343	-0.1	0.224	0.301
56	LTE Band 71_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4/8	133322	683	config 0	24.32	25.70	1.374	-0.16	0.421	0.578
	LTE Band 71_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4/8	133322	683	config 0	23.42	24.70	1.343	-0.13	0.327	0.439
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	DSI 4/8	133322	683	config 1	24.17	25.70	1.422	-0.16	0.249	0.354
	LTE Band 71_Ant 1	20M	QPSK	50	24	Front	10mm	DSI 4/8	133322	683	config 1	23.28	24.70	1.387	-0.19	0.209	0.290
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	DSI 4/8	133322	683	config 1	24.17	25.70	1.422	-0.16	0.433	0.616
	LTE Band 71_Ant 1	20M	QPSK	50	24	Back	10mm	DSI 4/8	133322	683	config 1	23.28	24.70	1.387	-0.13	0.374	0.519

<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 8	40620	2593	config 0	23.52	24.60	1.282	62.9	1.006	-0.16	0.251	0.324
	LTE Band 41_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 8	40185	2549.5	config 0	23.75	24.60	1.216	62.9	1.006	-0.13	0.376	0.460
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	40620	2593	config 0	23.52	24.60	1.282	62.9	1.006	-0.11	0.549	0.708
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 8	39750	2506	config 0	23.36	24.60	1.330	62.9	1.006	-0.1	0.421	0.563
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 8	40185	2549.5	config 0	23.51	24.60	1.285	62.9	1.006	-0.16	0.476	0.615
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 8	41055	2636.5	config 0	23.52	24.60	1.282	62.9	1.006	-0.12	0.536	0.691
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 8	41490	2680	config 0	23.38	24.60	1.324	62.9	1.006	-0.06	0.653	0.870
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 8	40185	2549.5	config 0	23.75	24.60	1.216	62.9	1.006	-0.17	0.500	0.612
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 8	39750	2506	config 0	23.50	24.60	1.288	62.9	1.006	-0.14	0.440	0.570
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 8	40620	2593	config 0	23.62	24.60	1.253	62.9	1.006	-0.07	0.559	0.705
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 8	41055	2636.5	config 0	23.59	24.60	1.262	62.9	1.006	-0.11	0.553	0.702
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 8	41490	2680	config 0	23.50	24.60	1.288	62.9	1.006	-0.07	0.664	0.861
	LTE Band 41_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 8	40185	2549.5	config 0	23.65	24.60	1.245	62.9	1.006	-0.13	0.495	0.620
	LTE Band 38_HPUE_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	38000	2595	config 0	25.33	26.40	1.279	42.9	1.009	-0.13	0.657	0.848
	LTE Band 41C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	41055+40857	2636.5	config 0	24.14	24.60	1.112	62.9	1.006	0.06	0.623	0.697
	LTE Band 41_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	40620	2593	config 0	23.52	25.40	1.542	62.9	1.006	-0.16	0.251	0.389
	LTE Band 41_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 4	40185	2549.5	config 0	23.75	24.40	1.161	62.9	1.006	-0.13	0.376	0.439
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	40620	2593	config 0	23.52	25.40	1.542	62.9	1.006	-0.11	0.549	0.851
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 4	39750	2506	config 0	23.40	25.40	1.585	62.9	1.006	-0.1	0.421	0.671
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 4	40185	2549.5	config 0	23.51	25.40	1.545	62.9	1.006	-0.16	0.476	0.740
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 4	41055	2636.5	config 0	23.52	25.40	1.542	62.9	1.006	-0.12	0.536	0.831
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 4	41490	2680	config 0	23.38	25.40	1.592	62.9	1.006	-0.06	0.653	1.046
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 4	40185	2549.5	config 0	23.75	24.40	1.161	62.9	1.006	-0.17	0.500	0.584
	LTE Band 41_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 4	40185	2549.5	config 0	23.65	24.40	1.189	62.9	1.006	-0.13	0.495	0.592
	LTE Band 38_HPUE_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	38000	2595	config 0	25.33	27.20	1.538	42.9	1.009	-0.13	0.657	1.020
	LTE Band 41C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	41055+40857	2636.5	config 0	25.17	25.40	1.054	62.9	1.006	0.01	0.653	0.693
	LTE Band 41_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 8	40185	2549.5	config 1	21.80	23.20	1.380	62.9	1.006	-0.14	0.151	0.210
	LTE Band 41_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 8	40185	2549.5	config 1	21.90	23.20	1.349	62.9	1.006	-0.09	0.151	0.205
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	40185	2549.5	config 1	21.80	23.20	1.380	62.9	1.006	-0.03	0.518	0.719
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	39750	2506	config 1	21.69	23.20	1.416	62.9	1.006	-0.05	0.457	0.651
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	40620	2593	config 1	21.66	23.20	1.426	62.9	1.006	-0.06	0.579	0.830
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 8	41055	2636.5	config 1	21.79	23.20	1.384	62.9	1.006	-0.02	0.713	0.992
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 8	41490	2680	config 1	21.52	23.20	1.472	62.9	1.006	-0.03	0.603	0.893
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	40185	2549.5	config 1	21.90	23.20	1.349	62.9	1.006	-0.06	0.543	0.737
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	39750	2506	config 1	21.80	23.20	1.380	62.9	1.006	-0.05	0.500	0.694
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	40620	2593	config 1	21.78	23.20	1.387	62.9	1.006	-0.02	0.619	0.864
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	41055	2636.5	config 1	21.89	23.20	1.352	62.9	1.006	-0.18	0.731	0.994
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	41490	2680	config 1	21.57	23.20	1.455	62.9	1.006	0	0.620	0.908
	LTE Band 41_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 8	40185	2549.5	config 1	21.83	23.20	1.371	62.9	1.006	-0.14	0.541	0.746
	LTE Band 38_HPUE_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	38000	2595	config 1	23.83	25.00	1.309	42.9	1.009	-0.18	0.684	0.904
	LTE Band 41C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	40185+39987	2549.5	config 1	22.28	23.20	1.236	62.9	1.006	-0.01	0.489	0.608
	LTE Band 41_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 4	40620	2593	config 1	22.55	24.00	1.396	62.9	1.006	-0.13	0.208	0.292
	LTE Band 41_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 4	40620	2593	config 1	22.60	24.00	1.380	62.9	1.006	-0.11	0.254	0.353
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	40620	2593	config 1	22.55	24.00	1.396	62.9	1.006	-0.14	0.657	0.923
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	39750	2506	config 1	22.48	24.00	1.419	62.9	1.006	-0.15	0.531	0.758
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	40185	2549.5	config 1	22.43	24.00	1.435	62.9	1.006	-0.14	0.600	0.866
58	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 4	41055	2636.5	config 1	22.44	24.00	1.432	62.9	1.006	-0.16	0.814	1.173
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 4	41490	2680	config 1	22.29	24.00	1.483	62.9	1.006	-0.11	0.694	1.035
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	40620	2593	config 1	22.60	24.00	1.380	62.9	1.006	-0.17	0.667	0.926
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	39750	2506	config 1	22.57	24.00	1.390	62.9	1.006	-0.12	0.589	0.824
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	40185	2549.5	config 1	22.58	24.00	1.387	62.9	1.006	-0.11	0.629	0.878
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	41055	2636.5	config 1	22.51	24.00	1.409	62.9	1.006	-0.1	0.824	1.168
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	41490	2680	config 1	22.36	24.00	1.459	62.9	1.006	0.01	0.701	1.029
	LTE Band 41_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 4	40620	2593	config 1	22.61	24.00	1.377	62.9	1.006	-0.14	0.724	1.003
	LTE Band 38_HPUE_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	38000	2595	config 1	24.59	25.80	1.321	42.9	1.009	-0.14	0.829	1.105
	LTE Band 41C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	40185+39987	2549.5	config 1	23.17	24.00	1.211	62.9	1.006	-0.03	0.565	0.688

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	56640	3690	config 0	22.93	23.80	1.222	62.9	1.006	-0.1	0.229	0.281
	LTE Band 48_Ant 7	20M	QPSK	50	0	Front	10mm	DSI 8	56640	3690	config 0	22.23	22.80	1.140	62.9	1.006	-0.01	0.197	0.226
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 8	56640	3690	config 0	22.93	23.80	1.222	62.9	1.006	0.05	0.736	0.905
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 8	55340	3560	config 0	22.70	23.80	1.288	62.9	1.006	0.03	0.673	0.872
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 8	55830	3609	config 0	22.79	23.80	1.262	62.9	1.006	0.01	0.661	0.839
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 8	56150	3641	config 0	22.84	23.80	1.247	62.9	1.006	-0.04	0.695	0.872
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 8	56640	3690	config 0	22.23	22.80	1.140	62.9	1.006	0.02	0.629	0.722
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 8	55340	3560	config 0	22.02	22.80	1.197	62.9	1.006	-0.05	0.573	0.690
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 8	55830	3609	config 0	22.11	22.80	1.172	62.9	1.006	0.01	0.569	0.671
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 8	56150	3641	config 0	22.14	22.80	1.164	62.9	1.006	0.02	0.606	0.710
	LTE Band 48_Ant 7	20M	QPSK	100	0	Back	10mm	DSI 8	56640	3690	config 0	22.16	22.80	1.159	62.9	1.006	0.03	0.635	0.740
	LTE Band 48C_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 8	55830+55632	3609	config 0	16.09	17.20	1.291	62.9	1.006	0.03	0.125	0.162
	LTE Band 48_Ant 7	20M	QPSK	1	0	Front	10mm	DSI 4	56640	3690	config 0	22.93	24.20	1.340	62.9	1.006	-0.1	0.229	0.309
	LTE Band 48_Ant 7	20M	QPSK	50	0	Front	10mm	DSI 4	56640	3690	config 0	22.23	23.20	1.250	62.9	1.006	-0.01	0.197	0.248
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 4	56640	3690	config 0	22.93	24.20	1.340	62.9	1.006	0.05	0.736	0.992
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 4	55340	3560	config 0	22.70	24.20	1.413	62.9	1.006	0.03	0.673	0.956
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 4	55830	3609	config 0	22.79	24.20	1.384	62.9	1.006	0.01	0.661	0.920
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 4	56150	3641	config 0	22.84	24.20	1.368	62.9	1.006	-0.04	0.695	0.956
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 4	56640	3690	config 0	22.23	23.20	1.250	62.9	1.006	0.02	0.629	0.791
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 4	55340	3560	config 0	22.02	23.20	1.312	62.9	1.006	-0.05	0.573	0.756
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 4	55830	3609	config 0	22.11	23.20	1.285	62.9	1.006	0.01	0.569	0.736
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 4	56150	3641	config 0	22.14	23.20	1.276	62.9	1.006	0.02	0.606	0.778
	LTE Band 48_Ant 7	20M	QPSK	100	0	Back	10mm	DSI 4	56640	3690	config 0	22.16	23.20	1.271	62.9	1.006	0.03	0.635	0.812
	LTE Band 48C_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 4	55830+55632	3609	config 0	16.07	17.20	1.297	62.9	1.006	0.03	0.125	0.163
	LTE Band 48_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 8	55830	3609	config 1	21.17	21.40	1.054	62.9	1.006	-0.19	0.052	0.055
	LTE Band 48_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 8	55830	3609	config 1	20.86	21.40	1.132	62.9	1.006	0.12	0.047	0.054
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	55830	3609	config 1	21.17	21.40	1.054	62.9	1.006	0.01	0.802	0.851
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	55340	3560	config 1	21.16	21.40	1.057	62.9	1.006	0.09	0.939	0.998
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	56150	3641	config 1	21.13	21.40	1.064	62.9	1.006	0.18	0.743	0.795
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	56640	3690	config 1	21.00	21.40	1.096	62.9	1.006	0.13	0.667	0.736
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 8	55830	3609	config 1	20.86	21.40	1.132	62.9	1.006	0.06	0.560	0.638
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 8	55340	3560	config 1	20.83	21.40	1.140	62.9	1.006	-0.07	0.557	0.639
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 8	56150	3641	config 1	20.85	21.40	1.135	62.9	1.006	-0.01	0.575	0.657
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 8	56640	3690	config 1	20.68	21.40	1.180	62.9	1.006	0.01	0.603	0.716
	LTE Band 48_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 8	55830	3609	config 1	20.81	21.40	1.146	62.9	1.006	-0.02	0.550	0.634
	LTE Band 48C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	55830+55632	3609	config 1	14.47	15.60	1.297	62.9	1.006	0.02	0.149	0.194
	LTE Band 48_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	55830	3609	config 1	21.17	22.20	1.268	62.9	1.006	-0.19	0.052	0.066
	LTE Band 48_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 4	55830	3609	config 1	20.86	21.60	1.186	62.9	1.006	0.12	0.047	0.056
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	55830	3609	config 1	21.17	22.20	1.268	62.9	1.006	0.01	0.802	1.023
59	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	55340	3560	config 1	21.16	22.20	1.271	62.9	1.006	0.09	0.939	1.200
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	56150	3641	config 1	21.13	22.20	1.279	62.9	1.006	0.18	0.743	0.956
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	56640	3690	config 1	21.00	22.20	1.318	62.9	1.006	0.13	0.667	0.885
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 4	55830	3609	config 1	20.86	21.60	1.186	62.9	1.006	0.06	0.560	0.668
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 4	55340	3560	config 1	20.83	21.60	1.194	62.9	1.006	-0.07	0.557	0.669
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 4	56150	3641	config 1	20.85	21.60	1.189	62.9	1.006	-0.01	0.575	0.687
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 4	56640	3690	config 1	20.68	21.60	1.236	62.9	1.006	0.01	0.603	0.750
	LTE Band 48_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 4	55830	3609	config 1	20.81	21.60	1.199	62.9	1.006	-0.02	0.550	0.664
	LTE Band 48C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	55830+55632	3609	config 1	14.47	15.60	1.297	62.9	1.006	0.02	0.149	0.194

<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	23.56	25.00	1.393	0.01	0.206	0.287
	FR1 n5_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 4/8	167300	836.5	Config 0	23.55	25.00	1.396	0	0.229	0.320
	FR1 n5_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 4/8	167300	836.5	Config 0	23.56	25.00	1.393	-0.08	0.300	0.418
	FR1 n5_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 4/8	167300	836.5	Config 0	23.55	25.00	1.396	-0.04	0.340	0.475
	FR1 n5_Ant 1	20M	BPSK	1	1	Front	10mm	DSI 4/8	167300	836.5	Config 1	23.41	25.00	1.442	0.11	0.286	0.412
	FR1 n5_Ant 1	20M	BPSK	50	28	Front	10mm	DSI 4/8	167300	836.5	Config 1	23.46	25.00	1.426	-0.09	0.293	0.418
	FR1 n5_Ant 1	20M	BPSK	1	1	Back	10mm	DSI 4/8	167300	836.5	Config 1	23.41	25.00	1.442	-0.14	0.498	0.718
60	FR1 n5_Ant 1	20M	BPSK	50	28	Back	10mm	DSI 4/8	167300	836.5	Config 1	23.46	25.00	1.426	-0.06	0.514	0.733

<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	6	2437	14.40	14.50	1.023	98.72	1.013	-0.05	0.102	0.106
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4	3	6	2437	14.40	14.50	1.023	98.72	1.013	-0.08	0.204	0.211
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 3	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.17	0.248	0.263
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.18	0.369	0.391
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(4)	3	6	2437	16.70	17.00	1.072	98.92	1.011	-0.03	0.241	0.261
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(3)	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.03	0.207	0.219
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(4)	3	6	2437	16.70	17.00	1.072	98.92	1.011	0.17	0.361	0.391
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(3)	3	6	2437	18.80	19.00	1.047	98.92	1.011	0.17	0.340	0.360
	WLAN2.4GHz-	802.11b 1Mbps	Front	10mm	Ant 4	1	6	2437	19.30	19.50	1.047	98.72	1.013	-0.12	0.356	0.378
	WLAN2.4GHz-	802.11b 1Mbps	Back	10mm	Ant 4	1	6	2437	19.30	19.50	1.047	98.72	1.013	-0.03	0.622	0.660
	WLAN2.4GHz-	802.11b 1Mbps	Front	10mm	Ant 3	1	6	2437	19.40	19.50	1.023	98.92	1.011	-0.16	0.261	0.270
	WLAN2.4GHz-	802.11b 1Mbps	Back	10mm	Ant 3	1	6	2437	19.40	19.50	1.023	98.92	1.011	-0.08	0.392	0.406
	WLAN2.4GHz-	802.11b 1Mbps	Front	10mm	Ant 4+3(4)	1	6	2437	19.40	19.50	1.023	98.92	1.011	-0.18	0.483	0.500
	WLAN2.4GHz-	820.11b 1Mbps	Front	10mm	Ant 4+3(3)	1	6	2437	19.40	19.50	1.023	98.92	1.011	-0.18	0.221	0.229
61	WLAN2.4GHz-	802.11b 1Mbps	Back	10mm	Ant 4+3(4)	1	6	2437	19.40	19.50	1.023	98.92	1.011	-0.08	0.659	0.682
	WLAN2.4GHz-	820.11b 1Mbps	Back	10mm	Ant 4+3(3)	1	6	2437	19.40	19.50	1.023	98.92	1.011	-0.08	0.373	0.386
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4	3	54	5270	17.20	17.50	1.072	95.35	1.049	-0.11	0.106	0.119
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4	3	54	5270	17.20	17.50	1.072	95.35	1.049	-0.18	0.144	0.162
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 3	3	54	5270	13.90	14.00	1.023	95.96	1.042	-0.06	0.090	0.096
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3	3	54	5270	13.90	14.00	1.023	95.96	1.042	-0.12	0.320	0.341
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3(4)	3	54	5270	17.20	17.50	1.072	95.34	1.049	0.07	0.134	0.151
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3(3)	3	54	5270	14.70	15.00	1.072	95.34	1.049	0.06	0.118	0.133
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(4)	3	54	5270	17.20	17.50	1.072	95.34	1.049	0.11	0.166	0.187
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(3)	3	54	5270	14.70	15.00	1.072	95.34	1.049	0.13	0.366	0.411
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4	1	54	5270	17.40	17.50	1.023	95.93	1.042	0.07	0.124	0.132
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4	1	54	5270	17.40	17.50	1.023	95.93	1.042	-0.12	0.163	0.174
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 3	1	54	5270	16.90	17.50	1.148	95.96	1.042	-0.17	0.166	0.199
62	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3	1	54	5270	16.90	17.50	1.148	95.96	1.042	-0.12	0.499	0.597
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3(4)	1	54	5270	17.40	17.50	1.023	95.93	1.042	-0.14	0.092	0.098
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3(3)	1	54	5270	17.00	17.50	1.122	95.93	1.042	-0.14	0.161	0.188
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(4)	1	54	5270	17.40	17.50	1.023	95.93	1.042	0.09	0.153	0.163
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(3)	1	54	5270	17.00	17.50	1.122	95.93	1.042	0.09	0.487	0.569

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-HT20 MCS0	Front	10mm	Ant 4	3	132	5660	17.30	18.00	1.175	97.69	1.024	-0.11	0.085	0.102
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4	3	132	5660	17.30	18.00	1.175	97.69	1.024	-0.16	0.102	0.123
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3	3	138	5690	9.40	10.50	1.288	92.00	1.087	0.1	0.039	0.055
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3	3	138	5690	9.40	10.50	1.288	92.00	1.087	-0.15	0.212	0.297
	WLAN5GHz	802.11n-HT20 MCS0	Front	10mm	Ant 4+3(4)	3	132	5660	17.30	18.00	1.175	97.69	1.024	0.07	0.138	0.166
	WLAN5GHz	802.11n-HT20 MCS0	Front	10mm	Ant 4+3(3)	3	132	5660	11.30	11.50	1.047	97.69	1.024	0.07	0.064	0.069
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(4)	3	132	5660	17.30	18.00	1.175	97.69	1.024	-0.17	0.130	0.156
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(3)	3	132	5660	11.30	11.50	1.047	97.69	1.024	-0.17	0.313	0.336
	WLAN5GHz	802.11n-HT20 MCS0	Front	10mm	Ant 4	1	132	5660	17.30	18.00	1.175	97.69	1.024	-0.11	0.085	0.102
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4	1	132	5660	17.30	18.00	1.175	97.69	1.024	-0.16	0.102	0.123
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3	1	138	5690	13.10	13.50	1.096	92.00	1.087	-0.13	0.128	0.153
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3	1	138	5690	13.10	13.50	1.096	92.00	1.087	-0.19	0.556	0.663
	WLAN5GHz	802.11n-HT20 MCS0	Front	10mm	Ant 4+3(4)	1	132	5660	17.30	18.00	1.175	97.69	1.024	0.14	0.119	0.143
	WLAN5GHz	802.11n-HT20 MCS0	Front	10mm	Ant 4+3(3)	1	132	5660	15.40	16.00	1.148	97.69	1.024	0.14	0.198	0.233
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(4)	1	132	5660	17.30	18.00	1.175	97.69	1.024	-0.19	0.128	0.154
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(3)	1	132	5660	15.40	16.00	1.148	97.69	1.024	-0.19	0.862	1.013
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(4)	1	140	5700	17.20	18.00	1.202	97.69	1.024	-0.07	0.099	0.122
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(3)	1	140	5700	15.20	16.00	1.202	97.69	1.024	-0.07	0.897	1.104
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(4)	1	142	5710	17.40	17.50	1.023	95.34	1.049	-0.12	0.115	0.123
63	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(3)	1	142	5710	15.20	16.00	1.202	95.34	1.049	-0.12	0.942	1.188
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(4)	1	142	5710	17.40	17.50	1.023	95.34	1.049	-0.12	0.113	0.121
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(3)	1	142	5710	15.20	16.00	1.202	95.34	1.049	-0.12	0.923	1.164
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4	3	157	5785	18.40	18.50	1.023	97.83	1.022	-0.19	0.050	0.052
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	3	157	5785	18.40	18.50	1.023	97.83	1.022	-0.14	0.116	0.121
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3	3	155	5775	9.30	10.00	1.175	92.00	1.087	0.02	0.040	0.051
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3	3	155	5775	9.30	10.00	1.175	92.00	1.087	0.1	0.284	0.363
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(4)	3	157	5785	18.40	18.50	1.023	97.83	1.022	-0.09	0.064	0.067
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(3)	3	157	5785	9.70	10.50	1.202	97.83	1.022	-0.09	0.081	0.100
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	3	157	5785	18.40	18.50	1.023	97.83	1.022	0.16	0.082	0.086
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	3	157	5785	9.70	10.50	1.202	97.83	1.022	0.16	0.222	0.273
	WLAN5GHz-	802.11a 6Mbps	Front	10mm	Ant 4	1	157	5785	18.40	18.50	1.023	97.83	1.022	-0.19	0.050	0.052
	WLAN5GHz-	802.11a 6Mbps	Back	10mm	Ant 4	1	157	5785	18.40	18.50	1.023	97.83	1.022	-0.14	0.116	0.121
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3	1	155	5775	13.30	13.50	1.047	92.00	1.087	-0.1	0.095	0.108
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3	1	155	5775	13.30	13.50	1.047	92.00	1.087	-0.18	0.608	0.692
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(4)	1	157	5785	18.40	18.50	1.023	97.83	1.022	-0.1	0.072	0.075
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(3)	1	157	5785	15.80	16.00	1.047	97.83	1.022	-0.1	0.163	0.174
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	1	157	5785	18.40	18.50	1.023	97.83	1.022	-0.14	0.130	0.136
64	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	1	157	5785	15.80	16.00	1.047	97.83	1.022	-0.14	0.699	0.748

<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	39	2441	14.50	14.50	1.000	77.13	1.080	-0.12	0.077	0.083
	Bluetooth	1Mbps	Back	10mm	Ant 4	3	39	2441	14.50	14.50	1.000	77.13	1.080	-0.18	0.156	0.168
	Bluetooth	1Mbps	Front	10mm	Ant 4	1	0	2402	17.92	18.00	1.019	77.13	1.080	-0.12	0.182	0.200
65	Bluetooth	1Mbps	Back	10mm	Ant 4	1	0	2402	17.92	18.00	1.019	77.13	1.080	-0.1	0.366	0.403

15.4 Product Specific SAR

<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 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 4	1	54	5270	17.40	17.50	1.023	95.93	1.042	0.13	0.579	0.617
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 4	1	54	5270	17.40	17.50	1.023	95.93	1.042	-0.02	0.593	0.632
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 4	1	54	5270	17.40	17.50	1.023	95.93	1.042	0.17	0.008	0.009
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 4	1	54	5270	17.40	17.50	1.023	95.93	1.042	-0.11	0.803	0.856
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 4	1	54	5270	17.40	17.50	1.023	95.93	1.042	0.11	1.040	1.109
	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 3	1	54	5270	16.90	17.50	1.148	95.96	1.042	-0.13	0.547	0.654
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 3	1	54	5270	16.90	17.50	1.148	95.96	1.042	0.14	1.010	1.208
66	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 3	1	54	5270	16.90	17.50	1.148	95.96	1.042	0.16	1.590	1.902
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 3	1	54	5270	16.90	17.50	1.148	95.96	1.042	0	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 3	1	54	5270	16.90	17.50	1.148	95.96	1.042	0.11	0.054	0.065
	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 4+3(4)	1	54	5270	17.40	17.50	1.023	95.93	1.042	0.16	0.406	0.433
	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 4+3(3)	1	54	5270	17.00	17.50	1.122	95.93	1.042	0.16	0.559	0.654
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 4+3(4)	1	54	5270	17.40	17.50	1.023	95.93	1.042	0.06	1.040	1.109
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 4+3(3)	1	54	5270	17.00	17.50	1.122	95.93	1.042	0.06	0.402	0.470
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 4+3(3)	1	54	5270	17.00	17.50	1.122	95.93	1.042	0.1	1.370	1.602
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 4+3(4)	1	54	5270	17.40	17.50	1.023	95.93	1.042	0.17	0.679	0.724
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 4+3(4)	1	54	5270	17.40	17.50	1.023	95.93	1.042	-0.18	0.571	0.609
	WLAN5GHz	802.11n-HT20 MCS0	Front	0mm	Ant 4	1	132	5660	17.30	18.00	1.175	97.69	1.024	0.15	0.686	0.825
	WLAN5GHz	802.11n-HT20 MCS0	Back	0mm	Ant 4	1	132	5660	17.30	18.00	1.175	97.69	1.024	-0.15	0.492	0.592
	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	Ant 4	1	132	5660	17.30	18.00	1.175	97.69	1.024	0.01	0.002	0.002
	WLAN5GHz	802.11n-HT20 MCS0	Right Side	0mm	Ant 4	1	132	5660	17.30	18.00	1.175	97.69	1.024	-0.16	0.551	0.663
	WLAN5GHz	802.11n-HT20 MCS0	Top Side	0mm	Ant 4	1	132	5660	17.30	18.00	1.175	97.69	1.024	0.17	0.474	0.570
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 3	1	138	5690	13.10	13.50	1.096	92.00	1.087	0.17	0.122	0.145
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 3	1	138	5690	13.10	13.50	1.096	92.00	1.087	0.1	0.819	0.976
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 3	1	138	5690	13.10	13.50	1.096	92.00	1.087	-0.12	0.934	1.113
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 3	1	138	5690	13.10	13.50	1.096	92.00	1.087	0.11	0.002	0.003
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 3	1	138	5690	13.10	13.50	1.096	92.00	1.087	-0.04	0.021	0.025
	WLAN5GHz	802.11n-HT20 MCS0	Front	0mm	Ant 4+3(4)	1	132	5660	17.30	18.00	1.175	97.69	1.024	-0.02	0.448	0.539
	WLAN5GHz	802.11n-HT20 MCS0	Front	0mm	Ant 4+3(3)	1	132	5660	15.40	16.00	1.148	97.69	1.024	-0.02	0.536	0.630
	WLAN5GHz	802.11n-HT20 MCS0	Back	0mm	Ant 4+3(4)	1	132	5660	17.30	18.00	1.175	97.69	1.024	-0.17	1.120	1.347
	WLAN5GHz	802.11n-HT20 MCS0	Back	0mm	Ant 4+3(3)	1	132	5660	15.40	16.00	1.148	97.69	1.024	-0.17	0.373	0.439
67	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	Ant 4+3(3)	1	132	5660	15.40	16.00	1.148	97.69	1.024	0.04	1.440	1.693
	WLAN5GHz	802.11n-HT20 MCS0	Right Side	0mm	Ant 4+3(4)	1	132	5660	17.30	18.00	1.175	97.69	1.024	0.12	0.276	0.332
	WLAN5GHz	802.11n-HT20 MCS0	Top Side	0mm	Ant 4+3(4)	1	132	5660	17.30	18.00	1.175	97.69	1.024	-0.1	0.833	1.002
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 3	1	155	5775	13.30	13.50	1.047	92.00	1.087	0.02	0.903	1.028
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 3	1	155	5775	13.30	13.50	1.047	92.00	1.087	-0.15	1.080	1.229
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3(4)	1	157	5785	18.40	18.50	1.023	97.83	1.022	-0.05	0.343	0.359
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3(3)	1	157	5785	15.80	16.00	1.047	97.83	1.022	-0.05	1.040	1.113
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(4)	1	157	5785	18.40	18.50	1.023	97.83	1.022	-0.09	0.183	0.191
68	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(3)	1	157	5785	15.80	16.00	1.047	97.83	1.022	-0.09	1.310	1.402

15.5 Repeated SAR Measurement

No.	Band	Mode	Test Position	Gap (mm)	Antenna	Output power state	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	LTE Band 14_Ant 1	10M_QPSK_1_0	Right Cheek	0mm		DSI 7	23330	793	config 1	23.99	24.90	1.233			-0.13	0.808	-	0.996
2nd	LTE Band 14_Ant 1	10M_QPSK_1_0	Right Cheek	0mm		DSI 7	23330	793	config 1	23.99	24.90	1.233		1.000	-0.07	0.788	1.03	0.972
1st	LTE Sub 6G N5_Ant 1	20M_BPSK_100_0	Right Cheek	0mm		DSI 2	167300	836.5	Config 1	23.30	24.90	1.445			-0.04	0.825	-	1.192
2nd	LTE Sub 6G N5_Ant 1	20M_BPSK_100_0	Right Cheek	0mm		DSI 2	167300	836.5	Config 1	23.30	24.90	1.445		1.000	0.09	0.822	1.00	1.188
1st	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm		DSI 4	810	1909.8	config 1	21.65	23.20	1.429			-0.12	0.830	-	1.186
2nd	GSM1900_Ant 0-	GPRS (4 Tx slots)	Back	10mm		DSI 4	810	1909.8	config 1	21.65	23.20	1.429		1.000	-0.03	0.824	1.01	1.177
1st	LTE Band 30_Ant 0	10M_QPSK_50_0	Back	10mm		DSI 4	27710	2310	config 1	21.30	22.40	1.288			-0.1	0.930	-	1.198
2nd	LTE Band 30_Ant 0	10M_QPSK_50_0	Back	10mm		DSI 4	27710	2310	config 1	21.30	22.40	1.288		1.000	-0.06	0.928	1.00	1.195
1st	LTE Band 38_HPUE_Ant 0	20M_QPSK_1_0	Back	10mm		DSI 4	38000	2595	config 1	24.59	25.80	1.321	42.9	1.009	-0.14	0.829	-	1.105
2nd	LTE Band 38_HPUE_Ant 0	20M_QPSK_1_0	Back	10mm		DSI 4	38000	2595	config 1	24.59	25.80	1.321	42.9	1.009	0.06	0.811	1.02	1.081
1st	LTE Band 48_Ant 2	20M_QPSK_1_0	Back	10mm		DSI 4	55340	3560	config 1	21.16	22.20	1.271	62.9	1.006	0.09	0.938	-	1.199
2nd	LTE Band 48_Ant 2	20M_QPSK_1_0	Back	10mm		DSI 4	55340	3560	config 1	21.16	22.20	1.271	62.9	1.006	0.12	0.905	1.04	1.157
1st	LTE Band 66C_Ant 2	20M_QPSK_1_0	Front	0mm		DSI 4	132322+132124	1745	config 0	25.07	25.70	1.156			0.01	0.984	-	1.138
2nd	LTE Band 66C_Ant 2	20M_QPSK_1_0	Front	0mm		DSI 4	132322+132124	1745	config 0	25.07	25.70	1.156		1.000	0.09	0.962	1.02	1.112
1st	WLAN5GHz-	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(3)	1	142	5710		15.20	16.00	1.202	95.34	1.049	-0.12	0.942	-	1.188
2nd	WLAN5GHz-	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(3)	1	142	5710		15.20	16.00	1.202	95.34	1.049	0.06	0.920	1.02	1.160

General Note:

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

15.6 LTE Power Class 2 and Power Class 3 Linearity

This device support Power Class 2 and Power Class 3 operations for LTE Band 38. 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 for B41, due to B38 is overlapping band cove by B41. Power Class 2 for B38 is tested using the highest SAR test configuration in Power Class 3 for each LTE B41 configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg, Separate SAR testing for Power Class 2 is not required

<LTE Band 41 Linearity Data for Head>

	Config 0	
Standalone	LTE Band 41 (Power Class 3)	LTE Band 38 (Power Class 2)
Maximum Tune up Power (dBm)	25.7	27.5
Reported 1g SAR (W/kg)	0.097	0.093
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	235.18	243.49
Linearity SAR(W/kg)	0.10	
% deviation from expected linearity		-7.40%

	Config 1	
Standalone	LTE Band 41 (Power Class 3)	LTE Band 38 (Power Class 2)
Maximum Tune up Power (dBm)	25.7	27.5
Reported 1g SAR (W/kg)	0.33	0.313
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	235.18	243.49
Linearity SAR(W/kg)	0.34	
% deviation from expected linearity		-8.39%

<LTE Band 41 Linearity Data for Hotspot>

	Config 0	
Standalone	LTE Band 41 (Power Class 3)	LTE Band 38 (Power Class 2)
Maximum Tune up Power (dBm)	24.6	26.4
Reported 1g SAR (W/kg)	0.87	0.848
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	182.56	189.01
Linearity SAR(W/kg)	0.90	
% deviation from expected linearity		-5.86%

	Config 1	
Standalone	LTE Band 41 (Power Class 3)	LTE Band 38 (Power Class 2)
Maximum Tune up Power (dBm)	23.2	25
Reported 1g SAR (W/kg)	0.944	0.904
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	132.25	136.93
Linearity SAR(W/kg)	0.98	
% deviation from expected linearity		-7.51%

<LTE Band 41 Linearity Data for body-wron>

Standalone	Config 0	
	LTE Band 41	LTE Band 38
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25.4	27.2
Reported 1g SAR (W/kg)	1.046	1.02
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	219.48	227.24
Linearity SAR(W/kg)	1.08	
% deviation from expected linearity		-5.81%

Standalone	Config 1	
	LTE Band 41	LTE Band 38
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	24	25.8
Reported 1g SAR (W/kg)	1.171	1.105
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	159.00	164.62
Linearity SAR(W/kg)	1.21	
% deviation from expected linearity		-8.86%

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 + FR1 (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 FA022521-04B
2. This device WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications.
3. The worst case WLAN reported SAR for each configuration was used for SAR summation, regardless of whether the WLAN channel has WiFi Direct and Hotspot capability. Therefore, the following summations represent the absolute worst cases for simultaneous transmission with WLAN.
4. The Scaled SAR summation is calculated based on the same configuration and test position.
5. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
   i) Scalar SAR summation < 1.6W/kg.
   ii) SPLSR = (SAR1 + SAR2)^1.5 / (min. separation distance, mm), and the peak separation distance is determined from the square root of [(x1-x2)2 + (y1-y2)2 + (z1-z2)2], where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
   iii) If SPLSR ≤ 0.04 for 1g SAR, if SPLSR < 0.1 for 10g SAR, simultaneously transmission SAR measurement is not necessary.
   iv) Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.

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

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

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

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

*x% * A + (100-x)% * B ≤ 1.0,*

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

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

*x% * A + (100-x)% * B + C ≤ 1.0* (1)

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

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

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

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

16.2 Head Exposure Conditions

<Standalone WWAN OFF>

Exposure Position	1 2.4GHz WLAN Ant 4 1g SAR (W/kg)	2 2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	3 5GHz WLAN Ant 3 1g SAR (W/kg)	4 5GHz WLAN Ant 4+3 1g SAR (W/kg)	5 Bluetooth Ant 4 1g SAR (W/kg)	6 5GHz WLAN Ant 4 1g SAR (W/kg)	7 2.4GHz WLAN Ant 3 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	3+5 Summed 1g SAR (W/kg)	4+5 Summed 1g SAR (W/kg)	5+6 Summed 1g SAR (W/kg)
Right Cheek	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.334**	**0.314**	**0.317**	**0.212**
Right Tilted	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.087**	**0.052**	**0.169**	**0.256**
Left Cheek	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.558**	**0.468**	**0.559**	**0.481**
Left Tilted	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.252**	**0.173**	**0.590**	**0.507**

<Simultaneous Transmission is active WWAN OFF>
<Config 0>

WWAN Band	Exposure Position	1 WWAN 1g SAR (W/kg)	2 2.4GHz WLAN Ant 4 1g SAR (W/kg)	3 2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	4 5GHz WLAN Ant 3 1g SAR (W/kg)	5 5GHz WLAN Ant 4+3 1g SAR (W/kg)	6 Bluetooth Ant 4 1g SAR (W/kg)	7 5GHz WLAN Ant 4 1g SAR (W/kg)	8 2.4GHz WLAN Ant 3 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+2+4 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+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
GSM850_ Ant 0	Right Cheek	0.424	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.716**	**0.758**	**0.738**	**0.741**	**0.636**	**0.687**	**0.474**
	Right Tilted	0.238	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.337**	**0.325**	**0.290**	**0.407**	**0.494**	**0.291**	**0.279**
	Left Cheek	0.520	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**1.025**	**1.078**	**0.988**	**1.079**	**1.001**	**0.772**	**0.715**
	Left Tilted	0.255	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.622**	**0.507**	**0.428**	**0.845**	**0.762**	**0.290**	**0.407**
GSM1900 _Ant 2	Right Cheek	0.465	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.757**	**0.799**	**0.779**	**0.782**	**0.677**	**0.728**	**0.515**
	Right Tilted	0.289	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.388**	**0.376**	**0.341**	**0.458**	**0.545**	**0.342**	**0.330**
	Left Cheek	0.243	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.748**	**0.801**	**0.711**	**0.802**	**0.724**	**0.495**	**0.438**
	Left Tilted	0.309	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.676**	**0.561**	**0.482**	**0.899**	**0.816**	**0.344**	**0.461**
WCDMA II_Ant 2	Right Cheek	0.997	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**1.289**	**1.331**	**1.311**	**1.314**	**1.209**	**1.260**	**1.047**
	Right Tilted	0.450	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.549**	**0.537**	**0.502**	**0.619**	**0.706**	**0.503**	**0.491**
	Left Cheek	0.463	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.968**	**1.021**	**0.931**	**1.022**	**0.944**	**0.715**	**0.658**
	Left Tilted	0.400	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.767**	**0.652**	**0.573**	**0.990**	**0.907**	**0.435**	**0.552**
WCDMA IV_Ant 2	Right Cheek	0.619	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.911**	**0.953**	**0.933**	**0.936**	**0.831**	**0.882**	**0.669**
	Right Tilted	0.369	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.468**	**0.456**	**0.421**	**0.538**	**0.625**	**0.422**	**0.410**
	Left Cheek	0.646	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**1.151**	**1.204**	**1.114**	**1.205**	**1.127**	**0.898**	**0.841**
	Left Tilted	0.371	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.738**	**0.623**	**0.544**	**0.961**	**0.878**	**0.406**	**0.523**
WCDMA V_Ant 0	Right Cheek	0.358	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.650**	**0.692**	**0.672**	**0.675**	**0.570**	**0.621**	**0.408**
	Right Tilted	0.189	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.288**	**0.276**	**0.241**	**0.358**	**0.445**	**0.242**	**0.230**
	Left Cheek	0.366	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.871**	**0.924**	**0.834**	**0.925**	**0.847**	**0.618**	**0.561**
	Left Tilted	0.199	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.566**	**0.451**	**0.372**	**0.789**	**0.706**	**0.234**	**0.351**
LTE Band 7_Ant 2	Right Cheek	0.333	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.625**	**0.667**	**0.647**	**0.650**	**0.545**	**0.596**	**0.383**
	Right Tilted	0.119	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.218**	**0.206**	**0.171**	**0.288**	**0.375**	**0.172**	**0.160**
	Left Cheek	0.298	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.803**	**0.856**	**0.766**	**0.857**	**0.779**	**0.550**	**0.493**
	Left Tilted	0.226	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.593**	**0.478**	**0.399**	**0.816**	**0.733**	**0.261**	**0.378**
LTE Band 12_Ant 0	Right Cheek	0.409	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.701**	**0.743**	**0.723**	**0.726**	**0.621**	**0.672**	**0.459**
	Right Tilted	0.209	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.308**	**0.296**	**0.261**	**0.378**	**0.465**	**0.262**	**0.250**
	Left Cheek	0.453	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.958**	**1.011**	**0.921**	**1.012**	**0.934**	**0.705**	**0.648**
	Left Tilted	0.190	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.557**	**0.442**	**0.363**	**0.780**	**0.697**	**0.225**	**0.342**
LTE Band 13_Ant 0	Right Cheek	0.381	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.673**	**0.715**	**0.695**	**0.698**	**0.593**	**0.644**	**0.431**
	Right Tilted	0.215	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.314**	**0.302**	**0.267**	**0.384**	**0.471**	**0.268**	**0.256**
	Left Cheek	0.409	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.914**	**0.967**	**0.877**	**0.968**	**0.890**	**0.661**	**0.604**
	Left Tilted	0.214	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.581**	**0.466**	**0.387**	**0.804**	**0.721**	**0.249**	**0.366**

WWAN Band	Exposure Position	1 WWAN 1g SAR (W/kg)	2 2.4GHz WLAN Ant 4 1g SAR (W/kg)	3 2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	4 5GHz WLAN Ant 3 1g SAR (W/kg)	5 5GHz WLAN Ant 4+3 1g SAR (W/kg)	6 Bluetooth Ant 4 1g SAR (W/kg)	7 5GHz WLAN Ant 4 1g SAR (W/kg)	8 2.4GHz WLAN Ant 3 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+2+4 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+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
LTE Band 14_Ant 0	Right Cheek	0.388	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.680**	**0.722**	**0.702**	**0.705**	**0.600**	**0.651**	**0.438**
	Right Tilted	0.226	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.325**	**0.313**	**0.278**	**0.395**	**0.482**	**0.279**	**0.267**
	Left Cheek	0.427	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.932**	**0.985**	**0.895**	**0.986**	**0.908**	**0.679**	**0.622**
	Left Tilted	0.227	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.594**	**0.479**	**0.400**	**0.817**	**0.734**	**0.262**	**0.379**
LTE Band 25_Ant 2	Right Cheek	0.998	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**1.290**	**1.332**	**1.312**	**1.315**	**1.210**	**1.261**	**1.048**
	Right Tilted	0.521	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.620**	**0.608**	**0.573**	**0.690**	**0.777**	**0.574**	**0.562**
	Left Cheek	0.494	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.999**	**1.052**	**0.962**	**1.053**	**0.975**	**0.746**	**0.689**
	Left Tilted	0.395	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.762**	**0.647**	**0.568**	**0.985**	**0.902**	**0.430**	**0.547**
LTE Band 26_Ant 0	Right Cheek	0.419	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.711**	**0.753**	**0.733**	**0.736**	**0.631**	**0.682**	**0.469**
	Right Tilted	0.206	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.305**	**0.293**	**0.258**	**0.375**	**0.462**	**0.259**	**0.247**
	Left Cheek	0.409	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.914**	**0.967**	**0.877**	**0.968**	**0.890**	**0.661**	**0.604**
	Left Tilted	0.226	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.593**	**0.478**	**0.399**	**0.816**	**0.733**	**0.261**	**0.378**
LTE Band 30_Ant 2	Right Cheek	0.261	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.553**	**0.595**	**0.575**	**0.578**	**0.473**	**0.524**	**0.311**
	Right Tilted	0.079	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.178**	**0.166**	**0.131**	**0.248**	**0.335**	**0.132**	**0.120**
	Left Cheek	0.118	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.623**	**0.676**	**0.586**	**0.677**	**0.599**	**0.370**	**0.313**
	Left Tilted	0.112	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.479**	**0.364**	**0.285**	**0.702**	**0.619**	**0.147**	**0.264**
LTE Band 41_Ant 2	Right Cheek	0.097	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.389**	**0.431**	**0.411**	**0.414**	**0.309**	**0.360**	**0.147**
	Right Tilted	0.034	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.133**	**0.121**	**0.086**	**0.203**	**0.290**	**0.087**	**0.075**
	Left Cheek	0.087	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.592**	**0.645**	**0.555**	**0.646**	**0.568**	**0.339**	**0.282**
	Left Tilted	0.079	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.446**	**0.331**	**0.252**	**0.669**	**0.586**	**0.114**	**0.231**
LTE Band 48_Ant 7	Right Cheek	0.035	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.327**	**0.369**	**0.349**	**0.352**	**0.247**	**0.298**	**0.085**
	Right Tilted	0.059	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.158**	**0.146**	**0.111**	**0.228**	**0.315**	**0.112**	**0.100**
	Left Cheek	0.115	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.620**	**0.673**	**0.583**	**0.674**	**0.596**	**0.367**	**0.310**
	Left Tilted	0.022	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.389**	**0.274**	**0.195**	**0.612**	**0.529**	**0.057**	**0.174**
LTE Band 66_Ant 2	Right Cheek	0.566	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.858**	**0.900**	**0.880**	**0.883**	**0.778**	**0.829**	**0.616**
	Right Tilted	0.398	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.497**	**0.485**	**0.450**	**0.567**	**0.654**	**0.451**	**0.439**
	Left Cheek	0.674	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**1.179**	**1.232**	**1.142**	**1.233**	**1.155**	**0.926**	**0.869**
	Left Tilted	0.421	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.788**	**0.673**	**0.594**	**1.011**	**0.928**	**0.456**	**0.573**
LTE Band 71_Ant 0	Right Cheek	0.278	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.570**	**0.612**	**0.592**	**0.595**	**0.490**	**0.541**	**0.328**
	Right Tilted	0.131	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.230**	**0.218**	**0.183**	**0.300**	**0.387**	**0.184**	**0.172**
	Left Cheek	0.309	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.814**	**0.867**	**0.777**	**0.868**	**0.790**	**0.561**	**0.504**
	Left Tilted	0.158	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.525**	**0.410**	**0.331**	**0.748**	**0.665**	**0.193**	**0.310**

WWAN Band	Exposure Position	1 WWAN 1g SAR (W/kg)	2 2.4GHz WLAN Ant 4 1g SAR (W/kg)	3 2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	4 5GHz WLAN Ant 3 1g SAR (W/kg)	5 5GHz WLAN Ant 4+3 1g SAR (W/kg)	6 Bluetooth Ant 4 1g SAR (W/kg)	7 5GHz WLAN Ant 4 1g SAR (W/kg)	8 2.4GHz WLAN Ant 3 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+2+4 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+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
FR1 n5_Ant 0	Right Cheek	0.320	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.612**	**0.654**	**0.634**	**0.637**	**0.532**	**0.583**	**0.370**
	Right Tilted	0.152	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.251**	**0.239**	**0.204**	**0.321**	**0.408**	**0.205**	**0.193**
	Left Cheek	0.320	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.825**	**0.878**	**0.788**	**0.879**	**0.801**	**0.572**	**0.515**
	Left Tilted	0.170	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.537**	**0.422**	**0.343**	**0.760**	**0.677**	**0.205**	**0.322**

<Config 1>

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 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+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3							
		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	0.957	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**1.249**	**1.291**	**1.271**	**1.274**	**1.169**	**1.220**	**1.007**
	Right Tilted	0.742	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.841**	**0.829**	**0.794**	**0.911**	**0.998**	**0.795**	**0.783**
	Left Cheek	0.629	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**1.134**	**1.187**	**1.097**	**1.188**	**1.110**	**0.881**	**0.824**
	Left Tilted	0.517	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.884**	**0.769**	**0.690**	**1.107**	**1.024**	**0.552**	**0.669**
GSM1900_Ant 0	Right Cheek	0.072	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.364**	**0.406**	**0.386**	**0.389**	**0.284**	**0.335**	**0.122**
	Right Tilted	0.077	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.176**	**0.164**	**0.129**	**0.246**	**0.333**	**0.130**	**0.118**
	Left Cheek	0.092	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.597**	**0.650**	**0.560**	**0.651**	**0.573**	**0.344**	**0.287**
	Left Tilted	0.041	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.408**	**0.293**	**0.214**	**0.631**	**0.548**	**0.076**	**0.193**
WCDMA II_Ant 0	Right Cheek	0.219	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.511**	**0.553**	**0.533**	**0.536**	**0.431**	**0.482**	**0.269**
	Right Tilted	0.231	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.330**	**0.318**	**0.283**	**0.400**	**0.487**	**0.284**	**0.272**
	Left Cheek	0.449	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.954**	**1.007**	**0.917**	**1.008**	**0.930**	**0.701**	**0.644**
	Left Tilted	0.205	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.572**	**0.457**	**0.378**	**0.795**	**0.712**	**0.240**	**0.357**
WCDMA IV_Ant 0	Right Cheek	0.051	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.343**	**0.385**	**0.365**	**0.368**	**0.263**	**0.314**	**0.101**
	Right Tilted	0.077	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.176**	**0.164**	**0.129**	**0.246**	**0.333**	**0.130**	**0.118**
	Left Cheek	0.129	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.634**	**0.687**	**0.597**	**0.688**	**0.610**	**0.381**	**0.324**
	Left Tilted	0.052	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.419**	**0.304**	**0.225**	**0.642**	**0.559**	**0.087**	**0.204**
WCDMA V_Ant 1	Right Cheek	0.997	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**1.289**	**1.331**	**1.311**	**1.314**	**1.209**	**1.260**	**1.047**
	Right Tilted	0.564	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.663**	**0.651**	**0.616**	**0.733**	**0.820**	**0.617**	**0.605**
	Left Cheek	0.455	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.960**	**1.013**	**0.923**	**1.014**	**0.936**	**0.707**	**0.650**
	Left Tilted	0.374	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.741**	**0.626**	**0.547**	**0.964**	**0.881**	**0.409**	**0.526**
LTE Band 7_Ant 0	Right Cheek	0.277	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.569**	**0.611**	**0.591**	**0.594**	**0.489**	**0.540**	**0.327**
	Right Tilted	0.111	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.210**	**0.198**	**0.163**	**0.280**	**0.367**	**0.164**	**0.152**
	Left Cheek	0.471	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.976**	**1.029**	**0.939**	**1.030**	**0.952**	**0.723**	**0.666**
	Left Tilted	0.225	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.592**	**0.477**	**0.398**	**0.815**	**0.732**	**0.260**	**0.377**
LTE Band 12_Ant 1	Right Cheek	0.899	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**1.191**	**1.233**	**1.213**	**1.216**	**1.111**	**1.162**	**0.949**
	Right Tilted	0.569	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.668**	**0.656**	**0.621**	**0.738**	**0.825**	**0.622**	**0.610**
	Left Cheek	0.455	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.960**	**1.013**	**0.923**	**1.014**	**0.936**	**0.707**	**0.650**
	Left Tilted	0.319	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.686**	**0.571**	**0.492**	**0.909**	**0.826**	**0.354**	**0.471**
LTE Band 13_Ant 1	Right Cheek	0.616	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.908**	**0.950**	**0.930**	**0.933**	**0.828**	**0.879**	**0.666**
	Right Tilted	0.437	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.536**	**0.524**	**0.489**	**0.606**	**0.693**	**0.490**	**0.478**
	Left Cheek	0.104	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.609**	**0.662**	**0.572**	**0.663**	**0.585**	**0.356**	**0.299**
	Left Tilted	0.078	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.445**	**0.330**	**0.251**	**0.668**	**0.585**	**0.113**	**0.230**
LTE Band 14_Ant 1	Right Cheek	0.996	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**1.288**	**1.330**	**1.310**	**1.313**	**1.208**	**1.259**	**1.046**
	Right Tilted	0.641	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.740**	**0.728**	**0.693**	**0.810**	**0.897**	**0.694**	**0.682**
	Left Cheek	0.591	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**1.096**	**1.149**	**1.059**	**1.150**	**1.072**	**0.843**	**0.786**
	Left Tilted	0.462	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.829**	**0.714**	**0.635**	**1.052**	**0.969**	**0.497**	**0.614**
LTE Band 25_Ant 0	Right Cheek	0.073	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.365**	**0.407**	**0.387**	**0.390**	**0.285**	**0.336**	**0.123**
	Right Tilted	0.048	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.147**	**0.135**	**0.100**	**0.217**	**0.304**	**0.101**	**0.089**
	Left Cheek	0.084	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.589**	**0.642**	**0.552**	**0.643**	**0.565**	**0.336**	**0.279**
	Left Tilted	0.046	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.413**	**0.298**	**0.219**	**0.636**	**0.553**	**0.081**	**0.198**
LTE Band 26_Ant 1	Right Cheek	0.944	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**1.236**	**1.278**	**1.258**	**1.261**	**1.156**	**1.207**	**0.994**
	Right Tilted	0.577	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.676**	**0.664**	**0.629**	**0.746**	**0.833**	**0.630**	**0.618**
	Left Cheek	0.510	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**1.015**	**1.068**	**0.978**	**1.069**	**0.991**	**0.762**	**0.705**
	Left Tilted	0.376	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.743**	**0.628**	**0.549**	**0.966**	**0.883**	**0.411**	**0.528**

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 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+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3							
		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 0	Right Cheek	0.165	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.457**	**0.499**	**0.479**	**0.482**	**0.377**	**0.428**	**0.215**
	Right Tilted	0.070	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.169**	**0.157**	**0.122**	**0.239**	**0.326**	**0.123**	**0.111**
	Left Cheek	0.361	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.866**	**0.919**	**0.829**	**0.920**	**0.842**	**0.613**	**0.556**
	Left Tilted	0.091	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.458**	**0.343**	**0.264**	**0.681**	**0.598**	**0.126**	**0.243**
LTE Band 41_Ant 0	Right Cheek	0.317	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.609**	**0.651**	**0.631**	**0.634**	**0.529**	**0.580**	**0.367**
	Right Tilted	0.106	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.205**	**0.193**	**0.158**	**0.275**	**0.362**	**0.159**	**0.147**
	Left Cheek	0.330	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.835**	**0.888**	**0.798**	**0.889**	**0.811**	**0.582**	**0.525**
	Left Tilted	0.198	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.565**	**0.450**	**0.371**	**0.788**	**0.705**	**0.233**	**0.350**
LTE Band 48_Ant 2	Right Cheek	0.039	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.331**	**0.373**	**0.353**	**0.356**	**0.251**	**0.302**	**0.089**
	Right Tilted	0.036	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.135**	**0.123**	**0.088**	**0.205**	**0.292**	**0.089**	**0.077**
	Left Cheek	0.098	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.603**	**0.656**	**0.566**	**0.657**	**0.579**	**0.350**	**0.293**
	Left Tilted	0.033	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.400**	**0.285**	**0.206**	**0.623**	**0.540**	**0.068**	**0.185**
LTE Band 66_Ant 0	Right Cheek	0.021	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**0.313**	**0.355**	**0.335**	**0.338**	**0.233**	**0.284**	**0.071**
	Right Tilted	0.036	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.135**	**0.123**	**0.088**	**0.205**	**0.292**	**0.089**	**0.077**
	Left Cheek	0.061	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.566**	**0.619**	**0.529**	**0.620**	**0.542**	**0.313**	**0.256**
	Left Tilted	0.022	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.389**	**0.274**	**0.195**	**0.612**	**0.529**	**0.057**	**0.174**
LTE Band 71_Ant 1	Right Cheek	0.971	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**1.263**	**1.305**	**1.285**	**1.288**	**1.183**	**1.234**	**1.021**
	Right Tilted	0.730	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.829**	**0.817**	**0.782**	**0.899**	**0.986**	**0.783**	**0.771**
	Left Cheek	0.486	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**0.991**	**1.044**	**0.954**	**1.045**	**0.967**	**0.738**	**0.681**
	Left Tilted	0.351	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.718**	**0.603**	**0.524**	**0.941**	**0.858**	**0.386**	**0.503**

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 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+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3							
		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	Right Cheek	0.992	0.070	0.292	0.264	0.267	0.050	0.162	0.263	**1.284**	**1.326**	**1.306**	**1.309**	**1.204**	**1.255**	**1.042**
	Right Tilted	0.637	0.076	0.099	0.011	0.128	0.041	0.215	0.053	**0.736**	**0.724**	**0.689**	**0.806**	**0.893**	**0.690**	**0.678**
	Left Cheek	0.557	0.285	0.505	0.273	0.364	0.195	0.286	0.252	**1.062**	**1.115**	**1.025**	**1.116**	**1.038**	**0.809**	**0.752**
	Left Tilted	0.458	0.231	0.367	0.021	0.438	0.152	0.355	0.035	**0.825**	**0.710**	**0.631**	**1.048**	**0.965**	**0.493**	**0.610**

16.3 Hotspot Exposure Conditions

<Simultaneous Transmission is active WWAN OFF>

<Config 0>

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 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+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3							
		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 0	Front	0.354	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.615**	**0.537**	**0.514**	**0.537**	**0.509**	**0.617**	**0.437**
	Back	0.483	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**0.874**	**1.057**	**1.014**	**0.924**	**0.772**	**0.874**	**0.651**
	Left side	0.383	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.777**	**0.942**	**0.942**	**0.829**	**0.400**	**0.723**	**0.384**
	Right side	0.454	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.755**	**0.629**	**0.616**	**0.837**	**0.860**	**0.472**	**0.615**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.150								**0.150**	**0.150**	**0.150**	**0.150**	**0.150**	**0.150**	**0.150**
GSM1900_Ant 2	Front	0.563	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.824**	**0.746**	**0.723**	**0.746**	**0.718**	**0.826**	**0.646**
	Back	0.479	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**0.870**	**1.053**	**1.010**	**0.920**	**0.768**	**0.870**	**0.647**
	Left side	0.337	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.731**	**0.896**	**0.896**	**0.783**	**0.354**	**0.677**	**0.338**
	Right side	0.478	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.779**	**0.653**	**0.640**	**0.861**	**0.884**	**0.496**	**0.639**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.212								**0.212**	**0.212**	**0.212**	**0.212**	**0.212**	**0.212**	**0.212**
WCDMA II_Ant 2	Front	0.996	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**1.257**	**1.179**	**1.156**	**1.179**	**1.151**	**1.259**	**1.079**
	Back	0.661	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.052**	**1.235**	**1.192**	**1.102**	**0.950**	**1.052**	**0.829**
	Left side	0.671	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**1.065**	**1.230**	**1.230**	**1.117**	**0.688**	**1.011**	**0.672**
	Right side	0.770	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**1.071**	**0.945**	**0.932**	**1.153**	**1.176**	**0.788**	**0.931**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.373								**0.373**	**0.373**	**0.373**	**0.373**	**0.373**	**0.373**	**0.373**
WCDMA IV_Ant 2	Front	0.994	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**1.255**	**1.177**	**1.154**	**1.177**	**1.149**	**1.257**	**1.077**
	Back	0.778	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.169**	**1.352**	**1.309**	**1.219**	**1.067**	**1.169**	**0.946**
	Left side	0.278	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.672**	**0.837**	**0.837**	**0.724**	**0.295**	**0.618**	**0.279**
	Right side	0.636	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.937**	**0.811**	**0.798**	**1.019**	**1.042**	**0.654**	**0.797**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.525								**0.525**	**0.525**	**0.525**	**0.525**	**0.525**	**0.525**	**0.525**
WCDMA V_Ant 0	Front	0.319	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.580**	**0.502**	**0.479**	**0.502**	**0.474**	**0.582**	**0.402**
	Back	0.507	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**0.898**	**1.081**	**1.038**	**0.948**	**0.796**	**0.898**	**0.675**
	Left side	0.360	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.754**	**0.919**	**0.919**	**0.806**	**0.377**	**0.700**	**0.361**
	Right side	0.370	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.671**	**0.545**	**0.532**	**0.753**	**0.776**	**0.388**	**0.531**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.109								**0.109**	**0.109**	**0.109**	**0.109**	**0.109**	**0.109**	**0.109**
LTE Band 7_Ant 2	Front	0.779	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**1.040**	**0.962**	**0.939**	**0.962**	**0.934**	**1.042**	**0.862**
	Back	0.986	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.377**	**1.560**	**1.517**	**1.427**	**1.275**	**1.377**	**1.154**
	Left side	0.204	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.598**	**0.763**	**0.763**	**0.650**	**0.221**	**0.544**	**0.205**
	Right side	0.998	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**1.299**	**1.173**	**1.160**	**1.381**	**1.404**	**1.016**	**1.159**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.754								**0.754**	**0.754**	**0.754**	**0.754**	**0.754**	**0.754**	**0.754**
LTE Band 12_Ant 0	Front	0.439	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.700**	**0.622**	**0.599**	**0.622**	**0.594**	**0.702**	**0.522**
	Back	0.641	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.032**	**1.215**	**1.172**	**1.082**	**0.930**	**1.032**	**0.809**
	Left side	0.382	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.776**	**0.941**	**0.941**	**0.828**	**0.399**	**0.722**	**0.383**
	Right side	0.388	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.689**	**0.563**	**0.550**	**0.771**	**0.794**	**0.406**	**0.549**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.118								**0.118**	**0.118**	**0.118**	**0.118**	**0.118**	**0.118**	**0.118**

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 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+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3							
		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 13_Ant 0	Front	0.475	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.736**	**0.658**	**0.635**	**0.658**	**0.630**	**0.738**	**0.558**
	Back	0.649	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.040**	**1.223**	**1.180**	**1.090**	**0.938**	**1.040**	**0.817**
	Left side	0.609	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**1.003**	**1.168**	**1.168**	**1.055**	**0.626**	**0.949**	**0.610**
	Right side	0.592	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.893**	**0.767**	**0.754**	**0.975**	**0.998**	**0.610**	**0.753**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.097								**0.097**	**0.097**	**0.097**	**0.097**	**0.097**	**0.097**	**0.097**
LTE Band 14_Ant 0	Front	0.435	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.696**	**0.618**	**0.595**	**0.618**	**0.590**	**0.698**	**0.518**
	Back	0.583	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**0.974**	**1.157**	**1.114**	**1.024**	**0.872**	**0.974**	**0.751**
	Left side	0.498	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.892**	**1.057**	**1.057**	**0.944**	**0.515**	**0.838**	**0.499**
	Right side	0.569	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.870**	**0.744**	**0.731**	**0.952**	**0.975**	**0.587**	**0.730**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.116								**0.116**	**0.116**	**0.116**	**0.116**	**0.116**	**0.116**	**0.116**
LTE Band 25_Ant 2	Front	0.848	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**1.109**	**1.031**	**1.008**	**1.031**	**1.003**	**1.111**	**0.931**
	Back	0.692	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.083**	**1.266**	**1.223**	**1.133**	**0.981**	**1.083**	**0.860**
	Left side	0.333	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.727**	**0.892**	**0.892**	**0.779**	**0.350**	**0.673**	**0.334**
	Right side	0.687	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.988**	**0.862**	**0.849**	**1.070**	**1.093**	**0.705**	**0.848**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.320								**0.320**	**0.320**	**0.320**	**0.320**	**0.320**	**0.320**	**0.320**
LTE Band 26_Ant 0	Front	0.318	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.579**	**0.501**	**0.478**	**0.501**	**0.473**	**0.581**	**0.401**
	Back	0.568	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**0.959**	**1.142**	**1.099**	**1.009**	**0.857**	**0.959**	**0.736**
	Left side	0.335	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.729**	**0.894**	**0.894**	**0.781**	**0.352**	**0.675**	**0.336**
	Right side	0.399	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.700**	**0.574**	**0.561**	**0.782**	**0.805**	**0.417**	**0.560**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.100								**0.100**	**0.100**	**0.100**	**0.100**	**0.100**	**0.100**	**0.100**
LTE Band 30_Ant 2	Front	0.509	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.770**	**0.692**	**0.669**	**0.692**	**0.664**	**0.772**	**0.592**
	Back	0.397	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**0.788**	**0.971**	**0.928**	**0.838**	**0.686**	**0.788**	**0.565**
	Left side	0.084	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.478**	**0.643**	**0.643**	**0.530**	**0.101**	**0.424**	**0.085**
	Right side	0.314	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.615**	**0.489**	**0.476**	**0.697**	**0.720**	**0.332**	**0.475**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.403								**0.403**	**0.403**	**0.403**	**0.403**	**0.403**	**0.403**	**0.403**
LTE Band 41_Ant 2	Front	0.460	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.721**	**0.643**	**0.620**	**0.643**	**0.615**	**0.723**	**0.543**
	Back	0.870	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.261**	**1.444**	**1.401**	**1.311**	**1.159**	**1.261**	**1.038**
	Left side	0.116	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.510**	**0.675**	**0.675**	**0.562**	**0.133**	**0.456**	**0.117**
	Right side	0.547	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.848**	**0.722**	**0.709**	**0.930**	**0.953**	**0.565**	**0.708**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.569								**0.569**	**0.569**	**0.569**	**0.569**	**0.569**	**0.569**	**0.569**
LTE Band 48_Ant 7	Front	0.281	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.542**	**0.464**	**0.441**	**0.464**	**0.436**	**0.544**	**0.364**
	Back	0.905	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.296**	**1.479**	**1.436**	**1.346**	**1.194**	**1.296**	**1.073**
	Left side	0.687	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**1.081**	**1.246**	**1.246**	**1.133**	**0.704**	**1.027**	**0.688**
	Right side	0.034	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.335**	**0.209**	**0.196**	**0.417**	**0.440**	**0.052**	**0.195**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.181								**0.181**	**0.181**	**0.181**	**0.181**	**0.181**	**0.181**	**0.181**
LTE Band 66_Ant 2	Front	0.993	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**1.254**	**1.176**	**1.153**	**1.176**	**1.148**	**1.256**	**1.076**
	Back	0.847	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.238**	**1.421**	**1.378**	**1.288**	**1.136**	**1.238**	**1.015**
	Left side	0.228	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.622**	**0.787**	**0.787**	**0.674**	**0.245**	**0.568**	**0.229**
	Right side	0.421	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.722**	**0.596**	**0.583**	**0.804**	**0.827**	**0.439**	**0.582**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.248								**0.248**	**0.248**	**0.248**	**0.248**	**0.248**	**0.248**	**0.248**
LTE Band 71_Ant 0	Front	0.374	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.635**	**0.557**	**0.534**	**0.557**	**0.529**	**0.637**	**0.457**
	Back	0.578	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**0.969**	**1.152**	**1.109**	**1.019**	**0.867**	**0.969**	**0.746**
	Left side	0.407	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.801**	**0.966**	**0.966**	**0.853**	**0.424**	**0.747**	**0.408**
	Right side	0.324	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.625**	**0.499**	**0.486**	**0.707**	**0.730**	**0.342**	**0.485**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.111								**0.111**	**0.111**	**0.111**	**0.111**	**0.111**	**0.111**	**0.111**

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 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+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3							
		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	0.320	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.581**	**0.503**	**0.480**	**0.503**	**0.475**	**0.583**	**0.403**
	Back	0.475	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**0.866**	**1.049**	**1.006**	**0.916**	**0.764**	**0.866**	**0.643**
	Left side	0.302	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.696**	**0.861**	**0.861**	**0.748**	**0.319**	**0.642**	**0.303**
	Right side	0.303	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.604**	**0.478**	**0.465**	**0.686**	**0.709**	**0.321**	**0.464**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.129								**0.129**	**0.129**	**0.129**	**0.129**	**0.129**	**0.129**	**0.129**

<Config 1>

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 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+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3							
		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	0.356	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.617**	**0.539**	**0.516**	**0.539**	**0.511**	**0.619**	**0.439**
	Back	0.736	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.127**	**1.310**	**1.267**	**1.177**	**1.025**	**1.127**	**0.904**
	Left side	0.213	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.607**	**0.772**	**0.772**	**0.659**	**0.230**	**0.553**	**0.214**
	Right side	0.275	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.576**	**0.450**	**0.437**	**0.658**	**0.681**	**0.293**	**0.436**
	Top side	0.340	0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.604**	**0.467**	**0.444**	**0.653**	**0.678**	**0.393**	**0.422**
	Bottom side									**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
GSM1900_Ant 0	Front	0.404	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.665**	**0.587**	**0.564**	**0.587**	**0.559**	**0.667**	**0.487**
	Back	0.993	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.384**	**1.567**	**1.524**	**1.434**	**1.282**	**1.384**	**1.161**
	Left side	0.194	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.588**	**0.753**	**0.753**	**0.640**	**0.211**	**0.534**	**0.195**
	Right side	0.055	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.356**	**0.230**	**0.217**	**0.438**	**0.461**	**0.073**	**0.216**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.717								**0.717**	**0.717**	**0.717**	**0.717**	**0.717**	**0.717**	**0.717**
WCDMA II_Ant 0	Front	0.405	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.666**	**0.588**	**0.565**	**0.588**	**0.560**	**0.668**	**0.488**
	Back	0.983	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.374**	**1.557**	**1.514**	**1.424**	**1.272**	**1.374**	**1.151**
	Left side	0.108	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.502**	**0.667**	**0.667**	**0.554**	**0.125**	**0.448**	**0.109**
	Right side	0.091	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.392**	**0.266**	**0.253**	**0.474**	**0.497**	**0.109**	**0.252**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.787								**0.787**	**0.787**	**0.787**	**0.787**	**0.787**	**0.787**	**0.787**
WCDMA IV_Ant 0	Front	0.387	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.648**	**0.570**	**0.547**	**0.570**	**0.542**	**0.650**	**0.470**
	Back	0.993	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.384**	**1.567**	**1.524**	**1.434**	**1.282**	**1.384**	**1.161**
	Left side	0.317	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.711**	**0.876**	**0.876**	**0.763**	**0.334**	**0.657**	**0.318**
	Right side	0.017	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.318**	**0.192**	**0.179**	**0.400**	**0.423**	**0.035**	**0.178**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.778								**0.778**	**0.778**	**0.778**	**0.778**	**0.778**	**0.778**	**0.778**
WCDMA V_Ant 1	Front	0.240	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.501**	**0.423**	**0.400**	**0.423**	**0.395**	**0.503**	**0.323**
	Back	0.466	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**0.857**	**1.040**	**0.997**	**0.907**	**0.755**	**0.857**	**0.634**
	Left side	0.120	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.514**	**0.679**	**0.679**	**0.566**	**0.137**	**0.460**	**0.121**
	Right side	0.150	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.451**	**0.325**	**0.312**	**0.533**	**0.556**	**0.168**	**0.311**
	Top side	0.212	0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.476**	**0.339**	**0.316**	**0.525**	**0.550**	**0.265**	**0.294**
	Bottom side									**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
LTE Band 7_Ant 0	Front	0.312	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.573**	**0.495**	**0.472**	**0.495**	**0.467**	**0.575**	**0.395**
	Back	0.892	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.283**	**1.466**	**1.423**	**1.333**	**1.181**	**1.283**	**1.060**
	Left side	0.251	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.645**	**0.810**	**0.810**	**0.697**	**0.268**	**0.591**	**0.252**
	Right side	0.076	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.377**	**0.251**	**0.238**	**0.459**	**0.482**	**0.094**	**0.237**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.749								**0.749**	**0.749**	**0.749**	**0.749**	**0.749**	**0.749**	**0.749**

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 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+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3							
		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 12_Ant 1	Front	0.356	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.617**	**0.539**	**0.516**	**0.539**	**0.511**	**0.619**	**0.439**
	Back	0.660	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.051**	**1.234**	**1.191**	**1.101**	**0.949**	**1.051**	**0.828**
	Left side	0.517	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.911**	**1.076**	**1.076**	**0.963**	**0.534**	**0.857**	**0.518**
	Right side	0.301	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.602**	**0.476**	**0.463**	**0.684**	**0.707**	**0.319**	**0.462**
	Top side	0.196	0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.460**	**0.323**	**0.300**	**0.509**	**0.534**	**0.249**	**0.278**
	Bottom side									**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
LTE Band 13_Ant 1	Front	0.061	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.322**	**0.244**	**0.221**	**0.244**	**0.216**	**0.324**	**0.144**
	Back	0.113	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**0.504**	**0.687**	**0.644**	**0.554**	**0.402**	**0.504**	**0.281**
	Left side	0.078	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.472**	**0.637**	**0.637**	**0.524**	**0.095**	**0.418**	**0.079**
	Right side	0.055	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.356**	**0.230**	**0.217**	**0.438**	**0.461**	**0.073**	**0.216**
	Top side	0.062	0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.326**	**0.189**	**0.166**	**0.375**	**0.400**	**0.115**	**0.144**
	Bottom side									**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
LTE Band 14_Ant 1	Front	0.425	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.686**	**0.608**	**0.585**	**0.608**	**0.580**	**0.688**	**0.508**
	Back	0.738	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.129**	**1.312**	**1.269**	**1.179**	**1.027**	**1.129**	**0.906**
	Left side	0.349	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.743**	**0.908**	**0.908**	**0.795**	**0.366**	**0.689**	**0.350**
	Right side	0.307	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.608**	**0.482**	**0.469**	**0.690**	**0.713**	**0.325**	**0.468**
	Top side	0.275	0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.539**	**0.402**	**0.379**	**0.588**	**0.613**	**0.328**	**0.357**
	Bottom side									**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
LTE Band 25_Ant 0	Front	0.484	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.745**	**0.667**	**0.644**	**0.667**	**0.639**	**0.747**	**0.567**
	Back	0.928	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.319**	**1.502**	**1.459**	**1.369**	**1.217**	**1.319**	**1.096**
	Left side	0.268	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.662**	**0.827**	**0.827**	**0.714**	**0.285**	**0.608**	**0.269**
	Right side	0.034	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.335**	**0.209**	**0.196**	**0.417**	**0.440**	**0.052**	**0.195**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.966								**0.966**	**0.966**	**0.966**	**0.966**	**0.966**	**0.966**	**0.966**
LTE Band 26_Ant 1	Front	0.483	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.744**	**0.666**	**0.643**	**0.666**	**0.638**	**0.746**	**0.566**
	Back	0.883	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.274**	**1.457**	**1.414**	**1.324**	**1.172**	**1.274**	**1.051**
	Left side	0.221	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.615**	**0.780**	**0.780**	**0.667**	**0.238**	**0.561**	**0.222**
	Right side	0.229	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.530**	**0.404**	**0.391**	**0.612**	**0.635**	**0.247**	**0.390**
	Top side	0.356	0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.620**	**0.483**	**0.460**	**0.669**	**0.694**	**0.409**	**0.438**
	Bottom side									**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
LTE Band 30_Ant 0	Front	0.500	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.761**	**0.683**	**0.660**	**0.683**	**0.655**	**0.763**	**0.583**
	Back	0.992	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.383**	**1.566**	**1.523**	**1.433**	**1.281**	**1.383**	**1.160**
	Left side	0.157	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.551**	**0.716**	**0.716**	**0.603**	**0.174**	**0.497**	**0.158**
	Right side	0.133	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.434**	**0.308**	**0.295**	**0.516**	**0.539**	**0.151**	**0.294**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.814								**0.814**	**0.814**	**0.814**	**0.814**	**0.814**	**0.814**	**0.814**
LTE Band 41_Ant 0	Front	0.210	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.471**	**0.393**	**0.370**	**0.393**	**0.365**	**0.473**	**0.293**
	Back	0.994	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.385**	**1.568**	**1.525**	**1.435**	**1.283**	**1.385**	**1.162**
	Left side	0.099	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.493**	**0.658**	**0.658**	**0.545**	**0.116**	**0.439**	**0.100**
	Right side	0.053	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.354**	**0.228**	**0.215**	**0.436**	**0.459**	**0.071**	**0.214**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.340								**0.340**	**0.340**	**0.340**	**0.340**	**0.340**	**0.340**	**0.340**
LTE Band 48_Ant 2	Front	0.055	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.316**	**0.238**	**0.215**	**0.238**	**0.210**	**0.318**	**0.138**
	Back	0.998	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.389**	**1.572**	**1.529**	**1.439**	**1.287**	**1.389**	**1.166**
	Left side	0.552	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.946**	**1.111**	**1.111**	**0.998**	**0.569**	**0.892**	**0.553**
	Right side	0.768	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**1.069**	**0.943**	**0.930**	**1.151**	**1.174**	**0.786**	**0.929**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.138								**0.138**	**0.138**	**0.138**	**0.138**	**0.138**	**0.138**	**0.138**

LTE Band 66_Ant 0	Front	0.498	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.759**	**0.681**	**0.658**	**0.681**	**0.653**	**0.761**	**0.581**
	Back	0.988	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.379**	**1.562**	**1.519**	**1.429**	**1.277**	**1.379**	**1.156**
	Left side	0.347	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.741**	**0.906**	**0.906**	**0.793**	**0.364**	**0.687**	**0.348**
	Right side	0.015	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.316**	**0.190**	**0.177**	**0.398**	**0.421**	**0.033**	**0.176**
	Top side		0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.264**	**0.127**	**0.104**	**0.313**	**0.338**	**0.053**	**0.082**
	Bottom side	0.935								**0.935**	**0.935**	**0.935**	**0.935**	**0.935**	**0.935**	**0.935**
LTE Band 71_Ant 1	Front	0.354	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.615**	**0.537**	**0.514**	**0.537**	**0.509**	**0.617**	**0.437**
	Back	0.616	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.007**	**1.190**	**1.147**	**1.057**	**0.905**	**1.007**	**0.784**
	Left side	0.566	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.960**	**1.125**	**1.125**	**1.012**	**0.583**	**0.906**	**0.567**
	Right side	0.219	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.520**	**0.394**	**0.381**	**0.602**	**0.625**	**0.237**	**0.380**
	Top side	0.169	0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.433**	**0.296**	**0.273**	**0.482**	**0.507**	**0.222**	**0.251**
	Bottom side									**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	**1+3 Summed 1g SAR (W/kg)**	**1+2+4 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+8 Summed 1g SAR (W/kg)**	**1+6 Summed 1g SAR (W/kg)**
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3							
		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	0.418	0.106	0.261	0.077	0.100	0.083	0.072	0.263	**0.679**	**0.601**	**0.578**	**0.601**	**0.573**	**0.681**	**0.501**
	Back	0.733	0.211	0.391	0.363	0.273	0.168	0.121	0.391	**1.124**	**1.307**	**1.264**	**1.174**	**1.022**	**1.124**	**0.901**
	Left side	0.186	0.001	0.394	0.558	0.445	0.001	0.016	0.340	**0.580**	**0.745**	**0.745**	**0.632**	**0.203**	**0.526**	**0.187**
	Right side	0.226	0.174	0.301	0.001	0.222	0.161	0.245	0.018	**0.527**	**0.401**	**0.388**	**0.609**	**0.632**	**0.244**	**0.387**
	Top side	0.325	0.105	0.264	0.022	0.231	0.082	0.256	0.053	**0.589**	**0.452**	**0.429**	**0.638**	**0.663**	**0.378**	**0.407**
	Bottom side									**0.000**	**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	0.354	0.200	**0.554**
	Back	0.483	0.403	**0.886**
	Left side	0.383	0.003	**0.386**
	Right side	0.454	0.373	**0.827**
	Top side		0.193	**0.193**
	Bottom side	0.150		**0.150**
GSM1900_Ant 2	Front	0.563	0.200	**0.763**
	Back	0.479	0.403	**0.882**
	Left side	0.337	0.003	**0.340**
	Right side	0.478	0.373	**0.851**
	Top side		0.193	**0.193**
	Bottom side	0.212		**0.212**
WCDMA II_Ant 2	Front	0.996	0.200	**1.196**
	Back	0.661	0.403	**1.064**
	Left side	0.671	0.003	**0.674**
	Right side	0.770	0.373	**1.143**
	Top side		0.193	**0.193**
	Bottom side	0.373		**0.373**
WCDMA IV_Ant 2	Front	0.994	0.200	**1.194**
	Back	0.778	0.403	**1.181**
	Left side	0.278	0.003	**0.281**
	Right side	0.636	0.373	**1.009**
	Top side		0.193	**0.193**
	Bottom side	0.525		**0.525**
WCDMA V_Ant 0	Front	0.319	0.200	**0.519**
	Back	0.507	0.403	**0.910**
	Left side	0.360	0.003	**0.363**
	Right side	0.370	0.373	**0.743**
	Top side		0.193	**0.193**
	Bottom side	0.109		**0.109**
LTE Band 7_Ant 2	Front	0.779	0.200	**0.979**
	Back	0.986	0.403	**1.389**
	Left side	0.204	0.003	**0.207**
	Right side	0.998	0.373	**1.371**
	Top side		0.193	**0.193**
	Bottom side	0.754		**0.754**
LTE Band 12_Ant 0	Front	0.439	0.200	**0.639**
	Back	0.641	0.403	**1.044**
	Left side	0.382	0.003	**0.385**
	Right side	0.388	0.373	**0.761**
	Top side		0.193	**0.193**
	Bottom side	0.118		**0.118**
LTE Band 13_Ant 0	Front	0.475	0.200	**0.675**
	Back	0.649	0.403	**1.052**
	Left side	0.609	0.003	**0.612**
	Right side	0.592	0.373	**0.965**
	Top side		0.193	**0.193**
	Bottom side	0.097		**0.097**

LTE Band 14_Ant 0	Front	0.435	0.200	**0.635**
	Back	0.583	0.403	**0.986**
	Left side	0.498	0.003	**0.501**
	Right side	0.569	0.373	**0.942**
	Top side		0.193	**0.193**
	Bottom side	0.116		**0.116**
LTE Band 25_Ant 2	Front	0.848	0.200	**1.048**
	Back	0.692	0.403	**1.095**
	Left side	0.333	0.003	**0.336**
	Right side	0.687	0.373	**1.060**
	Top side		0.193	**0.193**
	Bottom side	0.320		**0.320**
LTE Band 26_Ant 0	Front	0.318	0.200	**0.518**
	Back	0.568	0.403	**0.971**
	Left side	0.335	0.003	**0.338**
	Right side	0.399	0.373	**0.772**
	Top side		0.193	**0.193**
	Bottom side	0.100		**0.100**
LTE Band 30_Ant 2	Front	0.509	0.200	**0.709**
	Back	0.397	0.403	**0.800**
	Left side	0.084	0.003	**0.087**
	Right side	0.314	0.373	**0.687**
	Top side		0.193	**0.193**
	Bottom side	0.403		**0.403**
LTE Band 41_Ant 2	Front	0.460	0.200	**0.660**
	Back	0.870	0.403	**1.273**
	Left side	0.116	0.003	**0.119**
	Right side	0.547	0.373	**0.920**
	Top side		0.193	**0.193**
	Bottom side	0.569		**0.569**
LTE Band 48_Ant 7	Front	0.281	0.200	**0.481**
	Back	0.905	0.403	**1.308**
	Left side	0.687	0.003	**0.690**
	Right side	0.034	0.373	**0.407**
	Top side		0.193	**0.193**
	Bottom side	0.181		**0.181**
LTE Band 66_Ant 2	Front	0.993	0.200	**1.193**
	Back	0.847	0.403	**1.250**
	Left side	0.228	0.003	**0.231**
	Right side	0.421	0.373	**0.794**
	Top side		0.193	**0.193**
	Bottom side	0.248		**0.248**
LTE Band 71_Ant 0	Front	0.374	0.200	**0.574**
	Back	0.578	0.403	**0.981**
	Left side	0.407	0.003	**0.410**
	Right side	0.324	0.373	**0.697**
	Top side		0.193	**0.193**
	Bottom side	0.111		**0.111**
FR1_n5_Ant 0	Front	0.320	0.200	**0.320**
	Back	0.475	0.403	**0.475**
	Left side	0.302	0.003	**0.302**
	Right side	0.303	0.373	**0.303**
	Top side		0.193	**0.000**
	Bottom side	0.129		**0.129**

<Config 1>

WWAN Band	Exposure Position	1 WWAN 1g SAR (W/kg)	2 Bluetooth Ant 4 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)
GSM850_Ant 1	Front	0.356	0.200	**0.556**
	Back	0.736	0.403	**1.139**
	Left side	0.213	0.003	**0.216**
	Right side	0.275	0.373	**0.648**
	Top side	0.340	0.193	**0.533**
	Bottom side			**0.000**
GSM1900_Ant 0	Front	0.404	0.200	**0.604**
	Back	0.993	0.403	**1.396**
	Left side	0.194	0.003	**0.197**
	Right side	0.055	0.373	**0.428**
	Top side		0.193	**0.193**
	Bottom side	0.717		**0.717**
WCDMA II_Ant 0	Front	0.405	0.200	**0.605**
	Back	0.983	0.403	**1.386**
	Left side	0.108	0.003	**0.111**
	Right side	0.091	0.373	**0.464**
	Top side		0.193	**0.193**
	Bottom side	0.787		**0.787**
WCDMA IV_Ant 0	Front	0.387	0.200	**0.587**
	Back	0.993	0.403	**1.396**
	Left side	0.317	0.003	**0.320**
	Right side	0.017	0.373	**0.390**
	Top side		0.193	**0.193**
	Bottom side	0.778		**0.778**
WCDMA V_Ant 1	Front	0.240	0.200	**0.440**
	Back	0.466	0.403	**0.869**
	Left side	0.120	0.003	**0.123**
	Right side	0.150	0.373	**0.523**
	Top side	0.212	0.193	**0.405**
	Bottom side			**0.000**
LTE Band 7_Ant 0	Front	0.312	0.200	**0.512**
	Back	0.892	0.403	**1.295**
	Left side	0.251	0.003	**0.254**
	Right side	0.076	0.373	**0.449**
	Top side		0.193	**0.193**
	Bottom side	0.749		**0.749**
LTE Band 12_Ant 1	Front	0.356	0.200	**0.556**
	Back	0.660	0.403	**1.063**
	Left side	0.517	0.003	**0.520**
	Right side	0.301	0.373	**0.674**
	Top side	0.196	0.193	**0.389**
	Bottom side			**0.000**
LTE Band 13_Ant 1	Front	0.061	0.200	**0.261**
	Back	0.113	0.403	**0.516**
	Left side	0.078	0.003	**0.081**
	Right side	0.055	0.373	**0.428**
	Top side	0.062	0.193	**0.255**
	Bottom side			**0.000**
LTE Band 14_Ant 1	Front	0.425	0.200	**0.625**
	Back	0.738	0.403	**1.141**
	Left side	0.349	0.003	**0.352**
	Right side	0.307	0.373	**0.680**
	Top side	0.275	0.193	**0.468**
	Bottom side			**0.000**

LTE Band 25_Ant 0	Front	0.484	0.200	**0.684**
	Back	0.928	0.403	**1.331**
	Left side	0.268	0.003	**0.271**
	Right side	0.034	0.373	**0.407**
	Top side		0.193	**0.193**
	Bottom side	0.966		**0.966**
LTE Band 26_Ant 1	Front	0.483	0.200	**0.683**
	Back	0.883	0.403	**1.286**
	Left side	0.221	0.003	**0.224**
	Right side	0.229	0.373	**0.602**
	Top side	0.356	0.193	**0.549**
	Bottom side			**0.000**
LTE Band 30_Ant 0	Front	0.500	0.200	**0.700**
	Back	0.992	0.403	**1.395**
	Left side	0.157	0.003	**0.160**
	Right side	0.133	0.373	**0.506**
	Top side		0.193	**0.193**
	Bottom side	0.814		**0.814**
LTE Band 41_Ant 0	Front	0.210	0.200	**0.410**
	Back	0.994	0.403	**1.397**
	Left side	0.099	0.003	**0.102**
	Right side	0.053	0.373	**0.426**
	Top side		0.193	**0.193**
	Bottom side	0.340		**0.340**
LTE Band 48_Ant 2	Front	0.055	0.200	**0.255**
	Back	0.998	0.403	**1.401**
	Left side	0.552	0.003	**0.555**
	Right side	0.768	0.373	**1.141**
	Top side		0.193	**0.193**
	Bottom side	0.138		**0.138**
LTE Band 66_Ant 0	Front	0.498	0.200	**0.698**
	Back	0.988	0.403	**1.391**
	Left side	0.347	0.003	**0.350**
	Right side	0.015	0.373	**0.388**
	Top side		0.193	**0.193**
	Bottom side	0.935		**0.935**
LTE Band 71_Ant 1	Front	0.354	0.200	**0.554**
	Back	0.616	0.403	**1.019**
	Left side	0.566	0.003	**0.569**
	Right side	0.219	0.373	**0.592**
	Top side	0.169	0.193	**0.362**
	Bottom side			**0.000**
FR1_n5_Ant 1	Front	0.418	0.200	**0.418**
	Back	0.733	0.403	**0.733**
	Left side	0.186	0.003	**0.186**
	Right side	0.226	0.373	**0.226**
	Top side	0.325	0.193	**0.325**
	Bottom side			**0.000**

16.4 Body-Worn Accessory Exposure Conditions

<Standalone WWAN OFF>

Exposure Position	1 2.4GHz WLAN Ant 4 1g SAR (W/kg)	2 2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	3 5GHz WLAN Ant 3 1g SAR (W/kg)	4 5GHz WLAN Ant 4+3 1g SAR (W/kg)	5 Bluetooth Ant 4 1g SAR (W/kg)	6 5GHz WLAN Ant 4 1g SAR (W/kg)	7 2.4GHz WLAN Ant 3 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	3+5 Summed 1g SAR (W/kg)	4+5 Summed 1g SAR (W/kg)	5+6 Summed 1g SAR (W/kg)
Front	0.378	0.500	0.199	0.233	0.200	0.132	0.270	**0.577**	**0.399**	**0.433**	**0.332**
Back	0.660	0.682	0.692	1.188	0.403	0.174	0.406	**1.352**	**1.095**	**1.591**	**0.577**

<Simultaneous Transmission is active WWAN OFF>
<Config 0>

WWAN Band	Exposure Position	1 WWAN 1g SAR (W/kg)	2 2.4GHz WLAN Ant 4 1g SAR (W/kg)	3 2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	4 5GHz WLAN Ant 3 1g SAR (W/kg)	5 5GHz WLAN Ant 4+3 1g SAR (W/kg)	6 Bluetooth Ant 4 1g SAR (W/kg)	7 5GHz WLAN Ant 4 1g SAR (W/kg)	8 2.4GHz WLAN Ant 3 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+2+4 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+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
GSM850_Ant 0	Front	0.354	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.615**	**0.556**	**0.533**	**0.603**	**0.556**	**0.617**	**0.437**
	Back	0.483	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**0.874**	**1.057**	**1.014**	**1.062**	**0.813**	**0.874**	**0.651**
GSM1900_Ant 2	Front	0.563	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.824**	**0.765**	**0.742**	**0.812**	**0.765**	**0.826**	**0.646**
	Back	0.479	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**0.870**	**1.053**	**1.010**	**1.058**	**0.809**	**0.870**	**0.647**
WCDMA II_Ant 2	Front	0.996	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**1.257**	**1.198**	**1.175**	**1.245**	**1.198**	**1.259**	**1.079**
	Back	0.661	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.052**	**1.235**	**1.192**	**1.240**	**0.991**	**1.052**	**0.829**
WCDMA IV_Ant 2	Front	0.994	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**1.255**	**1.196**	**1.173**	**1.243**	**1.196**	**1.257**	**1.077**
	Back	0.778	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.169**	**1.352**	**1.309**	**1.357**	**1.108**	**1.169**	**0.946**
WCDMA V_Ant 0	Front	0.319	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.580**	**0.521**	**0.498**	**0.568**	**0.521**	**0.582**	**0.402**
	Back	0.507	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**0.898**	**1.081**	**1.038**	**1.086**	**0.837**	**0.898**	**0.675**
LTE Band 7_Ant 2	Front	0.779	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**1.040**	**0.981**	**0.958**	**1.028**	**0.981**	**1.042**	**0.862**
	Back	0.986	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.377**	**1.560**	**1.517**	**1.565**	**1.316**	**1.377**	**1.154**
LTE Band 12_Ant 0	Front	0.439	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.700**	**0.641**	**0.618**	**0.688**	**0.641**	**0.702**	**0.522**
	Back	0.641	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.032**	**1.215**	**1.172**	**1.220**	**0.971**	**1.032**	**0.809**
LTE Band 13_Ant 0	Front	0.475	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.736**	**0.677**	**0.654**	**0.724**	**0.677**	**0.738**	**0.558**
	Back	0.649	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.040**	**1.223**	**1.180**	**1.228**	**0.979**	**1.040**	**0.817**
LTE Band 14_Ant 0	Front	0.435	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.696**	**0.637**	**0.614**	**0.684**	**0.637**	**0.698**	**0.518**
	Back	0.583	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**0.974**	**1.157**	**1.114**	**1.162**	**0.913**	**0.974**	**0.751**
LTE Band 25_Ant 2	Front	0.848	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**1.109**	**1.050**	**1.027**	**1.097**	**1.050**	**1.111**	**0.931**
	Back	0.692	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.083**	**1.266**	**1.223**	**1.271**	**1.022**	**1.083**	**0.860**
LTE Band 26_Ant 0	Front	0.318	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.579**	**0.520**	**0.497**	**0.567**	**0.520**	**0.581**	**0.401**
	Back	0.568	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**0.959**	**1.142**	**1.099**	**1.147**	**0.898**	**0.959**	**0.736**
LTE Band 30_Ant 2	Front	0.509	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.770**	**0.711**	**0.688**	**0.758**	**0.711**	**0.772**	**0.592**
	Back	0.397	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**0.788**	**0.971**	**0.928**	**0.976**	**0.727**	**0.788**	**0.565**
LTE Band 41_Ant 2	Front	0.460	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.721**	**0.662**	**0.639**	**0.709**	**0.662**	**0.723**	**0.543**
	Back	0.870	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.261**	**1.444**	**1.401**	**1.449**	**1.200**	**1.261**	**1.038**
LTE Band 48_Ant 7	Front	0.281	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.542**	**0.483**	**0.460**	**0.530**	**0.483**	**0.544**	**0.364**
	Back	0.905	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.296**	**1.479**	**1.436**	**1.484**	**1.235**	**1.296**	**1.073**
LTE Band 66_Ant 2	Front	0.993	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**1.254**	**1.195**	**1.172**	**1.242**	**1.195**	**1.256**	**1.076**
	Back	0.847	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.238**	**1.421**	**1.378**	**1.426**	**1.177**	**1.238**	**1.015**
LTE Band 71_Ant 0	Front	0.374	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.635**	**0.576**	**0.553**	**0.623**	**0.576**	**0.637**	**0.457**
	Back	0.578	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**0.969**	**1.152**	**1.109**	**1.157**	**0.908**	**0.969**	**0.746**

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 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+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3							
		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	0.320	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.581**	**0.522**	**0.499**	**0.569**	**0.522**	**0.583**	**0.403**
	Back	0.475	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**0.866**	**1.049**	**1.006**	**1.054**	**0.805**	**0.866**	**0.643**

<Config 1>

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 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+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3							
		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	0.356	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.617**	**0.558**	**0.535**	**0.605**	**0.558**	**0.619**	**0.439**
	Back	0.736	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.127**	**1.310**	**1.267**	**1.315**	**1.066**	**1.127**	**0.904**
GSM1900_Ant 0	Front	0.404	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.665**	**0.606**	**0.583**	**0.653**	**0.606**	**0.667**	**0.487**
	Back	0.993	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.384**	**1.567**	**1.524**	**1.572**	**1.323**	**1.384**	**1.161**
WCDMA II_Ant 0	Front	0.405	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.666**	**0.607**	**0.584**	**0.654**	**0.607**	**0.668**	**0.488**
	Back	0.983	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.374**	**1.557**	**1.514**	**1.562**	**1.313**	**1.374**	**1.151**
WCDMA IV_Ant 0	Front	0.387	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.648**	**0.589**	**0.566**	**0.636**	**0.589**	**0.650**	**0.470**
	Back	0.993	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.384**	**1.567**	**1.524**	**1.572**	**1.323**	**1.384**	**1.161**
WCDMA V_Ant 1	Front	0.240	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.501**	**0.442**	**0.419**	**0.489**	**0.442**	**0.503**	**0.323**
	Back	0.466	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**0.857**	**1.040**	**0.997**	**1.045**	**0.796**	**0.857**	**0.634**
LTE Band 7_Ant 0	Front	0.312	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.573**	**0.514**	**0.491**	**0.561**	**0.514**	**0.575**	**0.395**
	Back	0.892	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.283**	**1.466**	**1.423**	**1.471**	**1.222**	**1.283**	**1.060**
LTE Band 12_Ant 1	Front	0.356	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.617**	**0.558**	**0.535**	**0.605**	**0.558**	**0.619**	**0.439**
	Back	0.660	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.051**	**1.234**	**1.191**	**1.239**	**0.990**	**1.051**	**0.828**
LTE Band 13_Ant 1	Front	0.061	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.322**	**0.263**	**0.240**	**0.310**	**0.263**	**0.324**	**0.144**
	Back	0.113	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**0.504**	**0.687**	**0.644**	**0.692**	**0.443**	**0.504**	**0.281**
LTE Band 14_Ant 1	Front	0.425	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.686**	**0.627**	**0.604**	**0.674**	**0.627**	**0.688**	**0.508**
	Back	0.738	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.129**	**1.312**	**1.269**	**1.317**	**1.068**	**1.129**	**0.906**
LTE Band 25_Ant 0	Front	0.484	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.745**	**0.686**	**0.663**	**0.733**	**0.686**	**0.747**	**0.567**
	Back	0.928	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.319**	**1.502**	**1.459**	**1.507**	**1.258**	**1.319**	**1.096**
LTE Band 26_Ant 1	Front	0.483	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.744**	**0.685**	**0.662**	**0.732**	**0.685**	**0.746**	**0.566**
	Back	0.883	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.274**	**1.457**	**1.414**	**1.462**	**1.213**	**1.274**	**1.051**
LTE Band 30_Ant 0	Front	0.500	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.761**	**0.702**	**0.679**	**0.749**	**0.702**	**0.763**	**0.583**
	Back	0.992	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.383**	**1.566**	**1.523**	**1.571**	**1.322**	**1.383**	**1.160**
LTE Band 41_Ant 0	Front	0.210	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.471**	**0.412**	**0.389**	**0.459**	**0.412**	**0.473**	**0.293**
	Back	0.994	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.385**	**1.568**	**1.525**	**1.573**	**1.324**	**1.385**	**1.162**
LTE Band 48_Ant 2	Front	0.055	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.316**	**0.257**	**0.234**	**0.304**	**0.257**	**0.318**	**0.138**
	Back	0.998	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.389**	**1.572**	**1.529**	**1.577**	**1.328**	**1.389**	**1.166**
LTE Band 66_Ant 0	Front	0.498	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.759**	**0.700**	**0.677**	**0.747**	**0.700**	**0.761**	**0.581**
	Back	0.988	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.379**	**1.562**	**1.519**	**1.567**	**1.318**	**1.379**	**1.156**
LTE Band 71_Ant 1	Front	0.354	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.615**	**0.556**	**0.533**	**0.603**	**0.556**	**0.617**	**0.437**
	Back	0.616	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.007**	**1.190**	**1.147**	**1.195**	**0.946**	**1.007**	**0.784**

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 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+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3							
		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	0.418	0.106	0.261	0.096	0.166	0.083	0.119	0.263	**0.679**	**0.620**	**0.597**	**0.667**	**0.620**	**0.681**	**0.501**
	Back	0.733	0.211	0.391	0.363	0.411	0.168	0.162	0.391	**1.124**	**1.307**	**1.264**	**1.312**	**1.063**	**1.124**	**0.901**

<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	0.354	0.200	**0.554**
	Back	0.483	0.403	**0.886**
GSM1900_Ant 2	Front	0.563	0.200	**0.763**
	Back	0.479	0.403	**0.882**
WCDMA II_Ant 2	Front	0.996	0.200	**1.196**
	Back	0.661	0.403	**1.064**
WCDMA IV_Ant 2	Front	0.994	0.200	**1.194**
	Back	0.778	0.403	**1.181**
WCDMA V_Ant 0	Front	0.319	0.200	**0.519**
	Back	0.507	0.403	**0.910**
LTE Band 7_Ant 2	Front	0.779	0.200	**0.979**
	Back	0.986	0.403	**1.389**
LTE Band 12_Ant 0	Front	0.439	0.200	**0.639**
	Back	0.641	0.403	**1.044**
LTE Band 13_Ant 0	Front	0.475	0.200	**0.675**
	Back	0.649	0.403	**1.052**
LTE Band 14_Ant 0	Front	0.435	0.200	**0.635**
	Back	0.583	0.403	**0.986**
LTE Band 25_Ant 2	Front	0.848	0.200	**1.048**
	Back	0.692	0.403	**1.095**
LTE Band 26_Ant 0	Front	0.318	0.200	**0.518**
	Back	0.568	0.403	**0.971**
LTE Band 30_Ant 2	Front	0.509	0.200	**0.709**
	Back	0.397	0.403	**0.800**
LTE Band 41_Ant 2	Front	0.460	0.200	**0.660**
	Back	0.870	0.403	**1.273**
LTE Band 48_Ant 7	Front	0.281	0.200	**0.481**
	Back	0.905	0.403	**1.308**
LTE Band 66_Ant 2	Front	0.993	0.200	**1.193**
	Back	0.847	0.403	**1.250**
LTE Band 71_Ant 0	Front	0.374	0.200	**0.574**
	Back	0.578	0.403	**0.981**

WWAN Band	Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
		WWAN	Bluetooth Ant 4	
		1g SAR (W/kg)	1g SAR (W/kg)	
FR1_n5_Ant 0	Front	0.320	0.200	**0.320**
	Back	0.475	0.403	**0.475**

<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	0.356	0.200	**0.556**
	Back	0.736	0.403	**1.139**
GSM1900_Ant 0	Front	0.404	0.200	**0.604**
	Back	0.993	0.403	**1.396**
WCDMA II_Ant 0	Front	0.405	0.200	**0.605**
	Back	0.983	0.403	**1.386**
WCDMA IV_Ant 0	Front	0.387	0.200	**0.587**
	Back	0.993	0.403	**1.396**
WCDMA V_Ant 1	Front	0.240	0.200	**0.440**
	Back	0.466	0.403	**0.869**
LTE Band 7_Ant 0	Front	0.312	0.200	**0.512**
	Back	0.892	0.403	**1.295**
LTE Band 12_Ant 1	Front	0.356	0.200	**0.556**
	Back	0.660	0.403	**1.063**
LTE Band 13_Ant 1	Front	0.061	0.200	**0.261**
	Back	0.113	0.403	**0.516**
LTE Band 14_Ant 1	Front	0.425	0.200	**0.625**
	Back	0.738	0.403	**1.141**
LTE Band 25_Ant 0	Front	0.484	0.200	**0.684**
	Back	0.928	0.403	**1.331**
LTE Band 26_Ant 1	Front	0.483	0.200	**0.683**
	Back	0.883	0.403	**1.286**
LTE Band 30_Ant 0	Front	0.500	0.200	**0.700**
	Back	0.992	0.403	**1.395**
LTE Band 41_Ant 0	Front	0.210	0.200	**0.410**
	Back	0.994	0.403	**1.397**
LTE Band 48_Ant 2	Front	0.055	0.200	**0.255**
	Back	0.998	0.403	**1.401**
LTE Band 66_Ant 0	Front	0.498	0.200	**0.698**
	Back	0.988	0.403	**1.391**
LTE Band 71_Ant 1	Front	0.354	0.200	**0.554**
	Back	0.616	0.403	**1.019**

WWAN Band	Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
		WWAN	Bluetooth Ant 4	
		1g SAR (W/kg)	1g SAR (W/kg)	
FR1 n5_Ant 1	Front	0.418	0.200	**0.418**
	Back	0.733	0.403	**0.733**

17. Supplemental Antenna tuner tests results

General Note:

1. This device implements antenna tuning techniques in the antenna0 for LTE 5, 12, 13, 26, 71. 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 33 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. Since the supported frequency span for LTE B5 falls completely within the supported frequency span for LTE B26, 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. The single point SAR time-sweep measurements were treated independently for each supported ACL frequency band. For the LTE B5 single point SAR measurement selected the highest measured SAR configuration and exposure condition of LTE B26.
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

WWAN Head (Ant 0)	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	0	8	16	24	32	7	15	23	31
	LTE Band 12	10M_QPKS_1_0	23095	Left Cheek	0.315	0.339	0.323	0.233	0.201	0.149	0.001	0.237	0.208	0.156	0.006
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	1	9	17	25	0	8	16	24	32
	LTE Band 13	10M_QPKS_1_49	23230	Left Cheek	0.308	0.331	0.269	0.249	0.208	0.128	0.321	0.257	0.211	0.133	0.084
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	2	10	18	26	1	9	17	25	0
	LTE Band 26	15M_QPKS_1_74	26865	Right Cheek	0.319	0.343	0.274	0.268	0.237	0.158	0.289	0.270	0.242	0.146	0.329
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	3	11	19	27	2	10	18	26	1
	LTE Band 71	20M_QPKS_1_0	133322	Left Cheek	0.243	0.263	0.199	0.181	0.147	0.078	0.204	0.192	0.161	0.063	0.222

17.2 Supplemental Body SAR results

WWAN Body (Ant 0)	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	4	12	20	28	3	11	19	27	2
	LTE Band 12	10M_QPKS_1_49	23095	Back	0.458	0.491	0.401	0.371	0.302	0.160	0.407	0.373	0.313	0.163	0.426
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	5	13	21	29	4	12	20	28	3
	LTE Band 13	10M_QPKS_1_49	23230	Back	0.489	0.518	0.437	0.411	0.333	0.141	0.462	0.423	0.346	0.137	0.496
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	6	14	22	30	5	13	21	29	4
	LTE Band 26	15M_QPKS_36_0	26865	Back	0.340	0.362	0.321	0.300	0.242	0.087	0.324	0.301	0.249	0.075	0.334
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	7	15	23	31	6	14	22	30	5
	LTE Band 71	20M_QPKS_1_0	133322	Back	0.421	0.474	0.341	0.299	0.205	0.041	0.342	0.307	0.214	0.037	0.412

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18. Uncertainty Assessment

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

19. References

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

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

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

[4] SPEAG DASY System Handbook

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

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

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

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

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

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

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

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

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

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