<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		

ENDC	LTE TX	NR TX
DC_7A_n5A	ANT1	ANT0
DC_41A_n77A	ANT1	ANT2
DC_5A_n78A	ANT0	ANT2
DC_7A_n78A	ANT5	ANT2
DC_38A_n78A	ANT1	ANT2
DC_41A_n78A	ANT1	ANT2

<WLAN Conducted Power>

General Note:

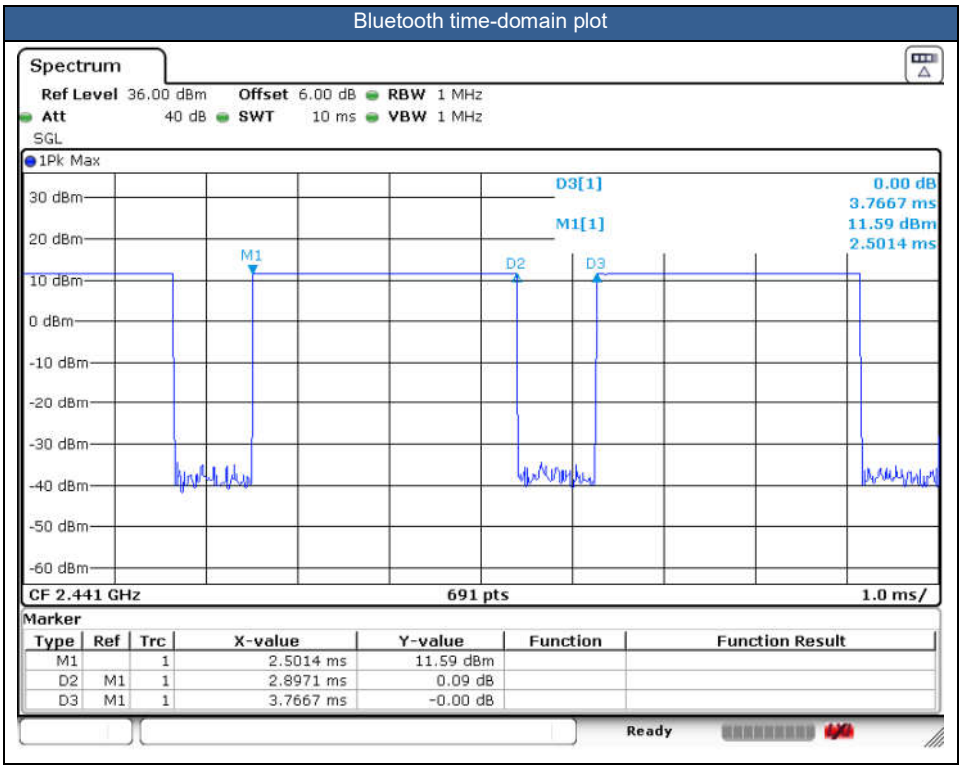
1. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. 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.

<2.4GHz Bluetooth>

General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps, due to its highest average power.
2. The Bluetooth duty cycle are 76.91% as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 83.3%, therefore the actual duty cycle will be scaled up to 83.3% for Bluetooth reported SAR calculation.

Bluetooth time-domain plot



15. Antenna Location

The detailed antenna location information can refer to SAR Test Setup Photos.

16. 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 WLAN 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 SAR testing of Bluetooth signal with 83.3% theoretical duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle) *83.3%".
   d. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
   e. For BT/WLAN: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
   f. For TDD LTE SAR measurement of power class 3, 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 (W/kg) = Measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
   g. For TDD LTE SAR measurement of power class 2, the duty cycle 1:2.33 (42.9 %) was used perform testing and considering the theoretical duty cycle of 43.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 42.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 43.3%/42.9% = 1.009 is applied to scale-up the measured SAR result. The reported TDD LTE SAR (W/kg) = 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 when the measured SAR is ≥ 0.8W/kg. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
4. The device implements the power management and proximity sensor /receiver detection/hotspot mode 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. And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E.
5. For WLAN when transmit simultaneous with WWAN, power reduction will be activated to head and Handheld. For WLAN when transmit simultaneous with WWAN and Proximity sensors trigger, power reduction will be activated to body-worn and Handheld.
6. For some WWAN bands, sensor on power level is higher than hotspot power level, so front/back sensor on SAR can represent hotspot conservatively.
7. This device supports HPUE for LTE Band 41 with class 2 level, HPUE power has been measured separately. For HPUE power is higher than power class 3 but with lower duty cycle, the maximum average power for class 2 and class 3 is almost the same, so we chose power class 3 full SAR testing and power class 2 verify the worst case of power class 3 SAR.
8. 5GNR n77/n78 supports HPUE, HPUE power and SAR testing performed separately.
9. 5GNR n77/n78 HPUE with higher power, 5GNR n77/n78 HPUE SAR can represent power class 3 level SAR.
10. For 5G NR test, using FTM (Factory Test Mode) with default 100% duty cycle transmission to perform SAR testing.
11. NSA and SA mode should perform SAR separately. For the maximum power of NSA mode is the same as SA total power level, so SA SAR can represent NSA mode SAR.
12. 5GNR NSA mode, the power level is the same as 5GNR SA mode, so 5GNR NSA mode and SA mode power table only show one time.
13. 5G NR supports CP-OFDM and DFT-s-OFDM modulation, for DFT-s-OFDM power is higher than CP-OFDM, so only show DFT-s-OFDM power table and chose DFT-s-OFDM to perform SAR testing.
14. For DFT-s-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction

for the CP-OFDM mode will not higher than DFT-s-OFDM mode, therefore, CP-OFDM measurement is unnecessary.

15. Per KDB648474 D04v01r03, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, when hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.
    a. For this device SAR for WWAN/WLAN transmitter scaled to maximum output power mode for product specific 10g SAR is higher than 1.2W/kg of GSM850/1900, WCDMA Band II/V, LTE Band 2/7/26/38/41/42, 5GNR n7/n77/n78, WLAN5.2/5.8GHz, therefore product specific 10g SAR is necessary.
    b. WLAN 5.3/5.5GHz tested the product specific 10g SAR since it has no hotspot mode.
    c. When 10-g product specific 10g SAR is considered, SAR thresholds is specified in the procedures for SAR test reduction and exclusion should be multiplied by 2.5.

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.
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 / HSPA+ 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 / HSPA+ to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA / HSPA+ , and according to the following RF output power, the output power results of the secondary modes (HSDPA / HSUPA / DC-HSDPA / HSPA+) are less than ¼ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA / HSPA+ .

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/64QAM/256QAM 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/64QAM/256QAM 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 B5 / B26 / B38 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 B5 / B38 SAR test was covered by LTE B26 / B41; according to April 2015 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

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 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.
   b. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
   c. 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.
   d. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not ½ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK /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 /n7/n77 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/Bluetooth 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. During SAR testing the WLAN transmission was verified using a spectrum analyzer.

16.1 Head SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	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)
850MHz																					
01	GSM850	-	-	-	-	GPRS (2 Tx slots)	Right Cheek	0mm	Ant 0	DSI 2	189	836.4	1	30.81	32.00	1.315	-	-	0.05	0.317	**0.417**
	GSM850	-	-	-	-	GPRS (2 Tx slots)	Right Tilted	0mm	Ant 0	DSI 2	189	836.4	1	30.81	32.00	1.315	-	-	0.01	0.177	0.233
	GSM850	-	-	-	-	GPRS (2 Tx slots)	Left Cheek	0mm	Ant 0	DSI 2	189	836.4	1	30.81	32.00	1.315	-	-	0.02	0.268	0.352
	GSM850	-	-	-	-	GPRS (2 Tx slots)	Left Tilted	0mm	Ant 0	DSI 2	189	836.4	1	30.81	32.00	1.315	-	-	0.01	0.153	0.201
02	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	DSI 2	4182	836.4	1	22.78	24.00	1.324	-	-	-0.13	0.292	**0.387**
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	DSI 2	4182	836.4	1	22.78	24.00	1.324	-	-	0.02	0.144	0.191
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	DSI 2	4182	836.4	1	22.78	24.00	1.324	-	-	0.08	0.266	0.352
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	DSI 2	4182	836.4	1	22.78	24.00	1.324	-	-	0.06	0.138	0.183
03	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 2	26865	831.5	1	22.32	24.00	1.472	-	-	0.05	0.220	**0.324**
	LTE Band 26	15M	QPSK	36	0	-	Right Cheek	0mm	Ant 0	DSI 2	26865	831.5	1	21.31	23.00	1.476	-	-	0.07	0.125	0.184
	LTE Band 26	15M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 2	26865	831.5	1	22.32	24.00	1.472	-	-	0.01	0.107	0.158
	LTE Band 26	15M	QPSK	36	0	-	Right Tilted	0mm	Ant 0	DSI 2	26865	831.5	1	21.31	23.00	1.476	-	-	0.06	0.060	0.089
	LTE Band 26	15M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 2	26865	831.5	1	22.32	24.00	1.472	-	-	0.09	0.189	0.278
	LTE Band 26	15M	QPSK	36	0	-	Left Cheek	0mm	Ant 0	DSI 2	26865	831.5	1	21.31	23.00	1.476	-	-	0.02	0.108	0.159
	LTE Band 26	15M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 2	26865	831.5	1	22.32	24.00	1.472	-	-	0.08	0.099	0.146
	LTE Band 26	15M	QPSK	36	0	-	Left Tilted	0mm	Ant 0	DSI 2	26865	831.5	1	21.31	23.00	1.476	-	-	0.06	0.056	0.083
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 2	167300	836.5	1	22.88	24.00	1.294	-	-	0.05	0.120	0.155
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 2	167300	836.5	1	22.71	24.00	1.346	-	-	0.02	0.131	0.176
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 2	167300	836.5	1	22.88	24.00	1.294	-	-	0.05	0.063	0.082
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 2	167300	836.5	1	22.71	24.00	1.346	-	-	0.01	0.069	0.093
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 2	167300	836.5	1	22.88	24.00	1.294	-	-	0.02	0.104	0.135
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 2	167300	836.5	1	22.71	24.00	1.346	-	-	0.01	0.114	0.153
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 2	167300	836.5	1	22.88	24.00	1.294	-	-	0.06	0.059	0.076
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 2	167300	836.5	1	22.71	24.00	1.346	-	-	0.08	0.063	0.085
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	167300	836.5	1	23.28	24.00	1.180	-	-	0.03	0.336	0.397
04	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	167300	836.5	1	23.01	24.00	1.256	-	-	0.01	0.391	**0.491**
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	167300	836.5	1	23.28	24.00	1.180	-	-	0.06	0.287	0.339
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	167300	836.5	1	23.01	24.00	1.256	-	-	0.09	0.338	0.425
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 2	167300	836.5	1	23.28	24.00	1.180	-	-	0.02	0.309	0.365
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 2	167300	836.5	1	23.01	24.00	1.256	-	-	0.08	0.367	0.461
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 2	167300	836.5	1	23.28	24.00	1.180	-	-	0.06	0.285	0.336
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 2	167300	836.5	1	23.01	24.00	1.256	-	-	0.09	0.333	0.418
	LTE Band 5	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	20525	836.5	1	21.69	23.00	1.352	-	-	0.01	0.453	0.612
	LTE Band 5	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 1	DSI 2	20525	836.5	1	20.71	22.00	1.346	-	-	0.06	0.257	0.346
	LTE Band 5	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	20525	836.5	1	21.69	23.00	1.352	-	-	0.09	0.392	0.530
	LTE Band 5	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 1	DSI 2	20525	836.5	1	20.71	22.00	1.346	-	-	0.05	0.225	0.303
05	LTE Band 5	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 2	20525	836.5	1	21.69	23.00	1.352	-	-	0.02	0.472	**0.638**
	LTE Band 5	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 2	20525	836.5	2	21.69	23.00	1.352	-	-	-0.03	0.378	0.511
	LTE Band 5	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 1	DSI 2	20525	836.5	1	20.71	22.00	1.346	-	-	0.07	0.276	0.371
	LTE Band 5	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 2	20525	836.5	1	21.69	23.00	1.352	-	-	0.06	0.442	0.598
	LTE Band 5	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 1	DSI 2	20525	836.5	1	20.71	22.00	1.346	-	-	0.08	0.251	0.338
1900MHz																					
06	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Right Cheek	0mm	Ant 0	DSI 2	661	1880	1	28.20	29.50	1.349	-	-	-0.04	0.102	**0.138**
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Right Tilted	0mm	Ant 0	DSI 2	661	1880	1	28.20	29.50	1.349	-	-	0.09	0.053	0.071
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Left Cheek	0mm	Ant 0	DSI 2	661	1880	1	28.20	29.50	1.349	-	-	0.02	0.075	0.101
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Left Tilted	0mm	Ant 0	DSI 2	661	1880	1	28.20	29.50	1.349	-	-	0.08	0.075	0.101
07	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	DSI 2	9400	1880	1	22.65	24.00	1.365	-	-	0.04	0.141	**0.192**
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	DSI 2	9400	1880	1	22.65	24.00	1.365	-	-	0.08	0.089	0.121

	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	DSI 2	9400	1880	1	22.65	24.00	1.365	-	-	0.04	0.109	0.149
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	DSI 2	9400	1880	1	22.65	24.00	1.365	-	-	0.06	0.108	0.147
08	LTE Band 2	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 2	18900	1880	1	22.18	24.00	1.521	-	-	0.07	0.147	**0.224**
	LTE Band 2	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	DSI 2	18900	1880	1	21.26	23.00	1.493	-	-	0.02	0.085	0.127
	LTE Band 2	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 2	18900	1880	1	22.18	24.00	1.521	-	-	0.04	0.097	0.147
	LTE Band 2	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	DSI 2	18900	1880	1	21.26	23.00	1.493	-	-	0.09	0.058	0.087
	LTE Band 2	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 2	18900	1880	1	22.18	24.00	1.521	-	-	0.07	0.113	0.172
	LTE Band 2	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	DSI 2	18900	1880	1	21.26	23.00	1.493	-	-	0.03	0.064	0.096
	LTE Band 2	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 2	18900	1880	1	22.18	24.00	1.521	-	-	0.06	0.117	0.178
	LTE Band 2	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	DSI 2	18900	1880	1	21.26	23.00	1.493	-	-	0.01	0.069	0.103
2600MHz																					
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	21100	2535	1	17.95	18.30	1.084	-	-	0.04	0.869	0.942
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	20850	2510	1	17.81	18.30	1.119	-	-	0.09	0.872	0.976
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	21350	2560	1	17.83	18.30	1.114	-	-	0.07	0.894	0.996
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	21100	2535	1	17.88	18.30	1.102	-	-	0.03	0.875	0.964
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	20850	2510	1	17.69	18.30	1.151	-	-	0.06	0.931	1.071
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	21350	2560	1	17.87	18.30	1.104	-	-	0.01	0.889	0.982
	LTE Band 7	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 1	DSI 2	21100	2535	1	17.67	18.30	1.156	-	-	0.03	0.894	1.034
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	21100	2535	1	17.95	18.30	1.084	-	-	0.02	1.000	1.084
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	20850	2510	1	17.81	18.30	1.119	-	-	0.04	0.998	1.117
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	21350	2560	1	17.83	18.30	1.114	-	-	0.09	1.030	1.148
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	21100	2535	1	17.88	18.30	1.102	-	-	0.02	1.020	1.124
09	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	20850	2510	1	17.69	18.30	1.151	-	-	0.01	1.070	**1.231**
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	21350	2560	1	17.87	18.30	1.104	-	-	0.06	1.030	1.137
	LTE Band 7	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 1	DSI 2	21100	2535	1	17.67	18.30	1.156	-	-	0.04	1.040	1.202
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 2	21100	2535	1	17.95	18.30	1.084	-	-	0.03	0.362	0.392
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 2	21100	2535	1	17.88	18.30	1.102	-	-	0.04	0.385	0.424
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 2	21100	2535	1	17.95	18.30	1.084	-	-	0.01	0.479	0.519
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 2	21100	2535	1	17.88	18.30	1.102	-	-	0.01	0.502	0.553
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2 Simultaneous	20850	2510	1	16.19	17.30	1.291	-	-	-0.01	0.703	0.908
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 2	21100	2535	1	22.28	24.00	1.486	-	-	0.02	0.251	0.373
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	DSI 2	21100	2535	1	21.30	23.00	1.479	-	-	0.06	0.206	0.305
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	DSI 2	21100	2535	1	22.28	24.00	1.486	-	-	0.09	0.172	0.256
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	DSI 2	21100	2535	1	21.30	23.00	1.479	-	-	0.01	0.143	0.212
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 2	21100	2535	1	22.28	24.00	1.486	-	-	0.06	0.406	0.603
	LTE Band 7C	20M	QPSK	1	99	-	Left Cheek	0mm	Ant 5	DSI 2	21100+ 21298	2535+ 2554.8	1	22.21	24.00	1.510	-	-	-0.08	0.359	0.542
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	DSI 2	21100	2535	1	21.30	23.00	1.479	-	-	0.03	0.339	0.501
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	DSI 2	21100	2535	1	22.28	24.00	1.486	-	-	0.01	0.162	0.241
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	DSI 2	21100	2535	1	21.30	23.00	1.479	-	-	0.02	0.131	0.194
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	40620	2593	1	19.84	20.30	1.112	62.9	1.006	-0.01	1.070	1.197
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	39750	2506	1	19.81	20.30	1.119	62.9	1.006	0.02	0.928	1.045
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	40185	2549.5	1	19.77	20.30	1.130	62.9	1.006	0.03	0.904	1.027
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	41055	2636.5	1	19.82	20.30	1.117	62.9	1.006	0.06	0.962	1.081
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	41490	2680	1	19.82	20.30	1.117	62.9	1.006	0.01	0.920	1.034
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	40620	2593	1	19.83	20.30	1.114	62.9	1.006	0.03	0.938	1.051
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	39750	2506	1	19.79	20.30	1.125	62.9	1.006	0.02	0.947	1.071
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	40185	2549.5	1	19.80	20.30	1.122	62.9	1.006	0.04	0.927	1.046
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	41055	2636.5	1	19.81	20.30	1.119	62.9	1.006	0.09	0.944	1.063
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	41490	2680	1	19.78	20.30	1.127	62.9	1.006	0.02	0.931	1.056
	LTE Band 41	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 1	DSI 2	40620	2593	1	19.75	20.30	1.135	62.9	1.006	0.04	0.930	1.062
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	40620	2593	1	19.84	20.30	1.112	62.9	1.006	-0.02	0.908	1.016
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	39750	2506	1	19.81	20.30	1.119	62.9	1.006	-0.06	0.939	1.057
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	40185	2549.5	1	19.77	20.30	1.130	62.9	1.006	0.06	0.912	1.037
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	41055	2636.5	1	19.82	20.30	1.117	62.9	1.006	0.04	0.912	1.025
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	41490	2680	1	19.82	20.30	1.117	62.9	1.006	0.03	0.904	1.016

	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	40620	2593	1	19.83	20.30	1.114	62.9	1.006	0.05	0.885	0.992
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	39750	2506	1	19.79	20.30	1.125	62.9	1.006	0.09	0.861	0.974
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	40185	2549.5	1	19.80	20.30	1.122	62.9	1.006	0.02	0.901	1.017
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	41055	2636.5	1	19.81	20.30	1.119	62.9	1.006	0.04	0.889	1.001
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	41490	2680	1	19.78	20.30	1.127	62.9	1.006	0.09	0.900	1.021
	LTE Band 41	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 1	DSI 2	40620	2593	1	19.75	20.30	1.135	62.9	1.006	0.07	0.899	1.026
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 2	40620	2593	1	19.84	20.30	1.112	62.9	1.006	0.03	0.329	0.368
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 2	40620	2593	1	19.83	20.30	1.114	62.9	1.006	0.06	0.246	0.276
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 2	40620	2593	1	19.84	20.30	1.112	62.9	1.006	0.04	0.423	0.473
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 2	40620	2593	1	19.83	20.30	1.114	62.9	1.006	0.03	0.320	0.359
10	LTE Band 41 HPUE	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	40620	2593	1	21.47	21.90	1.104	42.9	1.009	-0.01	1.110	**1.237**
	LTE Band 41C HPUE	20M	QPSK	1	99		Right Cheek	0mm	Ant 1	DSI 2	40620+ 40818	2593+ 2612.8	1	21.42	21.90	1.117	42.9	1.009	-0.01	1.010	1.138
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2 Simultaneous	40620	2593	1	18.45	18.80	1.084	62.9	1.006	0.02	0.755	0.823
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2 Simultaneous	40620	2593	1	19.99	20.40	1.099	42.9	1.009	0.09	0.749	0.831
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 5	DSI 2	507000	2535	1	22.66	24.00	1.361	-	-	0.02	0.216	0.294
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 5	DSI 2	507000	2535	1	22.61	24.00	1.377	-	-	0.06	0.186	0.256
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 5	DSI 2	507000	2535	1	22.66	24.00	1.361	-	-	0.09	0.181	0.246
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 5	DSI 2	507000	2535	1	22.61	24.00	1.377	-	-	0.05	0.138	0.190
11	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 2	507000	2535	1	22.66	24.00	1.361	-	-	0.03	0.396	**0.539**
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 2	507000	2535	1	22.61	24.00	1.377	-	-	0.06	0.331	0.456
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 5	DSI 2	507000	2535	1	22.66	24.00	1.361	-	-	0.07	0.163	0.222
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 5	DSI 2	507000	2535	1	22.61	24.00	1.377	-	-	0.01	0.136	0.187
3500-3900MHz																					
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 2	42590	3500	1	17.09	18.20	1.291	62.9	1.006	0.06	0.551	0.716
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 2	42590	3500	1	17.04	18.20	1.306	62.9	1.006	0.06	0.461	0.606
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 2	42590	3500	1	17.09	18.20	1.291	62.9	1.006	0.05	0.564	0.733
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 2	42590	3500	1	17.04	18.20	1.306	62.9	1.006	0.07	0.465	0.611
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 2	42590	3500	1	17.09	18.20	1.291	62.9	1.006	-0.02	0.929	1.207
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 2	42190	3460	1	17.01	18.20	1.315	62.9	1.006	0.06	0.922	1.220
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 2	42990	3540	1	16.97	18.20	1.327	62.9	1.006	0.02	0.939	1.254
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 2	42590	3500	1	17.04	18.20	1.306	62.9	1.006	0.03	0.776	1.020
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 2	42190	3460	1	16.97	18.20	1.327	62.9	1.006	0.04	0.763	1.019
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 2	42990	3540	1	16.95	18.20	1.334	62.9	1.006	0.05	0.783	1.050
	LTE Band 42 part27Q	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 2	DSI 2	42590	3500	1	16.99	18.20	1.321	62.9	1.006	0.09	0.773	1.027
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 2	42590	3500	1	17.09	18.20	1.291	62.9	1.006	0.02	0.946	1.229
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 2	42190	3460	1	17.01	18.20	1.315	62.9	1.006	0.01	0.942	1.246
12	LTE Band 42 part27Q	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 2	42990	3540	1	16.97	18.20	1.327	62.9	1.006	-0.03	0.949	**1.267**
	LTE Band 42C part27Q	20M	QPSK	1	0		Left Tilted	0mm	Ant 2	DSI 2	42990+ 42792	3540+ 3520.2	1	16.87	18.20	1.358	62.9	1.006	0.08	0.862	1.178
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 2	42990	3540	2	16.97	18.20	1.327	62.9	1.006	0.02	0.853	1.139
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	DSI 2	42590	3500	1	17.04	18.20	1.306	62.9	1.006	0.03	0.806	1.059
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	DSI 2	42190	3460	1	16.97	18.20	1.327	62.9	1.006	0.01	0.803	1.072
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	DSI 2	42990	3540	1	16.95	18.20	1.334	62.9	1.006	0.05	0.803	1.077
	LTE Band 42 part27Q	20M	QPSK	100	0	-	Left Tilted	0mm	Ant 2	DSI 2	42590	3500	1	16.99	18.20	1.321	62.9	1.006	0.09	0.803	1.067
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 2 Simultaneous	42990	3540	1	15.87	17.20	1.358	62.9	1.006	0.01	0.631	0.862
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 2	656000	3840	1	16.65	17.80	1.303	-	-	0.06	0.498	0.649
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 2	656000	3840	1	16.63	17.80	1.309	-	-	0.01	0.453	0.593
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 2	656000	3840	1	16.65	17.80	1.303	-	-	-0.02	0.557	0.726
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 2	656000	3840	1	16.63	17.80	1.309	-	-	0.03	0.566	0.741
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	DSI 2	656000	3840	1	16.65	17.80	1.303	-	-	0.04	0.539	0.702
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	DSI 2	656000	3840	1	16.63	17.80	1.309	-	-	0.03	0.598	0.783
13	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 2	656000	3840	1	16.65	17.80	1.303	-	-	0.01	0.796	**1.037**
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 2	656000	3840	2	16.65	17.80	1.303	-	-	0.03	0.696	0.907
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 2	656000	3840	1	16.63	17.80	1.309	-	-	0.06	0.760	0.995
	FR1 n77 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 2	656000	3840	1	16.58	17.80	1.324	-	-	-0.02	0.748	0.991
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 2 Simultaneous	656000	3840	1	15.12	16.80	1.472	-	-	0.03	0.560	0.824

	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 3	DSI 2	656000	3840	1	23.83	24.50	1.167	-	-	0.08	0.142	0.166
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 3	DSI 2	656000	3840	1	23.67	24.50	1.211	-	-	0.06	0.151	0.183
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 3	DSI 2	656000	3840	1	23.83	24.50	1.167	-	-	0.01	0.083	0.097
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 3	DSI 2	656000	3840	1	23.67	24.50	1.211	-	-	0.06	0.072	0.087
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 3	DSI 2	656000	3840	1	23.83	24.50	1.167	-	-	0.04	0.055	0.064
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 3	DSI 2	656000	3840	1	23.67	24.50	1.211	-	-	0.02	0.062	0.075
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 3	DSI 2	656000	3840	1	23.83	24.50	1.167	-	-	0.09	0.074	0.086
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 3	DSI 2	656000	3840	1	23.67	24.50	1.211	-	-	0.01	0.070	0.085
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 2	656000	3840	1	21.62	22.50	1.225	-	-	0.09	0.112	0.137
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 2	656000	3840	1	21.60	22.50	1.230	-	-	0.02	0.093	0.114
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	DSI 2	656000	3840	1	21.62	22.50	1.225	-	-	0.06	0.163	0.200
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	DSI 2	656000	3840	1	21.60	22.50	1.230	-	-	0.01	0.119	0.146
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 2	656000	3840	1	21.62	22.50	1.225	-	-	0.06	0.225	0.276
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 2	656000	3840	1	21.60	22.50	1.230	-	-	0.07	0.171	0.210
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 2	656000	3840	1	21.62	22.50	1.225	-	-	0.02	0.115	0.141
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 2	656000	3840	1	21.60	22.50	1.230	-	-	0.06	0.075	0.092
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 2	656000	3840	1	22.55	24.00	1.396	-	-	0.02	0.044	0.061
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 2	656000	3840	1	22.51	24.00	1.409	-	-	0.06	0.043	0.061
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 2	656000	3840	1	22.55	24.00	1.396	-	-	0.01	0.048	0.067
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 2	656000	3840	1	22.51	24.00	1.409	-	-	0.03	0.048	0.068
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 2	656000	3840	1	22.55	24.00	1.396	-	-	0.02	0.066	0.092
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 2	656000	3840	1	22.51	24.00	1.409	-	-	0.06	0.059	0.083
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 2	656000	3840	1	22.55	24.00	1.396	-	-	0.01	0.049	0.068
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 2	656000	3840	1	22.51	24.00	1.409	-	-	0.06	0.057	0.080

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	Sample	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)
WLAN/BT																	
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 8	Full power	1	2412	1	19.23	20.50	1.340	100	1.000	0.06	0.366	0.490
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 8	Full power	1	2412	1	19.23	20.50	1.340	100	1.000	0.04	0.352	0.472
14	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 8	Full power	1	2412	1	19.23	20.50	1.340	100	1.000	-0.01	1.020	**1.366**
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 8	Full power	1	2412	2	19.23	20.50	1.340	100	1.000	0.09	0.990	1.326
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 8	Full power	11	2462	1	19.21	20.50	1.346	100	1.000	0.02	0.831	1.118
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 8	Full power	1	2412	1	19.23	20.50	1.340	100	1.000	0.03	0.836	1.120
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 8	Full power	11	2462	1	19.21	20.50	1.346	100	1.000	0.04	0.708	0.953
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 8	Full power	6	2437	1	18.94	20.50	1.432	98.28	1.018	0.06	0.815	1.188
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 8	Simultaneous	1	2412	1	14.72	16.00	1.343	100	1.000	0.08	0.433	0.581
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 8	Full power	0	2402	1	12.40	13.00	1.148	76.91	1.083	0.01	0.048	0.060
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 8	Full power	0	2402	1	12.40	13.00	1.148	76.91	1.083	0.02	0.041	0.051
15	Bluetooth	1Mbps	Left Cheek	0mm	Ant 8	Full power	0	2402	1	12.40	13.00	1.148	76.91	1.083	-0.08	0.101	**0.126**
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 8	Full power	0	2402	1	12.40	13.00	1.148	76.91	1.083	0.01	0.087	0.108
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 8	Standalone	58	5290	1	13.28	15.00	1.486	92.17	1.085	0.03	0.318	0.513
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 8	Standalone	58	5290	1	13.28	15.00	1.486	92.17	1.085	0.09	0.393	0.633
16	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 8	Standalone	58	5290	1	13.28	15.00	1.486	92.17	1.085	0.07	0.720	**1.161**
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 8	Standalone	58	5290	1	13.28	15.00	1.486	92.17	1.085	0.01	0.707	1.140
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 8	Simultaneous	58	5290	1	11.36	13.00	1.459	92.17	1.085	0.06	0.378	0.598
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 8	Standalone	138	5690	1	14.20	16.00	1.514	92.17	1.085	0.01	0.334	0.549
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 8	Standalone	138	5690	1	14.20	16.00	1.514	92.17	1.085	0.05	0.385	0.632
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 8	Standalone	138	5690	1	14.20	16.00	1.514	92.17	1.085	0.06	0.720	1.182
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 8	Standalone	106	5530	1	14.12	15.50	1.374	92.17	1.085	0.08	0.706	1.053
17	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 8	Standalone	138	5690	1	14.20	16.00	1.514	92.17	1.085	-0.08	0.725	**1.191**
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 8	Standalone	138	5690	2	14.20	16.00	1.514	92.17	1.085	0.03	0.698	1.146
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 8	Standalone	106	5530	1	14.12	15.50	1.374	92.17	1.085	0.02	0.704	1.050
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 8	Simultaneous	138	5690	1	12.61	14.00	1.377	92.17	1.085	0.08	0.388	0.580
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 8	Standalone	155	5775	1	16.24	17.50	1.337	92.17	1.085	0.06	0.532	0.772
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 8	Standalone	155	5775	1	16.24	17.50	1.337	92.17	1.085	-0.01	0.613	0.889
18	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 8	Standalone	155	5775	1	16.24	17.50	1.337	92.17	1.085	0.03	0.819	**1.188**
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 8	Standalone	155	5775	2	16.24	17.50	1.337	92.17	1.085	0.03	0.729	1.057
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 8	Standalone	155	5775	1	16.24	17.50	1.337	92.17	1.085	0.06	0.812	1.178
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 8	Simultaneous	155	5775	1	13.51	15.00	1.409	92.17	1.085	0.01	0.389	0.595

16.2 Hotspot SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	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)
850MHz																					
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 0	DSI 3	189	836.4	1	26.05	27.20	1.303	-	-	0.01	0.490	0.639
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	DSI 3	189	836.4	1	26.05	27.20	1.303	-	-	0.02	0.935	1.218
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	DSI 3	128	824.2	1	26.05	27.20	1.303	-	-	0.01	0.913	1.190
19	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	DSI 3	251	848.8	1	26.02	27.20	1.312	-	-	0.03	0.943	**1.237**
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Side	5mm	Ant 0	DSI 3	189	836.4	1	26.05	27.20	1.303	-	-	-0.02	0.198	0.258
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Side	5mm	Ant 0	DSI 3	189	836.4	1	26.05	27.20	1.303	-	-	0.02	0.519	0.676
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	5mm	Ant 0	DSI 3	189	836.4	1	26.05	27.20	1.303	-	-	0.04	0.640	0.834
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	5mm	Ant 0	DSI 3	128	824.2	1	26.05	27.20	1.303	-	-	0.03	0.630	0.821
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	5mm	Ant 0	DSI 3	251	848.8	1	26.02	27.20	1.312	-	-	-0.02	0.612	0.803
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	DSI 3	4182	836.4	1	22.78	24.00	1.324	-	-	0.03	0.543	0.719
20	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	DSI 3	4182	836.4	1	22.78	24.00	1.324	-	-	-0.05	0.953	**1.262**
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	DSI 3	4132	826.4	1	22.61	24.00	1.377	-	-	0.02	0.910	1.253
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	DSI 3	4233	846.6	1	22.66	24.00	1.361	-	-	0.06	0.900	1.225
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 0	DSI 3	4182	836.4	1	22.78	24.00	1.324	-	-	0.01	0.186	0.246
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 0	DSI 3	4182	836.4	1	22.78	24.00	1.324	-	-	0.06	0.428	0.567
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	DSI 3	4182	836.4	1	22.78	24.00	1.324	-	-	0.02	0.665	0.881
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	DSI 3	4132	826.4	1	22.61	24.00	1.377	-	-	-0.03	0.643	0.886
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	DSI 3	4233	846.6	1	22.66	24.00	1.361	-	-	0.01	0.680	0.926
	LTE Band 26	15M	QPSK	1	0	-	Front	5mm	Ant 0	DSI 3	26865	831.5	1	22.32	23.40	1.282	-	-	0.03	0.528	0.677
	LTE Band 26	15M	QPSK	36	0	-	Front	5mm	Ant 0	DSI 3	26865	831.5	1	21.31	23.00	1.476	-	-	-0.02	0.322	0.475
21	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 0	DSI 3	26865	831.5	1	22.32	23.40	1.282	-	-	0.04	0.968	**1.241**
	LTE Band 26	15M	QPSK	36	0	-	Back	5mm	Ant 0	DSI 3	26865	831.5	1	21.31	23.00	1.476	-	-	0.01	0.764	1.127
	LTE Band 26	15M	QPSK	75	0	-	Back	5mm	Ant 0	DSI 3	26865	831.5	1	21.21	23.00	1.510	-	-	0.03	0.723	1.092
	LTE Band 26	15M	QPSK	1	0	-	Left Side	5mm	Ant 0	DSI 3	26865	831.5	1	22.32	23.40	1.282	-	-	0.05	0.163	0.209
	LTE Band 26	15M	QPSK	36	0	-	Left Side	5mm	Ant 0	DSI 3	26865	831.5	1	21.31	23.00	1.476	-	-	0.01	0.101	0.149
	LTE Band 26	15M	QPSK	1	0	-	Right Side	5mm	Ant 0	DSI 3	26865	831.5	1	22.32	23.40	1.282	-	-	0.06	0.386	0.495
	LTE Band 26	15M	QPSK	36	0	-	Right Side	5mm	Ant 0	DSI 3	26865	831.5	1	21.31	23.00	1.476	-	-	0.02	0.236	0.348
	LTE Band 26	15M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI 3	26865	831.5	1	22.32	23.40	1.282	-	-	0.04	0.597	0.766
	LTE Band 26	15M	QPSK	36	0	-	Bottom Side	5mm	Ant 0	DSI 3	26865	831.5	1	21.31	23.00	1.476	-	-	0.09	0.404	0.596
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 0	DSI 3	167300	836.5	1	22.88	24.00	1.294	-	-	0.06	0.421	0.545
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 0	DSI 3	167300	836.5	1	22.71	24.00	1.346	-	-	0.03	0.481	0.647
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 0	DSI 3	167300	836.5	1	22.88	24.00	1.294	-	-	-0.01	0.833	1.078
22	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 0	DSI 3	167300	836.5	1	22.71	24.00	1.346	-	-	0.07	0.846	**1.139**
	FR1 n5	20M	QPSK	100	0	DFT-SCS-15KHz	Back	5mm	Ant 0	DSI 3	167300	836.5	1	21.83	23.00	1.309	-	-	0.03	0.690	0.903
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 0	DSI 3	167300	836.5	1	22.88	24.00	1.294	-	-	0.02	0.150	0.194
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	5mm	Ant 0	DSI 3	167300	836.5	1	22.71	24.00	1.346	-	-	0.01	0.155	0.209
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 0	DSI 3	167300	836.5	1	22.88	24.00	1.294	-	-	-0.02	0.349	0.452
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	5mm	Ant 0	DSI 3	167300	836.5	1	22.71	24.00	1.346	-	-	0.03	0.358	0.482
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 0	DSI 3	167300	836.5	1	22.88	24.00	1.294	-	-	0.08	0.446	0.577
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	5mm	Ant 0	DSI 3	167300	836.5	1	22.71	24.00	1.346	-	-	0.02	0.543	0.731
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	DSI 3	167300	836.5	1	23.28	24.00	1.180	-	-	0.06	0.097	0.114
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 1	DSI 3	167300	836.5	1	23.01	24.00	1.256	-	-	0.03	0.121	0.152
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI 3	167300	836.5	1	23.28	24.00	1.180	-	-	0.01	0.234	0.276
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI 3	167300	836.5	1	23.01	24.00	1.256	-	-	0.05	0.259	0.325
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 1	DSI 3	167300	836.5	1	23.28	24.00	1.180	-	-	0.03	0.030	0.035
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	5mm	Ant 1	DSI 3	167300	836.5	1	23.01	24.00	1.256	-	-	0.02	0.034	0.043
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 1	DSI 3	167300	836.5	1	23.28	24.00	1.180	-	-	0.03	0.035	0.041
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	5mm	Ant 1	DSI 3	167300	836.5	1	23.01	24.00	1.256	-	-	0.01	0.042	0.053

	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI 3	167300	836.5	1	23.28	24.00	1.180	-	-	0.05	0.199	0.235
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI 3	167300	836.5	1	23.01	24.00	1.256	-	-	-0.02	0.261	0.328
	LTE Band 5	10M	QPSK	1	0	-	Front	5mm	Ant 1	DSI 3	20525	836.5	1	21.69	23.00	1.352	-	-	0.03	0.145	0.196
	LTE Band 5	10M	QPSK	25	0	-	Front	5mm	Ant 1	DSI 3	20525	836.5	1	20.71	22.00	1.346	-	-	0.01	0.092	0.124
23	LTE Band 5	10M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 3	20525	836.5	1	21.69	23.00	1.352	-	-	-0.04	0.353	**0.477**
	LTE Band 5	10M	QPSK	25	0	-	Back	5mm	Ant 1	DSI 3	20525	836.5	1	20.71	22.00	1.346	-	-	0.06	0.213	0.287
	LTE Band 5	10M	QPSK	1	0	-	Left Side	5mm	Ant 1	DSI 3	20525	836.5	1	21.69	23.00	1.352	-	-	0.03	0.044	0.059
	LTE Band 5	10M	QPSK	25	0	-	Left Side	5mm	Ant 1	DSI 3	20525	836.5	1	20.71	22.00	1.346	-	-	0.01	0.030	0.040
	LTE Band 5	10M	QPSK	1	0	-	Right Side	5mm	Ant 1	DSI 3	20525	836.5	1	21.69	23.00	1.352	-	-	0.05	0.051	0.069
	LTE Band 5	10M	QPSK	25	0	-	Right Side	5mm	Ant 1	DSI 3	20525	836.5	1	20.71	22.00	1.346	-	-	0.03	0.040	0.054
	LTE Band 5	10M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 3	20525	836.5	1	21.69	23.00	1.352	-	-	-0.03	0.334	0.452
	LTE Band 5	10M	QPSK	25	0	-	Top Side	5mm	Ant 1	DSI 3	20525	836.5	1	20.71	22.00	1.346	-	-	0.01	0.204	0.275
1900MHz																				
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 0	DSI 3	661	1880	1	19.50	20.50	1.259	-	-	0.03	0.363	0.457
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	DSI 3	661	1880	1	19.50	20.50	1.259	-	-	0.03	0.661	0.832
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	DSI 3	512	1850.2	1	19.45	20.50	1.274	-	-	0.06	0.652	0.830
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	DSI 3	810	1909.8	1	19.42	20.50	1.282	-	-	0.09	0.633	0.812
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Side	5mm	Ant 0	DSI 3	661	1880	1	19.50	20.50	1.259	-	-	0.02	0.075	0.094
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Side	5mm	Ant 0	DSI 3	661	1880	1	19.50	20.50	1.259	-	-	0.01	0.116	0.146
24	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	5mm	Ant 0	DSI 3	661	1880	1	19.50	20.50	1.259	-	-	-0.04	0.977	**1.230**
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	5mm	Ant 0	DSI 3	512	1850.2	1	19.45	20.50	1.274	-	-	0.03	0.951	1.211
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	5mm	Ant 0	DSI 3	810	1909.8	1	19.42	20.50	1.282	-	-	0.01	0.934	1.198
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	DSI 3	9400	1880	1	15.19	16.40	1.321	-	-	0.01	0.386	0.510
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	DSI 3	9400	1880	1	15.19	16.40	1.321	-	-	0.05	0.700	0.925
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	DSI 3	9262	1852.4	1	15.02	16.40	1.374	-	-	0.03	0.642	0.882
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	DSI 3	9538	1907.6	1	15.16	16.40	1.330	-	-	0.02	0.700	0.931
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 0	DSI 3	9400	1880	1	15.19	16.40	1.321	-	-	0.01	0.066	0.087
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 0	DSI 3	9400	1880	1	15.19	16.40	1.321	-	-	0.02	0.123	0.163
25	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	DSI 3	9400	1880	1	15.19	16.40	1.321	-	-	0.01	0.936	**1.237**
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	DSI 3	9262	1852.4	1	15.02	16.40	1.374	-	-	0.01	0.861	1.183
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	DSI 3	9538	1907.6	1	15.16	16.40	1.330	-	-	0.05	0.920	1.224
	LTE Band 2	20M	QPSK	1	0	-	Front	5mm	Ant 0	DSI 3	18900	1880	1	14.96	16.00	1.271	-	-	0.02	0.399	0.507
	LTE Band 2	20M	QPSK	50	0	-	Front	5mm	Ant 0	DSI 3	18900	1880	1	14.88	16.00	1.294	-	-	0.01	0.226	0.292
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI 3	18900	1880	1	14.96	16.00	1.271	-	-	0.02	0.601	0.764
	LTE Band 2	20M	QPSK	50	0	-	Back	5mm	Ant 0	DSI 3	18900	1880	1	14.88	16.00	1.294	-	-	0.09	0.462	0.598
	LTE Band 2	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	DSI 3	18900	1880	1	14.96	16.00	1.271	-	-	0.02	0.063	0.080
	LTE Band 2	20M	QPSK	50	0	-	Left Side	5mm	Ant 0	DSI 3	18900	1880	1	14.88	16.00	1.294	-	-	0.04	0.041	0.053
	LTE Band 2	20M	QPSK	1	0	-	Right Side	5mm	Ant 0	DSI 3	18900	1880	1	14.96	16.00	1.271	-	-	0.09	0.118	0.150
	LTE Band 2	20M	QPSK	50	0	-	Right Side	5mm	Ant 0	DSI 3	18900	1880	1	14.88	16.00	1.294	-	-	0.06	0.063	0.082
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI 3	18900	1880	1	14.96	16.00	1.271	-	-	0.01	0.960	1.220
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI 3	18700	1860	1	14.93	16.00	1.279	-	-	0.03	0.932	1.192
26	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI 3	19100	1900	1	14.89	16.00	1.291	-	-	0.06	0.966	**1.247**
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI 3	18900	1880	1	14.88	16.00	1.294	-	-	0.01	0.867	1.122
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI 3	18700	1860	1	14.81	16.00	1.315	-	-	0.05	0.848	1.115
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI 3	19100	1900	1	14.84	16.00	1.306	-	-	0.03	0.864	1.129
	LTE Band 2	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 0	DSI 3	18900	1880	1	14.80	16.00	1.318	-	-	0.02	0.770	1.015
2600MHz																				
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 1	DSI 3	21100	2535	1	13.95	15.10	1.303	-	-	0.07	0.216	0.281
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 1	DSI 3	21100	2535	1	13.90	15.10	1.318	-	-	0.01	0.206	0.272
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 3	21100	2535	1	13.95	15.10	1.303	-	-	-0.03	0.397	0.517
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	DSI 3	21100	2535	1	13.90	15.10	1.318	-	-	-0.07	0.432	0.569
	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	DSI 3	21100	2535	1	13.95	15.10	1.303	-	-	0.03	0.126	0.164
	LTE Band 7	20M	QPSK	50	0	-	Left Side	5mm	Ant 1	DSI 3	21100	2535	1	13.90	15.10	1.318	-	-	0.09	0.126	0.166
	LTE Band 7	20M	QPSK	1	0	-	Right Side	5mm	Ant 1	DSI 3	21100	2535	1	13.95	15.10	1.303	-	-	0.01	0.010	0.013
	LTE Band 7	20M	QPSK	50	0	-	Right Side	5mm	Ant 1	DSI 3	21100	2535	1	13.90	15.10	1.318	-	-	0.06	0.008	0.011
	LTE Band 7	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 3	21100	2535	1	13.95	15.10	1.303	-	-	-0.05	0.700	0.912

	LTE Band 7	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 3	20850	2510	1	13.89	15.10	1.321	-	-	0.04	0.702	0.928
	LTE Band 7	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 3	21350	2560	1	13.92	15.10	1.312	-	-	0.01	0.621	0.815
	LTE Band 7	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI 3	21100	2535	1	13.90	15.10	1.318	-	-	-0.03	0.680	0.896
	LTE Band 7	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI 3	20850	2510	1	13.85	15.10	1.334	-	-	0.01	0.618	0.824
	LTE Band 7	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI 3	21350	2560	1	13.81	15.10	1.346	-	-	0.05	0.632	0.851
	LTE Band 7	20M	QPSK	100	0	-	Top Side	5mm	Ant 1	DSI 3	21100	2535	1	13.88	15.10	1.324	-	-	-0.07	0.640	0.848
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 5	DSI 3	21100	2535	1	18.00	19.00	1.259	-	-	0.06	0.593	0.747
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 5	DSI 3	21100	2535	1	17.88	19.00	1.294	-	-	-0.03	0.517	0.669
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 5	DSI 3	21100	2535	1	18.00	19.00	1.259	-	-	0.01	0.941	1.185
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 5	DSI 3	20850	2510	1	17.92	19.00	1.282	-	-	0.05	0.935	1.199
27	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 5	DSI 3	21350	2560	1	17.91	19.00	1.285	-	-	-0.01	0.961	**1.235**
	LTE Band 7C	20M	QPSK	1	0	-	Back	5mm	Ant 5	DSI 3	21350+ 21152	2560+ 2540.2	1	17.90	19.00	1.288	-	-	0.08	0.836	1.077
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 5	DSI 3	21100	2535	1	17.88	19.00	1.294	-	-	0.01	0.756	0.978
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 5	DSI 3	20850	2510	1	17.79	19.00	1.321	-	-	-0.09	0.747	0.987
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 5	DSI 3	21350	2560	1	17.74	19.00	1.337	-	-	0.03	0.795	1.063
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 5	DSI 3	21100	2535	1	17.79	19.00	1.321	-	-	-0.03	0.806	1.065
	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant 5	DSI 3	21100	2535	1	18.00	19.00	1.259	-	-	0.01	0.481	0.606
	LTE Band 7	20M	QPSK	50	0	-	Left Side	5mm	Ant 5	DSI 3	21100	2535	1	17.88	19.00	1.294	-	-	0.06	0.410	0.531
	LTE Band 7	20M	QPSK	1	0	-	Right Side	5mm	Ant 5	DSI 3	21100	2535	1	18.00	19.00	1.259	-	-	0.04	0.079	0.099
	LTE Band 7	20M	QPSK	50	0	-	Right Side	5mm	Ant 5	DSI 3	21100	2535	1	17.88	19.00	1.294	-	-	0.01	0.064	0.083
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 5	DSI 3	21100	2535	1	18.00	19.00	1.259	-	-	-0.03	0.478	0.602
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 5	DSI 3	21100	2535	1	17.88	19.00	1.294	-	-	0.01	0.404	0.523
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 1	DSI 3	40620	2593	1	16.37	17.40	1.268	62.9	1.006	-0.04	0.223	0.284
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 1	DSI 3	40620	2593	1	16.35	17.40	1.274	62.9	1.006	0.09	0.172	0.220
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 3	40620	2593	1	16.37	17.40	1.268	62.9	1.006	0.09	0.547	0.698
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 3	39750	2506	1	16.25	17.40	1.303	62.9	1.006	0.01	0.524	0.687
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 3	40185	2549.5	1	16.29	17.40	1.291	62.9	1.006	0.03	0.510	0.662
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 3	41055	2636.5	1	16.29	17.40	1.291	62.9	1.006	0.01	0.526	0.683
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 3	41490	2680	1	16.27	17.40	1.297	62.9	1.006	0.06	0.512	0.668
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	DSI 3	40620	2593	1	16.35	17.40	1.274	62.9	1.006	-0.05	0.485	0.621
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	DSI 3	39750	2506	1	16.16	17.40	1.330	62.9	1.006	0.01	0.495	0.663
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	DSI 3	40185	2549.5	1	16.26	17.40	1.300	62.9	1.006	0.06	0.455	0.595
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	DSI 3	41055	2636.5	1	16.25	17.40	1.303	62.9	1.006	0.03	0.511	0.670
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	DSI 3	41490	2680	1	16.17	17.40	1.327	62.9	1.006	-0.02	0.519	0.693
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 1	DSI 3	40620	2593	1	16.33	17.40	1.279	62.9	1.006	0.01	0.411	0.529
	LTE Band 41	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	DSI 3	40620	2593	1	16.37	17.40	1.268	62.9	1.006	0.06	0.135	0.172
	LTE Band 41	20M	QPSK	50	0	-	Left Side	5mm	Ant 1	DSI 3	40620	2593	1	16.35	17.40	1.274	62.9	1.006	-0.03	0.114	0.146
	LTE Band 41	20M	QPSK	1	0	-	Right Side	5mm	Ant 1	DSI 3	40620	2593	1	16.37	17.40	1.268	62.9	1.006	0.02	0.011	0.014
	LTE Band 41	20M	QPSK	50	0	-	Right Side	5mm	Ant 1	DSI 3	40620	2593	1	16.35	17.40	1.274	62.9	1.006	0.01	0.010	0.013
	LTE Band 41	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 3	40620	2593	1	16.37	17.40	1.268	62.9	1.006	-0.06	0.739	0.942
	LTE Band 41	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 3	39750	2506	1	16.25	17.40	1.303	62.9	1.006	0.04	0.624	0.818
	LTE Band 41	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 3	40185	2549.5	1	16.29	17.40	1.291	62.9	1.006	0.01	0.707	0.918
	LTE Band 41	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 3	41055	2636.5	1	16.29	17.40	1.291	62.9	1.006	0.01	0.607	0.788
	LTE Band 41	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 3	41490	2680	1	16.27	17.40	1.297	62.9	1.006	0.09	0.611	0.797
	LTE Band 41	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI 3	40620	2593	1	16.35	17.40	1.274	62.9	1.006	0.06	0.701	0.898
	LTE Band 41	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI 3	39750	2506	1	16.16	17.40	1.330	62.9	1.006	0.03	0.681	0.911
	LTE Band 41	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI 3	40185	2549.5	1	16.26	17.40	1.300	62.9	1.006	0.01	0.655	0.857
	LTE Band 41	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI 3	41055	2636.5	1	16.25	17.40	1.303	62.9	1.006	0.06	0.639	0.838
	LTE Band 41	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI 3	41490	2680	1	16.17	17.40	1.327	62.9	1.006	-0.05	0.619	0.827
	LTE Band 41	20M	QPSK	100	0	-	Top Side	5mm	Ant 1	DSI 3	40620	2593	1	16.33	17.40	1.279	62.9	1.006	-0.01	0.622	0.801
28	LTE Band 41 HPUE	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 3	40620	2593	1	17.89	19.00	1.291	42.9	1.009	-0.01	0.747	**0.973**
	LTE Band 41C HPUE	20M	QPSK	1	99		Top Side	5mm	Ant 1	DSI 3	40620+ 40818	2593+ 2612.8	1	17.81	19.00	1.315	42.9	1.009	-0.06	0.689	0.914
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 5	DSI 3	507000	2535	1	18.89	19.80	1.233	-	-	0.06	0.555	0.684
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 5	DSI 3	507000	2535	1	18.76	19.80	1.271	-	-	0.02	0.545	0.692
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 5	DSI 3	507000	2535	1	18.89	19.80	1.233	-	-	0.03	0.985	1.215

29	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 5	DSI 3	507000	2535	1	18.76	19.80	1.271	-	-	-0.01	0.990	**1.258**
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 5	DSI 3	507000	2535	1	18.75	19.80	1.274	-	-	0.01	0.925	1.178
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 5	DSI 3	507000	2535	1	18.89	19.80	1.233	-	-	0.06	0.550	0.678
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant 5	DSI 3	507000	2535	1	18.76	19.80	1.271	-	-	-0.01	0.580	0.737
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 5	DSI 3	507000	2535	1	18.89	19.80	1.233	-	-	0.03	0.086	0.106
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	5mm	Ant 5	DSI 3	507000	2535	1	18.76	19.80	1.271	-	-	0.02	0.105	0.133
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 5	DSI 3	507000	2535	1	18.89	19.80	1.233	-	-	0.09	0.570	0.703
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	5mm	Ant 5	DSI 3	507000	2535	1	18.76	19.80	1.271	-	-	0.04	0.575	0.731
3500-3900MHz																					
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Front	5mm	Ant 2	DSI 3	42590	3500	1	16.65	18.30	1.462	62.9	1.006	0.03	0.357	0.525
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Front	5mm	Ant 2	DSI 3	42590	3500	1	16.49	18.30	1.517	62.9	1.006	0.06	0.317	0.484
30	LTE Band 42 part27Q	20M	QPSK	1	0	-	Back	5mm	Ant 2	DSI 3	42590	3500	1	16.65	18.30	1.462	62.9	1.006	0.01	0.670	**0.986**
	LTE Band 42C part27Q	20M	QPSK	1	99		Back	5mm	Ant 2	DSI 3	42590+ 42788	3500+ 3519.8	1	16.62	18.30	1.472	62.9	1.006	-0.08	0.601	0.890
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Back	5mm	Ant 2	DSI 3	42190	3460	1	16.49	18.30	1.517	62.9	1.006	0.03	0.611	0.932
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Back	5mm	Ant 2	DSI 3	42990	3540	1	16.48	18.30	1.521	62.9	1.006	-0.01	0.612	0.936
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Back	5mm	Ant 2	DSI 3	42590	3500	1	16.49	18.30	1.517	62.9	1.006	0.01	0.601	0.917
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Back	5mm	Ant 2	DSI 3	42190	3460	1	16.39	18.30	1.552	62.9	1.006	0.06	0.621	0.970
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Back	5mm	Ant 2	DSI 3	42990	3540	1	16.37	18.30	1.560	62.9	1.006	0.03	0.619	0.971
	LTE Band 42 part27Q	20M	QPSK	100	0	-	Back	5mm	Ant 2	DSI 3	42590	3500	1	16.38	18.30	1.556	62.9	1.006	-0.02	0.610	0.955
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Left Side	5mm	Ant 2	DSI 3	42590	3500	1	16.65	18.30	1.462	62.9	1.006	0.01	0.047	0.069
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Left Side	5mm	Ant 2	DSI 3	42590	3500	1	16.49	18.30	1.517	62.9	1.006	0.06	0.040	0.061
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Right Side	5mm	Ant 2	DSI 3	42590	3500	1	16.65	18.30	1.462	62.9	1.006	-0.02	0.097	0.143
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Right Side	5mm	Ant 2	DSI 3	42590	3500	1	16.49	18.30	1.517	62.9	1.006	0.04	0.075	0.114
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Top Side	5mm	Ant 2	DSI 3	42590	3500	1	16.65	18.30	1.462	62.9	1.006	0.03	0.517	0.760
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Top Side	5mm	Ant 2	DSI 3	42590	3500	1	16.49	18.30	1.517	62.9	1.006	-0.03	0.427	0.652
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 2	DSI 3	656000	3840	1	15.11	16.40	1.346	-	-	0.03	0.297	0.400
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 2	DSI 3	656000	3840	1	14.93	16.40	1.403	-	-	-0.02	0.307	0.431
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	DSI 3	656000	3840	1	15.11	16.40	1.346	-	-	0.06	0.566	0.762
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 2	DSI 3	656000	3840	1	14.93	16.40	1.403	-	-	0.02	0.501	0.703
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 2	DSI 3	656000	3840	1	15.11	16.40	1.346	-	-	0.02	0.058	0.078
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 2	DSI 3	656000	3840	1	14.93	16.40	1.403	-	-	-0.03	0.064	0.090
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 2	DSI 3	656000	3840	1	15.11	16.40	1.346	-	-	0.01	0.157	0.211
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 2	DSI 3	656000	3840	1	14.93	16.40	1.403	-	-	0.05	0.168	0.236
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 2	DSI 3	656000	3840	1	15.11	16.40	1.346	-	-	0.06	0.470	0.633
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 2	DSI 3	656000	3840	1	14.93	16.40	1.403	-	-	0.03	0.414	0.581
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 3	DSI 3	656000	3840	1	12.07	13.00	1.239	-	-	0.06	0.011	0.014
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 3	DSI 3	656000	3840	1	12.03	13.00	1.250	-	-	-0.02	0.012	0.015
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 3	DSI 3	656000	3840	1	12.07	13.00	1.239	-	-	0.04	0.760	0.941
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 3	DSI 3	656000	3840	1	12.03	13.00	1.250	-	-	0.01	0.787	0.984
	FR1 n77 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 3	DSI 3	656000	3840	1	11.96	13.00	1.271	-	-	0.02	0.771	0.980
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 3	DSI 3	656000	3840	1	12.07	13.00	1.239	-	-	0.03	0.105	0.130
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 3	DSI 3	656000	3840	1	12.03	13.00	1.250	-	-	0.02	0.119	0.149
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 3	DSI 3	656000	3840	1	12.07	13.00	1.239	-	-	-0.03	0.004	0.005
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 3	DSI 3	656000	3840	1	12.03	13.00	1.250	-	-	0.01	0.005	0.006
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 3	DSI 3	656000	3840	1	12.07	13.00	1.239	-	-	0.05	0.008	0.010
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 3	DSI 3	656000	3840	1	12.03	13.00	1.250	-	-	0.03	0.008	0.010
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 5	DSI 3	656000	3840	1	21.18	22.30	1.294	-	-	0.01	0.473	0.612
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 5	DSI 3	656000	3840	1	21.16	22.30	1.300	-	-	0.06	0.458	0.595
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 5	DSI 3	656000	3840	1	21.18	22.30	1.294	-	-	0.02	0.554	0.717
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 5	DSI 3	656000	3840	1	21.16	22.30	1.300	-	-	0.01	0.526	0.684
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 5	DSI 3	656000	3840	1	21.18	22.30	1.294	-	-	0.03	0.514	0.665
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 5	DSI 3	656000	3840	1	21.16	22.30	1.300	-	-	-0.01	0.498	0.647
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 5	DSI 3	656000	3840	1	21.18	22.30	1.294	-	-	0.05	0.034	0.044
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 5	DSI 3	656000	3840	1	21.16	22.30	1.300	-	-	-0.04	0.029	0.038
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	5mm	Ant 5	DSI 3	656000	3840	1	21.18	22.30	1.294	-	-	0.02	0.145	0.188
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	5mm	Ant 5	DSI 3	656000	3840	1	21.16	22.30	1.300	-	-	0.09	0.124	0.161

	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 7	DSI 3	656000	3840	1	17.00	17.90	1.230	-	-	0.06	0.026	0.032
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 7	DSI 3	656000	3840	1	16.98	17.90	1.236	-	-	0.01	0.030	0.037
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 7	DSI 3	656000	3840	1	17.00	17.90	1.230	-	-	0.06	0.796	0.979
31	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 7	DSI 3	656000	3840	1	16.98	17.90	1.236	-	-	0.05	0.798	**0.986**
	FR1 n77 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 7	DSI 3	656000	3840	1	16.90	17.90	1.259	-	-	0.02	0.772	0.972
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 7	DSI 3	656000	3840	1	17.00	17.90	1.230	-	-	0.06	0.018	0.022
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 7	DSI 3	656000	3840	1	16.98	17.90	1.236	-	-	-0.02	0.019	0.023
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 7	DSI 3	656000	3840	1	17.00	17.90	1.230	-	-	0.01	0.137	0.169
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 7	DSI 3	656000	3840	1	16.98	17.90	1.236	-	-	0.06	0.111	0.137
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 7	DSI 3	656000	3840	1	17.00	17.90	1.230	-	-	0.07	0.056	0.069
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 7	DSI 3	656000	3840	1	16.98	17.90	1.236	-	-	0.03	0.062	0.077

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	Sample	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)
WLAN/BT																	
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 8	Simultaneous	1	2412	1	14.72	16.00	1.343	100	1.000	0.06	0.259	0.348
32	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 8	Simultaneous	1	2412	1	14.72	16.00	1.343	100	1.000	0.05	0.432	**0.580**
	WLAN2.4GHz	802.11b 1Mbps	Left Side	5mm	Ant 8	Simultaneous	1	2412	1	14.72	16.00	1.343	100	1.000	0.01	0.042	0.056
	WLAN2.4GHz	802.11b 1Mbps	Right Side	5mm	Ant 8	Simultaneous	1	2412	1	14.72	16.00	1.343	100	1.000	0.03	0.322	0.432
	WLAN2.4GHz	802.11b 1Mbps	Top Side	5mm	Ant 8	Simultaneous	1	2412	1	14.72	16.00	1.343	100	1.000	-0.02	0.287	0.385
	Bluetooth	1Mbps	Front	5mm	Ant 8	Full power	0	2402	1	12.40	13.00	1.148	76.91	1.083	0.01	0.071	0.088
33	Bluetooth	1Mbps	Back	5mm	Ant 8	Full power	0	2402	1	12.40	13.00	1.148	76.91	1.083	0.08	0.095	**0.118**
	Bluetooth	1Mbps	Left Side	5mm	Ant 8	Full power	0	2402	1	12.40	13.00	1.148	76.91	1.083	0.03	0.001	0.001
	Bluetooth	1Mbps	Right Side	5mm	Ant 8	Full power	0	2402	1	12.40	13.00	1.148	76.91	1.083	0.02	0.081	0.101
	Bluetooth	1Mbps	Top Side	5mm	Ant 8	Full power	0	2402	1	12.40	13.00	1.148	76.91	1.083	0.01	0.055	0.068
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 8	Simultaneous	42	5210	1	9.83	11.00	1.309	92.17	1.085	0.03	0.120	0.170
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8	Simultaneous	42	5210	1	9.83	11.00	1.309	92.17	1.085	-0.02	0.337	0.479
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Left Side	5mm	Ant 8	Simultaneous	42	5210	1	9.83	11.00	1.309	92.17	1.085	0.06	0.014	0.020
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Right Side	5mm	Ant 8	Simultaneous	42	5210	1	9.83	11.00	1.309	92.17	1.085	0.02	0.115	0.163
34	WLAN5.2GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 8	Simultaneous	42	5210	1	9.83	11.00	1.309	92.17	1.085	-0.09	0.365	**0.518**
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 8	Simultaneous	155	5775	1	10.46	12.00	1.426	92.17	1.085	0.01	0.126	0.195
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8	Simultaneous	155	5775	1	10.46	12.00	1.426	92.17	1.085	0.02	0.195	0.302
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Side	5mm	Ant 8	Simultaneous	155	5775	1	10.46	12.00	1.426	92.17	1.085	0.02	0.019	0.029
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Side	5mm	Ant 8	Simultaneous	155	5775	1	10.46	12.00	1.426	92.17	1.085	0.05	0.080	0.124
35	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 8	Simultaneous	155	5775	1	10.46	12.00	1.426	92.17	1.085	0.03	0.336	**0.520**

16.3 Body Worn Accessory SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Headset	Power State	Ch.	Freq. (MHz)	Sample	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)
									850MHz													
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 0	-	DSI 3	189	836.4	1	26.05	27.20	1.303	-	-	0.01	0.490	0.639
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	-	DSI 3	189	836.4	1	26.05	27.20	1.303	-	-	0.02	0.935	1.218
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	-	DSI 3	128	824.2	1	26.05	27.20	1.303	-	-	0.01	0.913	1.190
36	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	-	DSI 3	251	848.8	1	26.02	27.20	1.312	-	-	0.03	0.943	**1.237**
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	Headset	DSI 3	251	848.8	1	26.02	27.20	1.312	-	-	0.02	0.931	1.222
	GSM850	-	-	-	-	GPRS (2 Tx slots)	Front	15mm	Ant 0	-	DSI 4	189	836.4	1	30.81	32.00	1.315	-	-	0.03	0.124	0.163
	GSM850	-	-	-	-	GPRS (2 Tx slots)	Back	17mm	Ant 0	-	DSI 4	251	848.8	1	30.74	32.00	1.337	-	-	-0.06	0.163	0.218
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	-	DSI 3	4182	836.4	1	22.78	24.00	1.324	-	-	0.03	0.543	0.719
37	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	4182	836.4	1	22.78	24.00	1.324	-	-	-0.05	0.953	**1.262**
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	4182	836.4	2	22.78	24.00	1.324	-	-	0.01	0.895	1.185
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	4132	826.4	1	22.61	24.00	1.377	-	-	0.02	0.910	1.253
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	4233	846.6	1	22.66	24.00	1.361	-	-	0.06	0.900	1.225
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	Headset	DSI 3	4182	836.4	1	22.78	24.00	1.324	-	-	0.03	0.948	1.255
	LTE Band 26	15M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	26865	831.5	1	22.32	23.40	1.282	-	-	0.03	0.528	0.677
	LTE Band 26	15M	QPSK	36	0	-	Front	5mm	Ant 0	-	DSI 3	26865	831.5	1	21.31	23.00	1.476	-	-	-0.02	0.322	0.475
38	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	26865	831.5	1	22.32	23.40	1.282	-	-	0.04	0.968	**1.241**
	LTE Band 26	15M	QPSK	36	0	-	Back	5mm	Ant 0	-	DSI 3	26865	831.5	1	21.31	23.00	1.476	-	-	0.01	0.764	1.127
	LTE Band 26	15M	QPSK	75	0	-	Back	5mm	Ant 0	-	DSI 3	26865	831.5	1	21.21	23.00	1.510	-	-	0.03	0.723	1.092
	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 0	Headset	DSI 3	26865	831.5	1	22.32	23.40	1.282	-	-	0.05	0.960	1.231
	LTE Band 26	15M	QPSK	1	0	-	Front	15mm	Ant 0	-	DSI 4	26865	831.5	1	22.32	24.00	1.472	-	-	0.03	0.196	0.289
	LTE Band 26	15M	QPSK	1	0	-	Back	17mm	Ant 0	-	DSI 4	26865	831.5	1	22.32	24.00	1.472	-	-	-0.05	0.226	0.333
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 0	-	DSI 3	167300	836.5	1	22.88	24.00	1.294	-	-	0.06	0.421	0.545
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 0	-	DSI 3	167300	836.5	1	22.71	24.00	1.346	-	-	0.03	0.481	0.647
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 0	-	DSI 3	167300	836.5	1	22.88	24.00	1.294	-	-	-0.01	0.833	1.078
39	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 0	-	DSI 3	167300	836.5	1	22.71	24.00	1.346	-	-	0.07	0.846	**1.139**
	FR1 n5	20M	QPSK	100	0	DFT-SCS-15KHz	Back	5mm	Ant 0	-	DSI 3	167300	836.5	1	21.83	23.00	1.309	-	-	0.03	0.690	0.903
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3	167300	836.5	1	23.28	24.00	1.180	-	-	0.06	0.117	0.138
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3	167300	836.5	1	23.01	24.00	1.256	-	-	-0.02	0.146	0.183
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	167300	836.5	1	23.28	24.00	1.180	-	-	0.01	0.283	0.334
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	167300	836.5	1	23.01	24.00	1.256	-	-	-0.06	0.313	0.393
	LTE Band 5	10M	QPSK	1	0	-	Front	5mm	Ant 1	-	DSI 3	20525	836.5	1	21.69	23.00	1.352	-	-	0.03	0.145	0.196
	LTE Band 5	10M	QPSK	25	0	-	Front	5mm	Ant 1	-	DSI 3	20525	836.5	1	20.71	22.00	1.346	-	-	0.01	0.092	0.124
40	LTE Band 5	10M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	20525	836.5	1	21.69	23.00	1.352	-	-	-0.04	0.353	**0.477**
	LTE Band 5	10M	QPSK	25	0	-	Back	5mm	Ant 1	-	DSI 3	20525	836.5	1	20.71	22.00	1.346	-	-	0.06	0.213	0.287
									1900MHz													
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 0	-	DSI 3	661	1880	1	21.70	22.60	1.230	-	-	0.03	0.457	0.562
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	-	DSI 3	661	1880	1	21.70	22.60	1.230	-	-	0.01	0.938	1.154
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	-	DSI 3	512	1850.2	1	21.56	22.60	1.271	-	-	0.05	0.955	1.213
41	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	-	DSI 3	810	1909.8	1	21.49	22.60	1.291	-	-	-0.06	0.970	**1.252**
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	Headset	DSI 3	810	1909.8	1	21.49	22.60	1.291	-	-	0.02	0.966	1.247
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Front	15mm	Ant 0	-	DSI 4	661	1880	1	28.20	29.50	1.349	-	-	0.03	0.615	0.830
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Front	15mm	Ant 0	-	DSI 4	512	1850.2	1	28.11	29.50	1.377	-	-	0.06	0.599	0.825
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Front	15mm	Ant 0	-	DSI 4	810	1909.8	1	28.14	29.50	1.368	-	-	0.01	0.588	0.804
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Back	17mm	Ant 0	-	DSI 4	810	1909.8	1	28.14	29.50	1.368	-	-	-0.02	0.632	0.864
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	-	DSI 3	9400	1880	1	17.34	18.20	1.219	-	-	0.01	0.568	0.692
42	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	9400	1880	1	17.34	18.20	1.219	-	-	-0.03	1.030	**1.256**
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	9400	1880	2	17.34	18.20	1.219	-	-	0.01	1.000	1.219
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	9262	1852.4	1	17.22	18.20	1.253	-	-	-0.06	0.997	1.249
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	9538	1907.6	1	17.30	18.20	1.230	-	-	0.02	0.988	1.216
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	Headset	DSI 3	9400	1880	1	17.34	18.20	1.219	-	-	0.03	1.010	1.231

	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 0	-	DSI 4	9400	1880	1	22.65	24.00	1.365	-	-	-0.02	0.430	0.587
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	17mm	Ant 0	-	DSI 4	9400	1880	1	22.65	24.00	1.365	-	-	-0.01	0.479	0.654
	LTE Band 2	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	18900	1880	1	16.86	18.00	1.300	-	-	0.03	0.585	0.761
	LTE Band 2	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	DSI 3	18900	1880	1	16.74	18.00	1.337	-	-	0.01	0.332	0.444
43	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	18900	1880	1	16.86	18.00	1.300	-	-	-0.08	0.955	**1.242**
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	18700	1860	1	16.76	18.00	1.330	-	-	0.01	0.919	1.223
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	19100	1900	1	16.74	18.00	1.337	-	-	0.05	0.911	1.218
	LTE Band 2	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	18900	1880	1	16.74	18.00	1.337	-	-	-0.06	0.901	1.204
	LTE Band 2	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	18700	1860	1	16.66	18.00	1.361	-	-	0.03	0.897	1.221
	LTE Band 2	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	19100	1900	1	16.58	18.00	1.387	-	-	0.01	0.888	1.231
	LTE Band 2	20M	QPSK	100	0	-	Back	5mm	Ant 0	-	DSI 3	18900	1880	1	16.72	18.00	1.343	-	-	0.02	0.892	1.198
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 0	Headset	DSI 3	18900	1880	1	16.86	18.00	1.300	-	-	0.01	0.941	1.223
	LTE Band 2	20M	QPSK	1	0	-	Front	15mm	Ant 0	-	DSI 4	18900	1880	1	22.18	24.00	1.521	-	-	0.05	0.326	0.496
	LTE Band 2	20M	QPSK	1	0	-	Back	17mm	Ant 0	-	DSI 4	18900	1880	1	22.18	24.00	1.521	-	-	0.01	0.389	0.591
	2600MHz																					
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	DSI 3	21100	2535	1	18.46	19.30	1.213	-	-	0.03	0.505	0.613
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 1	-	DSI 3	21100	2535	1	18.40	19.30	1.230	-	-	0.06	0.482	0.593
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	21100	2535	1	18.46	19.30	1.213	-	-	0.04	0.930	1.128
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	20850	2510	1	18.30	19.30	1.259	-	-	0.02	0.941	1.185
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	21350	2560	1	18.31	19.30	1.256	-	-	0.01	0.912	1.145
44	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	21100	2535	1	18.40	19.30	1.230	-	-	-0.09	1.010	**1.243**
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	20850	2510	1	18.19	19.30	1.291	-	-	0.03	0.957	1.236
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	21350	2560	1	18.37	19.30	1.239	-	-	-0.03	0.980	1.214
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 1	-	DSI 3	21100	2535	1	18.39	19.30	1.233	-	-	0.01	0.923	1.138
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	Headset	DSI 3	21100	2535	1	18.40	19.30	1.230	-	-	0.03	1.000	1.230
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3 Simultaneous	21100	2535	1	13.90	15.10	1.318	-	-	-0.07	0.432	0.569
	LTE Band 7	20M	QPSK	1	0	-	Front	15mm	Ant 1	-	DSI 4	21100	2535	1	22.72	24.00	1.343	-	-	0.09	0.314	0.422
	LTE Band 7	20M	QPSK	1	0	-	Back	17mm	Ant 1	-	DSI 4	21100	2535	1	22.72	24.00	1.343	-	-	0.01	0.589	0.791
	LTE Band 7	20M	QPSK	50	0	-	Back	17mm	Ant 1	-	DSI 4	21100	2535	1	21.92	23.00	1.282	-	-	0.02	0.416	0.533
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 5	-	DSI 3	21100	2535	1	18.00	19.00	1.259	-	-	0.06	0.593	0.747
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 5	-	DSI 3	21100	2535	1	17.88	19.00	1.294	-	-	-0.03	0.517	0.669
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 5	-	DSI 3	21100	2535	1	18.00	19.00	1.259	-	-	0.01	0.941	1.185
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 5	-	DSI 3	20850	2510	1	17.92	19.00	1.282	-	-	0.05	0.935	1.199
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 5	-	DSI 3	21350	2560	1	17.91	19.00	1.285	-	-	-0.01	0.961	1.235
	LTE Band 7C	20M	QPSK	1	0	-	Back	5mm	Ant 5	-	DSI 3	21350+ 21152	2560+ 2540.2	1	17.90	19.00	1.288	-	-	0.08	0.836	1.077
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 5	-	DSI 3	21100	2535	1	17.88	19.00	1.294	-	-	0.01	0.756	0.978
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 5	-	DSI 3	20850	2510	1	17.79	19.00	1.321	-	-	-0.09	0.747	0.987
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 5	-	DSI 3	21350	2560	1	17.74	19.00	1.337	-	-	0.03	0.795	1.063
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 5	-	DSI 3	21100	2535	1	17.79	19.00	1.321	-	-	-0.03	0.806	1.065
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 5	Headset	DSI 3	21350	2560	1	17.91	19.00	1.285	-	-	0.01	0.955	1.227
	LTE Band 7	20M	QPSK	1	0	-	Front	15mm	Ant 5	-	DSI 4	21100	2535	1	22.28	24.00	1.486	-	-	0.03	0.402	0.597
	LTE Band 7	20M	QPSK	1	0	-	Back	17mm	Ant 5	-	DSI 4	21350	2560	1	22.25	24.00	1.496	-	-	0.01	0.490	0.733
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	DSI 3	40620	2593	1	18.66	18.90	1.057	62.9	1.006	0.03	0.481	0.511
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 1	-	DSI 3	40620	2593	1	18.59	18.90	1.074	62.9	1.006	0.09	0.470	0.508
45	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	40620	2593	1	18.66	18.90	1.057	62.9	1.006	-0.05	1.180	**1.255**
	LTE Band 41C	20M	QPSK	1	99	-	Back	5mm	Ant 1	-	DSI 3	40620+ 40818	2593+ 2612.8	1	18.62	18.90	1.067	62.9	1.006	0.01	1.080	1.159
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	40620	2593	2	18.66	18.90	1.057	62.9	1.006	0.03	1.050	1.116
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	39750	2506	1	18.49	18.90	1.099	62.9	1.006	0.05	1.130	1.249
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	40185	2549.5	1	18.52	18.90	1.091	62.9	1.006	0.02	1.100	1.208
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	41055	2636.5	1	18.58	18.90	1.076	62.9	1.006	0.01	1.130	1.224
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	41490	2680	1	18.57	18.90	1.079	62.9	1.006	0.03	1.100	1.194
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	40620	2593	1	18.59	18.90	1.074	62.9	1.006	0.01	1.030	1.113
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	39750	2506	1	18.41	18.90	1.119	62.9	1.006	0.13	1.040	1.171
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	40185	2549.5	1	18.42	18.90	1.117	62.9	1.006	0.05	1.060	1.191
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	41055	2636.5	1	18.53	18.90	1.089	62.9	1.006	0.01	1.050	1.150

	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	41490	2680	1	18.47	18.90	1.104	62.9	1.006	0.05	1.000	1.111
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 1	-	DSI 3	40620	2593	1	18.54	18.90	1.086	62.9	1.006	0.01	1.010	1.104
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	40620	2593	1	20.39	20.50	1.026	42.9	1.009	-0.08	1.190	1.232
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	Headset	DSI 3	40620	2593	1	18.66	18.90	1.057	62.9	1.006	0.03	1.110	1.180
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3 Simultaneous	40620	2593	1	16.37	17.40	1.268	62.9	1.006	0.09	0.547	0.698
	LTE Band 41	20M	QPSK	1	0	-	Front	15mm	Ant 1	-	DSI 4	40620	2593	1	22.97	24.00	1.268	62.9	1.006	0.06	0.278	0.355
	LTE Band 41	20M	QPSK	1	0	-	Back	17mm	Ant 1	-	DSI 4	40620	2593	1	22.97	24.00	1.268	62.9	1.006	-0.03	0.506	0.645
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 5	-	DSI 3	507000	2535	1	18.89	19.80	1.233	-	-	0.06	0.555	0.684
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 5	-	DSI 3	507000	2535	1	18.76	19.80	1.271	-	-	0.02	0.545	0.692
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 5	-	DSI 3	507000	2535	1	18.89	19.80	1.233	-	-	0.03	0.985	1.215
46	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 5	-	DSI 3	507000	2535	1	18.76	19.80	1.271	-	-	-0.01	0.990	**1.258**
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 5	-	DSI 3	507000	2535	2	18.76	19.80	1.271	-	-	-0.03	0.973	1.236
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 5	-	DSI 3	507000	2535	1	18.75	19.80	1.274	-	-	0.01	0.925	1.178
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 5	Headset	DSI 3	507000	2535	1	18.76	19.80	1.271	-	-	0.06	0.977	1.241
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 5	-	DSI 4	507000	2535	1	22.61	24.00	1.377	-	-	0.02	0.288	0.397
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	17mm	Ant 5	-	DSI 4	507000	2535	1	22.61	24.00	1.377	-	-	0.01	0.394	0.543
3500-3900MHz																						
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	42590	3500	1	18.39	19.60	1.321	62.9	1.006	0.03	0.429	0.570
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	DSI 3	42590	3500	1	18.10	19.60	1.413	62.9	1.006	0.05	0.382	0.543
47	LTE Band 42 part27Q	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	42590	3500	1	18.39	19.60	1.321	62.9	1.006	0.06	0.936	**1.244**
	LTE Band 42C part27Q	20M	QPSK	1	99	-	Back	5mm	Ant 2	-	DSI 3	42590+ 42788	3500+ 3519.8	1	18.28	19.60	1.355	62.9	1.006	-0.03	0.811	1.106
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	42190	3460	1	18.34	19.60	1.337	62.9	1.006	0.01	0.909	1.222
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	42990	3540	1	18.36	19.60	1.330	62.9	1.006	0.06	0.911	1.219
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	DSI 3	42590	3500	1	18.10	19.60	1.413	62.9	1.006	-0.03	0.794	1.128
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	DSI 3	42190	3460	1	18.09	19.60	1.416	62.9	1.006	0.02	0.777	1.107
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	DSI 3	42990	3540	1	18.07	19.60	1.422	62.9	1.006	0.01	0.777	1.112
	LTE Band 42 part27Q	20M	QPSK	100	0	-	Back	5mm	Ant 2	-	DSI 3	42590	3500	1	18.08	19.60	1.419	62.9	1.006	-0.02	0.733	1.046
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Back	5mm	Ant 2	Headset	DSI 3	42590	3500	1	18.39	19.60	1.321	62.9	1.006	0.09	0.928	1.234
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3 Simultaneous	42590	3500	1	16.65	18.30	1.462	62.9	1.006	0.01	0.613	0.902
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Front	15mm	Ant 2	-	DSI 4	42590	3500	1	22.29	24.00	1.483	62.9	1.006	0.03	0.348	0.519
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Back	17mm	Ant 2	-	DSI 4	42590	3500	1	22.29	24.00	1.483	62.9	1.006	0.02	0.418	0.623
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 2	-	DSI 3	656000	3840	1	16.04	17.40	1.368	-	-	0.03	0.390	0.533
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 2	-	DSI 3	656000	3840	1	15.95	17.40	1.396	-	-	-0.02	0.403	0.563
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3	656000	3840	1	16.04	17.40	1.368	-	-	0.05	0.743	1.016
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3	656000	3840	1	15.95	17.40	1.396	-	-	0.02	0.658	0.919
	FR1 n77 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3	656000	3840	1	15.92	17.40	1.406	-	-	0.04	0.646	0.908
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3 Simultaneous	656000	3840	1	15.11	16.40	1.346	-	-	0.06	0.566	0.762
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 2	-	DSI 4	656000	3840	1	21.82	23.00	1.312	-	-	-0.01	0.566	0.743
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 2	-	DSI 4	656000	3840	1	21.76	23.00	1.330	-	-	0.03	0.590	0.785
	FR1 n77 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Front	15mm	Ant 2	-	DSI 4	656000	3840	1	21.70	23.00	1.349	-	-	0.04	0.545	0.735
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	17mm	Ant 2	-	DSI 4	656000	3840	1	21.82	23.00	1.312	-	-	0.02	0.671	0.880
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 3	-	DSI 3	656000	3840	1	13.36	14.00	1.159	-	-	0.06	0.014	0.016
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 3	-	DSI 3	656000	3840	1	13.31	14.00	1.172	-	-	-0.02	0.016	0.019
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 3	-	DSI 3	656000	3840	1	13.36	14.00	1.159	-	-	0.04	1.020	1.182
48	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 3	-	DSI 3	656000	3840	1	13.31	14.00	1.172	-	-	0.01	1.060	**1.243**
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 3	-	DSI 3	656000	3840	2	13.31	14.00	1.172	-	-	0.08	0.856	1.003
	FR1 n77 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 3	-	DSI 3	656000	3840	1	13.21	14.00	1.199	-	-	0.02	1.030	1.235
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 3	Headset	DSI 3	656000	3840	1	13.31	14.00	1.172	-	-	0.06	1.050	1.231
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 3	-	DSI 3 Simultaneous	656000	3840	1	12.03	13.00	1.250	-	-	0.03	0.707	0.884
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 3	-	DSI 4	656000	3840	1	15.81	17.00	1.315	-	-	0.02	0.590	0.776
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	17mm	Ant 3	-	DSI 4	656000	3840	1	15.81	17.00	1.315	-	-	0.06	0.672	0.884
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 5	-	DSI 3	656000	3840	1	21.18	22.30	1.294	-	-	0.01	0.632	0.818
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 5	-	DSI 3	656000	3840	1	21.16	22.30	1.300	-	-	0.06	0.618	0.804
	FR1 n77 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 5	-	DSI 3	656000	3840	1	20.15	21.50	1.365	-	-	0.01	0.597	0.815
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 5	-	DSI 3	656000	3840	1	21.18	22.30	1.294	-	-	0.02	0.739	0.956

	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 5	-	DSI 3	656000	3840	2	21.18	22.30	1.294	-	-	0.03	0.588	0.761
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 5	-	DSI 3	656000	3840	1	21.16	22.30	1.300	-	-	0.01	0.719	0.935
	FR1 n77 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 5	-	DSI 3	656000	3840	1	20.15	21.50	1.365	-	-	-0.02	0.698	0.952
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 5	-	DSI 4	656000	3840	1	21.62	22.50	1.225	-	-	0.02	0.200	0.245
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	17mm	Ant 5	-	DSI 4	656000	3840	1	21.62	22.50	1.225	-	-	0.01	0.265	0.325
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 7	-	DSI 3	656000	3840	1	17.95	18.90	1.245	-	-	0.06	0.031	0.038
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 7	-	DSI 3	656000	3840	1	17.90	18.90	1.259	-	-	0.01	0.035	0.044
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 7	-	DSI 3	656000	3840	1	17.95	18.90	1.245	-	-	0.06	0.901	1.121
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 7	-	DSI 3	656000	3840	1	17.90	18.90	1.259	-	-	0.01	0.938	1.181
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 7	-	DSI 3	656000	3840	2	17.90	18.90	1.259	-	-	0.09	0.811	1.021
	FR1 n77 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 7	-	DSI 3	656000	3840	1	17.87	18.90	1.268	-	-	0.02	0.896	1.136
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 7	-	DSI 3 Simultaneous	656000	3840	1	16.98	17.90	1.236	-	-	0.05	0.720	0.890
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 7	-	DSI 4	656000	3840	1	20.44	21.50	1.276	-	-	0.01	0.150	0.191
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	17mm	Ant 7	-	DSI 4	656000	3840	1	20.44	21.50	1.276	-	-	0.02	0.182	0.232

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Headset	Power Reduction	Ch.	Freq. (MHz)	Sample	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)
WLAN/BT																		
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 8		Full power	1	2412	1	19.23	20.50	1.340	100	1.000	0.06	0.517	0.693
49	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 8		Full power	1	2412	1	19.23	20.50	1.340	100	1.000	0.02	0.862	**1.155**
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 8		Full power	11	2462	1	19.21	20.50	1.346	100	1.000	0.01	0.810	1.090
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 8		Simultaneous	1	2412	1	14.72	16.00	1.343	100	1.000	0.01	0.426	0.572
	WLAN2.4GHz	802.11b 1Mbps	Front	15mm	Ant 8		Full power	1	2412	1	19.23	20.50	1.340	100	1.000	0.03	0.105	0.141
	WLAN2.4GHz	802.11b 1Mbps	Back	17mm	Ant 8		Full power	1	2412	1	19.23	20.50	1.340	100	1.000	0.02	0.182	0.244
	Bluetooth	1Mbps	Front	5mm	Ant 8		Full power	0	2402	1	12.40	13.00	1.148	76.91	1.083	0.01	0.071	0.088
50	Bluetooth	1Mbps	Back	5mm	Ant 8		Full power	0	2402	1	12.40	13.00	1.148	76.91	1.083	0.08	0.095	**0.118**
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 8		Standalone	58	5290	1	12.51	14.00	1.409	92.17	1.085	0.09	0.451	0.690
51	WLAN5.3GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8		Standalone	58	5290	1	12.51	14.00	1.409	92.17	1.085	0.02	0.777	**1.188**
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8		Standalone	58	5290	2	12.51	14.00	1.409	92.17	1.085	0.08	0.739	1.130
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8		Simultaneous	58	5290	1	9.56	11.00	1.393	92.17	1.085	0.01	0.371	0.561
	WLAN5.3GHz	802.11n-HT40 MCS0	Front	15mm	Ant 8		Full power	54	5270	1	17.89	19.50	1.449	96.3	1.038	0.03	0.184	0.277
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	17mm	Ant 8		Full power	54	5270	1	17.89	19.50	1.449	96.3	1.038	0.06	0.280	0.421
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 8		Standalone	138	5690	1	13.45	15.00	1.429	92.17	1.085	0.09	0.269	0.417
52	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8		Standalone	138	5690	1	13.45	15.00	1.429	92.17	1.085	0.01	0.721	**1.118**
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8		Standalone	122	5610	1	13.41	15.00	1.442	92.17	1.085	0.05	0.694	1.086
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8		Simultaneous	138	5690	1	9.97	11.50	1.422	92.17	1.085	0.02	0.359	0.554
	WLAN5.5GHz	802.11n-HT40 MCS0	Front	15mm	Ant 8		Full power	142	5710	1	18.28	19.50	1.323	96.3	1.038	0.02	0.241	0.331
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	17mm	Ant 8		Full power	142	5710	1	18.28	19.50	1.323	96.3	1.038	0.08	0.314	0.431
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 8		Standalone	155	5775	1	14.62	16.00	1.374	92.17	1.085	0.01	0.526	0.784
53	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8		Standalone	155	5775	1	14.62	16.00	1.374	92.17	1.085	-0.01	0.751	**1.120**
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8		Simultaneous	155	5775	1	10.46	12.00	1.426	92.17	1.085	0.09	0.355	0.549
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	15mm	Ant 8		Full power	151	5755	1	18.35	20.00	1.461	96.3	1.038	0.02	0.207	0.314
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	17mm	Ant 8		Full power	151	5755	1	18.35	20.00	1.461	96.3	1.038	0.07	0.241	0.365

16.4 Product specific 10g SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	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)
850MHz																					
54	GSM850	-	-	-	-	GPRS (2 Tx slots)	Back	0mm	Ant 0	DSI 6	189	836.4	1	30.81	32.00	1.315	-	-	0.05	1.330	**1.749**
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	DSI 6	4182	836.4	1	22.78	24.00	1.324	-	-	0.06	1.760	2.331
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	DSI 6	4132	826.4	1	22.61	24.00	1.377	-	-	-0.02	1.840	2.534
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	DSI 6	4233	846.6	1	22.66	24.00	1.361	-	-	0.03	1.780	2.423
55	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	DSI 6	4182	836.4	1	22.78	24.00	1.324	-	-	0.1	2.050	**2.715**
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	DSI 6	4132	826.4	1	22.61	24.00	1.377	-	-	0.06	1.890	2.603
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	DSI 6	4233	846.6	1	22.66	24.00	1.361	-	-	0.01	1.970	2.682
56	LTE Band 26	15M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	26865	831.5	1	22.32	23.50	1.312	-	-	0.04	2.090	**2.742**
	LTE Band 26	15M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	26865	831.5	2	22.32	23.50	1.312	-	-	0.06	1.860	2.441
	LTE Band 26	15M	QPSK	36	0	-	Back	0mm	Ant 0	DSI 6	26865	831.5	1	21.31	23.00	1.476	-	-	0.03	1.810	2.671
	LTE Band 26	15M	QPSK	75	0	-	Back	0mm	Ant 0	DSI 6	26865	831.5	1	21.21	23.00	1.510	-	-	0.01	1.750	2.643
	LTE Band 26	15M	QPSK	1	0	-	Back	19mm	Ant 0	DSI 4	26865	831.5	1	22.32	24.00	1.472	-	-	0.03	0.136	0.200
1900MHz																					
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	0mm	Ant 0	DSI 6	661	1880	1	23.50	24.70	1.318	-	-	0.05	1.110	1.463
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	0mm	Ant 0	DSI 6	661	1880	1	23.50	24.70	1.318	-	-	0.01	2.010	2.650
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	0mm	Ant 0	DSI 6	512	1850.2	1	23.39	24.70	1.352	-	-	0.11	1.960	2.650
57	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	0mm	Ant 0	DSI 6	810	1909.8	1	23.42	24.70	1.343	-	-	-0.09	2.040	**2.739**
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	0mm	Ant 0	DSI 6	661	1880	1	23.50	24.70	1.318	-	-	0.02	1.790	2.360
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	0mm	Ant 0	DSI 6	512	1850.2	1	23.39	24.70	1.352	-	-	0.01	1.850	2.501
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	0mm	Ant 0	DSI 6	810	1909.8	1	23.42	24.70	1.343	-	-	0.03	1.750	2.350
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Front	14mm	Ant 0	DSI 4	661	1880	1	28.20	29.50	1.349	-	-	0.06	0.290	0.391
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Back	19mm	Ant 0	DSI 4	810	1909.8	1	28.14	29.50	1.368	-	-	0.03	0.250	0.342
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Bottom Side	17mm	Ant 0	DSI 4	512	1850.2	1	28.11	29.50	1.377	-	-	0.01	0.411	0.566
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 0	DSI 6	9400	1880	1	20.56	21.60	1.271	-	-	0.01	1.220	1.550
58	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	DSI 6	9400	1880	1	20.56	21.60	1.271	-	-	0.02	2.170	**2.757**
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	DSI 6	9400	1880	2	20.56	21.60	1.271	-	-	0.04	2.090	2.655
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	DSI 6	9262	1852.4	1	20.46	21.60	1.300	-	-	0.03	1.910	2.483
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	DSI 6	9538	1907.6	1	20.51	21.60	1.285	-	-	0.01	2.060	2.648
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	DSI 6	9400	1880	1	20.56	21.60	1.271	-	-	0.05	1.720	2.185
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	DSI 6	9262	1852.4	1	20.46	21.60	1.300	-	-	0.01	1.800	2.340
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	DSI 6	9538	1907.6	1	20.51	21.60	1.285	-	-	0.03	1.780	2.288
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	14mm	Ant 0	DSI 4	9400	1880	1	22.65	24.00	1.365	-	-	0.01	0.198	0.270
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	19mm	Ant 0	DSI 4	9400	1880	1	22.65	24.00	1.365	-	-	0.02	0.183	0.250
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	17mm	Ant 0	DSI 4	9262	1852.4	1	22.61	24.00	1.377	-	-	0.03	0.388	0.534
	LTE Band 2	20M	QPSK	1	0	-	Front	0mm	Ant 0	DSI 6	18900	1880	1	20.08	21.30	1.324	-	-	0.01	1.170	1.549
	LTE Band 2	20M	QPSK	50	0	-	Front	0mm	Ant 0	DSI 6	18900	1880	1	19.99	21.30	1.352	-	-	0.02	1.080	1.460
59	LTE Band 2	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	18900	1880	1	20.08	21.30	1.324	-	-	0.09	2.080	**2.755**
	LTE Band 2	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	18700	1860	1	20.02	21.30	1.343	-	-	0.03	1.960	2.632
	LTE Band 2	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	19100	1900	1	19.98	21.30	1.355	-	-	0.03	1.910	2.588
	LTE Band 2	20M	QPSK	50	0	-	Back	0mm	Ant 0	DSI 6	18900	1880	1	19.99	21.30	1.352	-	-	0.02	1.720	2.326
	LTE Band 2	20M	QPSK	50	0	-	Back	0mm	Ant 0	DSI 6	18700	1860	1	19.90	21.30	1.380	-	-	0.01	1.670	2.305
	LTE Band 2	20M	QPSK	50	0	-	Back	0mm	Ant 0	DSI 6	19100	1900	1	19.93	21.30	1.371	-	-	-0.02	1.630	2.235
	LTE Band 2	20M	QPSK	100	0	-	Back	0mm	Ant 0	DSI 6	18900	1880	1	19.96	21.30	1.361	-	-	0.03	1.550	2.110
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 0	DSI 6	18900	1880	1	20.08	21.30	1.324	-	-	0.05	1.270	1.682
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 0	DSI 6	18900	1880	1	19.99	21.30	1.352	-	-	-0.02	1.080	1.460
	LTE Band 2	20M	QPSK	1	0	-	Front	14mm	Ant 0	DSI 4	18900	1880	1	22.18	24.00	1.521	-	-	0.03	0.182	0.277
	LTE Band 2	20M	QPSK	1	0	-	Back	19mm	Ant 0	DSI 4	18900	1880	1	22.18	24.00	1.521	-	-	0.05	0.150	0.228
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	17mm	Ant 0	DSI 4	18900	1880	1	22.18	24.00	1.521	-	-	-0.03	0.343	0.522

2600MHz																					
	LTE Band 7	20M	QPSK	1	0	-	Front	0mm	Ant 1	DSI 6	21100	2535	1	21.62	22.70	1.282	-	-	0.09	1.660	2.129
	LTE Band 7	20M	QPSK	1	0	-	Front	0mm	Ant 1	DSI 6	20850	2510	1	21.56	22.70	1.300	-	-	0.01	1.600	2.080
	LTE Band 7	20M	QPSK	1	0	-	Front	0mm	Ant 1	DSI 6	21350	2560	1	21.56	22.70	1.300	-	-	0.05	1.580	2.054
	LTE Band 7	20M	QPSK	50	0	-	Front	0mm	Ant 1	DSI 6	21100	2535	1	21.49	22.70	1.321	-	-	-0.05	1.600	2.114
	LTE Band 7	20M	QPSK	50	0	-	Front	0mm	Ant 1	DSI 6	20850	2510	1	21.41	22.70	1.346	-	-	0.04	1.540	2.073
	LTE Band 7	20M	QPSK	50	0	-	Front	0mm	Ant 1	DSI 6	21350	2560	1	21.45	22.70	1.334	-	-	0.01	1.590	2.120
	LTE Band 7	20M	QPSK	100	0	-	Front	0mm	Ant 1	DSI 6	21100	2535	1	21.48	22.70	1.324	-	-	-0.03	1.540	2.039
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 1	DSI 6	21100	2535	1	21.62	22.70	1.282	-	-	0.01	2.000	2.565
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 1	DSI 6	20850	2510	1	21.56	22.70	1.300	-	-	0.07	1.970	2.561
60	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 1	DSI 6	21350	2560	1	21.56	22.70	1.300	-	-	-0.04	2.110	**2.743**
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 1	DSI 6	21350	2560	2	21.56	22.70	1.300	-	-	0.1	2.000	2.600
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 1	DSI 6	21100	2535	1	21.49	22.70	1.321	-	-	0.05	1.990	2.629
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 1	DSI 6	20850	2510	1	21.41	22.70	1.346	-	-	-0.03	1.640	2.207
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 1	DSI 6	21350	2560	1	21.45	22.70	1.334	-	-	0.01	1.680	2.240
	LTE Band 7	20M	QPSK	100	0	-	Back	0mm	Ant 1	DSI 6	21100	2535	1	21.48	22.70	1.324	-	-	0.05	1.560	2.066
	LTE Band 7	20M	QPSK	1	0	-	Left Side	0mm	Ant 1	DSI 6	21100	2535	1	21.62	22.70	1.282	-	-	-0.07	1.220	1.564
	LTE Band 7	20M	QPSK	50	0	-	Left Side	0mm	Ant 1	DSI 6	21100	2535	1	21.49	22.70	1.321	-	-	0.09	1.170	1.546
	LTE Band 7	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	DSI 6	21100	2535	1	21.62	22.70	1.282	-	-	0.07	1.790	2.295
	LTE Band 7	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	DSI 6	20850	2510	1	21.56	22.70	1.300	-	-	-0.04	1.850	2.405
	LTE Band 7	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	DSI 6	21350	2560	1	21.56	22.70	1.300	-	-	0.05	1.960	2.548
	LTE Band 7	20M	QPSK	50	0	-	Top Side	0mm	Ant 1	DSI 6	21100	2535	1	21.49	22.70	1.321	-	-	-0.03	1.870	2.471
	LTE Band 7	20M	QPSK	50	0	-	Top Side	0mm	Ant 1	DSI 6	20850	2510	1	21.41	22.70	1.346	-	-	-0.03	1.560	2.100
	LTE Band 7	20M	QPSK	50	0	-	Top Side	0mm	Ant 1	DSI 6	21350	2560	1	21.45	22.70	1.334	-	-	0.01	1.500	2.000
	LTE Band 7	20M	QPSK	100	0	-	Top Side	0mm	Ant 1	DSI 6	21100	2535	1	21.48	22.70	1.324	-	-	0.05	1.490	1.973
	LTE Band 7	20M	QPSK	1	0	-	Front	6mm	Ant 1	DSI 4	21100	2535	1	22.72	24.00	1.343	-	-	-0.07	0.652	0.875
	LTE Band 7	20M	QPSK	1	0	-	Back	13mm	Ant 1	DSI 4	21350	2560	1	22.62	24.00	1.374	-	-	0.09	0.325	0.447
	LTE Band 7	20M	QPSK	1	0	-	Left Side	6mm	Ant 1	DSI 4	21100	2535	1	22.72	24.00	1.343	-	-	0.01	0.523	0.702
	LTE Band 7	20M	QPSK	1	0	-	Top Side	10mm	Ant 1	DSI 4	21350	2560	1	22.62	24.00	1.374	-	-	0.06	0.820	1.127
	LTE Band 7	20M	QPSK	1	0	-	Front	0mm	Ant 5	DSI 6	21100	2535	1	19.28	20.40	1.294	-	-	-0.07	1.480	1.915
	LTE Band 7	20M	QPSK	50	0	-	Front	0mm	Ant 5	DSI 6	21100	2535	1	19.23	20.40	1.309	-	-	0.01	1.240	1.623
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 5	DSI 6	21100	2535	1	19.28	20.40	1.294	-	-	0.02	2.110	2.731
	LTE Band 7C	20M	QPSK	1	99		Back	0mm	Ant 5	DSI 6	21100+ 21298	2535+ 2554.8	1	19.20	20.40	1.318			0.09	2.060	2.716
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 5	DSI 6	21100	2535	2	19.28	20.40	1.294	-	-	-0.02	2.060	2.666
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 5	DSI 6	20850	2510	1	19.21	20.40	1.315	-	-	0.09	1.910	2.512
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 5	DSI 6	21350	2560	1	19.26	20.40	1.300	-	-	0.06	2.100	2.730
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 5	DSI 6	21100	2535	1	19.23	20.40	1.309	-	-	0.01	1.780	2.330
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 5	DSI 6	20850	2510	1	19.06	20.40	1.361	-	-	0.03	1.810	2.464
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 5	DSI 6	21350	2560	1	19.21	20.40	1.315	-	-	0.01	1.740	2.288
	LTE Band 7	20M	QPSK	100	0	-	Back	0mm	Ant 5	DSI 6	21100	2535	1	19.24	20.40	1.306	-	-	0.06	1.770	2.312
	LTE Band 7	20M	QPSK	1	0	-	Left Side	0mm	Ant 5	DSI 6	21100	2535	1	19.28	20.40	1.294	-	-	-0.05	1.310	1.695
	LTE Band 7	20M	QPSK	50	0	-	Left Side	0mm	Ant 5	DSI 6	21100	2535	1	19.23	20.40	1.309	-	-	-0.03	1.090	1.427
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 5	DSI 6	21100	2535	1	19.28	20.40	1.294	-	-	0.09	1.160	1.501
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 5	DSI 6	21100	2535	1	19.23	20.40	1.309	-	-	0.01	0.963	1.261
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 5	DSI 4	21100	2535	1	22.28	24.00	1.486	-	-	-0.02	0.834	1.239
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 4	21100	2535	1	22.28	24.00	1.486	-	-	0.01	0.425	0.632
	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant 5	DSI 4	21100	2535	1	22.28	24.00	1.486	-	-	0.06	0.720	1.070
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	8mm	Ant 5	DSI 4	21100	2535	1	22.28	24.00	1.486	-	-	-0.02	0.360	0.535
	LTE Band 41	20M	QPSK	1	0	-	Front	0mm	Ant 1	DSI 6	40620	2593	1	21.50	22.50	1.259	62.9	1.006	0.06	1.300	1.646
	LTE Band 41	20M	QPSK	50	0	-	Front	0mm	Ant 1	DSI 6	40620	2593	1	21.45	22.50	1.274	62.9	1.006	0.03	1.280	1.640
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 1	DSI 6	40620	2593	1	21.50	22.50	1.259	62.9	1.006	0.04	2.070	2.622
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 1	DSI 6	39750	2506	1	21.37	22.50	1.297	62.9	1.006	-0.03	1.960	2.558
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 1	DSI 6	40185	2549.5	1	21.32	22.50	1.312	62.9	1.006	0.01	1.870	2.469
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 1	DSI 6	41055	2636.5	1	21.48	22.50	1.265	62.9	1.006	0.02	2.070	2.634
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 1	DSI 6	41490	2680	1	21.39	22.50	1.291	62.9	1.006	0.04	1.940	2.520
	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 1	DSI 6	40620	2593	1	21.45	22.50	1.274	62.9	1.006	0.03	1.970	2.524

	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 1	DSI 6	39750	2506	1	21.30	22.50	1.318	62.9	1.006	0.02	1.900	2.520
	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 1	DSI 6	40185	2549.5	1	21.27	22.50	1.327	62.9	1.006	-0.03	1.950	2.604
	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 1	DSI 6	41055	2636.5	1	21.39	22.50	1.291	62.9	1.006	0.02	1.870	2.429
	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 1	DSI 6	41490	2680	1	21.35	22.50	1.303	62.9	1.006	-0.08	1.930	2.530
	LTE Band 41	20M	QPSK	100	0	-	Back	0mm	Ant 1	DSI 6	40620	2593	1	21.41	22.50	1.285	62.9	1.006	0.04	1.920	2.483
	LTE Band 41	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	DSI 6	40620	2593	1	21.50	22.50	1.259	62.9	1.006	-0.06	1.450	1.836
	LTE Band 41	20M	QPSK	50	0	-	Top Side	0mm	Ant 1	DSI 6	40620	2593	1	21.45	22.50	1.274	62.9	1.006	0.03	1.380	1.768
61	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	0mm	Ant 1	DSI 6	41055	2636.5	1	22.97	24.10	1.297	42.9	1.009	-0.09	2.090	**2.736**
	LTE Band 41C HPUE	20M	QPSK	1	99	-	Back	0mm	Ant 1	DSI 6	41055+41253	2636.5+2656.3	1	22.73	24.10	1.371	42.9	1.009	0.01	1.830	2.531
	LTE Band 41	20M	QPSK	1	0	-	Front	6mm	Ant 1	DSI 4	40620	2593	1	22.97	24.00	1.268	62.9	1.006	0.03	0.490	0.625
	LTE Band 41	20M	QPSK	1	0	-	Back	13mm	Ant 1	DSI 4	41055	2636.5	1	22.93	24.00	1.279	62.9	1.006	-0.01	0.327	0.421
	LTE Band 41	20M	QPSK	1	0	-	Top Side	10mm	Ant 1	DSI 4	40620	2593	1	22.97	24.00	1.268	62.9	1.006	0.06	0.782	0.997
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	0mm	Ant 5	DSI 6	507000	2535	1	19.81	20.50	1.172	-	-	0.04	1.400	1.641
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	0mm	Ant 5	DSI 6	507000	2535	1	19.74	20.50	1.191	-	-	0.02	1.430	1.703
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	0mm	Ant 5	DSI 6	507000	2535	1	19.81	20.50	1.172	-	-	0.02	2.250	2.637
62	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	0mm	Ant 5	DSI 6	507000	2535	1	19.74	20.50	1.191	-	-	-0.08	2.280	**2.716**
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Back	0mm	Ant 5	DSI 6	507000	2535	1	18.77	19.50	1.183	-	-	0.04	1.810	2.141
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	0mm	Ant 5	DSI 6	507000	2535	1	19.81	20.50	1.172	-	-	-0.06	1.360	1.594
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	0mm	Ant 5	DSI 6	507000	2535	1	19.74	20.50	1.191	-	-	0.02	1.380	1.644
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	0mm	Ant 5	DSI 6	507000	2535	1	19.81	20.50	1.172	-	-	0.07	1.150	1.348
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	0mm	Ant 5	DSI 6	507000	2535	1	19.74	20.50	1.191	-	-	0.02	1.210	1.441
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 5	DSI 4	507000	2535	1	22.61	24.00	1.377	-	-	-0.06	0.644	0.887
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 5	DSI 4	507000	2535	1	22.61	24.00	1.377	-	-	0.02	0.389	0.536
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant 5	DSI 4	507000	2535	1	22.61	24.00	1.377	-	-	0.09	0.605	0.833
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	8mm	Ant 5	DSI 4	507000	2535	1	22.61	24.00	1.377	-	-	0.01	0.325	0.448
3500-3900MHz																					
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Front	0mm	Ant 2	DSI 4	42590	3500	1	22.29	24.00	1.483	62.9	1.006	-0.06	1.410	2.103
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Front	0mm	Ant 2	DSI 4	42190	3460	1	22.23	24.00	1.503	62.9	1.006	0.02	1.480	2.238
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Front	0mm	Ant 2	DSI 4	42990	3540	1	22.21	24.00	1.510	62.9	1.006	0.09	1.370	2.081
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Front	0mm	Ant 2	DSI 4	42590	3500	1	21.31	23.00	1.476	62.9	1.006	-0.06	1.180	1.752
	LTE Band 42 part27Q	20M	QPSK	100	0	-	Front	0mm	Ant 2	DSI 4	42590	3500	1	21.27	23.00	1.489	62.9	1.006	0.02	1.200	1.798
63	LTE Band 42 part27Q	20M	QPSK	1	0	-	Back	0mm	Ant 2	DSI 6	42590	3500	1	20.96	22.00	1.271	62.9	1.006	0.07	2.150	**2.748**
	LTE Band 42C part27Q	20M	QPSK	1	99	-	Back	0mm	Ant 2	DSI 6	42590+42788	3500+3519.8	1	20.79	22.00	1.321	62.9	1.006	-0.01	1.920	2.552
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Back	0mm	Ant 2	DSI 6	42590	3500	2	20.96	22.00	1.271	62.9	1.006	0.03	2.010	2.569
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Back	0mm	Ant 2	DSI 6	42190	3460	1	20.79	22.00	1.321	62.9	1.006	0.06	1.920	2.552
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Back	0mm	Ant 2	DSI 6	42990	3540	1	20.86	22.00	1.300	62.9	1.006	0.02	2.100	2.747
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Back	0mm	Ant 2	DSI 6	42590	3500	1	20.83	22.00	1.309	62.9	1.006	0.04	1.780	2.344
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Back	0mm	Ant 2	DSI 6	42190	3460	1	20.72	22.00	1.343	62.9	1.006	0.02	1.780	2.404
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Back	0mm	Ant 2	DSI 6	42990	3540	1	20.71	22.00	1.346	62.9	1.006	-0.03	1.710	2.315
	LTE Band 42 part27Q	20M	QPSK	100	0	-	Back	0mm	Ant 2	DSI 6	42590	3500	1	20.81	22.00	1.315	62.9	1.006	0.01	1.580	2.091
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Top Side	0mm	Ant 2	DSI 6	42590	3500	1	20.96	22.00	1.271	62.9	1.006	0.05	1.260	1.611
	LTE Band 42 part27Q	20M	QPSK	50	0	-	Top Side	0mm	Ant 2	DSI 6	42590	3500	1	20.83	22.00	1.309	62.9	1.006	0.03	1.040	1.370
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Back	5mm	Ant 2	DSI 4	42590	3500	1	22.29	24.00	1.483	62.9	1.006	0.11	0.996	1.485
	LTE Band 42 part27Q	20M	QPSK	1	0	-	Top Side	7mm	Ant 2	DSI 4	42590	3500	1	22.29	24.00	1.483	62.9	1.006	0.05	0.556	0.829
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Front	0mm	Ant 2	DSI 4	656000	3840	1	21.82	23.00	1.312	-	-	-0.03	2.010	2.638
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	0mm	Ant 2	DSI 4	656000	3840	1	21.76	23.00	1.330	-	-	0.01	2.030	2.701
	FR1 n77 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Front	0mm	Ant 2	DSI 4	656000	3840	1	21.70	23.00	1.349	-	-	0.05	1.960	2.644
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 2	DSI 6	656000	3840	1	18.97	20.10	1.297	-	-	0.05	2.120	2.750
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 2	DSI 6	656000	3840	2	18.97	20.10	1.297	-	-	0.03	1.980	2.568
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 2	DSI 6	656000	3840	1	18.95	20.10	1.303	-	-	0.06	2.030	2.645
	FR1 n77 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 2	DSI 6	656000	3840	1	18.86	20.10	1.330	-	-	0.02	1.900	2.528
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	0mm	Ant 2	DSI 4	656000	3840	1	21.82	23.00	1.312	-	-	-0.01	0.560	0.735
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	0mm	Ant 2	DSI 4	656000	3840	1	21.76	23.00	1.330	-	-	0.05	0.540	0.718
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	0mm	Ant 2	DSI 6	656000	3840	1	18.97	20.10	1.297	-	-	0.05	1.400	1.816
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	0mm	Ant 2	DSI 6	656000	3840	1	18.95	20.10	1.303	-	-	0.05	1.410	1.837

	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	DSI 4	656000	3840	1	25.61	27.00	1.377	-	-	0.03	0.989	1.362
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	7mm	Ant 2	DSI 4	656000	3840	1	25.41	27.00	1.442	-	-	0.01	0.571	0.823
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 3	DSI 4	656000	3840	1	16.01	17.00	1.256	-	-	0.05	2.170	2.726
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 3	DSI 4	656000	3840	2	16.01	17.00	1.256	-	-	0.06	1.990	2.499
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 3	DSI 4	656000	3840	1	15.81	17.00	1.315	-	-	0.03	1.980	2.604
	FR1 n77 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 3	DSI 4	656000	3840	1	15.75	17.00	1.334	-	-	0.02	1.820	2.427
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	0mm	Ant 3	DSI 4	656000	3840	1	15.81	17.00	1.315	-	-	0.04	0.430	0.566
	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 7	DSI 4	656000	3840	1	20.48	21.50	1.265	-	-	0.03	2.080	2.631
64	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 7	DSI 4	656000	3840	1	20.44	21.50	1.276	-	-	0.02	2.160	**2.757**
	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 7	DSI 4	656000	3840	2	20.44	21.50	1.276	-	-	0.06	1.960	2.502
	FR1 n77 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 7	DSI 4	656000	3840	1	20.32	21.50	1.312	-	-	-0.05	1.900	2.493

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	Sample	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)
WLAN																	
69	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 8	Full power	1	2412	1	19.23	20.50	1.340	100	1.000	0.07	0.905	**1.212**
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 8	Full power	1	2412	2	19.23	20.50	1.340	100	1.000	0.03	0.823	1.103
	WLAN2.4GHz	802.11b 1Mbps	Right Side	0mm	Ant 8	Full power	1	2412	1	19.23	20.50	1.340	100	1.000	-0.03	0.722	0.967
	WLAN5.2GHz	802.11n-HT40 MCS0	Back	0mm	Ant 8	Full power	38	5190	1	18.24	19.50	1.337	96.3	1.038	0.01	0.776	1.077
65	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 8	Full power	38	5190	1	18.24	19.50	1.337	96.3	1.038	-0.08	1.200	**1.665**
	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 8	Full power	38	5190	2	18.24	19.50	1.337	96.3	1.038	0.02	1.050	1.457
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 8	Simultaneous	42	5210	1	13.41	15.00	1.442	92.17	1.085	0.06	0.366	0.573
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 8	Simultaneous	42	5210	1	13.41	15.00	1.442	92.17	1.085	0.03	0.502	0.785
	WLAN5.2GHz	802.11n-HT40 MCS0	Back	9mm	Ant 8	Full power	38	5190	1	18.24	19.50	1.337	96.3	1.038	0.04	0.227	0.315
	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 8	Full power	38	5190	1	18.24	19.50	1.337	96.3	1.038	0.02	0.318	0.441
	WLAN5.3GHz	802.11n-HT40 MCS0	Front	0mm	Ant 8	Full power	54	5270	1	17.89	19.50	1.449	96.3	1.038	0.06	0.791	1.190
66	WLAN5.3GHz	802.11n-HT40 MCS0	Back	0mm	Ant 8	Full power	54	5270	1	17.89	19.50	1.449	96.3	1.038	0.01	1.010	**1.519**
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 8	Full power	54	5270	1	17.89	19.50	1.449	96.3	1.038	0.02	0.020	0.030
	WLAN5.3GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 8	Full power	54	5270	1	17.89	19.50	1.449	96.3	1.038	0.04	0.582	0.875
	WLAN5.3GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 8	Full power	54	5270	1	17.89	19.50	1.449	96.3	1.038	0.06	0.981	1.475
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 8	Simultaneous	58	5290	1	14.28	16.00	1.486	92.17	1.085	0.03	0.489	0.788
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 8	Simultaneous	58	5290	1	14.28	16.00	1.486	92.17	1.085	-0.03	0.412	0.664
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	9mm	Ant 8	Full power	54	5270	1	17.89	19.50	1.449	96.3	1.038	0.02	0.245	0.368
	WLAN5.3GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 8	Full power	54	5270	1	17.89	19.50	1.449	96.3	1.038	0.04	0.333	0.501
	WLAN5.5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 8	Full power	142	5710	1	18.28	19.50	1.324	96.3	1.038	0.06	0.617	0.848
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 8	Full power	142	5710	1	18.28	19.50	1.324	96.3	1.038	0.02	0.820	1.127
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 8	Full power	142	5710	1	18.28	19.50	1.324	96.3	1.038	0.03	0.038	0.052
	WLAN5.5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 8	Full power	142	5710	1	18.28	19.50	1.324	96.3	1.038	0.01	0.351	0.483
67	WLAN5.5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 8	Full power	142	5710	1	18.28	19.50	1.324	96.3	1.038	0.08	0.873	**1.200**
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 8	Simultaneous	138	5690	1	15.53	17.50	1.574	92.17	1.085	0.03	0.386	0.659
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 8	Simultaneous	138	5690	1	15.53	17.50	1.574	92.17	1.085	0.06	0.451	0.770
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	9mm	Ant 8	Full power	142	5710	1	18.28	19.50	1.324	96.3	1.038	-0.03	0.216	0.297
	WLAN5.5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 8	Full power	142	5710	1	18.28	19.50	1.324	96.3	1.038	0.01	0.310	0.426
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	0mm	Ant 8	Full power	151	5755	1	18.35	20.00	1.462	96.3	1.038	0.01	0.590	0.895
68	WLAN5.8GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 8	Full power	151	5755	1	18.35	20.00	1.462	96.3	1.038	-0.02	0.876	**1.330**
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 8	Simultaneous	155	5775	1	14.62	16.00	1.374	92.17	1.085	-0.09	0.377	0.562
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 8	Simultaneous	155	5775	1	14.62	16.00	1.374	92.17	1.085	0.09	0.475	0.708
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	9mm	Ant 8	Full power	151	5755	1	18.35	20.00	1.462	96.3	1.038	0.01	0.257	0.390
	WLAN5.8GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 8	Full power	151	5755	1	18.35	20.00	1.462	96.3	1.038	0.05	0.369	0.560

16.5 Repeated SAR Measurement

<1g>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	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 42 part27Q	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 2	42990	3540	1	16.97	18.20	1.327	62.9	1.006	-0.03	0.949	1	1.267
2nd	LTE Band 42 part27Q	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 2	42990	3540	1	16.97	18.20	1.327	62.9	1.006	0.02	0.935	1.015	1.249
1st	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 3	40620	2593	1	20.39	20.50	1.026	42.9	1.009	-0.08	1.190	1	1.232
2nd	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 3	40620	2593	1	20.39	20.50	1.026	42.9	1.009	0.02	1.170	1.017	1.211
1st	WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Left Cheek	0mm	Ant 8	Full power	1	2412	1	19.23	20.50	1.340	100	1.000	-0.01	1.020	1	1.366
2nd	WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Left Cheek	0mm	Ant 8	Full power	1	2412	1	19.23	20.50	1.340	100	1.000	0.02	1.000	1.020	1.340
1st	WLAN5.8GHz	-	-	-	-	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 8	Standalone	155	5775	1	16.24	17.50	1.337	92.17	1.085	0.03	0.819	1	1.188
2nd	WLAN5.8GHz	-	-	-	-	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 8	Standalone	155	5775	1	16.24	17.50	1.337	92.17	1.085	0.02	0.810	1.011	1.175
1st	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 0	DSI 3	26865	831.5	1	22.32	23.40	1.282	-	-	0.04	0.968	1	1.241
2nd	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 0	DSI 3	26865	831.5	1	22.32	23.40	1.282	-	-	0.02	0.955	1.014	1.225
1st	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	DSI 3	9400	1880	1	17.34	18.20	1.219	-	-	-0.03	1.030	1	1.256
2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	DSI 3	9400	1880	1	17.34	18.20	1.219	-	-	0.02	1.020	1.010	1.243
1st	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 3	DSI 3	656000	3840	1	13.31	14.00	1.172	-	-	0.01	1.060	1	1.243
2nd	FR1 n77 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 3	DSI 3	656000	3840	1	13.31	14.00	1.172	-	-	0.06	1.040	1.019	1.219

<10g>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	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)	Ratio	Reported 10g SAR (W/kg)
1st	LTE Band 26	15M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	26865	831.5	1	22.32	23.50	1.312	-	-	0.04	2.090	1	2.742
2nd	LTE Band 26	15M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	26865	831.5	1	22.32	23.50	1.312	-	-	0.02	2.070	1.010	2.716
1st	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	DSI 6	9400	1880	1	20.56	21.60	1.271	-	-	0.02	2.170	1	2.757
2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	DSI 6	9400	1880	1	20.56	21.60	1.271	-	-	0.06	2.150	1.009	2.732
1st	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	0mm	Ant 5	DSI 6	507000	2535	1	19.74	20.50	1.191	-	-	-0.08	2.280	1	2.716
2nd	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	0mm	Ant 5	DSI 6	507000	2535	1	19.74	20.50	1.191	-	-	0.05	2.240	1.018	2.668
1st	LTE Band 42 part27Q	20M	QPSK	1	0	-	Back	0mm	Ant 2	DSI 6	42590	3500	1	20.96	22.00	1.271	62.9	1.006	0.07	2.150	1	2.748
2nd	LTE Band 42 part27Q	20M	QPSK	1	0	-	Back	0mm	Ant 2	DSI 6	42590	3500	1	20.96	22.00	1.271	62.9	1.006	0.06	2.130	1.009	2.723
1st	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 3	DSI 4	656000	3840	1	16.01	17.00	1.256	-	-	0.05	2.170	1	2.726
2nd	FR1 n77 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 3	DSI 4	656000	3840	1	16.01	17.00	1.256	-	-	0.06	2.150	1.009	2.700

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. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
4. The ratio is the difference in percentage between original and repeated *measured SAR*.
5. All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

16.6 TDD LTE Linearity Data Analysis

General Note:
This device support Power Class 2 and Power Class 3 operations for LTE Band 41. The highest available duty cycle for Power Class 2 operation is 43.3% using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each LTE configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg for 1g and < 3.5 W/kg for 10g, Separate SAR testing for Power Class 2 is not required.

LTE Band 41(HPUE) Ant 1-Linearity Data for Head		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	20.30	21.90
Reported 1g SAR (W/kg)	1.197	1.237
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	67.83	67.06
Linearity SAR (W/kg)	1.184	
% deviation from expected linearity		4.52%
LTE Band 41(HPUE) Ant 1-Linearity Data for Body-worn		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	18.90	20.50
Reported 1g SAR (W/kg)	1.255	1.232
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	49.14	48.58
Linearity SAR (W/kg)	1.241	
% deviation from expected linearity		-0.72%
LTE Band 41(HPUE) Ant 1-Linearity Data for Hotspot		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	17.40	19.00
Reported 1g SAR (W/kg)	0.942	0.973
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	34.79	34.39
Linearity SAR (W/kg)	0.931	
% deviation from expected linearity		4.47%
LTE Band 41(HPUE) Ant 1-Linearity Data for Extremity SAR		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	22.50	24.10
Reported 10g SAR (W/kg)	2.634	2.736
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	112.57	111.30
Linearity SAR (W/kg)	2.604	
% deviation from expected linearity		5.05%

17. Simultaneous Transmission Analysis

No.	Simultaneous Transmission Configurations	Portable Handset			
		Head	Body-worn	Hotspot	Product specific 10g SAR
1.	WWAN + WLAN2.4GHz	Yes	Yes	Yes	Yes
2.	WWAN + WLAN5GHz	Yes	Yes	Yes	Yes
3.	WWAN + Bluetooth	Yes	Yes	Yes	Yes
4.	WLAN5GHz+ Bluetooth	Yes	Yes	Yes	Yes
5.	WWAN + WLAN5GHz+ Bluetooth	Yes	Yes	Yes	Yes

General Note:

1. This device supports VoIP in GPRS, EGPRS, WCDMA and LTE (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
2. WWAN above includes 5G NR bands.
3. EUT will choose each GSM, WCDMA, LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
4. For EN-DC mode, Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure from 4G(LTE) and time-averaged RF exposure from 5G NR. Smart Transmit algorithm controls the total RF exposure from both 4G and 5G NR to not exceed FCC limit. Therefore, simultaneous transmission compliance between 4G+5G NR operation is demonstrated in the Part 2 Report during algorithm validation. In Part 1 Report, simultaneous transmission compliance was evaluated individually with other Radios (WLAN or BT) using one of 4G or 5G NR.
5. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
6. This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WLAN Direct (GC/GO), and 5.3GHz / 5.5GHz supports WLAN Direct (GC only).
7. The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
8. WLAN 2.4GHz and Bluetooth share the same antenna, and they cannot transmit simultaneously each other.
9. According to the EUT characteristic, WLAN 5GHz and Bluetooth can transmit simultaneously.
10. According to the EUT characteristic, WLAN 5GHz and WLAN 2.4GHz cannot transmit simultaneously.
11. The maximum SAR summation is calculated based on the same configuration and test position.
12. For distance SAR and non-distance SAR always chose higher SAR to do co-located analysis.
13. For simultaneously analysis, since the SAR summation of 3 transmitters can cover others combination of 2 transmitters, therefore in this section did not additional to evaluate 2TX combination of simultaneously transmission.
14. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
    i) 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/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 and SPLSR≤ 0.10 for 10g SAR , simultaneously transmission SAR measurement is not necessary.
    iv) Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.
    v) The SPLSR calculated results please refer to section 17.6.

17.1 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. 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

Above analysis is also apply to LTE inter-band uplink, LTE1 + LTE2 + WLAN + BT simultaneous transmission, So inter-band uplink CA no need to do additional simultaneously analysis again. Only required comply with total exposure ratio (TER) of LTE + WLAN + BT < 1.

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17.2 Head Exposure Conditions

WWAN Band	Exposure Position	1 WWAN 1g SAR (W/kg)	2 WLAN2.4GHz Ant 8 1g SAR (W/kg)	3 WLAN5GHz Ant 8 1g SAR (W/kg)	4 Bluetooth Ant 8 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)
GSM850 Ant 0	Right Cheek	0.417	0.581	0.598	0.060	1.00	1.08
	Right Tilted	0.233	0.581	0.598	0.051	0.81	0.88
	Left Cheek	0.352	0.581	0.598	0.126	0.93	1.08
	Left Tilted	0.201	0.581	0.598	0.108	0.78	0.91
GSM1900 Ant 0	Right Cheek	0.138	0.581	0.598	0.060	0.72	0.80
	Right Tilted	0.071	0.581	0.598	0.051	0.65	0.72
	Left Cheek	0.101	0.581	0.598	0.126	0.68	0.83
	Left Tilted	0.101	0.581	0.598	0.108	0.68	0.81
WCDMA II Ant 0	Right Cheek	0.192	0.581	0.598	0.060	0.77	0.85
	Right Tilted	0.121	0.581	0.598	0.051	0.70	0.77
	Left Cheek	0.149	0.581	0.598	0.126	0.73	0.87
	Left Tilted	0.147	0.581	0.598	0.108	0.73	0.85
WCDMA V Ant 0	Right Cheek	0.387	0.581	0.598	0.060	0.97	1.05
	Right Tilted	0.191	0.581	0.598	0.051	0.77	0.84
	Left Cheek	0.352	0.581	0.598	0.126	0.93	1.08
	Left Tilted	0.183	0.581	0.598	0.108	0.76	0.89
LTE Band 2 Ant 0	Right Cheek	0.224	0.581	0.598	0.060	0.81	0.88
	Right Tilted	0.147	0.581	0.598	0.051	0.73	0.80
	Left Cheek	0.172	0.581	0.598	0.126	0.75	0.90
	Left Tilted	0.178	0.581	0.598	0.108	0.76	0.88
LTE Band 5 Ant 1	Right Cheek	0.612	0.581	0.598	0.060	1.19	1.27
	Right Tilted	0.530	0.581	0.598	0.051	1.11	1.18
	Left Cheek	0.638	0.581	0.598	0.126	1.22	1.36
	Left Tilted	0.598	0.581	0.598	0.108	1.18	1.30
LTE Band 7 Ant 1	Right Cheek	0.908	0.581	0.598	0.060	1.49	1.57
	Right Tilted	0.908	0.581	0.598	0.051	1.49	1.56
	Left Cheek	0.424	0.581	0.598	0.126	1.01	1.15
	Left Tilted	0.553	0.581	0.598	0.108	1.13	1.26
LTE Band 7 Ant 5	Right Cheek	0.373	0.581	0.598	0.060	0.95	1.03
	Right Tilted	0.256	0.581	0.598	0.051	0.84	0.91
	Left Cheek	0.603	0.581	0.598	0.126	1.18	1.33
	Left Tilted	0.241	0.581	0.598	0.108	0.82	0.95
LTE Band 26 Ant 0	Right Cheek	0.324	0.581	0.598	0.060	0.91	0.98
	Right Tilted	0.158	0.581	0.598	0.051	0.74	0.81
	Left Cheek	0.278	0.581	0.598	0.126	0.86	1.00
	Left Tilted	0.146	0.581	0.598	0.108	0.73	0.85
LTE Band 41 Ant 1	Right Cheek	0.831	0.581	0.598	0.060	1.41	1.49
	Right Tilted	0.831	0.581	0.598	0.051	1.41	1.48
	Left Cheek	0.831	0.581	0.598	0.126	1.41	1.56
	Left Tilted	0.831	0.581	0.598	0.108	1.41	1.54
LTE Band 42_Part27Q Ant 2	Right Cheek	0.862	0.581	0.598	0.060	1.44	1.52
	Right Tilted	0.862	0.581	0.598	0.051	1.44	1.51
	Left Cheek	0.862	0.581	0.598	0.126	1.44	1.59
	Left Tilted	0.862	0.581	0.598	0.108	1.44	1.57

WWAN Band	Exposure Position	1 WWAN 1g SAR (W/kg)	2 WLAN2.4GHz Ant 8 1g SAR (W/kg)	3 WLAN5GHz Ant 8 1g SAR (W/kg)	4 Bluetooth Ant 8 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)
FR1 n5 Ant 0	Right Cheek	0.176	0.581	0.598	0.060	0.76	0.83
	Right Tilted	0.093	0.581	0.598	0.051	0.67	0.74
	Left Cheek	0.153	0.581	0.598	0.126	0.73	0.88
	Left Tilted	0.085	0.581	0.598	0.108	0.67	0.79
FR1 n5 Ant 1	Right Cheek	0.491	0.581	0.598	0.060	1.07	1.15
	Right Tilted	0.425	0.581	0.598	0.051	1.01	1.07
	Left Cheek	0.461	0.581	0.598	0.126	1.04	1.19
	Left Tilted	0.418	0.581	0.598	0.108	1.00	1.12
FR1 n7 Ant 5	Right Cheek	0.294	0.581	0.598	0.060	0.88	0.95
	Right Tilted	0.246	0.581	0.598	0.051	0.83	0.90
	Left Cheek	0.539	0.581	0.598	0.126	1.12	1.26
	Left Tilted	0.222	0.581	0.598	0.108	0.80	0.93
FR1 n77 HPUE_Ant 2	Right Cheek	0.824	0.581	0.598	0.060	1.41	1.48
	Right Tilted	0.824	0.581	0.598	0.051	1.41	1.47
	Left Cheek	0.824	0.581	0.598	0.126	1.41	1.55
	Left Tilted	0.824	0.581	0.598	0.108	1.41	1.53
FR1 n77 HPUE_Ant 3	Right Cheek	0.183	0.581	0.598	0.060	0.76	0.84
	Right Tilted	0.097	0.581	0.598	0.051	0.68	0.75
	Left Cheek	0.075	0.581	0.598	0.126	0.66	0.80
	Left Tilted	0.086	0.581	0.598	0.108	0.67	0.79
FR1 n77 HPUE_Ant 5	Right Cheek	0.137	0.581	0.598	0.060	0.72	0.80
	Right Tilted	0.200	0.581	0.598	0.051	0.78	0.85
	Left Cheek	0.276	0.581	0.598	0.126	0.86	1.00
	Left Tilted	0.141	0.581	0.598	0.108	0.72	0.85
FR1 n77 HPUE_Ant 7	Right Cheek	0.061	0.581	0.598	0.060	0.64	0.72
	Right Tilted	0.068	0.581	0.598	0.051	0.65	0.72
	Left Cheek	0.092	0.581	0.598	0.126	0.67	0.82
	Left Tilted	0.080	0.581	0.598	0.108	0.66	0.79

17.3 Hotspot Exposure Conditions

WWAN Band	Exposure Position	1 WWAN 1g SAR (W/kg)	2 WLAN2.4GHz Ant 8 1g SAR (W/kg)	3 WLAN5GHz Ant 8 1g SAR (W/kg)	4 Bluetooth Ant 8 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)	Case No
GSM850 Ant 0	Front	0.639	0.348	0.195	0.088	0.99	0.92	
	Back	1.237	0.580	0.479	0.118	**1.82**	**1.83**	**1/2**
	Left side	0.258	0.056	0.029	0.001	0.31	0.29	
	Right side	0.676	0.432	0.163	0.101	1.11	0.94	
	Top side		0.385	0.520	0.068	0.39	0.59	
	Bottom side	0.834				0.83	0.83	
GSM1900 Ant 0	Front	0.457	0.348	0.195	0.088	0.81	0.74	
	Back	0.832	0.580	0.479	0.118	1.41	1.43	
	Left side	0.094	0.056	0.029	0.001	0.15	0.12	
	Right side	0.146	0.432	0.163	0.101	0.58	0.41	
	Top side		0.385	0.520	0.068	0.39	0.59	
	Bottom side	1.230				1.23	1.23	
WCDMA II Ant 0	Front	0.510	0.348	0.195	0.088	0.86	0.79	
	Back	0.931	0.580	0.479	0.118	1.51	1.53	
	Left side	0.087	0.056	0.029	0.001	0.14	0.12	
	Right side	0.163	0.432	0.163	0.101	0.60	0.43	
	Top side		0.385	0.520	0.068	0.39	0.59	
	Bottom side	1.237				1.24	1.24	
WCDMA V Ant 0	Front	0.719	0.348	0.195	0.088	1.07	1.00	
	Back	1.262	0.580	0.479	0.118	**1.84**	**1.86**	**3/4**
	Left side	0.246	0.056	0.029	0.001	0.30	0.28	
	Right side	0.567	0.432	0.163	0.101	1.00	0.83	
	Top side		0.385	0.520	0.068	0.39	0.59	
	Bottom side	0.926				0.93	0.93	
LTE Band 2 Ant 0	Front	0.507	0.348	0.195	0.088	0.86	0.79	
	Back	0.764	0.580	0.479	0.118	1.34	1.36	
	Left side	0.080	0.056	0.029	0.001	0.14	0.11	
	Right side	0.150	0.432	0.163	0.101	0.58	0.41	
	Top side		0.385	0.520	0.068	0.39	0.59	
	Bottom side	1.247				1.25	1.25	
LTE Band 5 Ant 1	Front	0.196	0.348	0.195	0.088	0.54	0.48	
	Back	0.477	0.580	0.479	0.118	1.06	1.07	
	Left side	0.059	0.056	0.029	0.001	0.12	0.09	
	Right side	0.069	0.432	0.163	0.101	0.50	0.33	
	Top side	0.452	0.385	0.520	0.068	0.84	1.04	
	Bottom side					0.00	0.00	
LTE Band 7 Ant 1	Front	0.281	0.348	0.195	0.088	0.63	0.56	
	Back	0.569	0.580	0.479	0.118	1.15	1.17	
	Left side	0.166	0.056	0.029	0.001	0.22	0.20	
	Right side	0.013	0.432	0.163	0.101	0.45	0.28	
	Top side	0.928	0.385	0.520	0.068	1.31	1.52	
	Bottom side					0.00	0.00	
LTE Band 7 Ant 5	Front	0.747	0.348	0.195	0.088	1.10	1.03	
	Back	1.235	0.580	0.479	0.118	**1.82**	**1.83**	**5/6**
	Left side	0.606	0.056	0.029	0.001	0.66	0.64	
	Right side	0.099	0.432	0.163	0.101	0.53	0.36	
	Top side		0.385	0.520	0.068	0.39	0.59	
	Bottom side	0.602				0.60	0.60	
LTE Band 26	Front	0.677	0.348	0.195	0.088	1.03	0.96	

Ant 0	Back	1.241	0.580	0.479	0.118	**1.82**	**1.84**	**7/8**
	Left side	0.209	0.056	0.029	0.001	0.27	0.24	
	Right side	0.495	0.432	0.163	0.101	0.93	0.76	
	Top side		0.385	0.520	0.068	0.39	0.59	
	Bottom side	0.766				0.77	0.77	
LTE Band 41 Ant 1	Front	0.284	0.348	0.195	0.088	0.63	0.57	
	Back	0.698	0.580	0.479	0.118	1.28	1.30	
	Left side	0.172	0.056	0.029	0.001	0.23	0.20	
	Right side	0.014	0.432	0.163	0.101	0.45	0.28	
	Top side	0.973	0.385	0.520	0.068	1.36	1.56	
	Bottom side					0.00	0.00	
LTE Band 42_Part27Q Ant 2	Front	0.525	0.348	0.195	0.088	0.87	0.81	
	Back	0.986	0.580	0.479	0.118	**1.57**	1.58	
	Left side	0.069	0.056	0.029	0.001	0.13	0.10	
	Right side	0.143	0.432	0.163	0.101	0.58	0.41	
	Top side	0.760	0.385	0.520	0.068	1.15	1.35	
	Bottom side					0.00	0.00	

WWAN Band	Exposure Position	1 WWAN 1g SAR (W/kg)	2 WLAN2.4GHz Ant 8 1g SAR (W/kg)	3 WLAN5GHz Ant 8 1g SAR (W/kg)	4 Bluetooth Ant 8 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)	Case No
FR1 n5 Ant 0	Front	0.647	0.348	0.195	0.088	1.00	0.93	
	Back	1.139	0.580	0.479	0.118	**1.72**	**1.74**	**9/10**
	Left side	0.209	0.056	0.029	0.001	0.27	0.24	
	Right side	0.482	0.432	0.163	0.101	0.91	0.75	
	Top side		0.385	0.520	0.068	0.39	0.59	
	Bottom side	0.731				0.73	0.73	
FR1 n5 Ant 1	Front	0.152	0.348	0.195	0.088	0.50	0.44	
	Back	0.325	0.580	0.479	0.118	0.91	0.92	
	Left side	0.043	0.056	0.029	0.001	0.10	0.07	
	Right side	0.053	0.432	0.163	0.101	0.49	0.32	
	Top side	0.328	0.385	0.520	0.068	0.71	0.92	
	Bottom side					0.00	0.00	
FR1 n7 Ant 5	Front	0.692	0.348	0.195	0.088	1.04	0.98	
	Back	1.258	0.580	0.479	0.118	**1.84**	**1.86**	**11/12**
	Left side	0.737	0.056	0.029	0.001	0.79	0.77	
	Right side	0.133	0.432	0.163	0.101	0.57	0.40	
	Top side		0.385	0.520	0.068	0.39	0.59	
	Bottom side	0.731				0.73	0.73	
FR1 n77 HPUE_ Ant 2	Front	0.431	0.348	0.195	0.088	0.78	0.71	
	Back	0.762	0.580	0.479	0.118	1.34	1.36	
	Left side	0.090	0.056	0.029	0.001	0.15	0.12	
	Right side	0.236	0.432	0.163	0.101	0.67	0.50	
	Top side	0.633	0.385	0.520	0.068	1.02	1.22	
	Bottom side					0.00	0.00	
FR1 n77 HPUE_ Ant 3	Front	0.015	0.348	0.195	0.088	0.36	0.30	
	Back	0.984	0.580	0.479	0.118	1.56	1.58	
	Left side	0.149	0.056	0.029	0.001	0.21	0.18	
	Right side	0.006	0.432	0.163	0.101	0.44	0.27	
	Top side	0.010	0.385	0.520	0.068	0.40	0.60	
	Bottom side					0.00	0.00	
FR1 n77 HPUE_ Ant 5	Front	0.612	0.348	0.195	0.088	0.96	0.90	
	Back	0.717	0.580	0.479	0.118	1.30	1.31	
	Left side	0.665	0.056	0.029	0.001	0.72	0.70	
	Right side	0.044	0.432	0.163	0.101	0.48	0.31	
	Top side		0.385	0.520	0.068	0.39	0.59	
	Bottom side	0.188				0.19	0.19	
FR1 n77 HPUE_ Ant 7	Front	0.037	0.348	0.195	0.088	0.39	0.32	
	Back	0.986	0.580	0.479	0.118	1.57	1.58	
	Left side	0.023	0.056	0.029	0.001	0.08	0.05	
	Right side	0.169	0.432	0.163	0.101	0.60	0.43	
	Top side	0.077	0.385	0.520	0.068	0.46	0.67	
	Bottom side					0.00	0.00	

17.4 Body-Worn Accessory Exposure Conditions

WWAN Band	Exposure Position	1	2	3	4	1+2	1+3+4	Case No
		WWAN	WLAN2.4GHz Ant 8	WLAN5GHz Ant 8	Bluetooth Ant 8	Summed	Summed	
		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	0.639	0.572	0.561	0.088	1.21	1.29	
	Back	1.237	0.572	0.561	0.118	**1.81**	**1.92**	**1/2**
GSM1900 Ant 0	Front	0.562	0.572	0.561	0.088	1.13	1.21	
	Back	1.252	0.572	0.561	0.118	**1.82**	**1.93**	**3/4**
WCDMA II Ant 0	Front	0.692	0.572	0.561	0.088	1.26	1.34	
	Back	1.256	0.572	0.561	0.118	**1.83**	**1.94**	**5/6**
WCDMA V Ant 0	Front	0.719	0.572	0.561	0.088	1.29	1.37	
	Back	1.262	0.572	0.561	0.118	**1.83**	**1.94**	**7/8**
LTE Band 2 Ant 0	Front	0.761	0.572	0.561	0.088	1.33	1.41	
	Back	1.242	0.572	0.561	0.118	**1.81**	**1.92**	**9/10**
LTE Band 5 Ant 1	Front	0.196	0.572	0.561	0.088	0.77	0.85	
	Back	0.477	0.572	0.561	0.118	1.05	1.16	
LTE Band 7 Ant 1	Front	0.569	0.572	0.561	0.088	1.14	1.22	
	Back	0.569	0.572	0.561	0.118	1.14	1.25	
LTE Band 7 Ant 5	Front	0.747	0.572	0.561	0.088	1.32	1.40	
	Back	1.235	0.572	0.561	0.118	**1.81**	**1.91**	**11/12**
LTE Band 26 Ant 0	Front	0.677	0.572	0.561	0.088	1.25	1.33	
	Back	1.241	0.572	0.561	0.118	**1.81**	**1.92**	**13/14**
LTE Band 41 Ant 1	Front	0.698	0.572	0.561	0.088	1.27	1.35	
	Back	0.698	0.572	0.561	0.118	1.27	1.38	
LTE Band 42_Part27Q Ant 2	Front	0.902	0.572	0.561	0.088	1.47	1.55	
	Back	0.902	0.572	0.561	0.118	1.47	1.58	

WWAN Band	Exposure Position	1	2	3	4	1+2	1+3+4	Case No
		WWAN	WLAN2.4GHz Ant 8	WLAN5GHz Ant 8	Bluetooth Ant 8	Summed	Summed	
		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	0.647	0.572	0.561	0.088	1.22	1.30	
	Back	1.139	0.572	0.561	0.118	**1.71**	**1.82**	**15/16**
FR1 n5 Ant 1	Front	0.183	0.572	0.561	0.088	0.76	0.83	
	Back	0.393	0.572	0.561	0.118	0.97	1.07	
FR1 n7 Ant 5	Front	0.692	0.572	0.561	0.088	1.26	1.34	
	Back	1.258	0.572	0.561	0.118	**1.83**	**1.94**	**17/18**
FR1 n77 HPUE_ Ant 2	Front	0.762	0.572	0.561	0.088	1.33	1.41	
	Back	0.762	0.572	0.561	0.118	1.33	1.44	
FR1 n77 HPUE_ Ant 3	Front	0.884	0.572	0.561	0.088	1.46	1.53	
	Back	0.884	0.572	0.561	0.118	1.46	1.56	
FR1 n77 HPUE_ Ant 5	Front	0.818	0.572	0.561	0.088	1.39	1.47	
	Back	0.956	0.572	0.561	0.118	1.53	**1.64**	**19**
FR1 n77 HPUE_ Ant 7	Front	0.890	0.572	0.561	0.088	1.46	1.54	
	Back	0.890	0.572	0.561	0.118	1.46	1.57	

17.5 Product specific 10g SAR Exposure Conditions

Remark:
1. For Bluetooth Product specific 10g stand-alone SAR is not required for a transmitter or antenna, due to 1g hotspot SAR is <1.2W/kg.

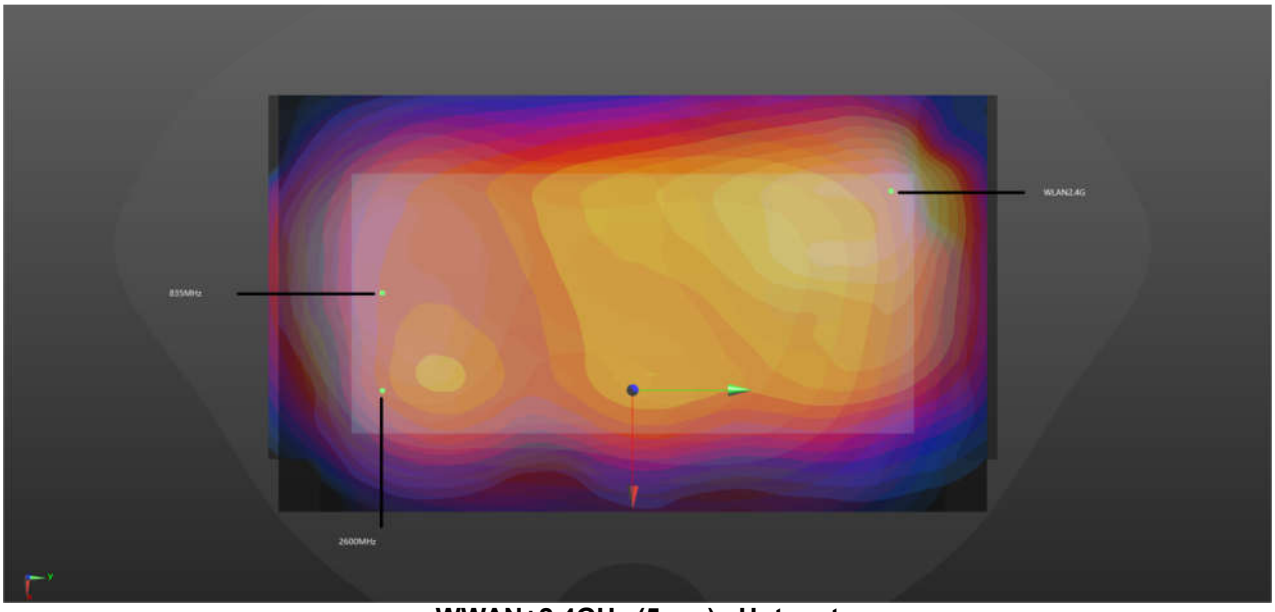
WWAN Band	Exposure Position	1	2	3	1+3	1+2
		WWAN	WLAN2.4GHz Ant 8	WLAN5GHz Ant 8	Summed	Summed
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)
GSM850 Ant 0	Back	1.749	1.212	0.788	2.54	2.96
GSM1900 Ant 0	Front	1.463		0.788	2.25	1.46
	Back	2.739	1.212	0.788	3.53	3.95
	Bottom side	2.501		0.788	3.29	2.50
WCDMA II Ant 0	Front	1.550		0.788	2.34	1.55
	Back	2.757	1.212	0.788	**3.55**	**3.97**
	Bottom side	2.340		0.788	3.13	2.34
WCDMA V Ant 0	Back	2.534	1.212	0.788	3.32	3.75
	Bottom side	2.715		0.788	3.50	2.72
LTE Band 2 Ant 0	Front	1.549		0.788	2.34	1.55
	Back	2.755	1.212	0.788	3.54	3.97
	Bottom side	1.682		0.788	2.47	1.68
LTE Band 7 Ant 1	Front	2.129		0.788	2.92	2.13
	Back	2.743	1.212	0.788	3.53	3.96
	Left side	1.564		0.788	2.35	1.56
	Top side	2.548		0.788	3.34	2.55
LTE Band 7 Ant 5	Front	1.915		0.788	2.70	1.92
	Back	2.731	1.212	0.788	3.52	3.94
	Left side	1.695		0.788	2.48	1.70
	Bottom side	1.501		0.788	2.29	1.50
LTE Band 26 Ant 0	Back	2.742	1.212	0.788	3.53	3.95
LTE Band 41 Ant 1	Front	1.646		0.788	2.43	1.65
	Back	2.736	1.212	0.788	3.52	3.95
	Top side	1.836		0.788	2.62	1.84
LTE Band 42 part27Q Ant 2	Front	2.238		0.788	3.03	2.24
	Back	2.748	1.212	0.788	3.54	3.96
	Top side	1.611		0.788	2.40	1.61

WWAN Band	Exposure Position	1	2	3	1+3	1+2
		WWAN	WLAN2.4GHz Ant 8	WLAN5GHz Ant 8	Summed	Summed
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)
FR1 n7 Ant 5	Front	1.703		0.788	2.49	1.70
	Back	2.716	1.212	0.788	3.50	3.93
	Left side	1.644		0.788	2.43	1.64
	Bottom side	1.441		0.788	2.23	1.44
FR1 n77 HPUE_ Ant 2	Front	2.701		0.788	3.49	2.70
	Back	2.750	1.212	0.788	3.54	3.96
	Right side	0.735	0.967	0.788	1.52	1.70
	Top side	1.837		0.788	2.63	1.84
FR1 n77 HPUE_ Ant 3	Back	2.726	1.212	0.788	3.51	3.94
	Left side	0.566		0.788	1.35	0.57
FR1 n77 HPUE_ Ant 7	Back	2.757	1.212	0.788	3.55	3.97

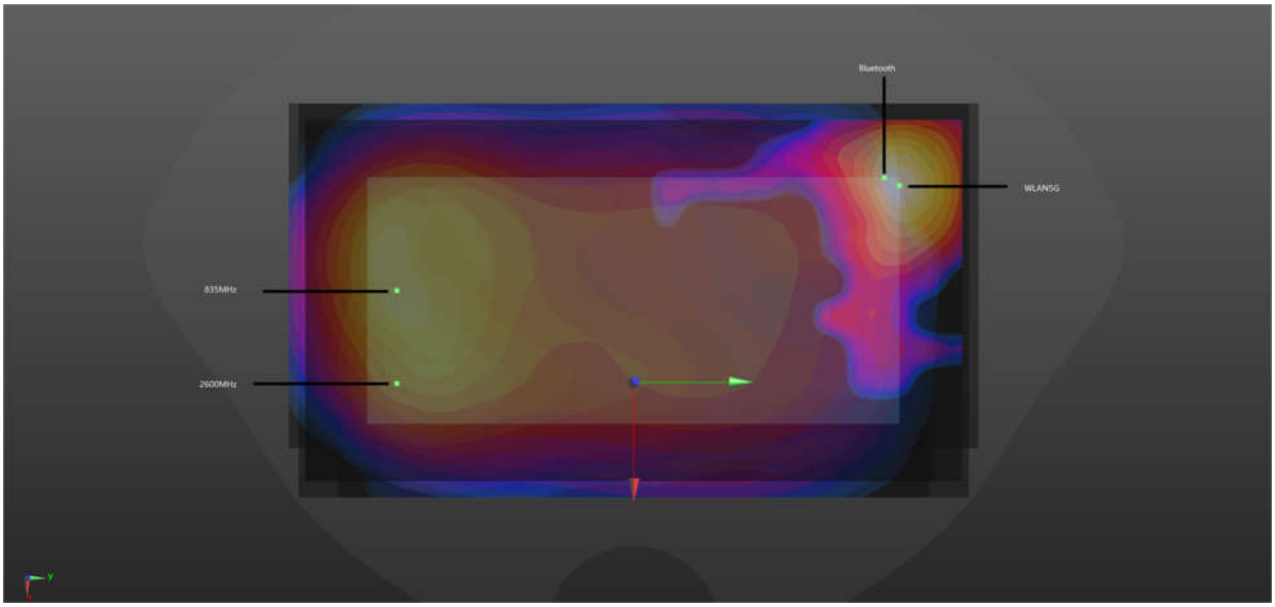
17.6 SPLSR Evaluation and Analysis

General Note:

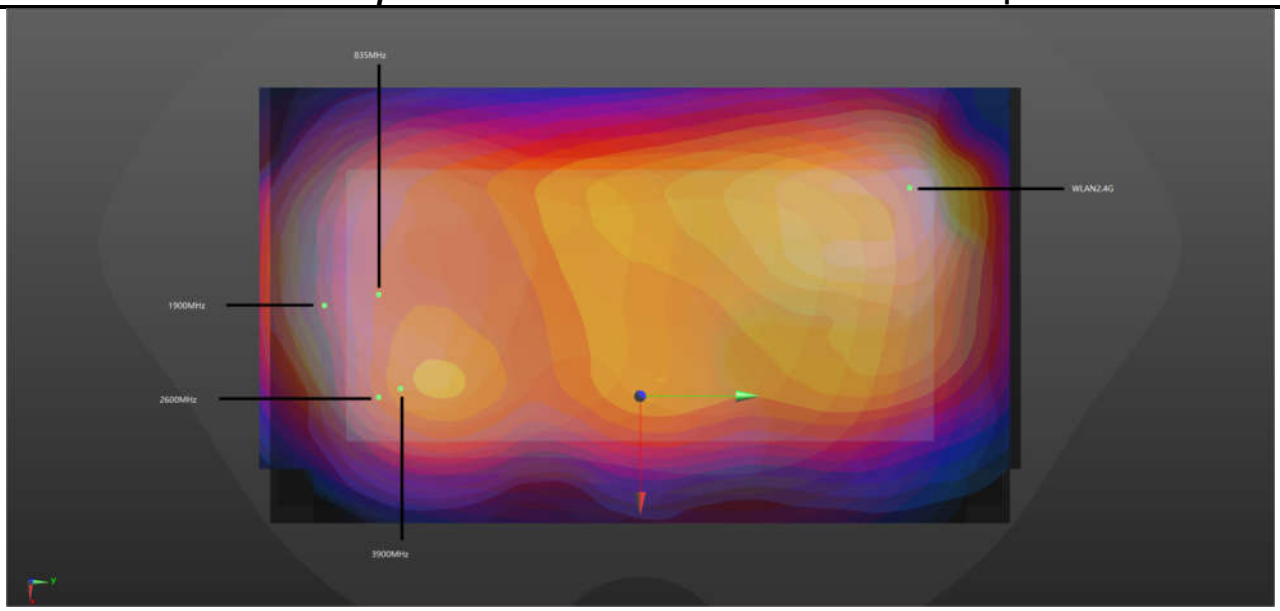
1. When standalone SAR is measured for both antennas in the pair, the peak location separation distance is computed by the square root of [(x1−x2)2 + (y1−y2)2 + (z1−z2)2], where (x1, y1, z1) and (x2, y2, z2) are the coordinates in the area scans or extrapolated peak SAR locations in the zoom scans, as appropriate.
2. SPLSR = (SAR1 + SAR2)1.5 / (min. separation distance, mm). If SPLSR ≤ 0.04 for 1g SAR, simultaneously transmission SAR measurement is not necessary.
3. Instead of doing a small volume scan over a co-located antenna pair, used summing the SAR values of the co-located pair and using that value in SPLSR calculation. In the calculation used the minimum distance between the spatially separated antenna and the closest antenna of the co-located antenna pair to be conservative.



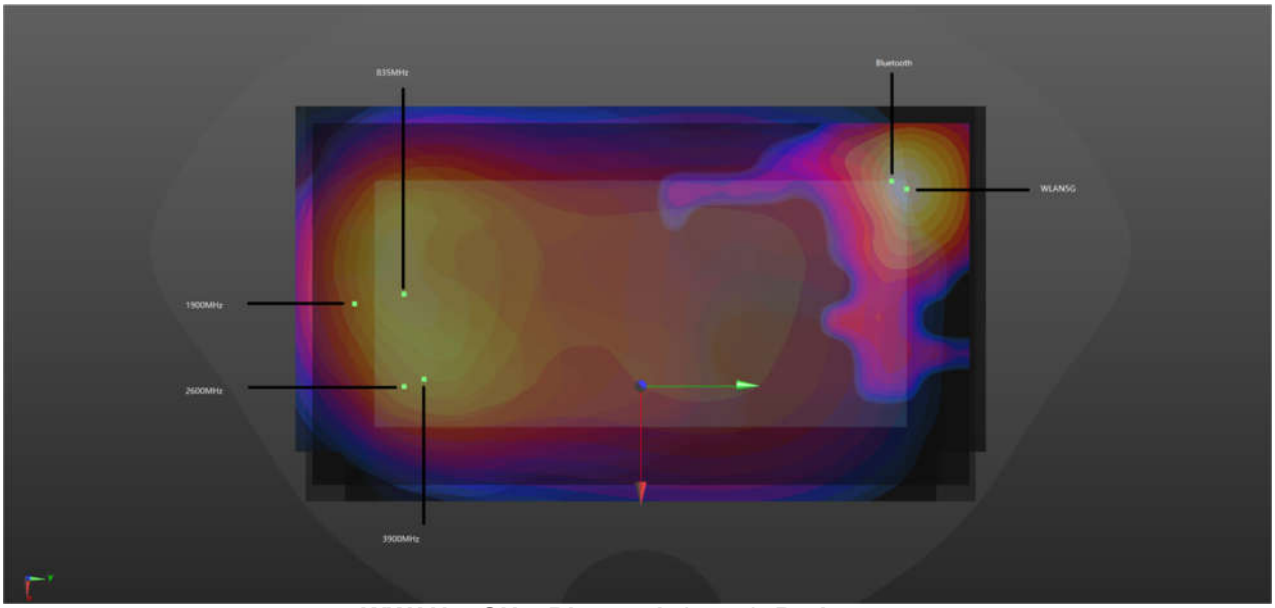
WWAN+2.4GHz (5mm)_ Hotspot



WWAN+5GHz+Bluetooth (5mm)_ Hotspot



WWAN+2.4GHz (5mm)_Body-worn



WWAN+5GHz+Bluetooth (5mm)_Body-worn

<Hotspot>

	Band	Position	SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				(mm)	X	Y	Z				
Case 1	GSM850 Ant 0	Back	1.237	5mm	-3	-72	-0.7	150.9	1.82	0.02	Not required
	WLAN2.4GHz Ant 8		0.58	5mm	-24.4	77.4	0.2				
Case 2	GSM850 Ant 0	Back	1.237	5mm	-3	-72	-0.7	148.4	1.83	0.02	Not required
	WLAN5GHz Ant 8		0.479	5mm	-35.8	80.2	-0.97				
	Bluetooth Ant 8		0.118	5mm	-27.4	74.4	-0.93				
Case 3	WCDMA V Ant 0	Back	1.262	5mm	-7.9	-81.4	-0.04	159.7	1.84	0.02	Not required
	WLAN2.4GHz Ant 8		0.58	5mm	-24.4	77.4	0.2				
Case 4	WCDMA V Ant 0	Back	1.262	5mm	-7.9	-81.4	-0.04	157.0	1.86	0.02	Not required
	WLAN5GHz Ant 8		0.479	5mm	-35.8	80.2	-0.97				
	Bluetooth Ant 8		0.118	5mm	-27.4	74.4	-0.93				
Case 5	LTE Band 7 Ant 5	Back	1.235	5mm	26.2	-72	0.01	157.7	1.82	0.02	Not required
	WLAN2.4GHz Ant 8		0.58	5mm	-24.4	77.4	0.2				
Case 6	LTE Band 7 Ant 5	Back	1.235	5mm	26.2	-72	0.01	155.9	1.83	0.02	Not required
	WLAN5GHz Ant 8		0.479	5mm	-35.8	80.2	-0.97				
	Bluetooth Ant 8		0.118	5mm	-27.4	74.4	-0.93				
Case 7	LTE Band 26 Ant 0	Back	1.241	5mm	-21.2	-75.2	-1.07	152.6	1.82	0.02	Not required
	WLAN2.4GHz Ant 8		0.58	5mm	-24.4	77.4	0.2				
Case 8	LTE Band 26 Ant 0	Back	1.241	5mm	-21.2	-75.2	-1.07	149.7	1.84	0.02	Not required
	WLAN5GHz Ant 8		0.479	5mm	-35.8	80.2	-0.97				
	Bluetooth Ant 8		0.118	5mm	-27.4	74.4	-0.93				
Case 9	FR1 n5 Ant 0	Back	1.139	5mm	-9.5	-79.9	-0.84	158.0	1.72	0.01	Not required
	WLAN2.4GHz Ant 8		0.58	5mm	-24.4	77.4	0.2				
Case 10	FR1 n5 Ant 0	Back	1.139	5mm	-9.5	-79.9	-0.84	155.3	1.74	0.01	Not required
	WLAN5GHz Ant 8		0.479	5mm	-35.8	80.2	-0.97				
	Bluetooth Ant 8		0.118	5mm	-27.4	74.4	-0.93				
Case 11	FR1 n7 Ant 5	Back	1.258	5mm	27.6	-69.8	-0.79	156.1	1.84	0.02	Not required
	WLAN2.4GHz Ant 8		0.58	5mm	-24.4	77.4	0.2				
Case 12	FR1 n7 Ant 5	Back	1.258	5mm	27.6	-69.8	-0.79	154.3	1.86	0.02	Not required
	WLAN5GHz Ant 8		0.479	5mm	-35.8	80.2	-0.97				
	Bluetooth Ant 8		0.118	5mm	-27.4	74.4	-0.93				

<Body-worn>

	Band	Position	SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				(mm)	X	Y	Z				
Case 1	GSM850 Ant 0	Back	1.237	5mm	-3	-72	-0.7	150.9	1.81	0.02	Not required
	WLAN2.4GHz Ant 8		0.572	5mm	-24.4	77.4	0.2				
Case 2	GSM850 Ant 0	Back	1.237	5mm	-3	-72	-0.7	148.4	1.92	0.02	Not required
	WLAN5GHz Ant 8		0.561	5mm	-35.8	80.2	-0.97				
	Bluetooth Ant 8		0.118	5mm	-27.4	74.4	-0.93				
Case 3	GSM1900 Ant 0	Back	1.252	5mm	4.8	-83.8	-1.05	163.8	1.82	0.02	Not required
	WLAN2.4GHz Ant 8		0.572	5mm	-24.4	77.4	0.2				
Case 4	GSM1900 Ant 0	Back	1.252	5mm	4.8	-83.8	-1.05	161.4	1.93	0.02	Not required
	WLAN5GHz Ant 8		0.561	5mm	-35.8	80.2	-0.97				
	Bluetooth Ant 8		0.118	5mm	-27.4	74.4	-0.93				
Case 5	WCDMA II Ant 0	Back	1.256	5mm	8.8	-79.8	-1.13	160.7	1.83	0.02	Not required
	WLAN2.4GHz Ant 8		0.572	5mm	-24.4	77.4	0.2				
Case 6	WCDMA II Ant 0	Back	1.256	5mm	8.8	-79.8	-1.13	158.4	1.94	0.02	Not required
	WLAN5GHz Ant 8		0.561	5mm	-35.8	80.2	-0.97				
	Bluetooth Ant 8		0.118	5mm	-27.4	74.4	-0.93				
Case 7	WCDMA V Ant 0	Back	1.262	5mm	-7.9	-81.4	-0.04	159.7	1.83	0.02	Not required
	WLAN2.4GHz Ant 8		0.572	5mm	-24.4	77.4	0.2				
Case 8	WCDMA V Ant 0	Back	1.262	5mm	-7.9	-81.4	-0.04	157.0	1.94	0.02	Not required
	WLAN5GHz Ant 8		0.561	5mm	-35.8	80.2	-0.97				
	Bluetooth Ant 8		0.118	5mm	-27.4	74.4	-0.93				
Case 9	LTE Band 2 Ant 0	Back	1.242	5mm	12	-79.7	-0.78	161.3	1.81	0.02	Not required
	WLAN2.4GHz Ant 8		0.572	5mm	-24.4	77.4	0.2				
Case 10	LTE Band 2 Ant 0	Back	1.242	5mm	12	-79.7	-0.78	159.1	1.92	0.02	Not required
	WLAN5GHz Ant 8		0.561	5mm	-35.8	80.2	-0.97				
	Bluetooth Ant 8		0.118	5mm	-27.4	74.4	-0.93				
Case 11	LTE Band 7 Ant 5	Back	1.235	5mm	26.2	-72	0.01	157.7	1.81	0.02	Not required
	WLAN2.4GHz Ant 8		0.572	5mm	-24.4	77.4	0.2				
Case 12	LTE Band 7 Ant 5	Back	1.235	5mm	26.2	-72	0.01	155.9	1.91	0.02	Not required

	WLAN5GHz Ant 8		0.561	5mm	-35.8	80.2	-0.97				
	Bluetooth Ant 8		0.118	5mm	-27.4	74.4	-0.93				
Case 13	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm) X	Y	Z	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 26 Ant 0	Back	1.241	5mm	-21.2	-75.2	-1.07	152.6	1.81	0.02	Not required
	WLAN2.4GHz Ant 8		0.572	5mm	-24.4	77.4	0.2				
Case 14	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm) X	Y	Z	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 26 Ant 0	Back	1.241	5mm	-21.2	-75.2	-1.07	149.7	1.92	0.02	Not required
	WLAN5GHz Ant 8		0.561	5mm	-35.8	80.2	-0.97				
	Bluetooth Ant 8		0.118	5mm	-27.4	74.4	-0.93				
Case 15	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm) X	Y	Z	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	FR1 n5 Ant 0	Back	1.139	5mm	-9.5	-79.9	-0.84	158.0	1.71	0.01	Not required
	WLAN2.4GHz Ant 8		0.572	5mm	-24.4	77.4	0.2				
Case 16	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm) X	Y	Z	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	FR1 n5 Ant 0	Back	1.139	5mm	-9.5	-79.9	-0.84	155.3	1.82	0.02	Not required
	WLAN5GHz Ant 8		0.561	5mm	-35.8	80.2	-0.97				
	Bluetooth Ant 8		0.118	5mm	-27.4	74.4	-0.93				
Case 17	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm) X	Y	Z	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	FR1 n7 Ant 5	Back	1.258	5mm	27.6	-69.8	-0.79	156.1	1.83	0.02	Not required
	WLAN2.4GHz Ant 8		0.572	5mm	-24.4	77.4	0.2				
Case 18	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm) X	Y	Z	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	FR1 n7 Ant 5	Back	1.258	5mm	27.6	-69.8	-0.79	154.3	1.94	0.02	Not required
	WLAN5GHz Ant 8		0.561	5mm	-35.8	80.2	-0.97				
	Bluetooth Ant 8		0.118	5mm	-27.4	74.4	-0.93				
Case 19	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm) X	Y	Z	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	FR1 n77 HPUE Ant 5	Back	0.956	5mm	23	-65.2	-0.57	148.4	1.64	0.01	Not required
	WLAN5GHz Ant 8		0.561	5mm	-35.8	80.2	-0.97				
	Bluetooth Ant 8		0.118	5mm	-27.4	74.4	-0.93				

Test Engineer : Martin Li, Varus Wang, Ricky Gu, Light Wang

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 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.

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

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

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

[9] FCC KDB 616217 D04 v01r02, “SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers”, Oct 2015

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

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

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

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

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

------THE END------